SINGAPORE AIRLINES

A STAR ALLIANCE MEMBER

SUSTAINABILITY REPORT FY2021/22











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MESSAGE FROM SINGAPORE AIRLINES CEO 102-14

"Over the course of the pandemic, the SIA Group has remained steadfast in our long-standing commitment to our Environmental, Social, and Governance (ESG) goals. This is a priority for us as a Company, and an area of focus for our customers, shareholders, investors, and people. We have made tangible progress in conducting our businesses in a more sustainable manner, and integrating ESG initiatives across our operations."



The Singapore Airlines (SIA) Group finally turned the corner in the battle against the Covid-19 pandemic in FY2021/22. Many countries around the world have begun to live with the virus on the back of high vaccination rates, giving them confidence to ease domestic pandemic-related restrictions and stringent border controls. Singapore, for example, launched its Vaccinated Travel Lane (VTL) arrangements in September 2021, and expanded them over the next six months, allowing eligible fully-vaccinated travellers to enter quarantine-free.

Getting through this unprecedented crisis has made the Group stronger, and our people even more resilient, innovative, and agile. This ensured we were ready to capitalise on all opportunities that arose as international air travel to, from, and through Singapore resumed.

As a result, SIA and Scoot were the first to operate and open sales on almost all VTL routes. The Group's passenger capacity doubled during the year to 51% of pre-Covid levels in March 2022. The two airlines collectively served 93 destinations in 36 countries and territories, or 68% of pre-pandemic levels, by end-March 2022. With VTLs proving to be the key that unlocked the pent-up demand for air travel, passenger carriage went up six-fold to 3.9 million from a year before.

Sustainability at the Heart of Our Business

Over the course of the pandemic, the SIA Group has remained steadfast in our long-standing commitment to our Environmental, Social, and Governance (ESG) goals. This is a priority for us as a Company, and an area of focus for our customers, shareholders, investors, and people. We have made tangible progress in conducting our businesses in a more sustainable manner, and integrating ESG initiatives across our operations.

Long-term success also requires collective action. We have involved our customers and people in multiple initiatives, recognising that all of us must play our part to bring about more sustainable air travel. Collaboration with partners across the entire aviation ecosystem is also integral to our success.

Climate Action and Resource Conservation

In May 2021, the SIA Group pledged to achieve net zero carbon emissions by 2050. It is an ambitious goal, and we are applying multiple levers in our decarbonisation journey. These include investing in new generation aircraft, achieving higher operational efficiencies, adopting low-carbon technology such as sustainable fuels, and sourcing for high quality carbon offsets.

Today, operating a young fleet of new generation aircraft is the most effective and immediate way for an airline to reduce its carbon emissions. The SIA Group fleet has an average age of around six years and three months, compared to an industry average of more than 15 years. This primarily comprises models such as Airbus' A350 and A320 Family and Boeing's 787 Family and 737-8s, which are on average around 25% more fuel efficient than the older generation aircraft that they replace on similar missions.

We have committed to a substantial investment in new generation aircraft, including the Boeing 777-9 large widebody and Airbus A350F freighter. SIA will be the launch operator of the A350F, which will burn up to 40% less fuel than our current freighters, reducing carbon emissions by 400,000 tonnes annually.

In February 2022, SIA was the first airline to sign the Global Sustainable Aviation Fuel Declaration. This affirms our commitment to collaborate with like-minded partners globally to accelerate the development, production, and adoption of sustainable aviation fuels (SAF).

We are working with the Civil Aviation Authority of Singapore (CAAS) and investment firm Temasek on a year-long pilot to study and operationalise the deployment of SAF in Singapore. We have ordered 1.25 million litres of neat SAF, which will be blended with refined jet fuel and delivered to Changi Airport. This will be uplifted on SIA and Scoot flights from the third quarter of 2022.

This pilot will help to validate SAF integration options in Singapore, and provide insights on the economic and commercial considerations. It will shape future policies that could accelerate and scale up the adoption of renewable aviation fuels. The pilot is also expected to reduce carbon dioxide emissions by about 2,500 tonnes.

SIA is a member of the International Advisory Panel (IAP) to develop a sustainable air hub in Singapore. Convened by CAAS, this panel includes industry and technology leaders from Singapore and around

MESSAGE BY SINGAPORE AIRLINES CEO (CONTINUED)

the world. It seeks to develop a blueprint that will detail the aviation sector's medium and long-term sustainability goals, and create practical pathways to make greener air travel viable and accessible for all.

We launched the SIA Group's Voluntary Carbon Offset Programme in June 2021, giving our passenger and cargo customers an opportunity to purchase quality carbon offsets and mitigate their carbon footprint. Contributions from the programme support verified projects that reduce carbon emissions, protect endangered species, and empower communities.

More details on our net zero carbon emissions ambition and our SAF journey can be found on pages 123 to 135 of this report.

We are committed to conserving the planet's finite resources by reducing waste both on the ground and in the air. Some initiatives include using sustainable alternative materials, improving our water conservation efforts, and adopting renewable energy. We will continue to explore more opportunities to pursue the 5Rs (Refuse, Reduce, Reuse, Recycle, and Repurpose) in our waste management approach. Further details can be found on pages 142 to 149.

Creating a Positive Impact on Our Society

SIA strives to leverage our business as a force for good, caring for our customers and employees as well as the local and global communities we serve.

Safeguarding the health and safety of our customers and employees is a priority. In recognition of our efforts to enhance health and safety measures during the pandemic, SIA and Scoot received the highest Diamond rating in the Airline Passenger Experience Association (APEX) Health Safety audit, and the top 5-Star rating in the Skytrax Covid-19 Airline Safety Audit.

We stepped up our employee engagement initiatives during the pandemic, and conducted our biennial Organisational Climate Survey and Transformation Pulse Surveys over the last year. These provide insights into our employees' evolving needs, giving us opportunities to better support them and deliver a positive working experience.

The challenging times also shone a light on the SIA spirit. Many staff actively volunteered their time and gave back to the communities that we serve, both in Singapore and around the world. To further support our Singapore-based staff in these efforts, we introduced an annual paid Corporate Social Responsibility Day that they can use for volunteering activities.

The SIA Group continued to facilitate the safe, reliable, and timely transportation of Covid-19 vaccines and medical supplies during the year. Through our partnership with Temasek Foundation and the United Nations World Food Programme, we operated more than 15 flights transporting 305 tonnes of medical supplies and other health and humanitarian items to India, Indonesia, Myanmar, Nepal, and the Philippines.

Responsible Stewardship

With the growing awareness of our sustainability initiatives, we are reviewing our material ESG topics to gain insights into how the pandemic has influenced our stakeholders' decisions. More details on our materiality assessment will be addressed in subsequent reports.

In line with new Singapore Exchange (SGX) requirements that take effect in FY2022/23, we will continue to improve our sustainability reporting and training, climate-related disclosures, and assurance systems.

Connecting Lives, Communities and the Future

This year's theme is Timeless Connections. We connect countries, cities, and destinations as an airline, supporting economic growth and improving livelihoods. In doing so, we also connect lives, communities, and the present to the future. These form the three sections that cover our seven material topics in this report.



Key contributions to the United Nations Sustainable Development Goals (SDGs) were identified, based on our material topics. We prioritise three of the 17 goals that are relevant to our Company's sustainability strategy and long-term targets. These are:

Goal 8: Promote sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all

Goal 12: Ensure sustainable consumption and production patterns

Goal 13: Take urgent action to combat climate change and its impact

The Road Ahead

The SIA Group is well positioned for recovery as our key markets around the world further ease restrictions, and the demand for air travel returns. At the same time, we must navigate increasing concerns about geopolitical issues and pressures on the global economy, and the impact that these could have on our business and the aviation industry in the coming years.

We will persevere and press on with our sustainability ambitions, in the hope of building a better, greener, future for all.

We look forward to sharing more about these initiatives in next year's report.

With regards,

Goh Choon Phong

Chief Executive Officer
Singapore Airlines

ABOUT THE REPORT

This is the 10th Sustainability Report of Singapore Airlines Limited and its subsidiaries. In 2013, we voluntarily published our first Sustainability Report. Since then, we have been committed to disclosing our sustainability information in a transparent and open manner.

Sustainability reporting enables us to better communicate our management's approach and performance of SIA's material economic, environmental, social, and governance topics with our stakeholders. It enables us to identify opportunities to better measure, monitor, and manage these sustainability topics across all levels of our organisation. We recognise the role we play in sustainable development, and endeavour to work closely with all our stakeholders in enhancing and integrating sustainability initiatives across our operations.

Reporting Framework and Initiatives 102-12 102-54

Global Reporting Initiative (GRI)

Our report has been prepared in accordance with the GRI Standards: Core option. The GRI Standards are selected as they represent the global best practice for reporting on the impact of an organisation's sustainability initiatives.

The following is an example of a tag that we have used throughout our report whenever a disclosure is made in line with a GRI Standard disclosure:

Tag Example
GRI Standard number AAA-BB *GRI Disclosure number*

Our GRI Content Index, located on pages 186 to 188, summarises the GRI Standards Disclosures selected for reporting. It also directs readers to the appropriate references in this Sustainability Report and other publicly available resources published by SIA.

Singapore Exchange (SGX) Sustainability Reporting Listing Rules and Guide

Our report has been prepared in accordance with the six primary components set out by the SGX-ST Listing Rules 711B and takes reference from the SGX Sustainability Reporting Guide, which provides guidelines on component requirements and reporting rules.

United Nations (UN) Global Compact

SIA is a signatory to the Ten Principles of the UN Global Compact. Our report serves as our Active Level Communication on Progress (COP), which details our actions to embed the Ten Principles into our business strategies and operations.

The following indicates the tags that we have used throughout our report whenever a section aligns with a principle:

Tag	Principle
PR-1	Businesses should support and respect the protection of internationally proclaimed human rights.
PR-2	Businesses should make sure that they are not complicit in human rights abuses.
PR-3	Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining.
PR-4	Businesses should uphold the elimination of all forms of forced and compulsory labour.
PR-5	Businesses should uphold the effective abolition of child labour.
PR-6	Businesses should uphold the elimination of discrimination in respect of employment and occupation.
PR-7	Businesses should support a precautionary approach to environmental challenges.
PR-8	Businesses should undertake initiatives to promote greater environmental responsibility.
PR-9	Businesses should encourage the development and diffusion of environmentally friendly technologies.
PR-10	Businesses should work against corruption in all its forms, including extortion and bribery.

UN Sustainable Development Goals (SDGs)

SIA supports the 2030 Agenda for Sustainable Development and the 17 SDGs, with a priority on SDGs 8 12 13. In our report, we mapped our key contributions to the SDGs through the management of our material sustainability topics.

The following indicates the icons that we have used throughout our report whenever a section aligns with an SDG:

Icon	Goal
1	End poverty in all its forms everywhere
2	End hunger, achieve food security and improved nutrition and promote sustainable agriculture
3	Ensure healthy lives and promote well-being for all at all ages
4	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all
5	Achieve gender equality and empower all women and girls
6	Ensure availability and sustainable management of water and sanitation for all
7	Ensure access to affordable, reliable, sustainable and modern energy for all
8	Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
9	Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation
10	Reduce inequality within and among countries
11	Make cities and human settlements inclusive, safe, resilient and sustainable
12	Ensure sustainable consumption and production patterns
13	Take urgent action to combat climate change and its impacts
14	Conserve and sustainably use the oceans, seas and marine resources for sustainable development
15	Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
16	Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
17	Strengthen the means of implementation and revitalise the global partnership for sustainable development

ABOUT THE REPORT (CONTINUED)

Reporting Period 102-50 102-51 102-52

The reporting period covers SIA's financial year 2021/22 (FY2021/22) from 1 April 2021 to 31 March 2022. Data and information from past reporting cycles have been included where available. Our report is published annually on a timely basis, with our last report published in June 2021.

Reporting Scope 102-45

The SIA Group's business is organised and managed separately according to the nature of services provided. All sustainability data and information presented in our report relates to two of our reportable businesses – Singapore Airlines and Scoot – unless otherwise stated. Sustainability data and information relating to Singapore Airlines Engineering Company (SIAEC), our subsidiary, is disclosed separately in SIAEC's Sustainability Report, which is published annually. The '$' used in this report refers to Singapore Dollars unless otherwise stated.

Organisation	Description of Services	Coverage in this SR
SINGAPORE AIRLINES	Singapore Airlines provides passenger and cargo air transportation with a focus on the full-service passenger segment. Following the successful integration of SilkAir into Singapore Airlines, Singapore Airlines' operational information includes data from SilkAir.	●
SILKAIR	SilkAir ceased its operations and has been fully integrated into Singapore Airlines as at September 2021. Due to the transitional period, SilkAir may continue to be referenced at various points in this report.	●
scoot	Scoot provides passenger air transportation with a focus on the low-cost passenger segment.	●
SIA ENGINEERING COMPANY	SIAEC is in the business of providing airframe maintenance and overhaul services, line maintenance, technical ground handling servics, and fleet management. It also manufactures aircraft cabin equipment, refurbishes aircraft galleys, and provides technical and non-technical handling services such as the repair and overhaul of hydro-mechanical aircraft equipment.	●
Others	Other services provided by the SIA Group, such as the training of pilots, air charters and tour wholesaling, have been aggregated under the segment 'Others'.	●

● In scope ● Not in scope

Reporting Quality 102-56

In compliance with the International Civil Aviation Organization's (ICAO) Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA), as well as the European Union and the United Kingdom's Emissions Trading System (ETS), our carbon emissions reporting is subjected to external assurance by an accredited verifier. While SIA has not sought external assurance for our Sustainability Report, we have systems in place to assess the quality of data and information reported. Since our first report was published in 2013, we have been working closely with external consultants to perform an annual gap analysis to continually improve the quality of the report. In preparation for the upcoming changes of SGX reporting guidelines, our sustainability reporting processes will be subject to internal assurance review from FY2022/23.

Our report should be read in tandem with the SIA Annual Report FY2021/22 and the SIAEC Sustainability Report FY2021/22 for a more comprehensive overview of the SIA Group's sustainability performance.



ABOUT SINGAPORE AIRLINES

The Singapore Airlines Group's history dates back to 1947. Since its establishment, Singapore Airlines' commitment to service excellence, product leadership, and network connectivity has distinguished it as a world-class international airline group.

We remain true to our commitment to make every journey personal. Due to the disruptions caused by the Covid-19 pandemic, we had to significantly scale back our global network, which includes the suspension of services to several destinations. Nevertheless, we continued to seize opportunities to reinforce our position as a global leader in key markets during the year in review.

FY2021/22 Numbers for the SIA Group[1]

3.89 million
passengers carried

30.1%
passenger load factor

68,570 million
capacity (available seat-kilometres)

20,665 million
passenger traffic
(revenue passenger-kilometres)

183
fleet size[2]

98
destinations[3]

Our Core Values 102-16

- Excellence
- Care
- Safety
- Integrity
- Customer-focus
- Teamwork

Our Mission Statement

Singapore Airlines is a global company dedicated to providing air transportation services of the highest quality and to maximising returns for the benefit of its shareholders and employees.

Our Principal Activities 102-2

Our principal activities consist of passenger and cargo air transportation, engineering services, training of pilots, air charters, as well as tour wholesaling and related activities.

Our Memberships 102-13

We are a member of Star Alliance, the International Air Transport Association (IATA), the Association of Asia Pacific Airlines (AAPA), the Sustainable Aviation Fuel Users Group (SAFUG), and the Singapore Institute of Directors (SID), among other groups. We are also represented in various committees and working groups as part of our membership in these groups.

[1] *As of 31 March 2022, including destinations originally scheduled up to end-April 2022. For more information, please refer to the FY2021/22 SIA Annual Report.*
[2] *Excludes 18 aircraft that are currently not in service. Includes seven freighter aircraft.*
[3] *Figure refers to the total number of unique destinations operated by the SIA Group Airlines (including Singapore). Includes destinations served by passenger and freighter aircraft, as at 31 March 2022.*

ROUTE NETWORK

102-2 102-4 102-6 102-7

As at 31 March 2022, the Singapore Airlines Group's passenger and freighter network covers 98 destinations[4].

Destination	Airline
THE AMERICAS	
Anchorage	▶
Dallas / Fort Worth	▶
Houston	▶
Los Angeles	▶ ▶
New York (John F. Kennedy)	▶
New York (Newark Liberty)	▶
San Francisco	▶
Seattle	▶
Vancouver	▶
EUROPE	
Amsterdam	▶ ▶
Athens	▶
Barcelona	▶
Berlin	▶
Brussels	▶
Copenhagen	▶
Frankfurt	▶
Istanbul	▶
London (Gatwick)	▶
London (Heathrow)	▶ ▶
Manchester	▶
Milan	▶
Munich	▶
Paris	▶
Rome	▶
Zurich	▶

Destination	Airline
NORTH ASIA	
Chongqing	▶
Fukuoka	▶
Guangzhou	▶ ▶
Hong Kong SAR	▶ ▶ ▶
Macao SAR	▶
Nagoya	▶
Osaka	▶
Seoul	▶ ▶
Shanghai	▶ ▶
Taipei	▶ ▶
Tianjin	▶
Tokyo (Haneda)	▶
Tokyo (Narita)	▶ ▶
SOUTH EAST ASIA	
Angeles / Mabalacat	▶
Bandar Seri Begawan	▶
Bangkok (Suvarnabhumi)	▶ ▶
Cebu	▶
Chiang Mai	▶
Da Nang	▶
Davao	▶
Denpasar	▶ ▶
Hanoi	▶ ▶
Ho Chi Minh City	▶ ▶
Ipoh	▶
Jakarta	▶ ▶

Destination	Airline
Krabi	▶
Kuala Lumpur	▶ ▶
Kuching	▶
Langkawi	▶
Manado	▶
Manila	▶ ▶
Miri	▶
Penang	▶ ▶
Phnom Penh	▶
Phuket	▶ ▶
Siem Reap	▶
Singapore	▶ ▶ ▶
Surabaya	▶ ▶
Vientiane	▶
Yangon	▶
SOUTH WEST PACIFIC	
Adelaide	▶
Auckland	▶ ▶
Brisbane	▶
Cairns	▶
Christchurch	▶
Darwin	▶
Gold Coast	▶
Melbourne	▶ ▶ ▶
Perth	▶ ▶
Sydney	▶ ▶ ▶

Destination	Airline
WEST ASIA AND AFRICA	
Ahmedabad	▶
Amritsar	▶
Bengaluru	▶ ▶
Cape Town	▶
Chennai	▶ ▶
Coimbatore	▶
Colombo	▶
Delhi	▶
Dhaka	▶
Dubai	▶
Hyderabad	▶ ▶
Jeddah	▶
Johannesburg	▶ ▶
Kathmandu	▶
Kochi	▶
Kolkata	▶
Male	▶
Mumbai	▶ ▶
Nairobi	▶
Sharjah	▶
Tiruchirapalli	▶
Thiruvananthapuram	▶
Visakhapatnam	▶

Singapore Airlines
69 destinations

Scoot
43 destinations

Singapore Airlines (Freighter Aircraft)
19 destinations

Details on our route network can be found on SIA and Scoot's websites respectively.

Legend

▶ Singapore Airlines (Passenger Aircraft)

▶ Scoot

▶ Singapore Airlines (Freighter Aircraft)

[4] *Figure includes destinations served by passenger and freighter aircraft, of which 93 destinations are served by passenger aircraft, and 19 destinations are served by freighter aircraft. The figures do not include destinations we have temporarily stopped flying to due to the Covid-19 pandemic.*

NETWORK CHANGES IN FY2021/22 102-10

Throughout the financial year, the Group continued to restore its passenger network. This was done in a calibrated manner, in tandem with the reopening of airports and borders around the world, and the lifting of travel restrictions in countries as vaccination rates continued to rise. Singapore's launch and subsequent expansion of the VTL scheme facilitated quarantine-free mass travel into Singapore for the first time since the Covid-19 pandemic began, significantly boosted the demand for flights to and through Singapore, and helped to facilitate trade and commerce. The Group ramped up passenger capacity in a calibrated manner, growing from 24% of pre-Covid levels in April 2021 to 51% by the end of March 2022.

Singapore further relaxed border restrictions in April 2022[5], removing the need for quarantine and Covid-19 tests for fully vaccinated travellers. Key markets around the world further eased travel restrictions, supporting a strong recovery in demand for air travel across all cabin classes.

The Group restored its passenger network connectivity to 93 destinations as of 31 March 2022, versus 137 destinations pre-Covid[6]. We expect this to increase gradually in the coming year.

During the year in review, Singapore Airlines began operating the Boeing 737-8, which began services to Phuket on 23 November 2021 with new cabin products. The integration of SilkAir into Singapore Airlines was completed in September 2021.

As of 31 March 2022, Singapore Airlines operated services[7] to 69 destinations. Scoot operated services to 43 destinations, mainly in North Asia and South East Asia regions.



[5] *Following the announcement of the Vaccinated Travel Framework by the Singapore government, which simplified travel protocols for entry in Singapore, Singapore Airlines and Scoot will no longer designate VTL flights from 1 April 2022.*
[6] *This figure compares to January 2020, before the onset of the Covid-19 outbreak.*
[7] *The weekly frequencies for tagged or linked flights are double counted.*

FLEET INFORMATION[8]

102-2 102-7

Our fleet is one of the most modern and fuel-efficient in the world.

Singapore Airlines remains committed to operating a modern and fuel-efficient fleet despite the challenges and disruption posed by the Covid-19 pandemic.

In FY2021/22, we responded to changes in our projected long-term fleet needs with the conversion of 14 Boeing 787-10 aircraft orders to 11 Boeing 777-9 aircraft, which are more fuel-efficient. This is in line with our commitment to operate new generation aircraft that provide greater comfort and innovative products to our customers, further drive operating efficiency, and support ongoing efforts to materially lower our carbon emissions.

During the Singapore Airshow in February 2022, SIA ordered seven Airbus A350F freighters, with options for five more aircraft. The A350Fs will replace SIA's seven Boeing 747-400F freighters, making SIA the first airline to operate this new generation widebody freighter aircraft when deliveries begin in the fourth quarter of 2025. Powered by Rolls-Royce Trent XWB-97 engines, the A350F burns up to 40% less fuel on similar missions as compared to the Boeing 747-400F aircraft, reducing SIA's carbon emissions by around 400,000 tonnes annually. This supports the SIA Group's goal of achieving net zero carbon emissions by 2050.



[8] *Information is correct as at 31 March 2022.*

FLEET INFORMATION (CONTINUED)

Singapore Airlines Group Fleet[9]

The average age of the SIA Group operating fleet is six years and three months.

Singapore Airlines (Passenger Aircraft)

AVERAGE FLEET AGE

5 years **7** months | **123** in fleet **75** on order

AIRBUS A350-900



58 in fleet **7** on order

AIRBUS A380-800



12 in fleet

BOEING 737-8



8 in fleet[10] **24** on order

BOEING 737-800



7 in fleet

BOEING 777-9



31 on order

BOEING 777-300ER



23 in fleet

BOEING 787-10



15 in fleet **13** on order

Singapore Airlines (Freighter Aircraft)

AVERAGE FLEET AGE

18 years **4** months | **7** in fleet **7** on order

AIRBUS A350F FREIGHTER



7 on order

BOEING 747-400F FREIGHTER



7 in fleet

Scoot

AVERAGE FLEET AGE

6 years **1** month | **53** in fleet **26** on order

AIRBUS A320CEO



21 in fleet

AIRBUS A320NEO



5 in fleet **13** on order

AIRBUS A321NEO



7 in fleet[11] **6** on order

BOEING 787-8



10 in fleet **3** on order

BOEING 787-9



10 in fleet **4** on order

Image Credit: Yucca Studio and SPHM

[9] *Operating fleet excludes aircraft deemed surplus to fleet requirements and includes aircraft that were withdrawn from service for temporary storage due to significant capacity cuts arising from the Covid-19 pandemic.*
[10] *This figure excludes five Boeing 737-8 aircraft that have been delivered and are awaiting Entry into Service (EIS) cabin modifications.*
[11] *This figure excludes two A321neo aircraft that have been delivered and are awaiting Entry into Service (EIS) cabin modifications.*

SUSTAINABILITY JOURNEY

1990 – 2010: Building Awareness and Pioneering SIA's Sustainability Journey

1992 – Sets up the Environment Unit under the Safety and Security department, and publishes its first Environmental Statement

1993 – Pledges support to the Singapore Business Charter for Sustainable Development

2001 – Publishes its first Environment Report FY2000/01 to communicate environmental initiatives and performance

2002 – One of the five airlines selected, and the only company from Singapore, to be included in the Dow Jones Sustainability World Indexes (DJSI World)

2009 – Pledges its support to IATA's climate targets and Four-Pillar Strategy

2010 – Commits to rainforest preservation by supporting the Harapan Rainforest Initiative as the exclusive airline partner

2010 – Completes the world's first multi-sector demonstration green flight under the Asia and Pacific Initiative to Reduce Emissions (ASPIRE) programme

2011 – 2019: Accelerating Sustainability in SIA

2011 – Joins the Sustainable Aviation Fuel Users Group (SAFUG)

2012 – Implements the Suppliers' Code of Conduct (SCOC) to promote sustainable development

2013 – SIA is the Official Airline for the Giant Panda collaborative programme between Wildlife Reserves Singapore and the China Wildlife Conservation Association, and transported the giant pandas Kai Kai and Jia Jia to Singapore on board an SIA Cargo Boeing 747-400F freighter from Chengdu, China

2015 – Publishes its first Sustainability Report in FY2012/13, ahead of SGX introducing sustainability reporting on a "comply or explain" basis in June 2016. A year later, SIA published its report in line with the GRI-G4 reporting guidelines

2016 – Included in the SGX Sustainability Leaders Index, gaining recognition as a frontrunner in ESG standards

2016 – Takes delivery of SIA's first Airbus A350-900, which is one of the most fuel-efficient aircraft in its fleet

2017 – SIA, in partnership with the CAAS, operates a series of 12 green package flights over a three-month period from May on its non-stop San Francisco-Singapore route

2017 – Introduces a 'From Farm to Plane' concept to promote environmental sustainability and support local farmers' communities, and collaborated with AeroFarms, the world's largest indoor vertical farm of its kind based in the United States

2018 – Signs the United for Wildlife Transport Taskforce Buckingham Palace Declaration in support of efforts to prevent illegal trafficking and transportation of wildlife and their products

2018 – SIA is the first to fly the new Boeing 787-10 Dreamliner, one of the most fuel-efficient aircraft in its fleet

2019 – Sets up the Sustainability Office (SO) to enhance its sustainability strategy and framework, and drive sustainability initiatives across the SIA Group

2020 and Beyond: Emerging Stronger and Ensuring Sustainability at the Heart of Our Journey

February 2020 – Installs 20,000 solar panels at SIA's Airline House, SIA Training Centre, TechSQ, five of SIAEC's hangars and its Engine Test Facility, which generates 10,200MWh of clean energy annually, equivalent to offsetting 4,300 tonnes of CO_2 emissions in a year

June 2020 – Implements a range of health and safety initiatives as part of a comprehensive review of the end-to-end customer journey in light of the Covid-19 pandemic

November 2020 – Launches the new short-haul Economy Class meal concept, where customers enjoy a greater variety of local delights and international favourites packed in an eco-friendly box

January 2021 – Clinches highest diamond rating in global airline health and safety audit

February 2021 – SIA and Scoot are among the first carriers in the world to operate flights with a full complement of vaccinated pilots and cabin crew

May 2021 – Pledges to achieve net zero carbon emissions by 2050

June 2021 – Launches the SIA Group's Voluntary Carbon Offset Programme (VCOP), where our customers are empowered to fly carbon neutral by purchasing quality carbon offsets to mitigate their travel carbon footprint

February 2022 – First airline to sign the Global Sustainable Aviation Fuel declaration, committing to promote the acceleration of the development, production, and consumption of SAF

February 2022 – Firms up order for seven Airbus A350F freighters, which consume 40% less fuel on similar missions to the Boeing 747-400F, reducing SIA's carbon emissions by around 400,000 tonnes annually

February 2022 – Active participation in the International Advisory Panel (IAP) convened by CAAS, to collectively develop the Singapore Sustainable Air Hub Blueprint through collaboration with our ecosystem partners to develop practical pathways to make greener air travel viable and accessible for all

February 2022 – SIA, in partnership with CAAS and Temasek, selects ExxonMobil to supply 1.25 million litres of neat SAF for Singapore's first sustainable aviation fuel pilot

June 2022 – Announces the launch of SAF credits in July 2022, in partnership with CAAS and Temasek, to accelerate and scale up the collective adoption of sustainable aviation fuel

OUR COVID-19 RESPONSE AND ENGAGEMENT

102-10 COV-19 102-43

Responding to the impact of the Covid-19 pandemic has been our focus since the start of 2020. Despite the uncertainty, we have reaffirmed our commitment to our values, and vision, and have taken this opportunity to reassess what sustainable development means to us. We also established an internal task force to respond to our stakeholders' needs, and spearheaded plans to emerge stronger and more resilient as we recover from the pandemic. More than ever, we recognise that our stakeholders are a part of our shared journey.



CUSTOMERS

Our top priority is the health and safety of our customers. We introduced a slew of health and safety measures, and continued to adjust our operations based on the evolving situation.

#SIACARES INITIATIVES

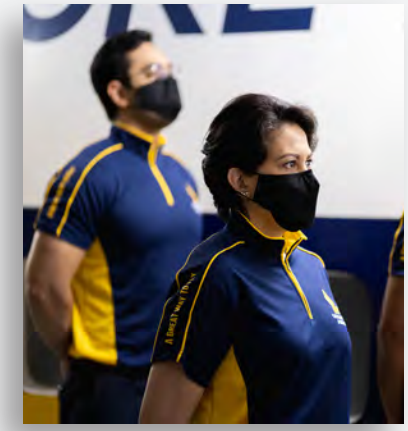
Introduced the #SIAcares initiatives to protect the well-being of our customers, giving them more assurance and confidence as they travel with us.

HEALTHCERT SERVICE LAYER (HSL)

Launched the HSL as a digital solution that enables SIA and Scoot customers to verify their digital health certificates as part of their online check-in and self-service kiosk flows. The HSL will be further expanded to recognise additional travel documents.

KEEPING OUR CUSTOMERS INFORMED

Introduced a Covid-19 Information Centre on the SIA website to provide customers with one-stop access to Covid-19-related content. Similarly, Scoot has a dedicated Covid-19 travel information page on its website.



EMPLOYEES

The health and safety of our employees and our relationships with them matter deeply to us. We work with them to establish mutually-reinforcing support systems to retain our talent, helping to ensure our long-term sustainability.

DEDICATED EMPLOYEE SUPPORT PORTAL (ESP)

Launched the ESP, which provided Covid-19-related resources on job support programmes, financial and income tax relief channels, Enrichment Day, mental wellness, vaccination exercise, and more.

ENHANCED TRAINING SUPPORT PACKAGE (ETSP) COURSES

Offered cabin crew a suite of ETSP courses focusing on three main aspects: Macro Environment, Onboard Environment, and Deep Skilling.

OUR CARE AND TRANSPORT AMBASSADORS

Supported Singapore's healthcare and transport sectors' frontline efforts, with hundreds of our cabin crew members volunteering for the roles of Care and Transport Ambassadors.

OUR COVID-19 RESPONSE AND ENGAGEMENT (CONTINUED)



GOVERNMENTS

We remain steadfast in supporting the measures by the governments around the world, and continue to be compliant with the border controls and travel restrictions.

We adopt a coordinated approach with the Singapore government, and play a crucial role in efforts to keep the country's air freight supply lines for essential goods open. Above all, we do our best to connect people with their loved ones around the world.

COVID-19 VACCINE CARRIAGE

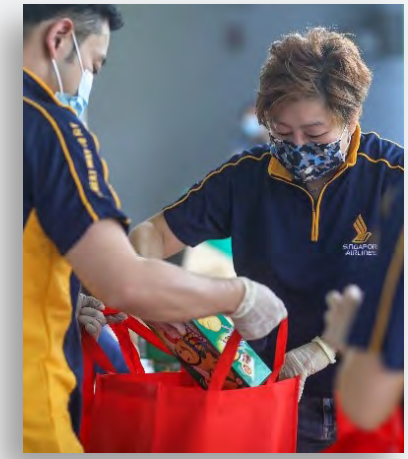
Supported the delivery of Singapore, Australia, and New Zealand's first shipments of Pfizer-BioNTech Covid-19 vaccine. SIA Cargo also supported the safe and reliable delivery of Covid-19 vaccines to various parts of the world. It has also been transporting shipments of Pfizer's Paxlovid antiviral pills, which are used to treat Covid-19 patients.

GOVERNMENT SUPPORT

Benefitted from government schemes such as the Jobs Support Scheme, cost reliefs for rents, as well as rebates on landing and parking charges.

REPATRIATION CHARTERS

Arranged repatriation charters to various countries to bring Singapore residents home.



COMMUNITIES

Since our humble beginnings, we have fostered strong bonds and inculcated a sense of responsibility towards the communities we serve.

We continued to provide support to global communities through our volunteering efforts and the transportation of the Covid-19 vaccines and essential supplies to multiple destinations around the world.

PARTNERSHIP WITH TEMASEK FOUNDATION AND UNITED NATIONS WORLD FOOD PROGRAMME (UN WFP)

Partnered with Temasek Foundation and UN WFP to help transport essential medical supplies and other health and humanitarian items by air to points of need around the world.

TRANSPORTATION OF ESSENTIAL SUPPLIES

Participated in international programmes such as the Australia government's International Freight Assistance Mechanism (IFAM) and the Singapore-New Zealand Airfreight Partnership (SNAP) to support the air transport of chilled meat and fresh produce, among other products.

COMMUNITY CONTRIBUTIONS IN SINGAPORE

SIA continues to partner stakeholders to drive various community projects in Singapore, in collaboration with organisations such as the Movement for the Intellectually Disabled of Singapore (MINDS), and a partnership between KrisFlyer and Make-A-Wish Singapore. Support is extended to various community groups in Singapore through corporate donations, ticket sponsorships, and staff volunteerism, among others, in the areas of education, sports excellence, the arts, and environmental stewardship.

OUR COVID-19 RESPONSE AND ENGAGEMENT (CONTINUED)



SHAREHOLDERS

Our shareholders are important to us. We engage them, address their concerns, and provide timely disclosures.

We commenced an agile plan to restart our operations, which has enabled us to ramp up our services as air travel recovers. The way we collectively respond to this crisis will greatly shape our long-term sustainability and boost our capability for sustainable value creation.

MAINTAINING STRONG LIQUIDITY AND CASH RESERVES

Implemented cost management steps to conserve cash, and build up our liquidity through various fundraising measures.

STRENGTHENING REVENUE-GENERATING CAPABILITIES

Expanded revenue generating business lines such as cargo-only flights on passenger aircraft and our freighter network and capacity. Invested in new revenue generating businesses such as Kris+, Pelago, and the Singapore Airlines Academy.

TRANSFORMATION PROGRAMME

Launched SIA's new Transformation chapter, which will bolster SIA's resilience and agility as the SIA Group recovers from the Covid-19 pandemic.



SUPPLIERS AND PARTNERS

The Covid-19 pandemic has had an unprecedented impact on the global supply chain. We strive to maintain collaborative relationships with our suppliers and business partners to respond swiftly to our shared challenges.

As disruptions continue to intensify, we recognise the role we must play to enable the continuous flow of essential goods around the world. We endeavour to maximise the use of our freighter fleet, schedule cargo-only flights on passenger aircraft and ad hoc charter flights where opportunities arise.

WORKING WITH AIRCRAFT MANUFACTURERS

Reached agreements with Airbus and Boeing to revise our aircraft delivery schedule, allowing us time to recalibrate and re-establish our capacity.

PREPARING FOR RESTART

Implemented a suite of measures to ensure that we are ready to restart our operations smoothly as air travel improves and our network is being rebuilt.

CARGO-ONLY FLIGHTS ON PASSENGER AIRCRAFT

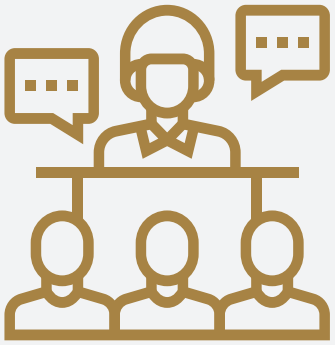
Maintained an effective air freight network to enable the flow of essential goods and medical supplies globally.

SUSTAINABILITY APPROACH

SUSTAINABILITY GOVERNANCE

102-14 102-18 102-19 102-20 102-26 102-31 102-32

We have a long-standing commitment to the integration of sustainability into every aspect of our business. To achieve our sustainability goals, clear lines of accountability are important to enable us to make effective and meaningful decisions.



BOARD STATEMENT

The Board recognises the importance of sustainability. It steers the Management Committee in ensuring that SIA's long-term value creation is achieved with environmental, social, and governance factors as guiding principles at all times. Sustainability is an integral part of SIA's operations and will be anchored across all levels of the organisation.

Board of Directors

The **Board's Customer Experience, Technology and Sustainability Committee (CETSC)** oversees sustainability and provides advice and guidance on sustainability management through the development of a strategic roadmap for environmental, social, and governance (ESG) topics. In addition, sustainability risks (climate-related, safety, etc.) are part of the enterprise risk management framework that is overseen by the **Board's Safety and Risk Committee (BSRC)**.

Management Committee

The **CEO**, assisted by the **Management Committee (MC)**, makes strategic proposals to the Board and oversees the execution of the Board's decisions, with direct oversight of the Sustainability Office (SO). The CEO oversees the execution of the Company's corporate and business strategies and policies, and the conduct of its business, ensuring that sustainability is driven across the company.

Sustainability Steering Committee

The Sustainability Steering Committee (SSC), which comprises divisional Senior Vice Presidents directly involved in sustainability matters in SIA, spearheads SIA's sustainability pursuits. The SSC reports to the MC on all sustainability-related matters.

Sustainability Strategic Working Committee

The Sustainability Strategic Working Committee (SSWC), a cross-functional team represented by various business units, drives SIA's sustainability strategies and iniatives.

The **Sustainability Office (SO)**, led by Vice President Sustainability, was set up in December 2019. It is involved in policy planning and the coordination of Company-wide sustainability efforts, and engages both partners and suppliers in these efforts. SO also acts as the secretariat for the SSC and the SSWC.

SUSTAINABILITY APPROACH (CONTINUED)

Sustainability Policy

Singapore Airlines is dedicated to providing air transportation services of the highest quality to the world. We take a long-term approach in the responsible development of our air transportation and related businesses, and have programmes in place to ensure that sustainable practices are implemented across the Company by considering material environmental, social, and governance topics.

The following are key elements of our sustainability strategy:

Upholding Safety

- Safety is an essential part of our operations and we constantly strive to improve our safety practices.

Managing Environmental Impact

- We are committed to environmental sustainability, and ensure that our operations are carried out in a responsible manner through a framework to mitigate climate risks, prevent pollution, ensure sustainable use of energy and resource, and conservation of biodiversity.

Supporting Our Communities

- We practise good corporate citizenship and contribute to and invest in the communities in which we operate.

Engaging Our Stakeholders

- **Customers** - We are committed to offering our customers the best travel experience through leadership in product and service innovation, our modern fleet and extensive service network.
- **Employees** - We value our employees and care for their safety, well-being and career development, while expecting them to adhere to a high standard of ethical behaviour, as laid out in our Code of Conduct.
- **Shareholders** - We strive to maximise returns for long-term profitability, with the aim of creating sustainable shareholder value.
- **Suppliers** - We treat our suppliers with respect and emphasise fairness in our relationships with them. The SIA's Suppliers' Code of Conduct sets a comprehensive framework that our suppliers are required to adhere to.





Materiality 102-15 102-42 102-46

We identify and prioritise the sustainability topics that matter most to SIA and our stakeholders.

Our activities and relationships with other entities across our value chain will impact our stakeholders and the environment. In 2013, we conducted our inaugural Materiality Assessment covering SIA's operations in Singapore with the purpose of assessing our sustainability impacts, as well as the concerns and expectations of our key stakeholders. Moving forward, we plan to progressively expand the coverage of the Materiality Assessment to include the operations of our subsidiaries, to reflect a more comprehensive picture of the Group's sustainability risks and opportunities.

Following the unprecedented disruption caused by the pandemic, SIA recognises that there could be significant shifts in stakeholder priorities. In FY2021/22, we continue to report on the same material topics that were last reviewed in 2017, which remain relevant for reporting and were endorsed by SIA's Management Committee and the Board. The seven existing material sustainability topics are summarised in the following section. The Company is in the midst of conducting a refreshed materiality assessment to review our business strategy for sustained growth, and will continually seek to embed material topics in our operations and across all levels of the organisation.



SUSTAINABILITY AMBITIONS

102-12 102-44 102-47

We believe in sustaining a great world to fly. To do that, we have set ambitions that will help us chart a flight path towards global sustainable development.

Material Topic	Ambition	Supporting the UN SDGs Through the Management of Our Material Topics
Governance	We seek to maintain high standards of corporate governance, professionalism, integrity and commitment at all levels, underpinned by strong internal controls and risk management systems.	16 PEACE, JUSTICE AND STRONG INSTITUTIONS; 17 PARTNERSHIPS FOR THE GOALS
Employees	We value our employees and care for their well-being and development.	3 GOOD HEALTH AND WELL-BEING; 4 QUALITY EDUCATION; 5 GENDER EQUALITY; 8 DECENT WORK AND ECONOMIC GROWTH; 10 REDUCED INEQUALITIES; 17 PARTNERSHIPS FOR THE GOALS
Safety	We strive to improve our safety practices, as well as inculcate a strong and positive safety culture within the organisation.	3 GOOD HEALTH AND WELL-BEING; 8 DECENT WORK AND ECONOMIC GROWTH; 17 PARTNERSHIPS FOR THE GOALS
Customer-focus	We endeavour to offer customers the best travel experience through service excellence and proactive customer engagement.	9 INDUSTRY, INNOVATION AND INFRASTRUCTURE; 17 PARTNERSHIPS FOR THE GOALS
Suppliers	We treat suppliers with respect, emphasise fairness in our relationships, and work towards sustainable business practices.	17 PARTNERSHIPS FOR THE GOALS
Shareholders	We seek to maximise returns for long-term profitability, with the aim of creating sustainable shareholder value.	8 DECENT WORK AND ECONOMIC GROWTH; 17 PARTNERSHIPS FOR THE GOALS
Environment	We remain committed to environmental sustainability and for our operations to be carried out responsibly in support of industry goals.	3 GOOD HEALTH AND WELL-BEING; 6 CLEAN WATER AND SANITATION; 7 AFFORDABLE AND CLEAN ENERGY; 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE; 11 SUSTAINABLE CITIES AND COMMUNITIES; 12 RESPONSIBLE CONSUMPTION AND PRODUCTION; 13 CLIMATE ACTION; 15 LIFE ON LAND; 17 PARTNERSHIPS FOR THE GOALS

TIMELESS CONNECTIONS

We have come a long way from our humble beginnings

And built a brand that is recognised worldwide for its timeless quality

As we grow, we asked ourselves what it will take to remain timeless

We realised it must begin with sustaining our precious connections

With people, with the world, with nature

These connections chart a course towards sustainable development

Empowering us to brave through headwinds

And remain true to the reasons for our existence



CONNECTING LIVES

The lives of our customers, their loved ones, and our employees

Making every flight and every workplace a home away from home

Where they can rest in comfort knowing we are doing all we can to keep them safe

We build and sustain connections with people

Because we believe our journey with them never ends



CONNECTING COMMUNITIES

Forging meaningful, stronger relationships with our stakeholders

From the investing community to our partners, aviation communities, and those we serve

Where we weave Singapore's social fabric with a global shared heritage

We sustain our connections with the world

Because we believe in flying the extra mile, with a higher purpose



CONNECTING THE FUTURE

Implementing solutions to reduce our environmental footprint

Doing all we can to future-proof the wonders of travel

For the adventurers of tomorrow and the generations to come

We sustain our connections with nature

Because we believe in conserving our planet and the destinations we serve



CONNECTING LIVES

The lives of our customers, their loved ones, and our employees

Making every flight and every workplace a home away from home

Where they can rest in comfort knowing we are doing all we can to keep them safe

We build and sustain connections with people

Because we believe our journey with them never ends

GOVERNANCE 103-1 103-2 103-3

We are committed to enhancing long-term value for our stakeholders by maintaining high standards of corporate governance across all levels of our organisation, underpinned by strong leadership, and a robust approach to risk management. Good governance enables us to ensure that the right resources are allocated judiciously to strengthen business resilience and ensure sustainable growth.



LEADERSHIP



RISK MANAGEMENT



VALUES AND PRINCIPLES



COMPLIANCE

OUR MANAGEMENT APPROACH

Key Engagement Activities

Engagement Mode	Frequency
Board Meetings, Board Committee Meetings (BSRC, CETSC, etc.)	Quarterly/As required
Strategy Sessions	Regular
Audits and Assessments	Regular
Training Programmes (Anti-corruption, etc.)	As required
Crisis Management Exercise	Yearly
Internal Broadcasts (Bulletins, Circulars, Magazines, Newsletters, Notices, etc.)	Regular
External, Statutory, and Regulatory Communications	Regular
Orientation Programmes	Regular
Employee Portals	Regular
Whistleblowing Channel	As required
Meetings (Briefings, Dialogues, Forums, Townhalls, etc.)	Regular

Key Policies, Processes, and Systems[12]

- Anti-corruption and Anti-bribery Policy and Procedures
- Anti-modern Slavery and Human Trafficking Statement
- Conflict of Interest Policy
- Risk Management Framework
- Staff Regulations
- Suppliers' Code of Conduct (SCOC)
- Whistleblowing Policy

SIA's Ambitions

We seek to maintain high standards of corporate governance, professionalism, integrity, and commitment at all levels, underpinned by strong internal controls and risk management systems.

Target	Due	Status
At least 95% of our employees[13] to complete the anti-corruption web-based training by the due date, annually	Yearly	Achieved

FY2021/22 in Numbers

96.7%
of employees completed the anti-corruption training

0
incidents of corruption involving employees or business partners

0
significant fines or non-monetary sanctions for non-compliance with environmental, health and safety laws and regulations

Supporting the UN SDGs



[12] *Please refer to pages 70 to 89 of the FY2021/22 SIA Annual Report.*
[13] *Our target excludes line pilots and cabin crew, as they do not need to enter into transactions on behalf of the Company in the ordinary course of their work.*

LEADERSHIP

The SIA Board of Directors and Management Committee play a crucial role in furthering SIA's sustainability agenda. They drive conversations around the things we can and must do to develop sustainably.

Board of Directors 102-22 102-23 102-26

The Board oversees the business performance and affairs of the Company, and provides general guidance to management. Its principal functions include charting the Group's strategic direction, guiding management on digitalisation, technology and innovation, reviewing and approving annual budgets, reviewing financial plans and monitoring the Group's performance, approving major acquisitions and fundraising exercises, as well as ensuring the Group's compliance with all laws and regulations as may be relevant to the business. The Board recognises the importance of sustainability. It steers the Management Committee in ensuring SIA's long-term value creation is achieved with environmental, social, and governance factors as guiding principles always.

Our Directors come from diverse backgrounds, bringing strong and varied expertise across the fields of business, finance, legal, management, and marketing, as well as environmental and social topics. Our independent directors Ms Goh Swee Chen and Mr Gautam Banerjee also serve as President of the Global Compact Network Singapore (GCNS), and Chairman of the Singapore Centre for Social Enterprise Ltd (raiSE), respectively.

Name of Director	Position Held on the Board	Nature of Appointment	Date of First Appointment to the Board	Date of Last Re-election as Director
Mr Peter Seah Lim Huat	Chairman	Non-executive / Independent	1 September 2015	29 July 2019
Mr Goh Choon Phong	Director	Executive / Non-Independent	1 October 2010	27 July 2020
Mr Gautam Banerjee	Director	Non-executive / Non-Independent	1 January 2013	29 July 2021
Mr Simon Cheong Sae Peng	Director	Non-executive / Independent	1 June 2017	27 July 2020
Mr David John Gledhill	Director	Non-executive / Independent	1 September 2018	29 July 2019
Ms Goh Swee Chen	Director	Non-executive / Independent	1 January 2019	29 July 2019
Mr Dominic Ho Chiu Fai	Director	Non-executive / Independent	1 May 2017	29 July 2021
Mr Hsieh Tsun-yan	Director	Non-executive / Non-Independent	1 September 2012	27 July 2020
Mr Lee Kim Shin	Director	Non-executive / Independent	1 September 2016	29 July 2021
Ms Jeanette Wong Kai Yuan	Director	Non-executive / Independent	1 June 2021	29 July 2021
Mr Yeoh Oon Jin	Director	Non-executive / Independent	1 August 2021	Not Applicable

Further information on our Board of Directors, Board Committees, and policies to ensure Board diversity and independence are available on pages 72 to 77 of the FY2021/22 SIA Annual Report.

RISK MANAGEMENT

Identifying, managing, and responding to risks while capitalising on potential opportunities allow us to remain agile and make informed decisions to achieve our strategic objectives.

Risk Management Framework

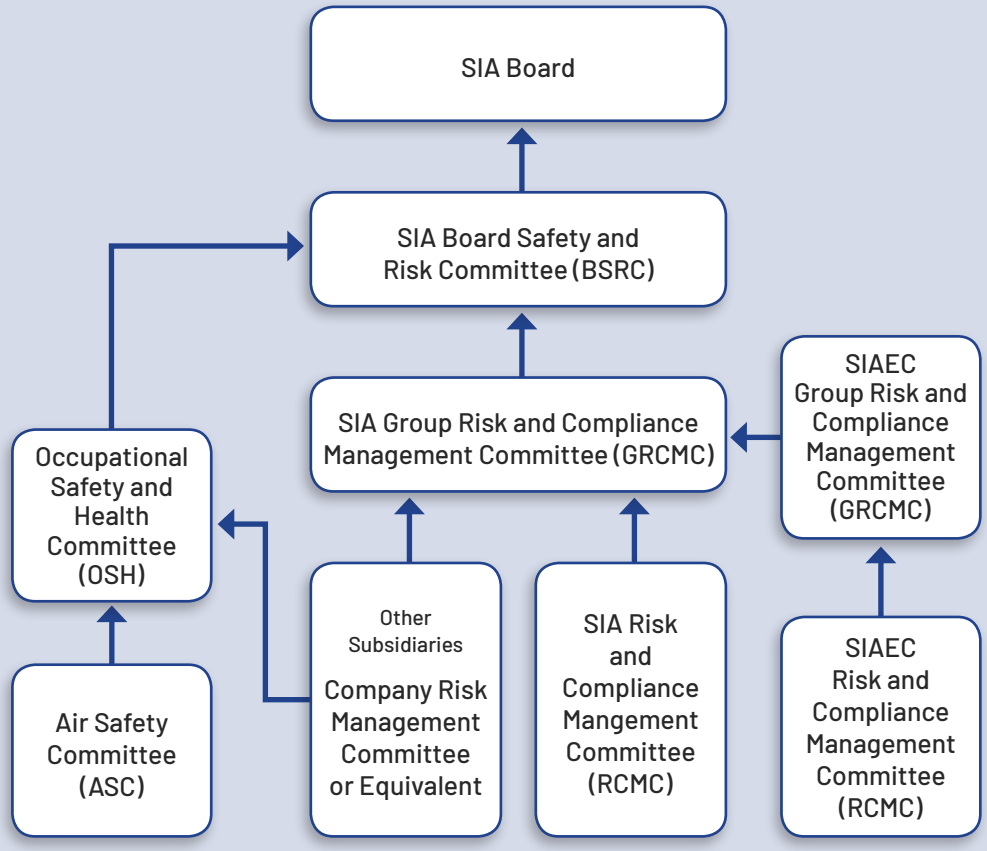
The effective management of risks and opportunities is integral to ensure operational resilience and growth of the business, due to the dynamic nature of commercial aviation business operations, and the continually evolving risk landscape.

To this end, we have a formalised Risk Management Framework, which encompasses a governance and reporting structure, risk assessment process, as well as a set of risk management principles, policies, and guidelines on Enterprise Risk Management, Business Continuity Management, and Third Party Risk Management. This framework is complemented with activities that run throughout the year, involving all levels of staff and the SIA Board, to ensure a sound system is in place to manage risks, where controls are implemented, regularly reviewed, and tested to validate their effectiveness and relevance.

As part of SIA's risk management, all employee with roles up to the Vice President level are assessed for sensitivity risks on a biennial basis. This is part of the Rotation of Sensitive Positions (ROSP) framework, and a policy review is conducted every four years.

More information on SIA's Risk Management Framework, Board of Directors, Board Committees, Risk Management Committee, and risk management functions can be found on our website.

GROUP RISK GOVERNANCE AND REPORTING STRUCTURE 102-30



Risk Management Department

We want to instil a healthy culture of risk-awareness for effective and efficient management of risks at all levels in the organisation. To achieve this, our Risk Management (RM) department dedicates resources to reach out to all levels of employees through targeted communications and engagements.

Continual training is another key element to equip our employees with the relevant knowledge and the right mindset to manage risks. The RM department developed an interactive web-based training module, which is mandatory for all ground employees to complete once every two years.

Business Continuity Plans (BCPs) are also tested regularly and independently verified to assess employees' readiness in responding to disruption scenarios in key operational functions.

Furthermore, the RM department proactively identifies and facilitates opportunities for collaboration across different functions and the SIA Group of companies, including joint reviews of risks and integrated tests of BCPs for risk events that have extensive and multi-disciplinary impact.

RISK MANAGEMENT (CONTINUED)

Crisis Management

Prudent crisis management enables SIA to manage major threats to our business through a coordinated and professional response. Our Crisis Management Manual sets out the procedures that guide our crisis response. It contains processes for our functional groups, and broadly describes the policies and procedures that enable our head office and station crisis appointment holders to manage a crisis globally. The manual has been prepared in accordance with the CAAS Air Navigation Regulations (ANR), family assistance laws, and regulations governing aviation accidents.

We remain vigilant in this evolving global landscape. In FY2021/22 measures were implemented across our operations to ensure the health and safety of all our stakeholders, as well as our operational and economic resilience.



VALUES AND PRINCIPLES 102-16 415-1

Our values and principles guide us in the way we work with our stakeholders, and how we conduct ourselves in the things that we do.

Our approach to ensuring ethical business conduct internally and along our supply chain is enforced through our policies, including our anti-bribery policy, whistleblowing policy, and conflict of interest policy. We expect the highest standards of integrity from our employees, business partners, suppliers, contractors and agents, and list our commitment and whistleblowing channels on our website. Our suppliers are required to include SIA's Suppliers' Code of Conduct (SCOC)[14] in our contracts, unless a waiver is granted by Vice President Sustainability or his/her alternate after a review is conducted.

As the national carrier of Singapore, SIA works closely with the government, policymakers, and regulators to help shape effective and comprehensive policies and regulations. We also advocate to stakeholders indirectly through our participation in industry and trade associations or coalitions such as AAPA, IATA, and Star Alliance. SIA does not make any contributions towards political campaigns, political organisations, lobbyists, or lobbying organisations, and other tax-exempt groups, for the purpose of obtaining, retaining, or directing business to the Company or any other entity. In FY2021/22, SIA did not make any political contributions other than memberships fees to trade associations.

CORE VALUES

Corporate sustainability begins with our core values. We also take a future-fit, principles-based approach in the conduct of our business.

EXCELLENCE
We strive to be the best we can be. Every time.



CARE
We care for our people and community. Every time.



SAFETY
We put safety at the core of everything we do. Every time.



INTEGRITY
We go out of our way to do the right thing. Every time.



CUSTOMER-FOCUS
We understand our guests so we can truly delight them. Every time.



TEAMWORK
We work as one team to achieve our goals. Every time.



Supporting the Ten Principles of the United Nations Global Compact

SIA has been a signatory to the Ten Principles of the UN Global Compact since 2018. We believe in building a responsible business, one which operates in ways that meet the fundamental responsibilities in the areas of human rights, labour, environment, and anti-corruption. We align our corporate strategies, policies and procedures with the Ten Principles, and strive to uphold our responsibilities to our people and our planet.

Employee Code of Conduct

Our Employee Code of Conduct outlines our expectations and compliance required for our employees in their handling and engagements with each other and the organisation. This is to ensure that we foster a well-organised, respectful and collaborative work environment, to bring out the best in our people and working with them to align their values and goals with that of the Company's. All employees are expected to adhere to our staff regulations, which cover aspects such as anti-corruption, competition law, personal conduct, discipline, non-discrimination, and personal data protection. These staff regulations are published on our corporate intranet, and are appended to all letters of offer to new hires, who are expected to read and acknowledge the contents during their onboarding process. We have an established disciplinary inquiry process to handle cases in the event an employee violates the staff regulations. Such proceedings are recorded, and a summary report of each inquiry is submitted to Senior Management. Our staff regulations are also reviewed regularly by our Human Resources Division and Legal department to ensure continued relevance. Changes are communicated to all employees in a timely manner for compliance. Grievance mechanisms for employees are detailed in our Collective Agreements. Our labour policies relating to child labour, forced or compulsory labour, human rights, as well as diversity and equal opportunity are in compliance and alignment with the Ministry of Manpower's (MOM) Employment Act in Singapore.

[14] *Please refer to page 97 for more information on the SIA Suppliers' Code of Conduct.*

VALUES AND PRINCIPLES (CONTINUED)

Anti-corruption 205-2 205-3 PR-10

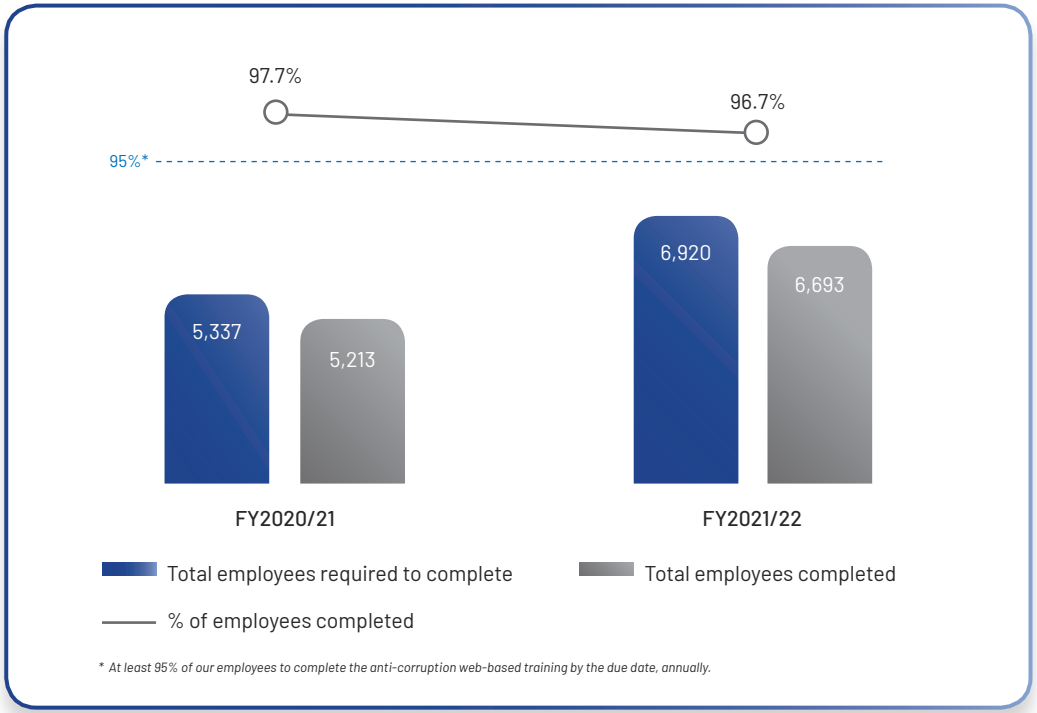
SIA has a zero-tolerance stance on corruption. Incidents of corruption can cause serious damage not only to our organisation and our stakeholders, but also to the communities in which we operate. It has a potentially crippling effect on global sustainable development efforts, which further underscores the importance of SIA working with stakeholders throughout our value chain to drive anti-corruption efforts. As part of the SIA Group, all employees, officers, and directors of our subsidiaries are expected to comply with the SIA Group's Anti-bribery and Anti-corruption Policy and Procedures under our employee regulations.

In FY2021/22, there were zero confirmed incidents of corruption involving our employees or business partners. There were also no legal cases of corruption brought against the Company.

Employees undergo a mandatory anti-corruption web-based training annually, and are assessed on their knowledge and understanding at the end of the course. Of the 6,920 SIA and Scoot employees required to complete the anti-corruption training in FY2021/22, 6,693 (96.7%) employees completed it.



Completion of Anti-corruption Training[15]



* At least 95% of our employees to complete the anti-corruption web-based training by the due date, annually.

0
cases of corruption brought against SIA

96.7%
completion rate for SIA and Scoot employees required to complete the anti-corruption training

[15] Number of employees completing anti-corruption training covers SIA and Scoot's global operations, since SilkAir has been fully integrated into Singapore Airlines in FY2021/22. Please refer to the Appendix for details on reporting boundaries.

VALUES AND PRINCIPLES (CONTINUED)

Conflict of Interest

Our policy on conflict of interest requires employees in a conflict of interest situation, or in one which could potentially lead to a conflict of interest, to report the matter immediately. The policy also requires all employees to make a declaration of all actual and potential conflict of interest situations to the Human Resources Division annually.

Anti-modern Slavery and Human Trafficking PR-1 PR-2 PR-4 PR-5

At SIA, we do not condone any form of slavery and human trafficking. We remain committed to combating these risks in our value chain. Our suppliers are selected on the basis of their commitment to our principles, and are required to comply with local labour standards as set out in our SCOC. Those found to be in breach of this code of conduct risk having their supplier contracts terminated.

We also recognise the important role we play in preventing human trafficking, as there is a risk that our airline services could be used by traffickers. We work closely with governments, national law enforcement agencies, and airports in the countries and territories we operate in to ensure that all suspected trafficking on our flights are reported and dealt with appropriately. We are committed to sharing best practices with our peers through IATA's platforms, and believe in the importance of investing resources to train our employees so they can assess and report suspicious behaviour. The full Anti-modern Slavery and Human Trafficking Statement was updated in FY2021/22 to take into account the Australian anti-modern slavery laws, and is available on our website.

Grievance Mechanism 102-17

We have channels for all internal and external stakeholders to raise concerns about possible improprieties in confidence. Our whistleblowing programme and Policy on Reporting Wrongdoing, is communicated to our employees through our corporate intranet, staff regulations, and a mandatory web-based training module. Under the whistleblowing programme, all staff including Management are responsible for reporting any suspected wrongdoing. External stakeholders may report suspected matters of wrongdoing affecting the Company through the channels listed on our website, which include our email at SIAGroup_whistleblow@tipoffs.com.sg, or telephone at +65 3158 1087. The Audit Committee continuously reviews the whistleblowing programme to ensure that it is adequate. All whistleblower reports on suspected wrongdoings are reviewed by the Audit Committee at its quarterly meetings to ensure independent investigation and adequate resolution.

Compliance 307-1 416-2

We seek to do our utmost to conduct our business in a manner that is just and responsible to the society and the environment.

Being compliant with the laws and regulations that govern us helps to foster trust and better relationships with our stakeholders. In FY2021/22, there were no significant fines[16] or non-monetary sanctions for non-compliance with environmental, health, and safety laws and regulations.



0 significant fines or non-monetary sanctions for non-compliance with environmental, health, and safety laws and regulations

[16] *Significant fines refer to those above US$10,000.*

EMPLOYEES 103-1 103-2 103-3

Our success as one of the world's leading airlines is a result of the passion and commitment of our employees. We recognise that attracting and retaining talent is essential to building a resilient and thriving organisation. We invest heavily in our employees to keep them motivated, and provide them with ample opportunities for personal and professional development. We believe we can soar to greater heights by working together.

OUR MANAGEMENT APPROACH

Key Engagement Activities

Engagement Mode	Frequency
Chill Out with CEO Sessions	Quarterly
Community Service Activities	Regular
Engagement with Union Leadership	Monthly
Extracurricular Activities (Arts, Health and Wellness, Sports and Recreation, Social Functions)	Regular
Organisational Climate and Transformation Pulse Surveys	Regular
Internal Broadcasts (Bulletins, Circulars, Magazines, Newsletters, Notices, etc.)	Regular
Safety and Security Week, CEO Service Excellence Awards, Staff-Ideas-In-Action Awards	Yearly
Senior Management Webinars, Divisional Townhalls, Engagement Sessions	Regular

Key Policies and Guidelines

- Collective Agreements
- Broader HR policies and guidelines governing Workforce Planning, Talent Acquisition and Staffing, Total Reward, Talent and Performance Management, Global Mobility, as well as Learning and Development
- Code of Conduct and Staff Regulations
- Policy on Harassment and Grievance Handling Process and Protocols
- Safe Management Measures and Workplace Protocols

Ambitions

We strive to be an employer of choice that:

- Enables and develops our employees to their fullest potential to achieve a highly performing and productive workforce that is future ready.
- Facilitates a work environment that is safe, flexible, nurturing and caters to individual needs and aspirations, including opportunities to contribute back to our communities through volunteer programmes.
- Provides our employees with an enriching experience in their journey with us.

Target	Due	Status
100% completion of ASCEND Fundamentals Module for SIA ground staff[17]	FY2022/23	On track
At least 25% female employees in senior positions (VPs and above)	FY2025/26	On track
At least 25% increase in the number of female pilots, from FY2020/21 levels	FY2025/26	On track

[17] *Target applies to all SIA ground staff worldwide (employed prior to 1 April 2021).*

FY2021/22 in Numbers

1.1 : 1.0
gender ratio (male:female) of employees

70%
of SIA employees completed the assigned Change Management and Digital Innovation Modules as part of the UPLIFT programme

62%
of SIA employees completed the ASCEND Fundamentals Module, exceeding the targeted 60% completion rate for the year FY2021/22

$18.9 million
investment in learning and development of employees

Supporting the UN SDGs



OUR EMPLOYEES[18]

Our success as one of the world's leading airlines is a result of the pride, passion, and commitment of our employees working as one to deliver on our brand promise to our customers.

Strength in Diversity 102-7 202-2 405-1

Singapore Airlines is committed to continue and expand our initiatives to support diversity, equality, and inclusion in the workplace. Our human resources policies, processes, and practices are progressive, and support these important values within the organisation. Our people come from a myriad of cultures and backgrounds. This results in a diversity of views and perspectives, enabling us to strengthen collectively and grow as an organisation. We strive for our people to feel comfortable, included, and valued at the workplace, and in the conduct of their work, regardless of their race, ethnicity, gender, age, beliefs, and other differences. Equal opportunities are given to all employees in the areas of their work assignments, personal development, and progress within the organisation. It is our firm belief that we can channel and leverage our diversity to make our company, our country, and our world a better place. Our aspiration is not only to mirror the diversity of the communities where we operate, but to also work towards a better future in which every person is supported, respected, and treated fairly.

As at 31 March 2022, the SIA Group has 21,973[19] employees (FY2020/21: 23,603 employees), reflecting a 6.9% decrease in headcount from the previous financial year. Of these, Singapore Airlines and Scoot employed 16,328 employees (FY2020/21: 17,565 employees). Female employees account for 48.6% of our workforce, while male employees account for 51.4%. In the SIA Group, 67.0% of employees are Singapore Citizens, with 100% of our Senior Management based in Singapore. Full-time employees account for 99.7% of our staff. In the SIA Group, 23.1% of our employees are under 30 years of age, 58.5% are between the ages of 30 and 50, and 18.4% above the age of 50. Senior Management make up around 0.2% of total employees, followed by 3.4%, 12.1%, and 84.3% for managers, executives, and other employees respectively.

16,328
employees in Singapore Airlines and Scoot

1.1 : 1.0
gender ratio (male:female) of SIA employees

New Hires and Turnover 401-1 COV-19

As of 31 March 2022, the Voluntary No Pay Leave (VNPL) scheme[20] has concluded for all employees. To date, over 6,000 staff have utilised the VNPL amounting to at least 215,500 VNPL days taken. This initiative has helped to reduce our headcount, and facilitated more effective manpower allocation through the redesign of each job role. In February 2022, SIA has resumed recruitment of cabin crew amid rising demand for international travel, and to support future growth plans.

In FY2021/22, Singapore Airlines and Scoot's overall new hire rate[21] increased by 4.8% (FY2020/21: 0.8%), with the new hire rate for male employees at 2.5%, and female employees at 2.2%. In terms of age group, our new hire rate was 2.6% for employees under 30 years of age, 1.9% between the ages of 30 and 50, and 0.2% above the age of 50.

Singapore Airlines and Scoot's overall turnover rate[22] stood at at 11.1% (FY2020/21: 6.6%) with the turnover rate for male employees at 3.8%, and female employees at 7.3%. In terms of age group, our turnover rate was 5.2% for employees under 30 years of age, 5.6% between the ages of 30 and 50, and 0.3% above the age of 50.

SilkAir Integration

As at September 2021, SilkAir has been fully integrated into SIA with all SilkAir ground staff and crew transferred to SIA.

[18] *Please refer to the Appendix on pages 157 to 164 for definitions and methodologies. Due to rounding, percentages presented may not add up precisely to the absolute totals indicated.*
[19] *Includes employees from all of SIA's subsidiaries. Please refer to the Appendix on page 158 for details on reporting boundaries.*
[20] *Please refer to page 30 of the SIA Sustainability Report FY2020/21 for more information on the VNPL scheme and the measures taken to manage the Covid-19 crisis.*
[21] *New hire rate is computed by number of new hires over the number of employees, expressed as a percentage. This can be computed by the respective demographic cuts.*
[22] *Turnover rate is computed by number of turnover over the number of employees, expressed as a percentage. This can be computed by the respective demographic cuts. Due to confidentiality constraints, turnover relates purely to voluntary attrition, and does not include involuntary turnover such as dismissal, completion of contract, etc.*

OUR EMPLOYEES (CONTINUED)



Strength in Our Workforce[23] 102-8 405-1

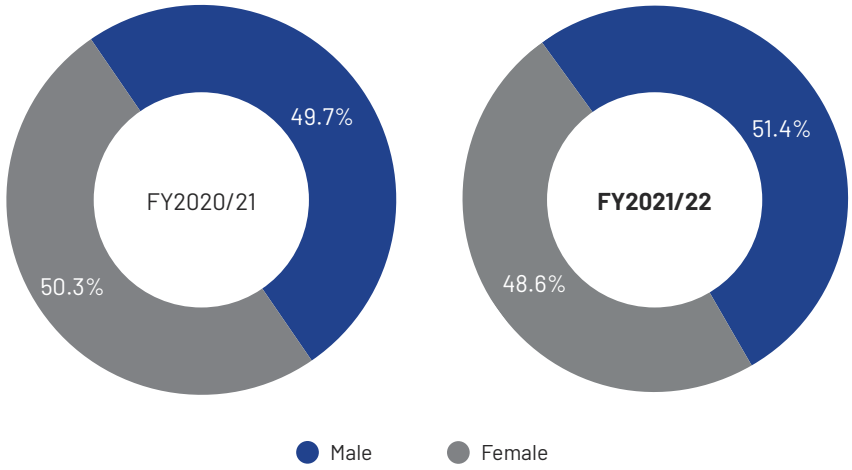
	FY2020/21	FY2021/22
Employees in the SIA Group	**23,603**	**21,973**
Employees, by Subsidiary		
Singapore Airlines	14,956	**14,125[24]**
SilkAir	608	
Scoot	2,001	**2,203**
SIA Engineering Company (SIAEC)	4,332	**3,964**
SIAEC's Subsidiaries	1,356	**1,330**
Tradewinds Tours & Travel	46	**42**
Cargo Community Network	77	**70**
Singapore Flying College	76	**62**
SAGI	3	**3**
KrisShop	100	**119**
Encounters	48	**55**

[23] *Excludes Singapore Airlines staff seconded to other companies but includes staff seconded to Singapore Airlines. Due to rounding, percentages presented may not add up precisely to the absolute totals indicated.*
[24] *In FY2021/22, SilkAir has been fully integrated into Singapore Airlines. Hence, there will not be any data reported under SilkAir.*

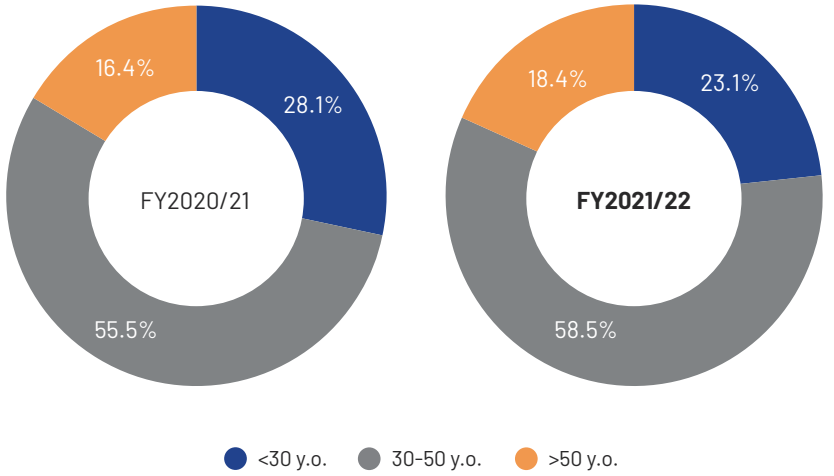
OUR EMPLOYEES (CONTINUED)

	FY2020/21		FY2021/22	
Singapore Airlines and Scoot Employees	**17,565**	**100%**	**16,328**	**100%**
Employees, by Gender				
Male	8,733	49.7%	**8,388**	**51.4%**
Female	8,832	50.3%	**7,940**	**48.6%**
Employees, by Age Group				
<30 y.o.	4,929	28.1%	**3,779**	**23.1%**
30-50 y.o.	9,752	55.5%	**9,550**	**58.5%**
>50 y.o.	2,884	16.4%	**2,999**	**18.4%**
Employees, by Employee Level and by Gender[25]				
Senior Management	25	0.1%	**26**	**0.2%**
Male	21	0.1%	**21**	**0.1%**
Female	4	0.02%	**5**	**0.03%**
Managers	556	3.2%	**563**	**3.4%**
Male	369	2.1%	**376**	**2.3%**
Female	187	1.1%	**187**	**1.1%**
Executives	1,797	10.2%	**1,974**	**12.1%**
Male	967	5.5%	**1,074**	**6.6%**
Female	830	4.7%	**900**	**5.5%**
Other Employees	14,579	83.0%	**13,765**	**84.3%**
Male	7,148	40.7%	**6,917**	**42.4%**
Female	7,431	42.3%	**6,848**	**41.9%**

SIA and Scoot Employees, by Gender



SIA and Scoot Employees, by Age Group



[25] *This is a new disclosure in FY2021/22. As such, the five-year dataset will only include SIA and Scoot's global operations as SilkAir has been integrated into SIA.*

OUR EMPLOYEES (CONTINUED)

	FY2020/21		FY2021/22	
Employees, by Employee Level and by Age Group[26]				
Senior Management	**25**	**0.1%**	**26**	**0.2%**
<30 y.o.	0	0.0%	**0**	**0.0%**
30-50 y.o.	13	0.1%	**13**	**0.1%**
>50 y.o.	12	0.1%	**13**	**0.1%**
Managers	**556**	**3.2%**	**563**	**3.4%**
<30 y.o.	4	0.02%	**1**	**0.01%**
30-50 y.o.	425	2.4%	**411**	**2.5%**
>50 y.o.	127	0.7%	**151**	**0.9%**
Executives	**1,797**	**10.2%**	**1,974**	**12.1%**
<30 y.o.	420	2.4%	**502**	**3.1%**
30-50 y.o.	1,144	6.5%	**1,236**	**7.6%**
>50 y.o.	233	1.3%	**236**	**1.4%**
Other Employees	**14,579**	**83.0%**	**13,765**	**84.3%**
<30 y.o.	4,192	23.9%	**3,276**	**20.1%**
30-50 y.o.	7,918	45.1%	**7,890**	**48.3%**
>50 y.o.	2,469	14.1%	**2,599**	**15.9%**

[26] *This is a new disclosure in FY2021/22 hence, the five-year dataset will only include SIA and Scoot's global operations since SilkAir has been integrated into SIA.*

OUR EMPLOYEES (CONTINUED)

Singapore Airlines and Scoot Employees, by Employment Type (Permanent and Contract) and by Gender	FY2020/21[27]		FY2021/22	
Permanent	**9,252**	**52.7%**	**9,024**	**55.3%**
Male	6,160	35.1%	**6,052**	**37.1%**
Female	3,092	17.6%	**2,972**	**18.2%**
Contract	**8,313**	**47.3%**	**7,304**	**44.7%**
Male	2,573	14.6%	**2,336**	**14.3%**
Female	5,740	32.7%	**4,968**	**30.4%**

[27] *A restatement of total number of permanent and temporary contract employees by gender in FY2020/21 was made after the improvement of Scoot's data compilation methodologies. Please refer to pages 157 to 164 of the Appendix for definitions, methodologies, and reasons for and effect of restatements.*

OUR EMPLOYEES (CONTINUED)

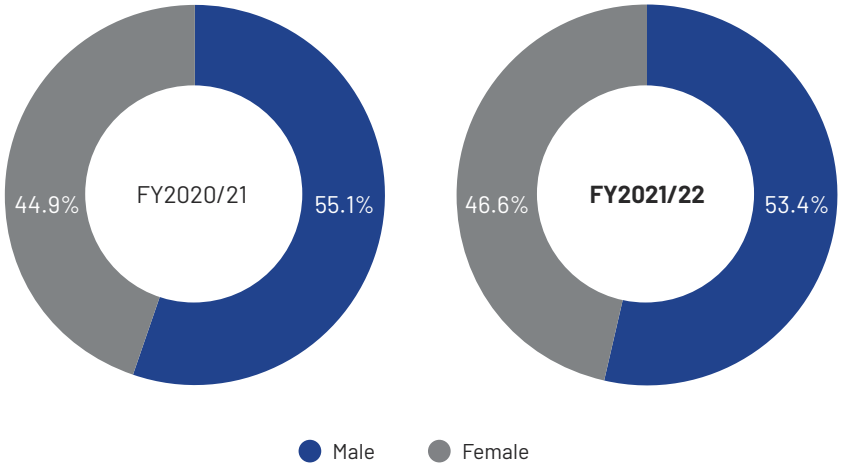
Singapore Airlines and Scoot Employees, by Employment Type (Permanent and Contract) and by Region	FY2020/21[28]		FY2021/22	
Permanent	**9,252**	**52.7%**	**9,024**	**55.3%**
Singapore	6,948	39.6%	**6,908**	**42.3%**
The Americas	138	0.8%	**127**	**0.8%**
Europe	430	2.4%	**407**	**2.5%**
North Asia	590	3.4%	**531**	**3.3%**
South East Asia	494	2.8%	**436**	**2.7%**
South West Pacific	325	1.9%	**311**	**1.9%**
West Asia and Africa	327	1.9%	**304**	**1.9%**
Contract	**8,313**	**47.3%**	**7,304**	**44.7%**
Singapore	8,253	47.0%	**7,228**	**44.3%**
The Americas	2	0.01%	**2**	**0.01%**
Europe	17	0.1%	**18**	**0.1%**
North Asia	29	0.2%	**49**	**0.3%**
South East Asia	1	0.01%	**2**	**0.01%**
South West Pacific	1	0.01%	**1**	**0.01%**
West Asia and Africa	10	0.1%	**4**	**0.02%**

[28] *A restatement of total number of permanent and temporary contract employees by region in FY2020/21 was made after the improvement of Scoot's data compilation methodologies. Please refer to the Appendix on pages 157 to 164 for definitions, methodologies, and reasons for and effect of restatements.*

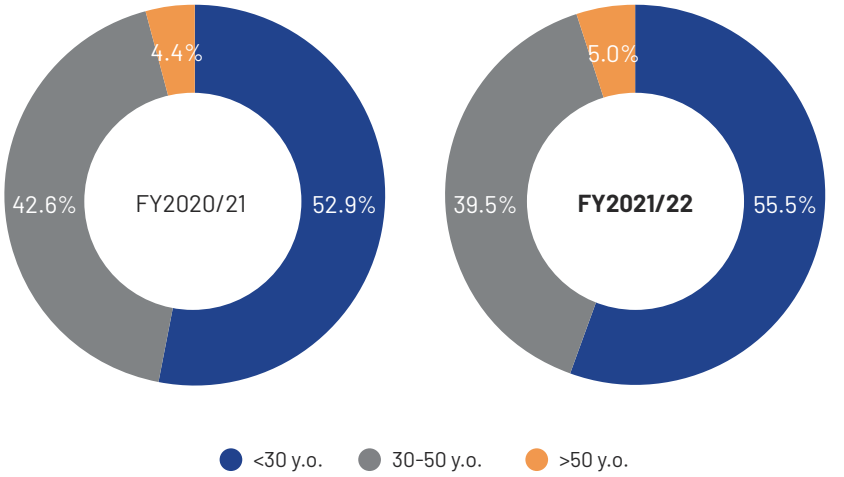
OUR EMPLOYEES (CONTINUED)

	FY2020/21		FY2021/22	
Singapore Airlines and Scoot New Hires	**136**	**100%**	**779**	**100%**
New Hires, by Gender				
Male	75	55.1%	**416**	**53.4%**
Female	61	44.9%	**363**	**46.6%**
New Hires, by Age Group				
<30 y.o.	72	52.9%	**432**	**55.5%**
30-50 y.o.	58	42.6%	**308**	**39.5%**
>50 y.o.	6	4.4%	**39**	**5.0%**
New Hires, by Region[29]				
Singapore	110	80.9%	**675**	**86.6%**
The Americas	4	2.9%	**20**	**2.6%**
Europe	3	2.2%	**12**	**1.5%**
North Asia	2	1.5%	**23**	**3.0%**
South East Asia	13	9.6%	**19**	**2.4%**
South West Pacific	1	0.7%	**24**	**3.1%**
West Asia and Africa	3	2.2%	**6**	**0.8%**
New Hires, by Employee Level[30]				
Senior Management	3	2.2%	**0**	**0.0%**
Managers	12	8.8%	**30**	**3.9%**
Executives	72	52.9%	**455**	**58.4%**
Other Employees	17	12.5%	**294**	**37.7%**

SIA and Scoot New Hires, by Gender



SIA and Scoot New Hires, by Age Group



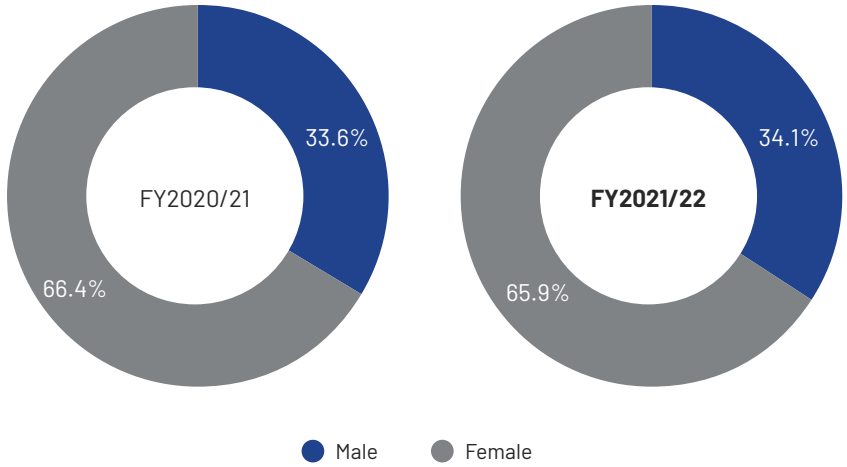
[29] *A restatement of new employee hires by region in FY2020/21 was made due to human transcription error. Please refer to the Appendix on pages 157 to 164 for definitions, methodologies, and reasons for and effect of restatements.*

[30] *This is a new disclosure in FY2021/22. As such, the five-year dataset will only include SIA and Scoot's global operations as SilkAir has been integrated into SIA.*

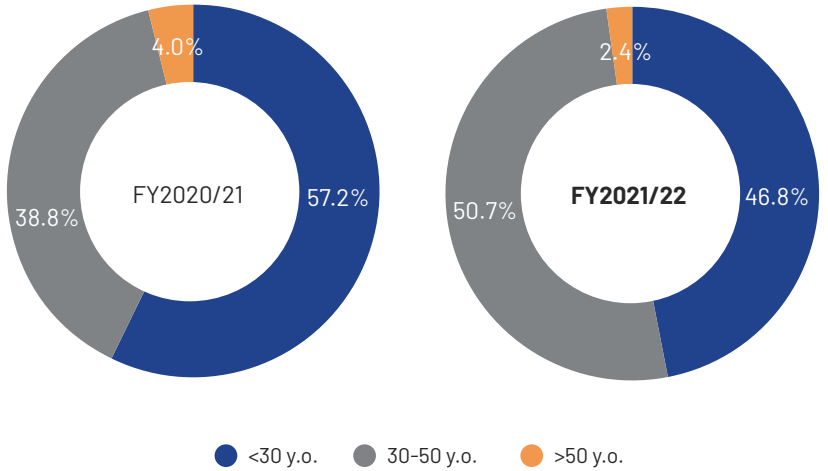
OUR EMPLOYEES (CONTINUED)

	FY2020/21		FY2021/22	
Singapore Airlines and Scoot Turnover[31]	**1,154**	**100%**	**1,809**	**100%**
Turnover, by Gender				
Male	388	33.6%	**616**	**34.1%**
Female	766	66.4%	**1,193**	**65.9%**
Turnover, by Age Group				
<30 y.o.	660	57.2%	**847**	**46.8%**
30-50 y.o.	448	38.8%	**918**	**50.7%**
>50 y.o.	46	4.0%	**44**	**2.4%**
Turnover, by Region				
Singapore	1,043	90.4%	**1,624**	**89.8%**
The Americas	10	0.9%	**28**	**1.5%**
Europe	23	2.0%	**23**	**1.3%**
North Asia	31	2.7%	**40**	**2.2%**
South East Asia	21	1.8%	**46**	**2.5%**
South West Pacific	22	1.9%	**33**	**1.8%**
West Asia and Africa	4	0.3%	**15**	**0.8%**
New Hires, by Employee Level[32]				
Senior Management	0	0.0%	**0**	**0.0%**
Managers	15	1.3%	**44**	**2.4%**
Executives	205	17.8%	**413**	**22.8%**
Other Employees	625	54.2%	**1,352**	**74.7%**

SIA and Scoot Turnover, by Gender



SIA and Scoot Turnover, by Age Group



[31] *Due to confidentiality constraints, turnover relates purely to voluntary attrition, and does not include involuntary turnover such as dismissal, completion of contract, etc.*
[32] *This is a new disclosure in FY2021/22. As such, the five-year dataset will only include SIA and Scoot's global operations as SilkAir has been integrated into SIA.*

EMPLOYEE ENGAGEMENT

Continual engagement with our employees enables us to understand them better. During this challenging period, such engagements allow us to keep our employees motivated and connected. It also allows us to identify and address issues, feedback and concerns, and put in place support programmes quickly and effectively.

Engaging our Employees 102-43 COV-19

We maintain multiple engagement modes and communication channels with all our employees, both local and overseas.

Activities and Events

Community Service Activities
Regular

Demo Day by KrisLab
Regular

Divisional Communications Sessions
Quarterly

Extra-curricular Activities (arts, health and wellness, sports and recreation, etc.)
Regular

Safety and Security Week
Annual

Staff Ideas-In-Action
Regular

Forums and Meetings

Business Meetings
Biannual

Chill Out with Choon Phong
Quarterly

Dialogues, Forums, Townhalls, etc.
Regular

Senior Management Webinars Focusing on SIA's Transformation Programme
Regular

Online Channels

e-learning Platforms
Regular

Employee Platforms (1SQ, SQhub)
Regular

Internal Collaboration Using Microsoft Teams
Regular

Yammer Groups
Regular

Employee Support Portal (resources on Job Support Programme, financial and income tax relief channels, Enrichment Day, mental wellness, vaccination exercise, etc.)*
Regular

** Covid-19 initiative*

Internal Broadcasts

Bulletins, Circulars, Notices, etc.
Regular

Cabin Crew Times
Monthly

CEO Message
Monthly

Fleet e-Newsletters
Biannual

Flight Safety Magazine
Biannual

Hazard Newsletters
Quarterly

Weekly Newsletter
Every Friday

Surveys

Organisational Climate Survey
Biennial

Transformation Pulse Survey
Biennial

We obtain feedback from employees through our Organisational Climate Survey (OCS) and Transformation Pulse Surveys. OCS and pulse surveys enable us to better understand our employees' needs, as well as identify areas of opportunities so that we can deliver a more positive working experience for them. The OCS and pulse surveys are conducted biennially, with the two conducted on alternating years. There has been a strong participation in the Transformation Pulse Survey and OCS conducted in March 2021 and February 2022 respectively. Through the feedback gathered from the two surveys, SIA was able to gain a better understanding on the general satisfaction levels and employees' sentiment towards certain changes within the company.

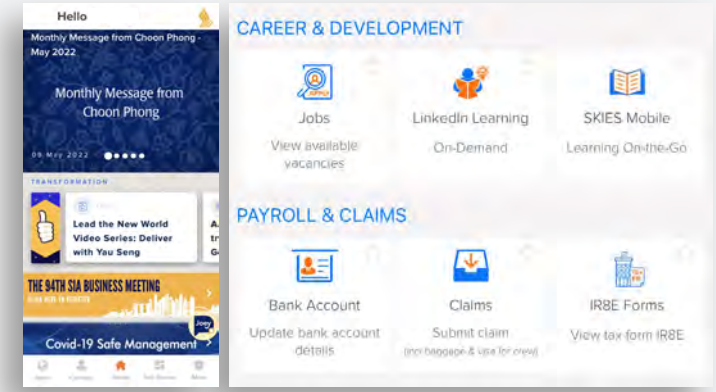
In FY2021/22, 82% of SIA employees participated in the OCS, demonstrating a 14% improvement in participation rate as compared to the previous survey. The organisation attained an engagement rate of 85%. Out of all the staff who participated in the OCS, 92% of them are proud to work for SIA.

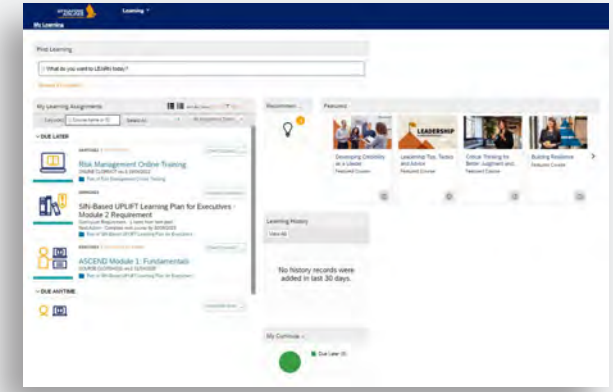
Scoot rolled out a company-wide employee pulse survey in March 2022 to better understand the work challenges that staff were facing during the Covid-19 pandemic. The intention was to gain insights on how receptive staff were toward ongoing initiatives, as well as determine other areas where more support could be extended to them. To facilitate closer engagement with telecommuting employees, Scoot also launched a video series hosted by Scoot's CEO, *Scoot Good News*, to keep staff up to date on the latest updates from the company.

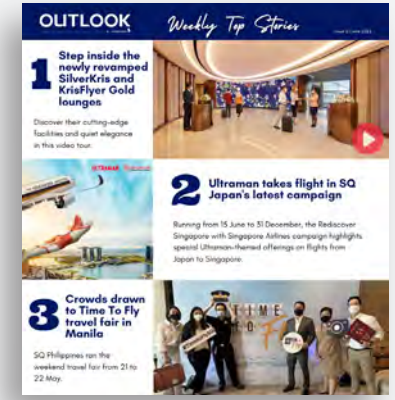
EMPLOYEE ENGAGEMENT (CONTINUED)

Leveraging Technology

We constantly seek opportunities to leverage technology and new digital tools to better connect with our employees, while providing them access to functions that enhance their overall experience with us anytime, anywhere.







1SQ and SQhub, SIA's One-stop Employee Mobile App and Employee Portal

Launched in February 2018 as part of SIA's digital transformation journey, 1SQ was designed to provide our employees with on-the-go access to the latest news, corporate deals, and the ability to perform self-service functions such as leave submissions and travel requests. As at 31 March 2022, over 92% of Head Office staff in Singapore are actively using the mobile app. With feedback from employees, 1SQ has improved progressively via an iterative process. Similarly, SQhub was launched in September 2020 as a centralised platform for management and company messages, as well as news about employees to establish effective communication within the organisation.

SKIES e-Learning Platform: Learn Anytime, Anywhere

Globally, SIA employees have access to courses on the SKIES e-learning platform, which hosts over 13,000 bite-sized learning modules from our e-library. With the launch of SKIES on Mobile since FY2019/20, all SIA employees are empowered to take charge of their learning and development through distance-based learning on-the-go.

Internal Communications: Thinking Outside the Box

Internal communications at SIA have evolved over the past year to include more digital platforms and new media elements. These encourage SIA employees to not only read about the latest company news, but to also engage with them.

The monthly Outlook publication ceased its run in early 2021, and was replaced by daily news updates on various internal digital platforms like 1SQ and SQhub, as well as Yammer, which offers an interactive platform for sharing employee feedback.

A weekly digest of curated top stories is also sent out via email to relay news of interest at a glance. In addition, the Internal Communications team is making greater use of video stories and other forms of visual storytelling to drive engagement across the SIA network, including among employees in Singapore, overseas stations, and our subsidiaries.

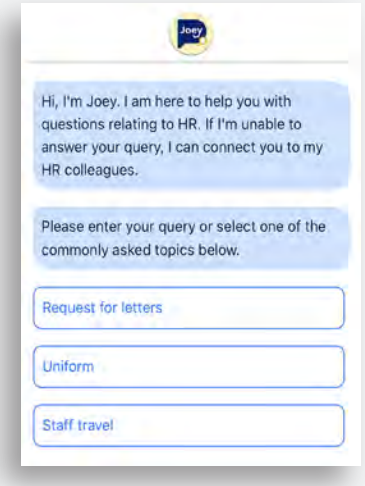
EMPLOYEE ENGAGEMENT (CONTINUED)

Ozy and Joey, Transactional Chatbots for Employee Messaging Support

Ozy is a transactional chatbot on Scoot's employee messaging app that was launched in September 2020 to handle common employee transactions such as annual leave, contact detail changes, and flexi-benefit enquiries on-the-go. When the national vaccination exercise opened to aviation sector workers in Singapore, Ozy was used to organise registrations and send appointment reminders to employees. It also allowed them to conveniently upload records of their vaccination certificates via Ozy as a company policy. As at March 2022, Ozy has resolved over 9,800 cases with a 100% success rate.

In a bid to further improve the employee experience and provide more self-service capabilities, SIA launched its own chatbot, Joey, in April 2021. Joey is SIA's first chatbot developed entirely in-house leveraging Smart Search technology that can assist staff with HR-related queries. Joey was further enhanced through integration with Google Dialogflow, which makes it more interactive. Since the launch of Joey, there has been an average of more than 1,200 queries each month. New HR content has also been added so that Joey can answer HR-related queries with greater clarity. Users are also prompted with commonly asked topics, links to relevant sites and resources, as well as the option to escalate their queries directly to the HR team, and even give valuable feedback so that Joey can be continuously improved.







ScootToWellness, Scoot's Online Employee Platform Group COV-19

In FY2020/21, to care for employees' well-being, curated content on self-care and mental health was published on ScootToWellness, Scoot's online employee platform group, so that employees could learn about caring for their mental, physical, social, and financial health during the pandemic. Employees who needed more support to cope with changes brought forth by the pandemic were also encouraged to seek guidance from experienced counsellors from Scoot's appointed medical partner, Raffles Medical Group, at no additional cost.

SIA's Employee Support Portal

Through the Employee Support Portal, SIA employees can choose to complete a company-organised instructor-led online course, online learning via SKIES, LinkedIn Learning, or learning via other training resources (Tableau, SkillsFuture, self-funded higher education, etc.). Apart from learning and upskilling, SIA also introduced mental wellness programmes and organised regular talks for employees, given the importance of this issue during this especially challenging time as employees helped the Company to navigate the crisis. To date, 13 mental wellness talks, as well as training sessions have been held on how to identify and manage colleagues under stress at the workplace.



EMPLOYEE ENGAGEMENT (CONTINUED)

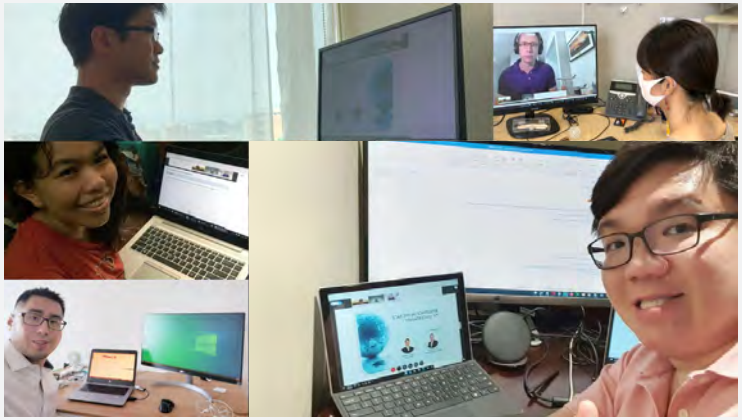
Leveraging Digital Technologies for Employee Engagement in the New Normal COV-19

We believe that our employees thrive when they feel connected with the Company and trust that they can make a difference to the organisation. During the Covid-19 pandemic when many of our employees were working remotely, we leveraged technology to continually engage them to keep our SIA spirit strong. These engagement activities include:

Regular Virtual Webinars with Senior Management

We launched a webinar series titled *Lead The New World*, which provided updates to employees on the current state of affairs in the Company and the recovery and growth strategy. Post-webinar surveys showed a 93% satisfaction rating, which helped to show that employees found the sessions engaging and useful.

Online crew engagement sessions were also held for SIA cabin crew. Topics covered included being a leader in a post-Covid world, SIA's new digital initiatives, as well as the vaccination exercise for Singapore's aviation industry. From July 2020 to December 2021, SIA held 12 engagement sessions, with an average of 977 employees participating in each session. Post-event surveys also indicated a high level of satisfaction with the content. Participants appreciated hearing directly from management and gained a better understanding of company processes.



Series of Senior Management Videos

In FY2021/22, a new video series featuring senior management was launched to focus on key initiatives that will reinforce our position as a global leader in the airline industry. The series featured seven management leaders across the organisation, focusing on what their teams have been working on and the learning points gleaned from the pandemic.

Chill Out with Choon Phong

SIA's CEO Goh Choon Phong continued to hold quarterly chill out sessions with employees during the year in review. In these sessions, the latest developments of the Company are shared, while staff can raise questions or provide an update on the initiatives helmed by their respective teams.

During the pandemic, physical chill out sessions were converted to virtual chats. Employees from all profiles such as ground staff, crew, pilots, and overseas staff can now tune in, making for a good conversation with different views represented. These sessions provide an open two-way communication channel between the management and employees.

In FY2021/22, four sessions were held in May, August, November 2021, and March 2022.



EMPLOYEE ENGAGEMENT (CONTINUED)

CASE STUDY

Employee Engagement: Fostering Innovation and Ideation Through Staff-Ideas-in-Action (S-I-A) and KrisLab Awards

The inaugural Staff-Ideas-in-Action (S-I-A) is an in-house staff suggestion scheme that started in 1969 as a platform to challenge employees to review their work processes and submit creative ideas to enhance revenue, reduce costs, promote efficiency, and improve on intangibles such as safety and brand image. Turning some of these digital ideas into reality was the next natural step for SIA as part of its transformation journey. KrisLab, which was established in 2018, has been the ideal conduit for that to happen.

Over the past few years, we have seen active participation from staff across the SIA Group, including SIAEC, Scoot, KrisShop, Tradewinds, and Pelago. In FY2021/22, the S-I-A scheme received more than 4,600 idea submissions and achieved a significant saving of $5 million. To celebrate this spirit of innovation, eight S-I-A awards and six KrisLab awards were given out during the virtual ceremony held on 22 November 2021, which saw 250 participants from around the world.

Some of those recognised by the S-I-A committee were Senior Manager Technical Services (Fabrication and Repair) Sito Wai Seng, who won Top Suggestor. West Asia and Africa were crowned Region of the Year, while Engineering Division picked up the Division of the Year award. Examples of winning ideas include Makan+, a brand-new restaurant reservations platform that allows users to earn and use KrisPay miles to offset purchases at Kris+ partner outlets worldwide, as well as a Crew Announcement Training app, which uses speech recognition technology and Artificial Intelligence to achieve greater efficiency and objectivity in enhancing the cabin crew's announcement-making proficiency.







EMPLOYMENT PRACTICES PR-3 PR-6 102-35

We believe in investing in our employees' well-being and development, keeping them meaningfully engaged, and ensuring that they have fulfilling careers with us.

Equal Remuneration

SIA believes that employees are our greatest asset and continuously strive to ensure that employees are rewarded through fair and merit-based remuneration package, regardless of gender. As such, our gender-agnostic remuneration system focuses on the performance of employees and considers the following factors:

- Depth of knowledge and application
- Level of problem solving and innovation
- Interpersonal and communication skills
- Organisational and personal impact
- Financial scope and accountability

In August 2021, the Group reinstated the monthly variable component (MVC) to the basic salary of all Singapore-based staff. The salary cut was initially implemented as an effort to manage expenditure during the Covid-19 pandemic, starting with the management team before it was extended to all employees. In April 2022, the Group announced that the basic salaries of SIA pilots will be progressively restored over a nine-month period ending on 31 December 2022. Moving forward, SIA will continue to work towards a gradual restoration of salaries for pilots and senior management as we embark on a recovery trajectory.

Further information on our remuneration policies are available on pages 78 to 85 of the SIA Annual Report FY2021/22.

Collaborative Partnerships with Unions 102-41 COV-19

We adopt a collaborative partnership approach when engaging with our unions. Our management and union leaders work closely, meeting each other monthly to address matters pertaining to the workforce and sharing updates on initiatives aimed at developing our employees' careers and competencies. Terms and conditions of service, which are encapsulated within the respective Collective Agreements, are structured and developed in a collaborative manner. Progressive wage increments that are benchmarked against the company's performance, productivity growth, and market conditions are also discussed with our unions annually.

Air Transport Executive Staff Union (AESU) is a representative body for about 40% of SIA executives.

Air Line Pilots Association Singapore (ALPA-S) is a representative body for about 97% of SIA pilots.

Singapore Airlines Staff Union (SIASU) is a representative body for about 79% of cabin crew and associates.

Approximately **98%** of SIA employees are covered by collective bargaining agreements[33]

[33] *Number of SIA employees covered by collective bargaining agreements refer to Head Office staff only.*

EMPLOYMENT PRACTICES (CONTINUED)

As part of our commitment to build a future-ready workforce, a Company Training Committee comprising management and union representatives from AESU and SIASU has been set up to review training needs of our employees in view of industry transformation. Our union leadership has also taken a progressive approach and supported us over the years in launching initiatives and programmes to enable our employees to be better prepared for the future.

SIA Chairman Peter Seah and senior management have quarterly lunch meetings with union leaders to share the Company's business outlook and discuss workforce matters. Union leaders are also invited to company functions such as retirement and long service award ceremonies, as well as SIA's business meetings, among others. From 1 January 2022, SIA amended the retirement and re-employment ages for eligible Singapore-based staff to 63 and 68 respectively, six months ahead of legislation changes. This means that staff turning 62 years old from 1 January 2022 will retire a year later, and those who are in their final re-employment contract at age 67 will get another year of re-employment, subject to them meeting the eligibility criteria.

Notice Periods 402-1

Our Collective Agreements and employment contracts set out the minimum notice period for the termination or resignation of our employees. For Singapore-based employees, the notice period is three months for confirmed cabin crew, pilots, executives and managers, and one month for confirmed ground associates. For overseas employees, the notice periods vary in alignment to local regulations and union agreements.

Returning Crew Scheme for Cabin Crew

As the safety of our employees is paramount to SIA, we do not permit pregnant crew members to carry out duties on flights. Under the Returning Crew Scheme, crew members are encouraged to return to their flying duties after delivering their child, subject to a pre-set list of criteria. Cabin crew members can return to their duties with minimum disruption to their careers, while retaining their seniority. To raise awareness of the scheme, talks are conducted twice a year with healthcare professionals for crew who left the company due to their pregnancy.

Career Transition Programme for Cabin Crew 404-2

We have in place a career transition programme, which has been specially developed for our cabin crew who wish to continue working beyond their retirement outside of the company. A Career Transition Guide and a list of career opportunities are shared with them six months before retirement. Potential employers will also be informed so they may get in touch with retiring crew members. The guide offers useful links, strategies and tools to support our cabin crew in developing an effective plan so that they can make informed decisions for their career. Preparation of good cover letters, tips for interviews, contacts for counselling, as well as worksheets for self-evaluation, are included in the guide. Financial management courses are also available to help crew make sound financial decisions in preparation for retirement.

Employee Benefits 401-2 401-3

Our employees' well-being and work-life integration is important to us. SIA employees enjoy complimentary return tickets to any destination in our network. Complimentary tickets are also available to employees with spouses and children. Scoot employees are similarly offered up to five complimentary tickets to any destination, which can be used for up to five nominees including family and friends. We have flexible work arrangements such as a work-from-home schemes and staggered working hours, where operationally feasible. Our employees and their eligible dependants are also covered by a range of medical benefits that include out-patient, specialist, hospitalisation, as well as subsidised insurance benefits, where applicable. Apart from healthcare, other benefits include life insurance and parental leave. Full-time, Singapore-based employees enjoy benefits such as:



Adoption, annual, childcare, compassionate, maternity, matrimonial, national service, paternity, and shared parental leave



Dental, in-patient, out-patient general practitioner, and specialist care



Different tiers of Company subsidies for Group Personal Accident Insurance, Group Term Life Insurance Scheme, and Medical Insurance for dependants of employees



Holiday accommodation subsidies



Staggered working hours, work-from-home scheme, and casual-wear everyday for ground employees based in Singapore

EMPLOYMENT PRACTICES (CONTINUED)

In FY2021/22, SIA and Scoot's overall retention rate and return to work rate of employees who took parental leave increased to 92.8% and 99.4% (FY2020/21: 85.7% and 90.3%) respectively.

	FY2020/21[34]			FY2021/22		
Parental Leave Statistics	Male	Female	**Total**	Male	Female	**Total**
Employees who were entitled to parental leave	2,765	1,343	4,108	2,463	995	3,458
Employees who took parental leave	1,295	1,075	2,370	1,386	810	2,196
Employees who returned to work after parental leave ended	1,285	856	2,141	1,381	802	2,183
Employees who returned to work after parental leave ended and who were still employed 12 months after returning to work	1,232	799	2,031	1,308	729	2,037
Retention rate[35] of employees who took parental leave	**95.1%**	**74.3%**	**85.7%**	**94.4%**	**90.0%**	**92.8%**
Return to work rate[36] of employees who took parental leave	**99.2%**	**79.6%**	**90.3%**	**99.6%**	**99.0%**	**99.4%**

92.8% overall retention rate of SIA and Scoot employees who took parental leave

99.4% overall return to work rate of SIA and Scoot employees who took parental leave

[34] *A restatement of total number of employees who were entitled to parental leave in FY2019/20 and FY2020/21 was made after the improvement of Scoot's data compilation methodologies. Please refer to the Appendix on pages 157 to 164 for definitions, methodologies, and reasons for and effect of restatements.*
[35] *Retention rate is computed by number of employees who returned to work after parental leave ended and who were still employed 12 months after their return to work, over number of employees who took parental leave, expressed as a percentage.*
[36] *Return to work rate is computed by number of employees who returned to work after parental leave ended, over number of employees who took parental leave, expressed as a percentage.*

A FUTURE-READY WORKFORCE 404-2

We believe in the constant development and nurturing of our employees to ensure that they are equipped with new skills and capabilities for the future.

Equipping Our Employees With the Right Skills to Thrive

Singapore Airlines believes that the continuous development and growth of our employees are key to remaining competitive and resilient. To mobilise the organisation to deliver transformation priorities and emerge stronger from the pandemic, SIA has been focused on equipping our employees with the relevant skills and competencies that allow them to be adaptable and prepared for change in a post-Covid operating environment. This allows our employees to remain relevant and competitive, enabling them to be deployed in a manner that meets evolving business priorities.

Continuous Learning

As part of our Transformation journey, the SIA Group strives to inspire passion in our employees by providing opportunities for personal growth. This includes equipping our employees with soft and hard skills, as well as upskilling and re-skilling them to support our Transformation initiatives. To further support the continuous delivery of learning, a new Learning Management System was launched in August 2021, with the aim of providing a consumer-grade employee learning experience to staff globally. Since going live, an average of 42,000 courses are delivered each month, with positive feedback from staff citing a better overall learning experience. We aim to continually reinforce and promote a vibrant learning and innovative culture geared towards empowered and continuous learning. On average, our staff took 5.7 training days in FY2021/22 (FY2020/21: 7.9 days).

Significant resources are invested to develop our employees globally. In FY2021/22, we invested a total of $18.9 million in the learning and development of our employees (FY2020/21: $22.4 million). Over 54,603 ground staff and crew have benefited from the Singapore government's Enhanced Training Support Package (ETSP) for the aviation sector, receiving relevant training via external and in-house training programmes.

Due to a major manpower restructure, which required a one-time reskilling for redeployed employees in FY2020/21, the average training hours were significantly higher in FY2020/21 as compared to FY2021/22. For cabin crew and pilots, the number of operational training was reduced considering the limited air travel during the pandemic. As such, average training days for FY2021/22 were lower as compared to FY2020/21.

Average Number of Training Hours by SIA and Scoot Employees, by Employee Category[37] 404-1

	FY2020/21	FY2021/22
Average Training Hours, by Employee Function		
Ground Staff	51	**37**
Cabin Crew	80	**56**
Pilots	37	**35**

$18.9 million

investment in learning and development of SIA and Scoot employees in FY2021/22

[37] *Training hours are derived based on the assumption that one training day is equivalent to eight training hours.*

A FUTURE-READY WORKFORCE (CONTINUED)

CASE STUDY

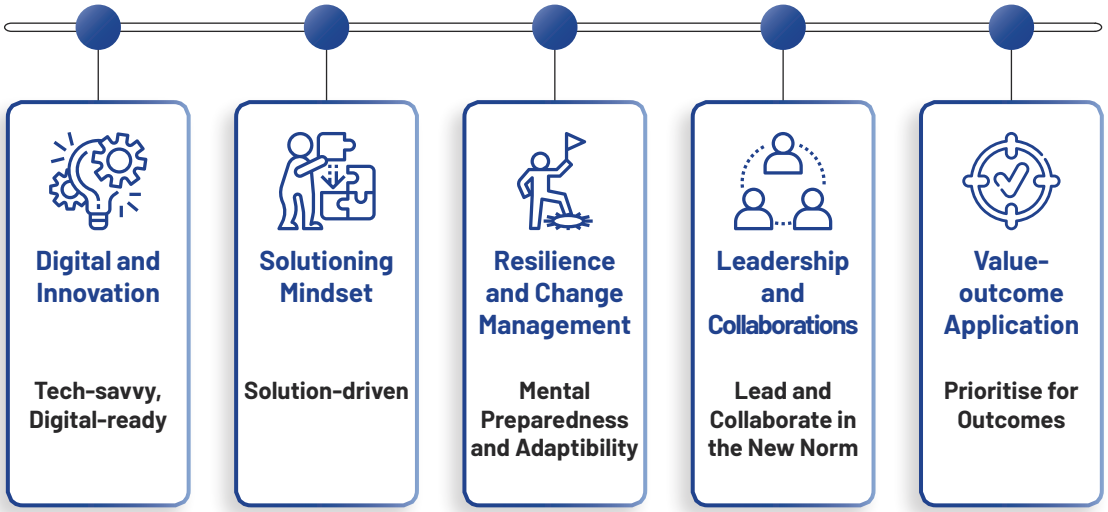
Progress on the Enhanced Training Support Package

As part of the Stabilisation and Support Package and supplementary Resilience Budget, the Enhanced Training Support Package (ETSP) was introduced to help sectors which were directly and severely affected by the Covid-19 pandemic. This initiative was jointly developed by SkillsFuture Singapore, Workforce Singapore and the Civil Aviation Authority of Singapore (CAAS), together with the National Trades Union Congress (NTUC) Aerospace and Aviation Cluster. Its objective is to support air transport companies who plan to send their employees for sector-specific programmes to upgrade their competencies by defraying eligible costs.

Through ETSP and the Singapore OneAviation Reskilling grant offered by CAAS in partnership with NTUC, a total of 54,603 training places were offered to Singapore Airlines staff, with training support received totalling $3.7 million. These training grants support our ongoing skilling efforts to position the Company for business recovery, helping to sustain our competitive edge in the industry.

Upskill Now, Be Future-ready

In April 2021, SIA launched UPLIFT, a two-year holistic upskilling programme focused on five key capabilities critical to ensuring that its employees remain competitive and relevant. The capabilities are: Digital and Innovation, Solutioning Mindset, Resilience and Change Management, Leadership and Collaborations, and Value-outcome Application. The programme aims to equip our people with the knowledge and skills needed for a resilient and future-ready workforce, and to be able to respond in a nimble and flexible manner to a dynamic external environment. As at 31 March 2022, 70% of SIA employees have completed the UPLIFT programme.

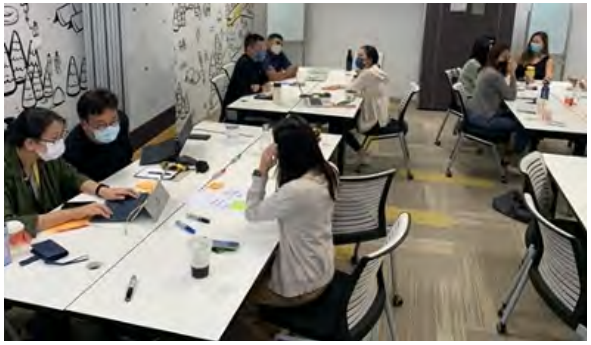


A FUTURE-READY WORKFORCE (CONTINUED)

ASCEND Programme

ASCEND is a company-wide learning experience and community designed to equip our staff with future-ready ways of thinking and working to create opportunities and creatively address real-world needs. The key objective of the programme is to equip our people with the digital toolset, skillset and mindset, and enable new ways of working for innovation and value creation in their day-to-day work. ASCEND leverages Design Thinking, Lean Startup, Agile, and Data-Digital approaches to enable employees with the mindset, toolset and skillset to be open to opportunities, leading meaningful and impactful changes in this rapidly evolving world.







Outcomes of ASCEND Learning Programme and Playbook

Well-equipped Singapore Airlines Staff

Maximise value for customers, users, and the organisation

Consistent Practice of Human-centric and Value-driven Approaches

Spot new opportunities and solve problems in collaborative and creative ways

A Learning Community That Continues to Grow Skills

Help others and the organisation to succeed

ASCEND Learning Programme Modules

Module 1 - Fundamentals

Exploring ASCEND and discovering the ASCEND mindset, skillset and toolkit

Module 2 - Practitioner

Exposure to tools and techniques to put into practice using the ASCEND mindset, skillset and toolset

Module 3 - Adventuring Practitioner

Discovering and practising the art of facilitation and coaching conversational skills to better support others in applying the ASCEND mindset, skillset and toolset

A FUTURE-READY WORKFORCE (CONTINUED)

ASCEND Programme Timeline

Jan 2019

ASCEND Inception

It started when our our Digital Acceleration Unit and Delivery Center at TechSQ initiated a framework for staff to lead SIA's digital transformation

Mar 2019

First runs of ASCEND workshops with Cabin Crew Division

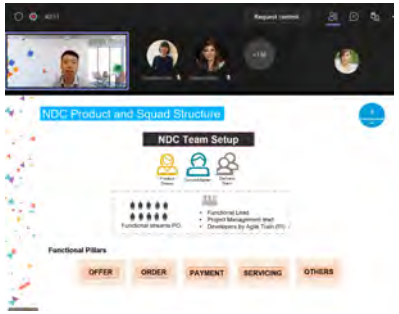
May 2019

Launch of ASCEND Community

Example of community events organised for and also by our community members as part of our ongoing upskilling in digital mindset, skillset and toolset

Jan 2020

Launch of new programme version in London, the UK



Mar 2020

Launch of ASCEND Playbook

The ASCEND Playbook is a reference guide with tools and techniques to support collaborative and co-creative ways for opportunity spotting and problem solving applying a digital mindset.

May 2020

Launch of ASCEND Practitioner Module 2

Feb 2021

Creation of ASCEND Adventuring Practitioner Module 3

Apr 2021

Roll-out of ASCEND Programme

(ASCEND Fundamentals and ASCEND for Sponsors to all SIA staff as part of UPLIFT)

Oct 2021

Launch of ASCEND Fundamentals e-learning on SKIES

Current Performance

200+ impacted initiatives

72 cross-divisional initiatives

14 divisions involved

39% sponsors trained

62% staff trained on fundamentals

466 overseas staff trained

Target

60% completion of ASCEND Module 1 Fundamentals by SIA and SIAEC ground staff by FY2021/22

Status

Achieved with a 62% completion rate

A FUTURE-READY WORKFORCE (CONTINUED)

Key Initiatives from ASCEND

Cabin Crew Digitalisation Journey

The Cabin Crew Division was the first to attend the ASCEND training and to practise applying the ASCEND approaches. One key pillar of SIA's digital transformation framework is to enable a productive workforce and optimise operations. Digital transformation for the Cabin Crew Division is centered around rethinking, improving and optimising processes, from recruiting and training, to daily operations and career development. The Cabin Crew Division reviewed its operations to identify areas for improvements, with the goal of elevating productivity by leveraging mobile, data optimisation, artificial intelligence and IoT. With this approach in mind, the Cabin Crew Division developed a cabin crew digital ecosystem to support the division's goals and to enable and enhance operational processes to support the cabin crew population.

Digital Ecosystem for Cabin Crew

Crew Manager LAUNCHED
- Crew operations tracking and management
- Regulatory compliance

Chatbot ASKme LAUNCHED
- Provide answers anytime, anywhere instead of relying on calls or emails to head office
- Leverages KrisNLP, developed in-house and used for other SIA chatbots

Announcement Training App IMPLEMENTATION SOON
- Originated as a staff-submitted idea: PoC done with a start-up with DIL
- AI-based training and assessment



AI Optimisation for Roster LAUNCHED
- Optimises and automatically updates roster

Crew App LAUNCHED
- Operational duties
- Covid-related action

B.E.S.T LAUNCHED
Beyond Excellent Service through Technology
- Onboard companion app
- Flight-specific passenger preferences and alerts
- Personalised passenger servicing enabling our world-class customer service

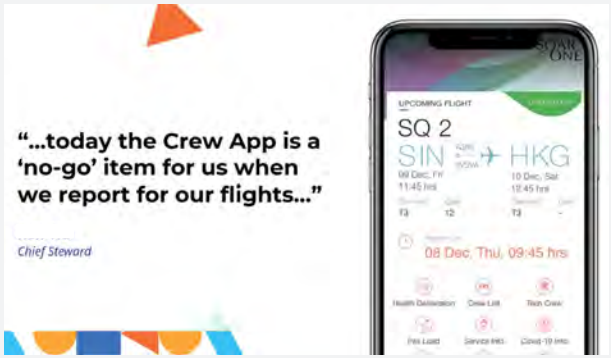
Crew Journey App MVP LAUNCHED
- Data- and AI- driven training prompts
- Empower self-directed learning and development

A FUTURE-READY WORKFORCE (CONTINUED)

Key Initiatives from ASCEND (continued)

Optimising Cabin Crew Planning and Operations

Cabin crew have been retrieving their duty information through a desktop computer using a physical token. This process was inconvenient for cabin crew as they are constantly on the go. As such, the team ran several Design Thinking workshops before developing the first Crew App in 2018.



Empowering Cabin Crew Learning and Development

With operational data available within the Crew App, the Cabin Crew Division looked into co-relating the crew's career path with their training programme and engagement levels. The goal was to empower our cabin crew to take charge of their own learning and development.

In January 2021, SIA introduced the Crew Journey app, which utilises data from an individual crew's past performance, their training footprint, duty patterns, as well as historical work position on board. With the information gathered, AI technology and data models were employed to trigger personalised messages and prompts.

Crew can choose to attend training programmes or speak with their supervisors on how they can improve their work performance.

On the training front, the Cabin Crew Division is in the initial stages of implementing an in-flight announcement training app named 'Elsa', which helps to elevate the announcement fluency of our crew while making training easily accessible.

Enabling Cabin Crew Engagement

The Crew Journey app has enabled virtual get-togethers among cabin crew and their supervisors through online appointments, thereby supporting and driving higher employee engagement during the pandemic.

The ASKme chatbot was launched in June 2021 to enable crew to obtain the answers to their queries quickly and more effectively. The chatbot uses a framework that was developed in-house, KrisNLP, and integrates it with Google DialogFlow to understand crew's intents to provide the most relevant answers.



A FUTURE-READY WORKFORCE (CONTINUED)

Key Initiatives from ASCEND (continued)

The team recognises the importance of initiating conversations with crew and the union to understand their concerns before developing potential solutions and products. In this volatile and complex environment, cabin crew often struggle with the constant regulatory and process changes.

Since the launch of the Crew App, the Cabin Crew Division has redesigned various business processes, prioritising areas with the biggest impact to crew operations from crew check-in to managing Covid-19 vaccination records. This agile approach in implementing changes allows the project team to work in small sprints producing continuous deliverables and improvements, while taking in crew feedback and responding to the quick-changing regulatory requirements.

Digital Transformation Outcomes

Adopting technologies and building digital capabilities are the foundation of the SIA digital strategy. The Cabin Crew Division's digital transformation story has demonstrated value for our employees, our customers, and for SIA's overall business.

Impact in Numbers (over 3 years)

7,100 crew

150 ground staff

Cost Savings of **close to $1 million**

1.4 million man-hours saved

Sustainability **2.8 million** paper sheets reduced

CASE STUDY

SIA Clinches *TechBlazer 2021 Award* for Cabin Crew Digital Ecosystem

In 2021, SIA was one of the recipients of the *TechBlazer Award* for its Cabin Crew Digital Ecosystem as part of SIA's digital Transformation journey. The team took on the challenge of managing cabin crew operations in the face of fast-changing operation regulations and border closures due to the Covid-19 pandemic, along with our crew's limited physical interaction with the rest of the company due to the nature of their role. With the Cabin Crew Digital Ecosystem, our cabin crew can obtain real-time updates and resources to carry out their duties in the Covid-19 environment with greater convenience and ease. A part of this Cabin Crew Digital Ecosystem is the Crew App, which was enhanced to perform certain administrative tasks such as the submission of videos after they have completed their ART tests. It also allows our crew to review changes in flight information, and access their rosters.

This is the first time SIA has received a TechBlazer Award, which is Singapore's top accolade for technological innovation, and aims to provide recognition and endorsement to organisations that have exemplified the spirit of innovation in their development of tech products and services. Organised by the Infocomm Media Develpoment Authority (IMDA) and SGTech, this year's awards included 450 entries, of which 11 were selected for semi-finals, and four entries for finals where SIA emerged as one of the winners in the Best Adoption – Enterprise category.



A FUTURE-READY WORKFORCE (CONTINUED)

CASE STUDY

Learning & Innovation For Everyone (LIFE) 2021

With the aim of driving staff engagement and upskilling the workforce, the biennial Learning & Innovation For Everyone (LIFE) learning event was held in April 2021 and officiated by SIA CEO Goh Choon Phong. Across the three days, a total of 55 activities were held, including talks, workshops, and game shows. Globally, over 3,700 staff worldwide tuned in virtually. Following the opening, eight teams in the final round of SIA's Learn & Hack Challenge brought their training in Tableau, Robotics Process Automation, and PowerApps to life and pitched their business recommendations using these digital tools to a panel of judges. Participants were tasked to pitch a business recommendation to showcase how data analytics, low-code apps and automation could create new opportunities for SIA. The winning team presented their Revenant app, which leveraged the Microsoft PowerApps development platform to aid in the tracking and planning of recurrent aircraft cabin maintenance tasks like cabin deep cleaning and antimicrobial treatment.

The opening of LIFE 2021 also featured the SIA DeepRacer League finals that saw eight racers vie for the top spot in the virtual racing competition. Competitors from across the Group competed against each other by building and training a machine learning model to race autonomous cars through a brand-new circuit for the finals. The winner took home a cash prize of $500.

Hackathon winning teams from the Information Technology Division delivered their innovative application developed over a single weekend, which seeks to address real business problems. The first application is a price watch tool, Smart Alert For Fares, that uses automation to enhance customer experience and engagement during flight booking. The other winning team introduced their digital assistant, Jarvis, that simplifies and speeds up refund processing tasks.







A FUTURE-READY WORKFORCE (CONTINUED)

Leadership and Professional Development

Singapore Airlines aims to further strengthen our key workforce capabilities in line with our transformation efforts to enable the Company to thrive and succeed in an evolving landscape. Following our efforts in previous years to strengthen our leadership and enhance workforce capabilities across all employee grades, employees continue to enjoy access to a suite of leadership and professional development programmes.

We prioritised equipping our employees with future-ready skills and digital capabilities, with an emphasis on building knowledge and skills among ground staff in design thinking, agile methodologies and data analytics. The learning curriculum was delivered using new technologies, such as virtual reality simulations, interactive video technology for custom scenario-based e-learning, as well as the SKIES e-learning mobile app.

Efforts were also made to redesign current in-person instructor-led training (ILT) curriculum to a format that could be conducted virtually. This included the development of new pre-course content, as well as new learning activities and content suited for virtual classrooms such as self-reading material, instructional videos, and online quizzes. Virtual ILTs are also made available to employees overseas, who were unable to participate in the trainings in Singapore due to the border closures.

In November 2021, SIA signed a Memorandum of Understanding (MoU) with the Institute for Adult Learning, and the Singapore University of Social Sciences (SUSS) to enhance the leadership and management capabilities of SIA. The partnership will see the three parties co-develop aviation-related postgraduate programmes, graduate courses, and executive management programmes for SIA. The quality of SIA's in-house trainers will also be elevated through the corporate WSQ Advanced Certificate in Learning and Performance (ACLP) programme. In addition, efforts will be made to identify possibilities for joint offering of courses or programmes to SIA and SUSS learners, and co-develop approaches and practices that enhance organisational and workplace learning through efforts in the likes of coaching and mentoring.

Singapore Airlines Academy

In November 2020, SIA launched the Singapore Airlines Academy as a new business to offer training programmes to external businesses and organisations in the areas of service excellence, operational excellence, organisational innovation, and digital transformation. The Academy bases its training curriculum on the Airline's wide range of globally-recognised skills and competencies, and taps on its experienced staff in delivering these programmes. This allows our trainers to remain relevant and to build their own capabilities while contributing to Singapore's larger national upskilling efforts.

The Singapore Airlines Academy has supported clients from a diverse range of organisations from the public and private sectors, including those from healthcare, finance, retail, infrastructure, and transportation. We received high ratings from our clients for both our standard and bespoke programmes, and continue to see strong interest from local and global companies. With over 50 trainers who are seasoned practitioners in their own field, the Academy has been able to offer engaging and insightful learning in various formats. They are drawn from divisions including Cabin Crew and Flight Operations, as well as our corporate departments. Each trainer has more than a decade of service at SIA and are experts in their respective fields. The Singapore Airlines Academy is not just a new source of revenue for the organisation, but also a testament of our people's agility and resourcefulness. What sets the Academy apart is that we live what we teach, as our trainers are also practitioners with extensive frontline and training experience, thereby delivering the SIA standard in our training delivery and content.



A FUTURE-READY WORKFORCE (CONTINUED)

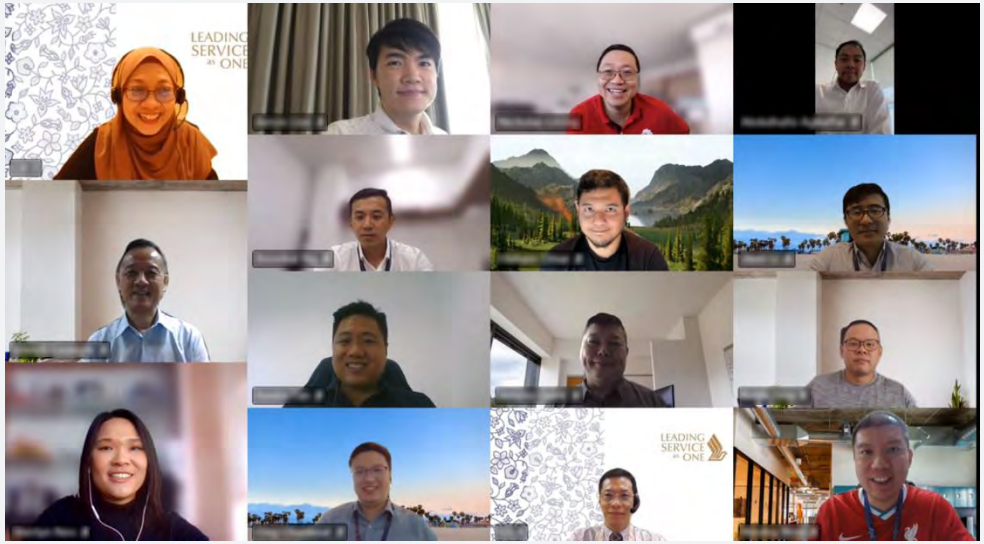
Service Excellence Programmes

For over four years, SOAR as ONE has taken centre stage when it comes to our service beliefs and commitment towards service excellence. Structured service training programmes enable our employees to appreciate and understand their roles in the service chain, and their impact on the overall customer experience. This allows us to align and reinforce a service culture that engenders consistently high service delivery standards across all touchpoints.

While SOAR as ONE is offered mainly to new joiners, Corporate Learning Centre (CLC) recently launched a second flagship programme, named Leading Service as ONE. CLC, together with our service affiliates at Service Culture and Quality (SCQ), believe that frontline staff who have been in service with the company for a few years should be groomed to lead teams and guide juniors in the SIA way. This was also echoed by frontline staff sentiments in the latest Service Climate Pulse Check, conducted just before the onset of the pandemic. Focusing on key roles that frontliners play and incorporating future-proof capabilities in collaborative leadership, service coaching, and human-centred design, the programme seeks to build a pipeline of new service leaders for the Company. A pilot run for the course was held virtually on 12 and 13 January 2022. Participants comprised frontline staff from our various offices in Singapore and around South East Asia, as well as our cabin crew. As at March 2022, a total of 164 frontline personnel worldwide have undergone training.

To drive a strong service culture, service recognition schemes like the annual CEO Service Excellence Awards pay tribute to exemplary individuals and teams for outstanding service, resilience, and service innovation. In FY2021/22, 33 CEO Service Excellence Awards were presented to individuals, teams, and service partner organisations, who went above and beyond the call of duty to deliver exceptional service to our customers and to our community.





A FUTURE-READY WORKFORCE (CONTINUED)

Strategy for Talent Recruitment

Building a sustainable talent pipeline continues to be critical for SIA and helps to ensure that we attract a steady stream of individuals who can meet the current and future needs of the organisation.

Participating in career fairs organised by academic institutions and providing internship opportunities remain important avenues for us to connect with tertiary students, while enhancing our employer branding. In FY2021/22, SIA attended career fairs organised by several local universities in Singapore and offered new internship opportunities to the first batch of students from the Singapore Institute of Technology's Air Transport Management degree programme. Our internship arrangements with Information Technology schools of the various tertiary institutions continued, and will be ongoing as a talent pipeline for SIA.

My Career Centre and Career Planning Microsite

My Career Centre is a one-stop platform for performance development, talent management and internal job placements. The portal enables employees to have increased visibility of job opportunities within the organisation. When recruitment was put on hold during the pandemic, the portal was used to facilitate internal placements and provide our employees with opportunities to move to other roles within the organisation.

To allow employees to take ownership of their own development, a one-stop career planning microsite was also developed to provide the tools and resources needed to guide employees and their managers in their career development journey. During the development of the microsite, employee inputs were gathered through a series of focus groups for consideration. It contains useful resources for employees to chart their development plan, discover their strengths and areas of development, and identify learning interventions to bridge competency gaps. The site contains a job and functional competency library so that employees can make more informed decisions when planning for job rotations. Managers are guided on how to leverage these resources to provide career planning guidance to their employees through career development conversations.

In FY2021/22, a dashboard was developed to provide HR Business Partners[38] (HRBP) with real time status update on their team's workflow and tasks during the annual performance review. With this live function, HRBPs can monitor and review the completion status of individual tasks and send out reminders whenever needed. The dashboard also allows HRBPs to extract analysis reports to monitor tasks within the department.

Mentorship Programme for Newly Promoted Managers

Talent management and development remains a top priority for SIA, where we focus on building the capabilities of our talents to enable growth and development. One key initiative is our mentorship programme for newly promoted managers, where they will be attached to a senior management leader for a year. The mentorship programme provides mentees with the exposure and learning opportunities to develop their leadership competencies as they step into a higher leadership role and widen their perspective of the Company's business. It also enables the mentors to develop coaching and mentoring skills to help nurture and develop the next generation of leaders.

Pilot and Cabin Crew Training

Before cabin crew can perform their flight duties on board, new cabin crew members must complete a 14-week classroom and on-the-job training programme. Aligned with SIA's emphasis on safety, our crew also undergo training in security, safety, and first aid procedures, which include learning cardiopulmonary resuscitation. Our cabin crew are also equipped with strong communications and customer handling skills to cater to the needs of all of our customers. Beyond the functional skills required for cabin crew to carry out their duties on board, opportunities for self-development are provided through our Self-directed Learning programme. The objective of the programme is to empower our crew to take charge of their development and upgrade their core skillsets with certified professional competencies.

Since 2020, we introduced peer-to-peer learning for our pilots as a means of effecting behavioural change towards self-directed learning in the new norm. Besides mandatory training programmes, developmental programmes for all ranks of pilots were also conducted to enhance their operational and flight skills. We also have a mentoring framework in place to instil our Company's core values and enhance our pilots' competencies by learning from experienced peers.

To facilitate the integration of SilkAir into Singapore Airlines, a customised training plan was developed to equip SilkAir employees with the competencies needed to deliver SIA's service standard known to our customers. The key topics covered include Airport Operations, Baggage Services, Narrow Body Weight and Balance, as well as Dangerous Goods Regulations. Similarly, new SIA cabin crew will have to undergo a core training programme to help them transition smoothly into the organisation.

[38] *HR Business Partners refer to the divisional representatives who drive and engage business on HR initiatives.*

A FUTURE-READY WORKFORCE (CONTINUED)



Scoot

In August 2019, Scoot, the Scoot Tigerair Staff Union, and the Singapore Employment and Employability Institute signed a Memorandum of Agreement for the formation of a Scoot Company Training Committee to plan and introduce skills training initiatives. In FY2021/22, Scoot continued to foster a culture of learning and continual growth among employees through platforms such as:

- Zunos, a digital learning management platform, accessible on desktops and mobile devices to facilitate learning on the go
- Design-thinking workshops to equip employees with the skills to develop customer-centric solutions
- Data analytics courses to raise employees' digital proficiency in data analysis
- Career Skills Awareness workshops on career planning and skills upgrading
- Udemy for Business, an online learning platform which grants employees access to over 3,500 online courses for self-learning
- Bimonthly "Learning Happy Hour" sessions, which provides employees with dedicated time to learn on the Udemy platform
- Annual learning fest from October to December 2020, where all employees including flying crew had access to over 25 virtual talks and workshops themed around digital skills, innovation, personal mastery, and well-being

As a result of the Covid-19 pandemic, Scoot accelerated the digitalisation of regulated training and partnered with the NTUC to roll out home-based virtual learning programmes to retrain and upskill Scoot crew members. Scoot also rolled out a weekly series of online webinars centred on digital, interpersonal, and service skills. The digital skills are essential to ensure crew members are equipped with the relevant skills to accelerate digital projects Scoot will be embarking on. Upskilling programmes crew members participated in include courses such as "SkillsFuture for the Digital Workplace", "Achieve Service Excellence Through the 5Cs" and "WSQ Direct End-to-End Change Management powered by Kotter".

SAFETY

103-1 103-2 103-3

Our priority has always been the health and safety of our customers and employees. At SIA, fostering a strong safety culture is a shared responsibility. It involves all individuals within our organisation, and permeates into the way that we work. We are constantly improving our processes to make them safer. In the face of intensifying geopolitical and societal risks, the onus is on us to remain vigilant and adapt swiftly when there are disruptions.

OUR MANAGEMENT APPROACH

Key Engagement Activities

Engagement Mode	Frequency
Audits and Assessments	Regular
Bulletins and Notices	Regular
Crisis Management Exercise	Yearly
Employee Portals (1SQ, SQhub, SKIES, etc.)	Regular
Evacuation Drills	Semi-yearly
External, Statutory, and Regulatory Communications	Regular
Flight Data Analysis Programme Newsletter	Every four months
Flight Safety Magazine	Half-yearly
Hazard Newsletter	Every four months
Hazard Reporting Programme	Regular
Incident Reporting and Investigation	Regular
Meetings (Associations, Briefings, Townhalls, etc.)	Regular
Safety and Security Week	Yearly
Training Programmes	Regular

Key Policies, Processes, and Systems

- Flight Safety Policy
- Safety and Health Policy
- Security Policy
- Safety Risk Management Policy
- Flight Safety Management System (SMS)
- Occupational Health and Safety Management System (OHSMS)
- Quality Management System (QMS)
- Security Management System (SEMS)
- Various operational manuals of our divisions and departments
- Various safety audits, including Airline Operator Certificate (AOC) Renewal Audit, IATA Operational Safety Audit (IOSA), and Line Operations Safety Audit (LOSA)

Supporting the UN SDGs



SIA's Ambitions

We strive to improve our safety practices, as well as inculcate a strong and positive safety culture within the organisation.

Targets	Due	Status
Conduct an annual Crisis Management Exercise	Every year	Achieved
Review the Departmental and Corporate Risk Register (Operations) once every six months	Every six months	Achieved
Conduct at least two fire evacuation drills for each office location in Singapore annually	Every year	Deferred[39]
Conduct an IATA Operational Safety Audit (IOSA) once every two years	By FY2021/22	Achieved
Conduct a Hazard Identification and Risk Assessment for Workplace once every three years	By FY2021/22	Achieved
Conduct a Line Operations Safety Audit (LOSA) once every five years	By FY2022/23	On track

FY2020/21 in Numbers

100%
of all reported hazards have been investigated and addressed

0
work-related fatalities and high-consequence work-related injuries for employees and key contractors

22
Safety Awards and Safety Citations awarded to employees at Safety and Security Week 2021

[39] *Fire evacuation drills were deferred in FY2021/22 due to safe management measures to mitigate the risk of Covid-19 transmission at workplace.*

SAFETY MANAGEMENT 403-1 403-4 403-7 PR-1

All employees are involved and actively engaged in the review and continual development of our safety programme.

Safety Governance

We have in place an open and effective safety culture that is built on trust and accountability, with clearly defined mandates, roles, and responsibilities. Our safety culture cuts across all levels of our organisation, with leaders inspiring and influencing our employees' attitudes and behaviour toward safety excellence.

EMPLOYEES



Every employee is empowered to be responsible for his or her health and safety, and that of others.

Adherence to Safe Work Procedures

- Every employee must adhere to safe work procedures at the workplace, including the use of protective gear and equipment.

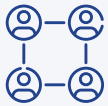
Reporting of Hazards

- Every employee is encouraged to take initiative in identifying and addressing hazards across our operations and workplaces.

Reporting of Incidents and Accidents

- Every employee is responsible to report any incident, accident, near miss, or dangerous occurrence.

DIVISIONS



Every division is responsible for its safety management system, including its processes, procedures, and allocation of resources.

Safety Action Groups (SAG)

- Comprises representatives from relevant departments in the division to address safety issues and performance within its functional responsibilities.

Safety Management System (SMS) Coordinators

- Appointed to facilitate each division's SMS activities, and function as the secretariat for their respective SAGs.

Occupational Safety and Health (OSH) Coordinators

- Appointed to ensure the safety and health of all stakeholders at the workplace.

EXECUTIVE FORUMS



Our Safety Management Systems are regularly reviewed by our Board of Directors and Management to ensure its suitability, adequacy, and effectiveness. The key executive forums are:

- Board Safety and Risk Committee (BSRC)
- Management Committee (MC) Forum
- Group Occupational Safety and Health (OSH) Committee
- Group Security Committee (GSC)
- Crisis Management Group (CMG)
- Air Safety Committee (ASC)
- Corporate Operational Quality Management Review (COQMR)

BOARD SAFETY AND RISK COMMITTEE (BSRC)

BSRC provides strategic direction and guidance on safety policies. It also oversees the Company's safety performance and trends. It ensures that an effective system is in place to manage critical operational safety and risk issues.

AIR SAFETY COMMITTEE (ASC)

ASC oversees the flight safety programme and Safety Management System on behalf of the CEO. The ASC is responsible for monitoring the safety performance and trends, as well as taking pre-emptive actions to avoid or mitigate risks. The committee also provides direction and guidance to the Safety Action Groups.

SAFETY ACTION GROUPS (SAGs)

SAGs are established within each operational division to address safety issues. These include Safety Risk Management and Safety Assurance of aviation-related activities within its functional responsibilities. The SAGs are chaired by the respective Senior Vice Presidents.

SAFETY MANAGEMENT (CONTINUED)

Safety Management Systems, Processes, and Procedures 403-1 403-8 416-1

We adopt a systematic approach and have in place robust organisational structures, accountabilities, policies, processes, and procedures to manage safety in the Company.

Our pursuit of operational and technical excellence is fuelled by the emphasis that we place on safety and reliability. Our aviation support services and activities comply with the requirements of the CAAS, as well as the recommendations of the International Civil Aviation Organization (ICAO). While achieving high standards in aircraft maintenance remains a key objective, the need to ensure a safe working environment for our employees and contractors also remains a top priority.

MANAGEMENT SYSTEMS

Flight Safety Management System (SMS)

Based on:

- CAAS Air Navigation Regulation (ANR)
- ICAO International Standards and Recommenvded Practices
  Annex 19 – Safety Management
- IOSA Standards Manual

Coverage:

- All operations
- All employees

Occupational Health and Safety Management System (OHSMS)

Based on:

- Workplace Safety and Health (WSH) Act
- ISO45001:2018 Occupational Health and Safety Management System

Coverage:

- All operations
- All employees
- All contractors working at SIA workplaces

Quality Management System (QMS)

Based on:

- CAAS Air Navigation Regulations (ANR)
- ISO 9001:2015 Quality Management System

Coverage:

- All operations
- All employees

Security Management System (SEMS)

Based on:

- Airport Police Division (APD) Security Directive for Aircraft Operators
- ICAO International Standards and Recommended Practices
  Annex 17 — Security
- IOSA Standards Manual

Coverage:

- All security operations
- All employees
- Applicable security providers

SAFETY MANAGEMENT (CONTINUED)

PROCESSES AND PROCEDURES

The lines of accountability, policies, and procedures relating to safety, security, and quality are governed by operational manuals of our divisions and departments.

Airport Operations Department

- Ground Services Manual
- Ground Services Quality Manual

Cabin Crew Division

- Cabin Crew Division Manual
- Cabin Crew Safety Management System Manual
- Cabin Crew Safety Manual
- Cabin Crew Safety, Security, Quality, and Health Department Procedures Manual

Cargo Division

- Cargo Quality Manual
- Cargo Safety Manual

Crisis Management Department

- Crisis Management Manual

Engineering Division

- Maintenance Control Manual

Flight Operations Division

- Crew Administration Manual
- Flight Operations Quality Manual

Safety, Security, and Quality Department

- Air Carrier Security Programme
- Corporate Flight Safety Management and Procedures Manual
- Corporate Operational Quality (Safety) Manual
- Flight Security Procedures Manual
- Ground Safety Manual
- Premises Security Manual
- Quality Manual
- Safety and Emergency Procedures Manual
- Security Management System Manual

SAFETY MANAGEMENT (CONTINUED)

Health Safety Excellence Framework COV-19

Since the start of the Covid-19 pandemic, we have put in place robust health and safety measures to assure customers of a safe journey with us. This is done through three primary levers. The first is the upholding of high standards in our cleanliness and hygiene by incorporating an enhanced cleaning regime. The second lever involves the adherence to contact reducing protocols, and upkeep of safe distancing measures through the digitalisation of certain operations. The third lever is by facilitating a seamless customer travel experience with SIA.

Our Health Safety Excellence framework enables the Company to assess, sustain, and improve our efforts in health and safety measures, beyond what is mandated by regulatory requirements. SIA regularly reviews our health and safety measures to instil confidence in our customers when they travel with us. To provide further reassurance for our customers, we mapped the various physical contact points across our customers' journey with us, covering both on-ground and in-flight phases of their journey.



Standards

Standards were developed for key areas of infection prevention control and cleaning, both on the ground and on board the aircraft.



Audits and Assessments

A network-wide comprehensive end-to-end assessment of on-ground health and safety measures, as well as cabin interior cleaning was completed.



Efficacy of Measures

Adenosine Triphosphate testing was conducted to validate the efficacy of cleaning measures in our aircraft cabin, SilverKris lounges and Service Centre at ION Orchard.



Innovative and New Initiatives

Various initiatives and precautionary measures focusing on cleanliness and hygiene, minimising contact, safe distancing, and facilitating travel have been rolled out across the customer journey.

SIA launched its HealthCert Service Layer, which is a digital solution that enables SIA and Scoot customers to verify their digital health certificates during online check-in and at self-service kiosks.



Proficiency of Staff

We will continue to provide e-learning on the management of Covid-19 measures for our cabin crew and frontline employees, and update our employees on Covid-19 measures as they evolve.

Health and Safety Measures

SIA has mapped and reviewed over 100 customer touchpoints to provide a safe and seamless journey with us from pre-flight to post-flight.

Cleanliness and Hygiene

- Protective barriers at check-in counters
- Increased cleaning and disinfection schedules, and electrostatic spraying application of long-lasting antimicrobial coating
- Customers can download reading materials from the e-library feature, available on the SingaporeAir mobile app
- Customer-facing staff put on masks and PPEs, where applicable
- Pillows wrapped in biodegradable plastics, which are replaced after every flight

Reducing Contact and Safe Distancing

- Automatic and online check in available using digital boarding passes
- Installation of safe distancing markers
- Print & Go contactless kiosks and automatic bag tag printing
- Digital food ordering systems in lounges and digital in-flight menu
- Staggered boarding and disembarkation for across all flights

Facilitating Travel

- Dedicated Covid-19 information centre
- Distribution of customer communications and health safety videos
- Enhanced flight credits for rebooking
- Personalised travel and visa information
- Digital health verification and declaration solutions

SAFETY MANAGEMENT (CONTINUED)

Training and Communication 403-4 403-5 403-6

SIA believes that all our employees play an integral part in building and maintaining a positive safety culture. Apart from training, employees are made aware of their individual safety obligations and other safety-critical information through a wide spectrum of communication channels and safety activities.

Safety Surveys

Our Safety, Security, and Quality (SSQ) department conducts a Safety Climate Survey annually, with the latest survey conducted in 2021. These surveys are conducted to identify safety issues that employees encounter during their daily operations. It also serves as an avenue where insights from the various aspects of safety resilience within the operational divisions may be disseminated. Besides gathering feedback on the safety climate, our employees are encouraged to clarify any doubts that they may have regarding unsafe working procedures or conditions.

Such safety surveys provide a platform for our employees to highlight and raise awareness on safety matters. A comprehensive list of quantitative and qualitative performance indicators helps us measure the effectiveness of our efforts in keeping our customers and employees safe. These indicators are reviewed on a quarterly basis, and are benchmarked against industry standards.







Safety Training and Communications

All employees are equipped with safety skills and knowledge required for them to perform their duties and respond appropriately when the need arises. All newly recruited employees will have to undergo a comprehensive safety training programme, including specialised and vocational training. Continual education is also provided through various channels to keep our employees abreast of the latest developments. It also gives them the opportunity to familiarise themselves with various operational systems.

Flight Operations management and relevant staff who conduct safety investigations in their scope of work are required to undergo a Safety Investigation course. Those managing operational safety also undergo training in Safety Management from accredited organisations such as IATA and the Singapore Aviation Academy. SIA ensures that the recency and operational proficiencies of our flight crew are maintained at the highest level through a series of flight simulators and check-rides.

To facilitate the dissemination of important safety and operational data, company iPads have been provided to all pilots to give them constant and timely access to emails and operational information on-the-go. Pilots are also kept abreast of operational events, safety incidents, and any other important issues via Safety Newsletters and fortnightly Flight Operations Notices. All pilots are also kept up to date on movements within the respective fleets and reports of aircraft incidents via SQhub, SIA's one-stop employee portal. Likewise, a Safety SharePoint was created to serve as a one-stop platform for pilots to access information on safety and security, incident reports, and hazard reports.

In FY2021/22, the Flight Operations Division launched a campaign to emphasise safety, pilot competency, and human factors. SIA also conducted a comprehensive review on the risk of interferences to aircraft avionics with the deployment of 5G within the vicinity of airports. Subsequently, pilots were provided with the necessary guidance and training material to address in-flight issues pertaining to the matter.

With the integration of SilkAir into SIA, additional measures on safety have been introduced to ensure that highest safety standards are maintained. These measures include the integration of SilkAir's safety framework with SIA's, additional briefings, and webinars for newly integrated crew on SIA's flight operations safety processes.

SAFETY MANAGEMENT (CONTINUED)

Safety Forums and Events

SIA takes an active approach to inculcate a culture of safety amongst our flight crew through safety initiatives and campaigns.

Flight Operations Safety Focus Forums

Pilots are regularly updated on safety incidents, fatigue risk management, and safety performance at our Flight Operations Safety Focus Forums, which are held once every three months. Topics that are discussed during these forums include recent incidents, an event trend analysis, safety issues, mental wellness, and flight experiences.

Due to Covid-19 safe management measures, the FY2021/22 fleet and safety forums were held virtually, and covered additional topics on operational safety risks related to Covid-19. These include reduced recency and maintaining mental fortitude.

Flight Operations Safety Series

The annual Flight Operations Safety Series was held virtually from 14 to 16 September 2021. This event aims to promote safety and raise awareness among pilots on safety-related issues. Renowned guest speakers were invited to speak at the event, covering topics such as airmanship, operations, training, and industry updates from Airbus and Boeing. Over the three days, over 300 attendees joined the event, which included flight crew from SIA, Scoot, and Vistara, along with external guests, and safety personnel from other business units.

Subsequently, a joint Technical and Cabin Crew session was held on 17 September 2021 to sum up the Safety Week. Pilots and cabin crew shared their personal stories on how they were coping with the impact of the pandemic.

CASE STUDY

Safety and Security Week 2021: Emerging Stronger in Safety and Security

The SIA Group's Safety and Security Week (SSW) 2021 was held virtually in October 2021, and saw over 650 attendees from our global offices. The theme of SSW 2021, Emerging Stronger in Safety and Security, highlights the importance of developing our ability to adapt and respond to unprecedented challenges as the Group recovers from the Covid-19 pandemic. A joint presentation by SIA and our ground handling partner, SATS Ltd, highlighted how we adapted and strengthened our cargo operations. SSW 2021 also featured individuals from the various SIA operational departments who shared how they overcame adversity during the pandemic, and how they are better equipping themselves as the aviation sector recovers from the Covid-19 pandemic. In conjunction with SSW 2021, numerous virtual events were held over the week to highlight the importance of emerging stronger as we look towards the future.

A highlight of the SSW 2021 was the presentation of the SIA Group Safety and Security Awards and Citations. A total of five Safety Awards, as well as 17 Safety and Security Citations, were awarded to our staff in the SIA Group and our service partners. These awards and citations recognise employees who help to avert safety and security incidents, as well as promote safe and secure practices within their daily operations.

The **SIA Group Safety Award** is presented to individuals who exhibit exemplary judgement and skills in preventing an accident or mishap from happening, or in managing and overcoming a difficult situation. It is presented to individuals who discover or correct major flaws in our aircraft or equipment systems, or contribute consistently and significantly towards safety.

The **SIA Group Safety and Security Citation** is presented to individuals who exhibit good judgement and skills in preventing or in handling an incident. It is also presented to individuals who contribute noteworthy efforts to promoting safety.

SAFETY MANAGEMENT (CONTINUED)

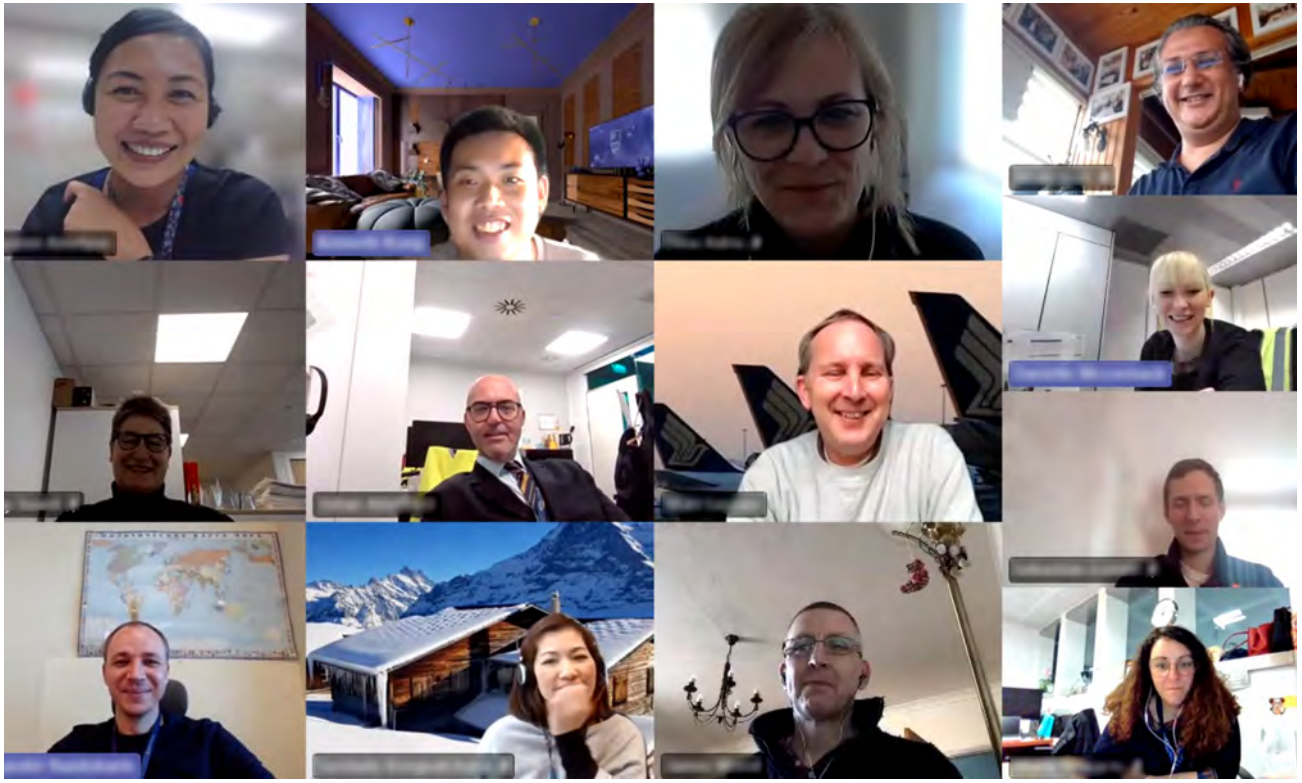
CASE STUDY

Station Safety Champion Programme

SIA has always placed an importance on safety as it serves as a foundation to create a conducive working environment for its employees. We continue to uphold our safety standards by placing an emphasis on inculcating a safety-oriented work culture through our Station Safety Champion virtual trainings conducted by SIA's Safety, Compliance, and Performance team within the Airport Operations department.

The programme aims to develop and position Safety Champions across our global network, who are well-versed in safety subject matters. These Safety Champions will work closely with Station Managers to chair safety matters and lobby towards achieving a safer working culture to drive safety initiatives.

As of April 2022, we have 81 Safety Champions across our global network. These champions are well equipped with in-depth knowledge and experience on safety-related matters. Refresher workshops and engagement sessions will also be conducted on an ongoing basis to increase the knowledge of our champions. Together with our champions, SIA will continue to build upon its strong safety culture.



PASSENGER SAFETY 403-5 403-7 PR-1

Crew Competency

Our cabin crew and pilots are trained in safety and emergency procedures. They regularly attend safety and security courses, and stay abreast of safety developments and regulatory protocols through avenues such as circulars, campaigns, and regular divisional communication sessions. The importance of providing service excellence while keeping in mind safety and security measures is consistently emphasised through these channels. Some key elements from our Safety and Emergency Procedures Manual include, but are not limited to:



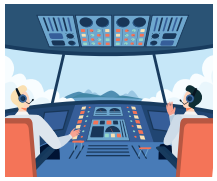
Emergency Procedures



In-flight Medical Emergency



Safety Equipment and Systems



Standard Operating Procedures



Survival

Pre-flight Safety Briefing

As part of our standard operating procedure, pilots undergo a pre-flight safety briefing. The briefing covers general safety, as well as specific aircraft, route, and weather information for the flight. For cabin crew, a mandatory briefing is also conducted prior to each flight. During the session, a safety video of the aircraft type they will be operating is viewed, and relevant safety topics and questions are discussed. This safety briefing reinforces and refreshes our crew's safety knowledge for each flight. We will continue issuing an aide-memoire to our flight crew as we increase our operational capacity, to highlight considerations to note when returning to their respective flight duties after a period of reduced flying brought about by the pandemic.

In-flight Safety Briefing

A mandatory in-flight safety briefing in the form of a safety video or live demonstration is carried out on all flights prior to departure. This is to increase our customers' awareness on the appropriate actions to take during their flight in the unlikely event of an emergency.

Medical Emergencies and Infectious Disease Handling COV-19

Emphasis is placed on the proper handling of medical emergencies when they happen on board our flights. In the event of an in-flight injury or illness, our cabin crew are equipped with the first aid skills and knowledge to administer care to an unwell passenger. The unwell passenger will be attended to by the relevant medical authorities upon landing. We will continue adopting strict measures both on the ground and in the air to minimise the spread of infectious diseases. Our ground employees and crew also undergo basic training on the procedures necessary to manage infectious diseases, in line with the health regulations and requirements implemented by local authorities. Cabin Safety Instructions are issued and communicated to all crew as and when there are changes to the regulations and requirements.

In FY2021/22, both our Cabin Crew Service Development and Safety, Security, Quality, and Health departments released several Cabin Crew Circulars to inform crew on Covid-19 developments, including management requirements and regulatory changes, which are reviewed quarterly. Covid-19 protocols prescribed by the regulators are disseminated in a timely manner to our crew members via various communication platforms such as SQhub, Yammer, and CrewApp. Videos were created and shared with crew via various platforms to further emphasise the importance of regulatory protocols. Ward Leaders who perform audits on their flights, and crew-in-charge are required to submit a declaration that in-flight safety measures are adhered to during every flight. This is done to ensure that we remain well prepared to respond swiftly to future occurrences of epidemics and pandemics.

PASSENGER SAFETY (CONTINUED)

Infectious Disease Handling Procedures and Covid-19 Measures COV-19

SIA adheres to the guidelines provided by health regulatory bodies within the regions we operate in, and implemented various on-ground and in-flight initiatives to ensure the safety of our customers. For instance, under the advisory by Singapore's Ministry of Health, we suspended the sale of air tickets from 23 December 2021 to 20 January 2022 to curb the spread of the Covid-19 Omicron strain.

We continue to adjust these measures based on the evolving circumstances, taking into account the requirements and recommendations from the IATA, governmental authorities and international bodies such as the World Health Organization (WHO). More information on our enhanced health and safety measures can be found on our website.

In recognition of our efforts to keep Covid-19 at bay, SIA was awarded the Diamond rating in the APEX Health Safety Audit 2021, and 5-Star Health and Safety rating in the Skytrax Covid-19 Airline Safety Audit 2021. The SIA Group will continue to apply the same standards in FY2021/22 to tackle cases of infectious diseases.

As of 31 March 2022, these are the following health and safety measures implemented pre-flight, in-flight, post-flight, during transits, and on the ground.



SIA HEALTH AND SAFETY MEASURES

PRE-FLIGHT



Pre-flight Preparation and Disinfection

- Enhanced pre-flight briefing sessions and practical door reviews are conducted to refresh cabin crew's knowledge on safety procedures, given the low frequency of flying in FY2021/22 due to the Covid-19 pandemic.
- To help operating crew prepare themselves, videos on the proper donning of Personal Protective Equipment (PPE) were developed.
- Cleaning frequencies have been increased, and a long-lasting antimicrobial disinfectant coating is applied to frequently touched surfaces.



Safe Distancing and Contactless Check-ins

- Zoning markers and alternate check-in kiosks are marked out to facilitate safe distancing.
- For SIA, online and mobile check-in options are provided for customers via SIA's website and the SingaporeAir mobile app. Self-service kiosks in Singapore Changi Airport also provide automated printing of bag tags upon scanning of the digital boarding pass.
- For Scoot, online check-in options are available on Scoot's website. For flights departing from Singapore, Hong Kong, Melbourne, Nanjing, and Taiwan, check in via Scoot's mobile app and customer chatbot M.A.R.V.I.E. is also available. Self-service check-in kiosks and automated bag-drop facilities are available in Singapore and Melbourne.



Observation and Health Screening

- Temperature screening and completion of health declaration is conducted for all operating crew and passengers before each flight, where applicable. Any passenger observed to be unwell will be referred to the airport medical authorities.
- All operating crew are required to undergo two fixed day self-administered Antigen Rapid Test swabs under the Employer-Led Supervised Self-Swab (ESSS) policy. The operating crew are also required to document the self-swabbing process and upload the video and images of the results into the Crew App.
- All airport staff wear face masks and follow safety standards mandated by the local authorities.



Grounding of Aircraft

- Should a passenger be offloaded from our aircraft and sent to a designated hospital due to an infectious disease, the aircraft will be disinfected before commencing the next flight. Depending on the situation, as well as health regulations at the departing station, the aircraft and passengers may be grounded for further observation, if necessary.

PASSENGER SAFETY (CONTINUED)

SIA HEALTH AND SAFETY MEASURES (CONTINUED)

IN-FLIGHT



Personal Protective Equipment

- Infectious disease handling kits are available on board all our aircraft.
- All operating crew are required to wear face masks throughout the flight, as well as plastic goggles or eye visors when interacting with passengers, where applicable.



Safe Distancing

- Different passenger groups are assigned specific seating zones to ensure segregation on board, in line with regulatory requirements.
- Cabin crew are seated in separate cabins from passengers.



Adjustments to In-flight Services and Amenities

- In-flight distribution of hot towels, children's amenities, baby kit bags, and arrival cards; as well as in-flight purchases from KrisShop, have been suspended to minimise contact between passengers and cabin crew.
- Disposable earpad covers for headphones will be provided to passengers. Customers are also encouraged to bring their own headphones to reduce waste.



Adjustments to Food and Beverage Services

- Meal services have been suspended or simplified in line with regulatory requirements. For customers requiring special meals, a reduced list based on the IATA guidelines will be available upon request for pre-ordering.
- Digital in-flight menu was launched where customers can access the menu through their personal electronic devices.



Caring for Unwell Passengers

- If a passenger is unwell, a dedicated crew member will care for the unwell passenger, while other crew members will seek assistance from the tele-medical service provider and any onboard medical professional.



Alerting Destination Airport Authorities

- If there is a suspected case of infectious disease on board the flight, pilots will alert the authorities at the destination airport to ensure that the unwell passenger will be attended to by the relevant medical authorities upon landing.

POST-FLIGHT AND TRANSITS



Health Screening

- Temperature screening, completion of a health declaration form and/or health assessment are conducted for all passengers upon arrival, where applicable.



Safe Distancing and Enhanced Measures to Minimise Contact

- A baggage end-to-end self-service portal was launched to minimise contact between staff and passengers. The portal allows passengers to receive scheduled updates on the search and return status of their baggage, and to manage their bag delay reports.
- Specifically for operating crew, dedicated crew lanes for immigration have been marked out. Where possible, large buses are chartered to facilitate safe distancing. Operating crew are also relocated to hotels near airports, with dedicated floors where possible.



Post-flight Disinfection

- The aircraft cabin and lavatories are disinfected to ensure that all surfaces are cleaned and refreshed for the next flight.
- Enhanced cleaning procedures are done for common surfaces and areas such as windows, tray tables, handsets, in-flight entertainment screens, lavatories, and galleys.
- Where there was a confirmed Covid-19 passenger on board, rigorous deep-cleaning procedures will be activated post-flight, which include the fogging of the entire cabin with disinfectants.
- Headsets, headrest covers, pillow covers, bedsheets, and blankets are replaced after every flight. Used linens are washed at high temperatures to disinfect them after every use.



Safe Transits

- To allow passengers to transit safely through Singapore Changi Airport, SIA partnered with SATS Ltd, CAG, and the CAAS to develop a transit handling model in Singapore. More information on the safe transit experience can be found on our website.

PASSENGER SAFETY (CONTINUED)

SIA HEALTH AND SAFETY MEASURES (CONTINUED)

GROUND OPERATIONS

Employee Measures

- All airport staff are required to wear face masks and follow safety standards mandated by the local authorities.
- PPE and hand sanitisers for employee use are available at key areas.
- Guided by the government's advisory, staff were allowed to work from home depending on the nature of their work.
- Measures are taken to avoid cross-deployment, and interaction between employees from different office premises.

Ground Premises

- Facilities such as the SIA Group Sports Club and the SIA Training Centre canteen have since been reopened to accommodate the return of SIA personnel to the offices.
- Safe distancing markings have been set up at all touchpoints.
- Enhanced premise-cleaning procedures are carried out.
- Pre-recorded audio announcements are broadcasted as a reminder to passengers to maintain social distancing and to keep their masks on at all times.

Airport Ticketing Offices

- SIA's Service Centre at ION Orchard Singapore resumed operations in July 2020.
- Services at Singapore Changi Airport Terminal 3 have been consolidated.
- Customer requests are handled via our 24-hour contact centre and online platforms.

SilverKris Lounges

- All SilverKris lounges were closed except for the SilverKris lounges at Singapore Changi Airport T3, Brisbane Airport, London Heathrow Terminal 2, Melbourne Airport, Perth Airport, and Sydney Airport.
- All customers and employees are required to wear masks at all times except when eating or drinking.
- Social distancing markings have been set up at all areas of our SilverKris lounges as and when required by local health regulatory bodies.
- Contingent on the development of Covid-19 measures, SIA will be gradually reverting to our normal service options in the coming months. Our customers can expect a buffet, à la carte, or a hybrid of the two within our service lounges.
- Our Electronic Menu Ordering (ELMO) services has since been extended to our customers visiting London Heathrow. Since April 2021, over 95,610 orders have been placed using ELMO. This represents 85.7% of all food orders by our guests.

COVID-19 VACCINE CARRIAGE

SIA continues to support the safe and reliable carriage of Covid-19 vaccines. As of February 2022, we have transported over 87 million doses of the vaccine within the Asia-Pacific region. Since January 2022, we have also begun transporting Covid therapeutics such as the Pfizer Paxlovid pills.

To ensure safe and efficient transportation of the vaccines on passenger and freighter aircraft, SIA's handling processes for pharmaceutical cargo is aligned with the highest industry standards and is certified under IATA's CEIV Pharma programme, and Envirotainer's Qualified Envirotainer Provider Training and Quality Program (QEP) accreditation. These certifications were obtained in January and November 2020 respectively.



PASSENGER SAFETY (CONTINUED)



Food Safety 416-2

We are committed to serving in-flight meals that meet the highest level of food safety and hygiene. We have a policy of not using Monosodium Glutamate (MSG) in the meals served to our customers. Our caterers ensure that ingredients are sourced from licenced and accredited establishments, which conform to the requirements of relevant regulatory authorities, as well as the Hazard Analysis and Critical Control Points (HACCP) and International Organization for Standardisation (ISO) systems. The Quality Assurance team from our local caterer, SATS Ltd, conducts factory audits on external suppliers, regular laboratory tests, and random quality checks on incoming raw ingredients. We also engaged Medina Quality Assurance to conduct regular audits on SATS Ltd and selected caterers from our overseas stations.

Globally, all our caterers are certified by their relevant local authorities for food safety and hygiene. Caterers are required to comply with their local laws and regulations, including food safety regulations. Locally manufactured items are procured from establishments licensed by the Singapore Food Agency (SFA), or the equivalent authority in other countries. Local authorities will advise SATS Ltd of such regulations during the development of meals, to ensure meals prepared are in line with local regulations. These include allergen labelling, and minimum food safety requirements for food handling for safe distribution into foreign countries.

In light of the Covid-19 pandemic, SIA adapted and introduced a one-tray meal service aiming to minimise interactions between passengers and crew, while still ensuring the quality of our in-flight meal service. Instead of serving passengers individual meal courses, meal services have been streamlined, where the appetiser, main course, and dessert are served on a single tray. Snack bags are also provided to passengers on selected flights. Where permissible by local health regulations, we are resuming meal service on a course-by-course basis, for our customers in Suites, First Class, and Business Class.

In FY2021/22, there were zero incidents of non-compliance to food safety and hygiene that resulted in any fines, penalties or warnings.

EMERGENCY PREPAREDNESS AND RESPONSE 403-4 403-5 403-7 PR-1

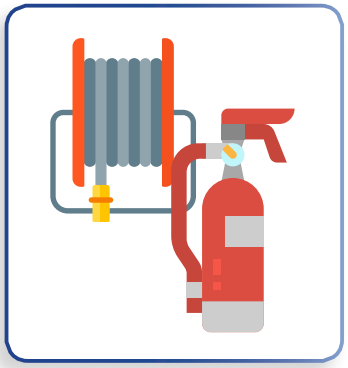
We have a robust set of measures in place to protect our stakeholders and assets in the event of an on-ground emergency. Our Company Emergency Response Team (CERT) will be the first to respond to an emergency to prevent further escalation.

The primary objective of CERT is to mitigate and control an emergency during the initial stages prior to the arrival of the Singapore Civil Defence Force (SCDF). Our Emergency Response Plan (ERP) is a comprehensive plan that integrates our Fire Emergency Plan and Arson Prevention Plan.



Fire Emergency Plan (FEP)

- Includes procedures for occupants and building management to follow in the event of a fire emergency.
- Regular fire evacuation drills are conducted to test the effectiveness of the plan.



Arson Prevention Plan (APP)

- Includes procedures to safeguard the building's fire safety system against security threats arising from arson attacks.

With our FEP setting the roles and responsibilities of occupants and building management to follow in the event of a fire emergency, our stakeholders are able to respond swiftly to a fire in any of our office premises. We aim to conduct at least two fire evacuation drills for each office location in Singapore annually. In FY2021/22, SCDF granted a waiver for fire evacuation drills in view of the Covid-19 safe management measures during mass evacuation and assembly. Notwithstanding the postponement of fire evacuation drills, SIA conducted biannual tabletop exercises with our Fire Wardens and CERT members. Fire evacuation drills will be planned in FY2022/23, pending further guidance from SCDF.

Crisis Management Exercises are also conducted on a regular basis. These are scenario-driven exercises for participants to derive solutions to likely emergency scenarios. It is intended to assist our Fire Safety Managers (FSMs) and building managers in addressing our occupants' needs when emergencies arise from a security or terrorist threat. During the exercises, issues surfaced will be discussed and assessed. Solutions will be drawn up and implemented to ensure the preparedness and readiness of the Company to address such emergencies.

HAZARD IDENTIFICATION AND RISK MANAGEMENT

403-2 403-3 403-4 403-5 403-7 PR-1

Hazard identification is part of our risk management process, which is centred around the principle of managing justifiable risks at the right time and at the right level. We evaluate the probability and potential consequences from the exposure of identified hazards, and determine the appropriate measures to prevent the occurrence of such situations.

STEP 1



Hazard Identification

We identify hazards from processes that are predictive, proactive, and reactive. The scope for hazards is wide and may relate to factors that are communication, design, human, organisational, procedural, regulatory, or work environment in nature.

The Covid-19 pandemic has brought with it a new set of operations to cater to the growing demand for cargo transportation. Together with our business units and service provider SATS Ltd., SIA Cargo Safety, Security and Compliance (CSSC), and Airport Operations Safety, Compliance and Performance (AOSCP) reviewed the hazards and risks associated with the new operations, and came up with mitigation measures to manage these risks. The measures were also shared with our stations to raise awareness.

STEP 2



Risk Assessment

We perform risk assessments based on the probability of the hazard causing harm or adverse consequences, and take into consideration the severity of their outcomes.

STEP 3



Risk Mitigation

We adopt three basic strategies in risk mitigation:

- Avoidance
- Reduction
- Segregation of exposure

A combination of measures such as administrative or engineering controls, procedures, equipment or contingency plans are taken into consideration to contain risks. Control measures that are higher up in the hierarchy of controls, such as elimination and substitution, will be considered first.

STEP 4



Implementation

We communicate the adopted measures to our internal stakeholders prior to its implementation. These may come in the form of bulletins, notices, and workshops.

A system is also in place to monitor compliance, and to assess the adequacy of these measures.

STEP 5



Review

We conduct reviews to assess the adequacy of risk management and ensure that the implemented controls are effective.

HAZARD IDENTIFICATION AND RISK MANAGEMENT (CONTINUED)

In FY2021/22, we investigated and addressed 100% of the 273 hazard reports received.

Hazard Reporting

Our employees are encouraged to identify and address hazards across our operations and workplaces without fear of reprisal. Hazard reports can be submitted electronically via our employee portal, our employee mobile app 1SQ, or through a hard copy form. All hazard reports are routed to the respective division or department to investigate, and implement measures to remove these hazards. An initial risk assessment and investigation findings of the hazard will have to be submitted within two weeks of the incident.

Each report brings us a step closer to a safer environment for our employees. All reported hazards have been investigated and addressed during the year. To raise awareness of hazards among our employees and to encourage them to step forward to report hazards, all hazard reports and notable case studies are circulated internally through our quarterly Hazards Newsletter. In FY2021/22, we investigated and addressed 100% of the 273 hazard reports received.

Fatigue Risk Management

Our Flight Operations and Cabin Crew divisions have a Fatigue Risk Management (FRM) framework in place to manage fatigue risk while operating flights. This framework includes a fatigue reporting system for crew to submit reports of fatigue that they might have experienced while performing their duties. These reports, together with tools such as a bio-mathematical fatigue model and fatigue surveys, will be used by management to determine areas of fatigue concern across our operations. Safety Focus Forums are conducted to update pilots on recent incidents, and employees who are involved in crew rostering and scheduling are trained in the science of risk management. SIA is also an active member of the IATA Fatigue Management Task Force, which keeps abreast of the latest regulatory and industry developments in the area.

Crew Psychological Well-being 403-6

The mental well-being of our pilots is important to us. We developed a comprehensive psychological support framework that leverages peer counsellors, aviation psychiatrists and psychologists, and the Civil Aviation Medical Board to care for the psychological well-being of our pilots. In addition, we abide by medical reporting guidelines to create a safe environment for reporting, and for pilots to seek assistance when required.

Our cabin crew are supported within an established reporting structure, in which the crew leaders (Ward Management Leaders, Ward Leaders, and In-flight Auditors) undergo training on managing mental well-being, which equips them with the necessary knowledge to provide support and guidance to their crew. Apart from attending assigned training courses related to improving well-being and self-care, cabin crew can also reach out to the Company's appointed psychologists and approved counsellors, if required. Resources and contacts to national agencies are also shared with cabin crew on various communication platforms.

Systematic Alcohol Screening

Safety is our highest priority and we view cases related to alcohol consumption seriously. SIA has clear policies regarding the consumption of alcohol for our operating crew and these policies are constantly reinforced. In accordance with CAAS guidelines, SIA implemented the Airline Alcohol Management Programme (AAMP), which involves detection through alcohol test screening, following a risk-based, randomised approach. Prior to flight departure, certified ground employees will perform alcohol breathalyser tests on our operating flight crew reporting for duty. This programme is over and above the stipulated Airport Alcohol Testing Programme (AATP), which CAAS mandates and enforces.

Our flight crew are prohibited from consuming alcohol 10 hours prior to reporting their flight duty. They are also encouraged to highlight any concerns they may have regarding the well-being and safety of our customers, fellow crew members and the aircraft they operate in. We continue to take all necessary measures to ensure that our flight crew are reminded of their responsibilities and the consequences of not adhering to these policies.

AIRCRAFT INCIDENTS 403-2 403-5 403-7 PR-1

Aircraft Incident Procedures

Extending beyond our legal and regulatory requirements, strong emphasis is placed on incident reporting and investigation to avoid incidents of a similar nature in the future.



Reporting

A robust set of reporting procedures are in place for different incident types. All incidents have to be reported promptly. These include:

- Air miss, air proximity, air traffic control, resolution advisory incidents, traffic collision avoidance system
- Flight incidents
- Ground incidents
- Incidents involving crew injury or illness
- Incidents involving passenger and supernumerary injury or illness
- Incidents involving tail strike
- Significant or serious incidents
- Suspected and actual bird strikes



Actions

Key stakeholder groups are engaged upon notification of the incident or receipt of the incident report. They include:

- Flight Operations Division
- Safety, Security, and Quality (SSQ) department
- SIA Engineering Company (SIAEC)
- SIA Operations Control
- Station Managers and Cargo Managers



Investigation

The purpose of the investigation is to determine facts, conditions, and circumstances pertaining to the incident so that actions can be taken to prevent recurrence.

All incidents, investigations and actions taken will be compiled by SSQ into a bi-monthly summary, which will be reviewed by the Air Safety Committee.



Communication

Incidents and investigation reports are made available to all employees on SQhub to increase the level of safety awareness and education.

WORKPLACE INCIDENTS 403-3 PR-1

SIA has set procedures in place to manage workplace incidents and accidents. In the event that an employee suffers from a work-related injury, swift action will be taken to care for the employee and to prevent similar incidents from reoccurring.

We also have a Confidential Incident Reporting programme to encourage employees to share any hazards, unsafe acts, or situations encountered at the workplace. Reports submitted under this programme will be treated in strict confidence. The identity of the reporter will be kept confidential, and their personal details are only disclosed should the SSQ department require further information for investigation.

Work-related Injuries[40] 403-9

In FY2021/22, we reported zero work-related fatalities and zero high-consequence work-related injuries. We recorded six work-related injuries for our ground employees, and 49 work-related injuries for our cabin crew, with an overall work-related injury rate of 3.2 injuries per million man-hours worked.

Each work-related injury is documented and the cause for such injuries are identified. Additional precautionary measures are implemented to ensure that such incidents do not reoccur. We continue to closely monitor the situation together with our stakeholders to ensure the safety and well-being of our employees.

In FY2021/22, we recorded zero work-related injuries for our key contractors. Measures were implemented at the incident site, such as increasing illumination and installing friction strips on staircases to minimise future occurrences.

Employees	FY2020/21		**FY2021/22**	
Estimated number of man-hours worked	11,768,518		**18,835,417**	
Number (and rate*) of fatalities as a result of work-related injuries	0	(0.0)	**0**	**(0.0)**
Number (and rate*) of high-consequence work-related injuries	0	(0.0)	**0**	**(0.0)**
Number (and rate*) of recordable work-related injuries	51	(4.3)	**60**	**(3.2)**
Main types of work-related injuries	• Slip, trips, and falls during cabin activities and turbulence • Struck by falling objects such as cabin baggage • Over-exertion and strenuous movements • Exposure to extreme temperatures such as scalds		• Slip, trips, falls, and knocks • Injury sustained from assisting in stowage of cabin baggage • Scalding and cuts • Over-exertion and strenuous movements	

Workers Who are Non-Employees[41]	FY2020/21		**FY2021/22**	
Scope of workers who are non-employees	Key contractors only (cleaners, maintenance, landscaping, warehouse operations)			
Estimated number of man-hours worked	1,421,863		**1,281,554**	
Number (and rate*) of fatalities as a result of work-related injuries	0	(0.0)	**0**	**(0.0)**
Number (and rate*) of high-consequence work-related injuries (excluding fatalities)	0	(0.0)	**0**	**(0.0)**
Number (and rate*) of recordable work-related injuries	0	(0.0)	**1**	**(0.8)**
Main types of work-related injuries	Nil		Slips, trips, and falls	

0 work-related fatalities and high-consequence work-related injuries for employees and key contractors

[40] *Please refer to the Appendix on pages 154 to 167 for definitions and methodologies.*
[41] *Workers man-hours worked and workplace injuries data reported only covers SIA global operations. Please refer to the Appendix for details on reporting boundaries.*
* *Rates are calculated per million man-hours.*

WORKPLACE INCIDENTS (CONTINUED)

Work-related Ill-health[42] 403-10

Due to the nature of our operations, employees may be exposed to loud noise and various chemicals. In FY2021/22, we reported six cases of work-related ill-health for our employees and key contractors, all of which were related to noise-induced deafness. To better address cases of noise-induced deafness, SIA launched a Hearing Conservation Programme, which comprises nine components such as ensuring correct fitting of hearing protection equipment on our staff, training on the proper use and maintenance of the hearing protection equipment, and an annual audiometric examination.

Employees	FY2020/21	**FY2021/22**
Number of fatalities as a result of work-related ill-health	0	**0**
Number of recordable work-related ill-health	21	**6**
Main types of work-related ill-health	Noise-induced deafness	Noise-induced deafness

Workers Who are Non-Employees[43]	FY2020/21	**FY2021/22**
Scope of workers who are non-employees	Key contractors only (cleaners, maintenance, landscaping, warehouse operations)	
Number of fatalities as a result of work-related ill-health	0	**0**
Number of recordable work-related ill-health	0	**0**
Main types of work-related ill-health	Nil	Nil

To safeguard our employees from being infected with the Covid-19 virus, we encourage our employees to be fully vaccinated. As of FY2021/22, 99.93% of our employees based in Singapore have received both the prescribed vaccination doses and booster shots.

[42] *Please refer to the Appendix on pages 154 to 167 for definitions and methodologies.*
[43] *Workers ill-health data reported only covers SIA global operations. Please refer to the Appendix for details on reporting boundaries.*

CUSTOMER-FOCUS 103-1 103-2 103-3

A focus on optimal customer experience is intrinsically linked to the Singapore Airlines brand promise. Whether pre-flight, in-flight or post-flight, we endeavour to make every journey personal. We continue to place emphasis on better understanding our customers' needs, so that we can provide our customers with safe and seamless journeys supported by our world-class products and services.

OUR MANAGEMENT APPROACH

Key Engagement Activities

Engagement Mode	Frequency
Annual Report	Yearly
Sustainability Report	Yearly
Customer Communications Channels (Chatbot, Email, Hotline, Live Chat, Social Media, etc.)	Regular
Customer Insights (Feedback Forms, Focus Groups, Voice of Customer Post-flight Surveys, etc.)	Regular
Press Releases	As required
Digital Publications (KrisWorld Magazine, Priority Magazine, SilverKris Magazine, SilverKris.com, etc.)	Regular

Key Policies, Processes, and Procedures

- Customer Experience Management
- Customer Insights Portal
- Health Safety Excellence Framework
- Performance Improvement Framework
- Privacy Policy
- Quality Framework
- Quality Management System
- Service Audits
- SOAR as ONE Service Philosophy
- Singapore Airlines Experience Principles

SIA Ambitions

We endeavour to offer customers the highest quality air transportation experience through service excellence and proactive customer engagement.

FY2021/22 in Numbers

+4.0 percentage points improvement

in Net Promoter Score (NPS) compared to pre-pandemic FY2019/20 performance, based on Voice of Customer (VoC) surveys conducted post-flight for customers' end-to-end travel experience across SIA's touchpoints on-ground and in-flight

World's Most Awarded Airline

Examples of awards won in FY2021/22 for our commitment to service excellence

World's Best Airline Cabin Staff
Skytrax World Airline Awards 2021 (UK)

5-Star Health and Safety Rating
Skytrax Covid-19 Airline Safety Audit 2021

Best Airline (30th consecutive year)
Business Traveller (Asia Pacific) 2021

World's Best International Airline (26th consecutive year)
Travel + Leisure Magazine (USA) 2021

Supporting the UN SDGs



CUSTOMER-FOCUS (CONTINUED)

Singapore Airlines aims to make every journey personal.

Understanding our customers' needs and enhancing their experience are key principles that guide our business decisions. We seek to improve the service that our customers receive across all of SIA's touchpoints, anticipating their needs, and delighting them throughout their journey both on the ground and in the air.

SIA recognises the value of innovation. As a market leader and industry trendsetter, we are proud to have achieved significant milestones through the decades, making us the world's most awarded airline.

Industry-leading Innovations

- First to fly non-stop across the Pacific between Hong Kong and San Francisco in 1989
- First to introduce satellite-based in-flight telephones in 1991
- First to involve a panel of world-renowned chefs, the International Culinary Panel, to develop in-flight meals in 1998
- First to offer audio- and video-on-demand capabilities on *KrisWorld* in all cabin classes in 2001
- First to fly the Airbus A380 superjumbo, from Singapore to Sydney to Singapore in 2007
- First to introduce a Companion App, which allows customers to control their in-flight entertainment experiences in 2016
- First to launch Global Express high-speed internet connectivity on the A380 aircraft in 2017
- First to launch a personalised in-flight entertainment system, *myKrisWorld*, in 2017
- First to fly the lightweight and fuel-efficient Boeing 787-10 Dreamliner in 2018
- First to offer pre-ordering of in-flight meals for Suites, First Class, and Business Class customers in 2018
- First to offer pre-ordering meals from different cuisine categories under its Child Meal Programme in 2019
- First to host a live TV broadcast on board with onboard Wi-Fi connectivity in 2019
- First to roll out digital solutions enabling verification of international digital health certificates as part of online check-in and self-service kiosk flows in 2021
- First to offer live online shopping on board its aircraft from 2021

CUSTOMER-FOCUS (CONTINUED)

A selection of awards won in FY2021/22 can be found on page 69 of the SIA Annual Report FY2021/22. Some of the awards we have won include:

WORLD'S BEST AIRLINE CABIN STAFF
Skytrax World Airline Awards 2021 (UK)

This award recognises the highest all-round performance of cabin crew, in the areas of technique, efficiency, attention, enthusiasm, attitude, friendliness, and hospitality.

★★★★★ 5-STAR HEALTH AND SAFETY RATING
Skytrax Covid-19 Airline Safety Audit 2021

Both SIA and Scoot received the 5-Star Health and Safety Rating after being assessed on over 190 safety and hygiene protocols across the customer journey. One of the highlights was our industry-leading response to the Covid-19 pandemic, which included the introduction of innovative digital solutions to enhance the travel experience, mitigating risks of Covid-19 transmission, and ensuring a safe and seamless travel journey for customers.

BEST AIRLINE
Business Traveller (Asia Pacific) 2021
(30th consecutive year)

Over 30,000 Business Traveller (Asia Pacific) subscribers voted for SIA in the Business Traveller Readers Poll. Taking an average of 19 business trips a year, these subscribers provide their assessment on what constitutes the perfect flight, and share opinions on everything from the best brands to the most impressive in-flight experiences. This is the 30th year that SIA is recognised as the best airline in the Business Traveller (Asia Pacific) awards.

WORLD'S BEST INTERNATIONAL AIRLINE
Travel + Leisure Magazine (USA) 2021
(26th consecutive year)

For the 26th year running, SIA is recognised in Travel + Leisure's annual ranking as the stalwart that impresses travellers with our world-class products and services. Voters commend the warm hospitable service received on board, highlighting how SIA's cabin crew are always ready to lend a hand and go the extra mile.

FAVOURITE INTERNATIONAL AIRLINE
Condé Nast Traveller (India)
India Readers' Travel Awards 2021

The Condé Nast Traveller Readers' Travel Awards are widely acknowledged as the most prestigious awards in the Indian travel and hospitality industry. This award recognises SIA as the choice airline as voted by Condé Nast Traveller's audience.

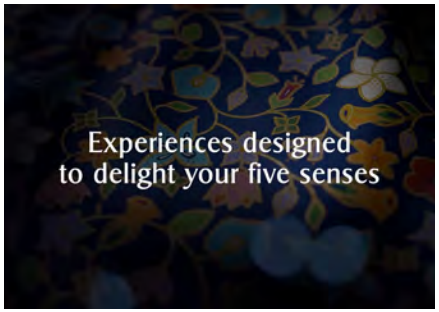
ENVIRONMENTALLY FRIENDLY AIRLINE OF THE YEAR
Sky Choice Travel Awards 2021 (China)

SIA won its first award from the prestigious Civil Aviation Authority of China Inflight Magazine Sky Choice Travel Awards in 2021. The magazine is one of the most influential aviation media outlets in China, and the accolade was awarded to SIA after comprehensive consideration and evaluation. It acknowledges SIA's efforts and commitment to sustainability with the launch of initiatives such as the SIA Group Voluntary Carbon Offset Programme, use of SAF, as well as our pledge to achieve net zero carbon emissions by 2050.

CUSTOMER-FOCUS (CONTINUED)

CASE STUDY

Discover an Elevated SIA Travel Experience



Elevating the SIA Customer Experience by Delighting the Five Senses

5 Senses is a design philosophy for SIA's products and services, to delight and elevate our customers' experience. SIA launched a 60-second video, titled *Experiences Designed to Delight Your Five Senses*, on its social medial channels to communicate this philosophy. It showcases elements of the end-to-end travel journey that engage, excite, and elevate the five senses *(sight, smell, touch, taste, and hearing)* as part of the Singapore Airlines customer experience. Available on Facebook, Instagram, and LinkedIn, the video received over 80 million impressions and 400,000 completed video views.



SIA's signature batik motif has been tastefully incorporated in the design of SIA products and services across customer touchpoints such as the iconic sarong kebaya worn by our cabin crew. Beyond these batik accents, our aesthetically pleasing and forward-thinking cabin designs are a delight to the eyes.



SIA's signature ambient scent, Batik Flora, comprises floral notes from six flowers in SIA's batik motif. A soothing aroma that reminds customers of their journey with us, this distinctive scent can be enjoyed at our lounge and service centre.



The Sound of Singapore Airlines, our sonic signature, is a melody composed in collaboration with an award-winning composer. This melodic symphony is played at SIA's KrisFlyer Gold and SilverKris lounges, and during boarding and landing on board the aircraft.



Customers can look forward to the warmth of the celebrated SIA service excellence across all customer touchpoints, as well as the comfortable furnishings.



SIA offers nourishing, delightful and satisfying local and international fares, on board all SIA flights and SilverKris lounges to tantalise our customers' taste buds.

More information on the SIA travel experiences can be found on our website.



We Look Forward to Seeing You in the Air Again

In October 2021, SIA launched a new brand campaign titled *We Look Forward to Seeing You in the Air Again*, as we prepared to welcome customers back to the skies.

The campaign aims to reassure customers that they will enjoy an enhanced travel experience despite the changes brought about by the Covid-19 pandemic. The campaign video received over 256 million impressions and 62 million video views.

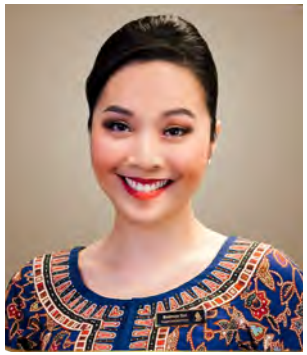
SIA has been preparing for the return of travel through the introduction of digital innovations, flexible booking policies and the integration of robust health and safety measures at all touchpoints, demonstrating our commitment in providing a seamless customer experience in the new normal.

Customers can travel with confidence and a peace of mind.

EXEMPLARY SERVICE QUALITY

CASE STUDY

Service Begins From the Heart



Beatrice Tan
Flight Stewardess
SIA Cabin Crew Division

Flight Stewardess Beatrice is an inspiring role model to those in the industry.

Despite graduating from training in February 2020 amidst the Covid-19 pandemic when flights opportunities were limited, Beatrice has proven that one's length of service is never a barrier to excellent customer service, whether in-flight or on-ground.

Beatrice showed her professionalism by extending help to a member of public, with a pair of six-month-old twins and a four-year-old daughter. Upon arrival in Singapore after her flight, she was approached by the mother for directions to the nearest restroom to feed her children urgently as there were no nursing rooms available in the vicinity. Beatrice went above and beyond to accompany the family to a quiet area on the same level to ensure that they were well cared for. She even cancelled her own transport to ensure she could properly help the mother in caring for her children.

Her proactiveness provided great comfort to the mother. Her embodiment of the service culture to show care and concern, and being able to empathise with the customers extending beyond the confines of the aircraft, is highly commendable.

"She helped me feed one of my sons, while I fed the other. She even took the effort to talk and interact with my four-year-old daughter. Words cannot explain how thankful I was. It was like God sent an angel to help me."
- Member of the public

A Leader Who Shows the Way



Winston Teo
Customer Services Supervisor
SIA Los Angeles

With over 36 years of experience under his belt, Customer Services Supervisor Winston Teo is one of the cornerstones of the SIA Los Angeles Office.

Well-respected by his team, Winston had guided many junior staff and showed them the ropes. With his wealth of knowledge and expertise,Winston is not only a pillar of support for colleagues across the region, he is also selfless and resourceful, helping anyone who requires assistance.

At Singapore Airlines, the importance of customer satisfaction cannot be overly emphasised. For Winston, this is evident from the constant review and monitoring of feedback received through cabin crew reports and the VoC surveys. When stations across the Americas were on reduced working hours due to the limited flight frequencies, Winston ensured that service and operational standards were never compromised.

Besides assuming the role as the station's second-in-command and juggling an administrative-heavy Catering Officer role, Winston is also the regional Associate Trainer for SOAR as ONE. Despite his heavy responsibilities and duties, he never ceases to motivate, inspire and impart his knowledge to both his local and regional colleagues from across airport, town and cargo offices. As a leader who shows the way, Winston is truly the epitome of inspiring leadership at its best.

"Winston has always been a pillar of support, a library of knowledge and experience, and a well of abundant encouragement for the SIA Los Angeles traffic team and for anyone who seeks his help. He is diligent, resourceful, selfless, helpful, motivated and determined, possessing all the desirable traits and qualities of a SIA role model."
– Mr Seah Chee Chian, Vice President Western USA, SIA

CUSTOMER ENGAGEMENT

Understanding our customers and going the extra mile for them when they travel with us.

Leveraging Insights to Design Our Customer Journey and Deliver a Positive SIA Experience

Maintaining open lines of communication with our customers enables us to understand their needs and identify opportunities to improve our products and service offerings. We proactively engage our customers on a regular basis, and enhance the customer experience to meet their needs and exceed their expectations.

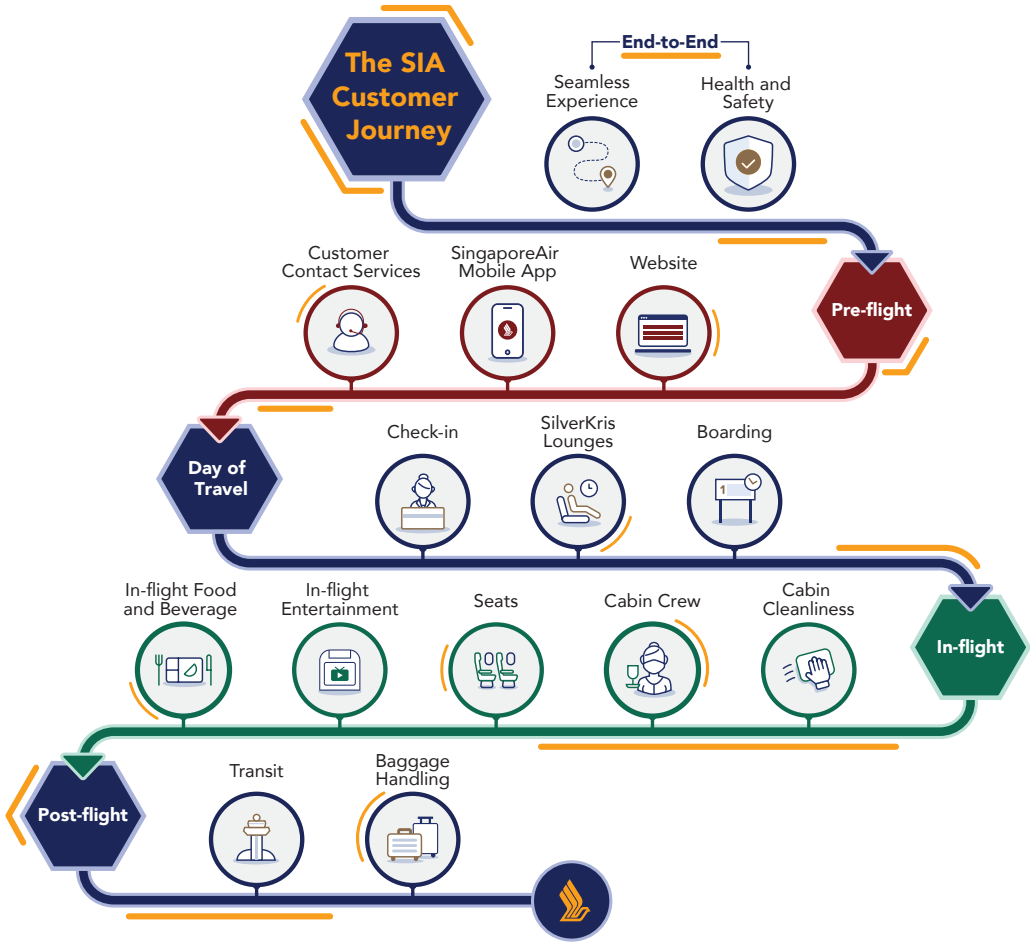
SIA's Customer Experience (CEx) department was formed in 2016 to expand SIA's potential to deliver exceptional customer experiences. SIA's CEx department adopts the 3Ds (Discover, Design and Deliver) methodology to envision the end-to-end customer journey and develop strategies that enhance the Singapore Airlines customer experience. Five key strategies revolving around health safety; contactless; seamless; personalisation; and sustainability were identified and developed in 2021 to restore travel confidence and welcome our customers back on board as international borders slowly reopened. We employ a customer-centric approach and leverage digitalisation to discover, design, and deliver value; as well as delight and provide memorable experiences to our customers at every stage of their journey, to boost customer loyalty for Singapore Airlines.

The Customer Insights Portal (CIP) was conceptualised in 2019 and launched in 2020 as the central platform for a single consolidated, 360-degree view of our customers' insights derived from various customer feedback sources. It leverages iterative machine learning to provide timely actionable insights to improve the SIA customer experience.

The Customer Experience Management (CEM) system enhances SIA's competitive edge in delivering a differentiated end-to-end customer experience. CEM takes the CIP insights into consideration, and provides a 360-degree view of customers. CEM data is also harnessed for analytics to gain insights that help us personalise each customer's experience. The Personalisation roadmap was conceptualised and endorsed at the Board's Customer Experience Technology and Sustainability Committee (CETSC) in February 2020, and is constantly being refined to adapt to the changes in customer value drivers and behaviors in the new normal.

SIA's Customer Affairs (CA) department attends to customer feedback and enquiries daily, ensuring that they are promptly addressed. Where necessary, investigations are carried out before a formal response is provided to address the customer's feedback. This allows the CA department to assess and adopt the appropriate service recovery methods, and restore our customers' confidence in SIA.

Along with the case management system, key performance indicator reports are regularly prepared to monitor achieved response rates at each station, department, and individual levels.



CUSTOMER ENGAGEMENT (CONTINUED)

Leveraging Digital Platforms and Data Analytics

SIA aims to transform our business using digital solutions, which allow us to thrive in a rapidly changing global environment. We are constantly on the lookout for new digital tools to adopt and further leverage data analytics to better engage our customers, streamline feedback, and respond more effectively to their concerns. Digital tools and platforms such as social media and mobile applications help us stay connected with our customers and improve on the delivery of our offerings, as well as the overall customer experience.

Digital Platform Enhancements

In FY2021/22, we continued to offer more self-service features on our website to improve the customer experience, and create a seamless travel experience. Through our website and the SingaporeAir mobile app, customers have easy access to a range of important information they need, including regulatory requirements for entry into countries, flight itineraries and updates, weather at destination, as well as baggage tracking status. If special assistance is required, our agents are equipped with the knowledge and skills to assist customers.

Better Service Through Digital Tools for Process Automation

Sales Return Bot

Automated sales return report generation, thereby reducing manual processing and saving about 500 man-hours annually.

Schedule Change Bot

Automated manual processes for following up with customers on schedule changes, thereby bringing about savings of about 1,400 man-hours annually.

Seat Displacement Bot

Automated removal of passenger name records from queue, thereby saving about 1,400 man-hours annually.

Service Recovery Bot

Automated the deposit of KrisFlyer miles into members' accounts, thereby reducing manual processing of miles crediting, and saving about 600 man-hours annually.

CASE STUDY

SIA's Seamless Travel Experience Digital Suite honoured at SG Mark 2021 Awards





A visual that maps out where the solutions in SIA's Seamless Travel Experience Digital Suite are integrated along a customer's travel journey.

For the second year running, SIA's Seamless Travel Experience Digital Suite has been recognised as one of the top five winners of the Singapore Good Design 2021 awards. The award, also known as SG Mark, celebrates businesses that showcase excellent design ethos and provide inspiring solutions to impact various industries.

The UX practice merged smart technology, innovative design, and creativity, to come up with the Singapore Airlines Seamless Travel Digital Suite, a series of digital solutions that allow customers to have greater peace of mind when they travel.

These digital solutions include a digitised mobile in-flight menu, electronic lounge menu ordering, rebooking flow and flight credit system, and a display of relevant travel advisories on entry requirements for customers based on their nationalities and destinations.

Even as the aviation industry recovers from the Covid-19 crisis, the implementation of health and safety measures remains a key factor that will aid in the reopening of international borders according to our customer insights. SIA's digital initiatives will enable the Airline to continue delivering exceptional services to our customers, as well as ensure their well-being when they travel with us.

CUSTOMER ENGAGEMENT (CONTINUED)

Digitalisation and Data Analytics to Manage Customers' Feedback and Needs

The CA department employs digital solutions and data analytics to automate and better manage SIA's feedback handling process. For example, the natural language processing feature in the Customer Feedback Analytics (CFA) allows for automated extraction of customer information, better feedback classification, facilitates case routing, and prioritises time-sensitive cases. By the end of FY2021/22, the department saved over 5,490 man-hours since the launch of CFA in March 2018. In particular, prioritising customer requests for refunds, re-bookings and ticket cancellations in relation to the Covid-19 pandemic has helped the department manage the surge in feedback volumes during the initial period of the outbreak.

In FY2021/22, SIA engaged Salesforce, the global leader in customer relationship management, to develop and implement a new customer case and knowledge management system for the Airline. The new system, 1Point, offers a holistic view of customer interactions through a single interface. SIA's service agents will no longer need to toggle among multiple systems to retrieve customer data, up-to-date information on products, services, policies, and procedures, as well as perform transactions. Its case management and guided workflows will also be integrated with SIA's in-house artificial intelligence and machine learning capabilities. As a dynamic case management tool, 1Point will help to enhance the travel experience by supporting consistent and more personalised service across various customer touchpoints. Service agents will have access to the relevant information, including those related to each customer's interactions. This facilitates quicker decision-making, and allows them to pre-empt customers' needs more efficiently. As of March 2022, 1Point was deployed at SIA's contact centres globally, and will be extended to customer feedback handling units over the next year.

Engaging Customers Through Social Media Platforms

Social media is an important communications platform through which we engage with our customers, convey important travel information, as well as obtain feedback. SIA's social media presence on Facebook, Twitter, Instagram, LinkedIn, YouTube, Weibo, and WeChat serve as additional touchpoints for online customer engagement. In 2014, the Social Media Engagement Unit (SMEU) was established to provide round-the-clock assistance for our customers. The SMEU responds to customer feedback on SIA's social media channels and provides assistance with requests and issues 24 hours a day, seven days a week.



CUSTOMER ENGAGEMENT (CONTINUED)

Customer Communications Through the Covid-19 Pandemic COV-19

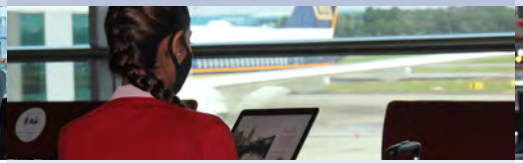
As borders slowly reopened, we remain connected with our customers, kept them updated on travel requirements, and supported them on their travel plans.

Ensuring frontliners are well-equipped to support customers



As global travel remains impacted by changes to travel restrictions and regulations, our contact centres and reservation offices continue to work closely with all business units to ensure that our frontline employees and self-service channels are kept updated with the latest information. This allows our employees to render the best assistance to our customers, helping them manage their travel needs amidst the complexities of new Covid-19-related measures.

Keeping customers up-to-date on the latest travel advisories



The Travel Advisory page, which is accessible on our website and the SingaporeAir mobile application, was set up to provide information on the latest entry requirements to various countries, including Singapore.

We proactively engage our customers by keeping them apprised of critical travel advisory information at key junctures in their travel journey with SIA. Travel advisories are available in customers' direct booking flow, and proactively sent 30 days prior to their flight's departure. Information is, continually updated in Manage Booking and MyTrips on the SingaporeAir mobile app, and also provided during online check-in.

Following Singapore's introduction of the Vaccinated Travel Lane (VTL) arrangement in September 2021, Singapore Airlines launched designated VTL flights in support of the Singapore government's plan to reopen Singapore in a safe and calibrated manner. To ensure a seamless customer experience, we launched a dedicated webpage to communicate on how VTLs operate, and what the travel requirements are.

In addition, Singapore Airlines actively uses its social media platforms to update customers of any key regulatory changes in Singapore, and continues to provide updates on key flight changes to customers as and when required through SMS and email.

Providing access to Covid-19-related information through a dedicated information centre



Introduced in 2020, the Covid-19 Information Centre was created to house all of the travel-related information a customer would need.

The one-stop portal continues to house the following content:

- Frequently asked questions from customers on Covid-19 travel
- Flight schedules
- Travel advisories
- Pre-departure Covid-19 test locations
- Transit and entry requirements for entry into Singapore
- Health and safety measures
- Complimentary rebooking policy
- Flight and bonus flight credits
- KrisFlyer Elite and PPS Club status extension
- Refunds for cancelled flights

Similarly, Scoot introduced a dedicated Covid-19 travel information page on its website.

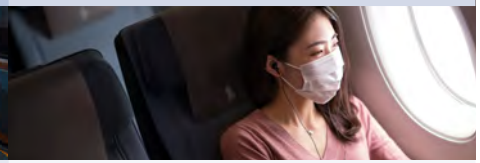
Supporting customers' travel arrangements



SIA's Covid-19 Assistance Request Form enables customers who have been impacted by Covid-19 travel-related issues to submit refund and rebooking requests without the need to contact the Airline. Requests related to medical emergencies and travel within 72 hours are automatically prioritised.

Under SIA's Global Travel Waiver Policy and Scoot's Covid-19 Travel Waiver Policy, which were introduced during the pandemic, impacted customers can consider seeking a full refund, collecting flight credits, or rebooking flights to a later date for their new travel plans.

Restoring confidence in air travel



Since 2020, a series of #SIAcares initiatives were launched to enhance the end-to-end health and safety of customers along the customer journey. Various measures were implemented and enhanced to improve the health and safety of all customers. Staggered boarding and disembarkation were also introduced to maintain safe distancing, and Singapore Airlines was among the first few airlines to operate flights with a full set of vaccinated pilots and cabin crew.

These initiatives and SIA's unwavering commitment to safeguard the well-being of our customers and crew were recognised with a Diamond rating in the APEX Health Safety Audit 2021 and 5-Star Health and Safety rating in the Skytrax Covid-19 Airline Safety Audit 2021.

Videos on our promise of care and other key safety and digital measures were available for viewing on our website and social media platforms to instill customer confidence. More details on the latest #SIAcares initiatives can be found on our website and YouTube channel.

CUSTOMER ENGAGEMENT (CONTINUED)

Enabling Flexibility in the New Age of Travel

SIA strives to reassure customers of the ease to reschedule bookings and enable them to book their travels with a greater peace of mind.

Extension of the Complimentary Rebooking Policy

In FY2021/22, SIA extended its complimentary rebooking policy, which was first introduced in March 2020 to 31 July 2022. Under this policy, customers may enjoy unlimited complimentary rebooking until 31 July 2022, regardless of fare type. Thereafter, one additional complimentary change will be allowed, and all amendment fees will be waived for eligible tickets. Fare difference remains applicable.

Revamped Corporate Travel Progamme Under the HighFlyer Brand

Since September 2021, SIA has integrated its corporate travel programmes under the HighFlyer brand, which will offer greater value, benefits, and options for corporate customers from businesses of all sizes, ranging from small and medium-sized enterprises to large multi-national companies. Previously, the SIA Corporate Travel Programme was aimed at large corporates, while the HighFlyer programme focused on small and medium-sized enterprises. With the integration, all benefits in the separate programmes will be retained in the new HighFlyer programme. New features have also been introduced, which include more eligible booking classes for HighFlyer points accrual on non-corporate discounted flights, as well as rewards for reaching specific milestones in customer spend. SIA will expand the rewards catalogue for HighFlyer members, introducing more options for members to redeem with HighFlyer points.

Participating companies will be able to enjoy preferential corporate fares, and earn HighFlyer points, for all eligible travel on both Singapore Airlines and Scoot. This gives businesses the flexibility to choose between a full-service or low-cost offering, and enjoy convenient connections on the complementary passenger network. The revamped HighFlyer programme will support seamless business travel at every step of the journey. Customers can access a convenient one-stop corporate portal for booking flights, redeeming rewards, and managing their travel with ease.

More information on the revamped HighFlyer programme can be found on our website.



ENSURING CUSTOMER SATISFACTION THROUGH SERVICE EXCELLENCE

Keeping true to our brand promise, delivering the highest standards of service excellence.

Tracking and Refining SIA's Service Quality Performance

The SIA Customer Contact Services (CCS) team aims to ensure high customer satisfaction levels when they assist travellers with their requests and enquiries. The team regularly collates and monitors customer satisfaction levels across SIA's customer servicing channels. A Process Improvement Framework is in place to help us achieve our service vision through collaboration and continuous learning. Our employees are trained to be on a lookout for opportunities to simplify and redesign processes. Our Quality Framework is continuously enhanced to enable us to deliver high quality service. In addition, the use of data analytics has enabled the CCS team to accelerate and enhance decision making, implementing more effective changes in our contact centres.

The Service Culture and Quality (SCQ) team is responsible for tracking customer feedback and compiling monthly service quality performance reports to enable business units to monitor their service performance. With the adoption of customised tableau dashboards, the team is now able to identify and monitor emerging topics of concern in real-time, and share insights with the relevant business units to enhance customer experience and develop new products and services.

A Data-centric Approach for a Customer-centric Design COV-19

SIA's CEx department works with business units across the organisation to adopt a consistent customer-centric and data-driven approach when designing and improving the end-to-end customer journey.

Building on our commitment to deliver personalised and meaningful customer service, CEx department supports other business units by guiding their decisions based on customer insights gathered from the various touchpoints. These insights are gathered through a combination of qualitative and quantitative research that helps us understand customers' needs, value drivers, concerns, and potential opportunities for improvements. This information is then shared with the relevant business units to design and implement ways to enhance the SIA experience.

Beyond large scale data projects and design workshops, the team also carries out ethnographic research to gain a deeper understanding about subtle customer needs and requirements. This research is combined with operational data, frontline observations, and notations of customer preferences from our CEM system to provide a better analysis of the service delivery improvements and requirements. Where in-depth research is unavailable or when execution timelines limit the ability to elicit customer insights, the team employs SIA's Experience Principles to assist with design decisions and implement initiatives that are true to our customers' needs and SIA's brand values.

With the Covid-19 pandemic impacting the travel and tourism industry, we also introduced additional regular surveys to help us understand our customers' sentiments regarding travel in the new normal.



ENSURING CUSTOMER SATISFACTION THROUGH SERVICE EXCELLENCE (CONTINUED)

Performance Tracking

Ensuring a positive customer experience across the customer journey is a key priority for Singapore Airlines. This is measured through Voice of Customer (VoC) surveys conducted after each flight, which covers customer touchpoints[44] both on the ground and in the air. In 2020, two additional metrics, seamless experience and health and safety, were added to help SIA calibrate measures to address the new priorities of our customers, which emerged amid the pandemic.

Through the VoC surveys, SIA obtains a Net Promoter Score (NPS), which is the leading metric for the measurement of customers' loyalty. In FY2021/22, we received more than 110,000 customer responses, and achieved a +4.0 percentage points improvement in NPS from the baseline year of FY2019/20[45], despite the additional challenges of operational complexities during the pandemic, and geopolitical developments over the past year.

Customer Satisfaction Score (CSAT) scores for on the ground and in the air touchpoints are also tracked to gain deeper insights into our customers' needs, and identify opportunities to enhance our services and product offerings across the customer journey.

We regularly review the NPS and CSAT scores, as well as customers' feedback and concerns raised through VoC surveys during SIA's management forums such as the Travel Experience Steering Committee, Management Committee Forums, and the Board's Customer Experience, Technology and Sustainability Committee meetings. In addition, our business units use them to review existing customer-related policies, products, and services.





[44] *On the ground and in the air touchpoints include areas such as call services, website, check-in, boarding, in-flight food and beverages, among others.*
[45] *FY2019/20 was selected as the baseline year for benchmarking as air travel was severely impacted by the Covid-19 pandemic in FY2020/21.*

ENSURING CUSTOMER SATISFACTION THROUGH SERVICE EXCELLENCE (CONTINUED)

Enhancement of Customer Touchpoints and Service Excellence

We continually innovate and implement new initiatives to improve the way we engage our customers.

Maintaining High Standards of Service Through #SIAcares COV-19

With a mission to prioritise the health and safety of our customers while offering a seamless end-to-end customer experience, the health safety journey framework was developed to formulate initiatives for the three main areas in a customer journey: pre-flight, in-flight, and post-flight. These #SIAcares initiatives were designed to protect our customers' well-being and enable a smoother and safer customer journey experience, bringing them greater peace of mind.

From check-in to arrival, customers can count on safety precautions such as enhanced cleaning and rigorous disinfection of high-touch surfaces, as well as meaningful innovations to minimise contact. Our unwavering commitment to safeguard the well-being of our customers and employees have been recognised with a Diamond rating in the APEX Health Safety Audit 2021 - the highest level attainable in SimpliFlying audit of global airlines; and 5-Star Health and Safety rating in the Skytrax Covid-19 Airline Safety Audit 2021.

As regulations ease, some of these measures may be further adjusted. More information on the latest updates for #SIAcares initiatives can be found on our website.

Pre-flight



- Consider getting our enhanced travel insurance coverage. More information can be found on our website.
- Get personalised travel information and prepare for pre-flight arrangements via the SingaporeAir mobile app.
- Connect with Kris, our chatbot, on queries relating to flight changes, flight schedule information, travel advisories, transit information and more.
- Use our one-stop online portal for more information on Covid-19 pre-departure testing requirements.
- Find out which clinics provide approved Covid-19 tests.
- Check in online via the SingaporeAir mobile app. For a more convenient experience, automatic check-in services at 48 hours to departure is also available for eligible passengers.
- Generate a digital or mobile boarding pass, and use self-service kiosks and automated bag drop counters at selected airports.
- View our in-flight menu online.
- Pre-order duty-free shopping on KrisShop.

In-flight



- Request for masks and wipes on board.
- Use your personal mobile device to connect to *KrisWorld*, our in-flight entertainment system[46] by downloading the SingaporeAir mobile app before your flight. You can also pair your device on board and control the in-flight entertainment screen.
- Connect to the Wi-Fi on board the flight and keep in touch with your loved ones[47].
- View the in-flight menu via the *KrisWorld* in-flight entertainment system.
- Every aircraft is equipped with High-Efficiency Particulate Air (HEPA) filters, which remove more than 99.9% of the microbes in the air. Cabin air is also refreshed every two to three minutes throughout the flight.
- Before every flight, the aircraft is thoroughly cleaned. Commonly-touched surfaces are disinfected. Lavatories are cleaned with high-strength disinfectants, and cabin surfaces are treated with a long-lasting antimicrobial coating.
- After every flight, all headsets, headrest covers, pillow covers, bedsheets and blankets are replaced. Our linens are laundered at high temperatures to sanitise them. Headsets are also disinfected and packed individually with hygienic covers.
- In preparing your in-flight meals, our catering partners uphold the highest hygiene standards including PPE for food handlers and using automation to reduce contact. Do note that meal services may be simplified or temporarily unavailable on certain flights to meet regulatory requirements.

Post-flight



- Obtain the baggage carousel number via the SingaporeAir mobile app.
- Translate local languages via the Translation Assistant on the SingaporeAir mobile app to help with the navigation of your surroundings.

[46] *This feature is not available on SIA's Boeing 737-800 NG aircraft.*
[47] *This feature is not available on SIA's Boeing 737-800 NG aircraft.*

ENSURING CUSTOMER SATISFACTION THROUGH SERVICE EXCELLENCE (CONTINUED)

Enabling Self-service Check-in for the SIA Group

To prevent the spread of Covid-19, many countries introduced additional entry requirements such as pre-departure tests and vaccination requirements. Health certificates had to be verified manually by our frontline agents, as most health certificates were not digitised.

This meant that the SIA Group's customers were unable to perform self-service check-in via our online channels or via our self-service check-in kiosks at the airport. The additional manual processes resulted in longer queues and wait times at the airport, and longer processing time for each check-in transaction.

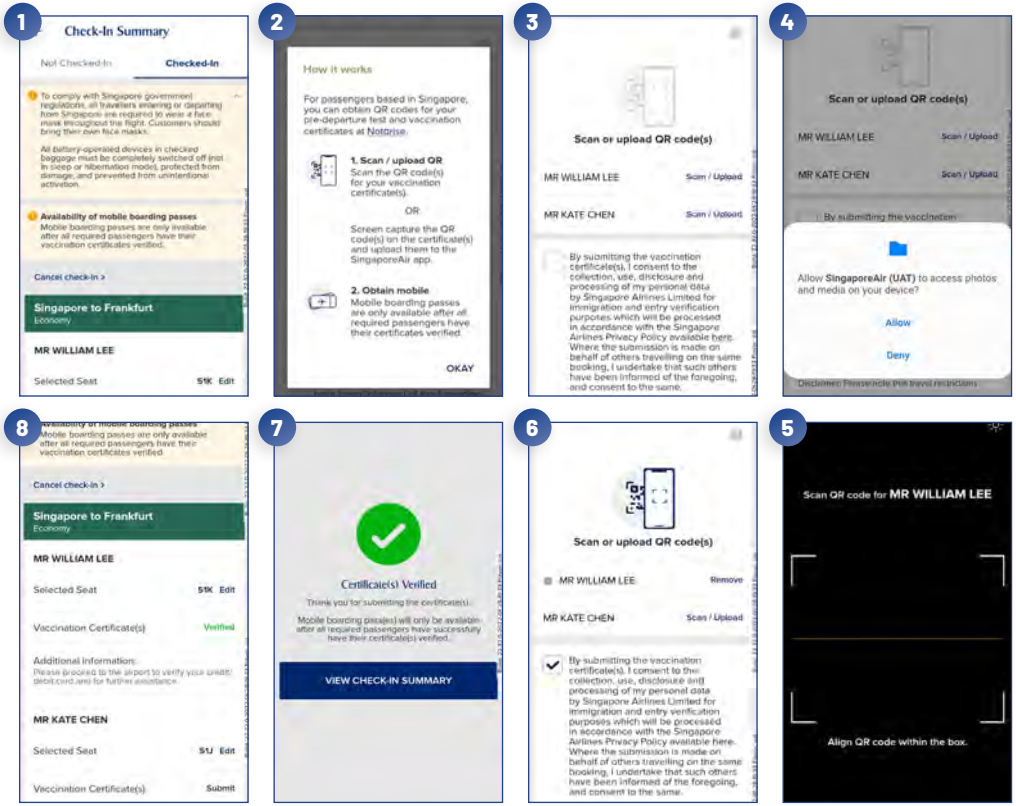
To improve check-in operations, two digital solutions were introduced:

HealthCert Service Layer COV-19

In July 2021, the HealthCert Service Layer (HSL) was launched for SIA flights from Singapore to Frankfurt and Munich. The HSL is a digital solution that enables SIA and Scoot customers to verify their digital health certificates as part of their online check-in and self-service kiosk process. Customers can also generate their boarding passes and skip the manual checks at the airport.

In March 2022, the HSL capabilities were expanded to cover other digital health certificates standards with the help of a third-party verifier. HSL was subsequently rolled out to more an additional 13 destinations in the SIA and Scoot network over nine months. The HSL would be further enhanced to recognise additional travel documents required by certain countries, such as Attestation Forms and paper health certificates, so that more customers can enjoy a seamless self-service check-in experience.

SingaporeAir Mobile Application HealthCert Service Layer Check-in Flow



SIA Group Kiosk Application

Conceptualised in-house in 2020, the SIA Group Kiosk application allows SIA and Scoot to replace their third-party kiosk applications. The agile development model for the SIA Group Kiosk application meant that kiosk application enhancements can be done quickly to meet the rapidly changing travel requirements, and offer customers a more consistent and seamless kiosk check-in experience. The SIA Group Kiosk application, integrated with HSL capabilities, was rolled out for SIA flights at Singapore Changi Airport in July 2021. This was subsequently expanded to Scoot flights in October 2021. The SIA Group Kiosk application will be rolled out progressively to overseas airports in 2022. With this application, the average transaction time for self-check-in via website, mobile app, or kiosk only takes up to 2.5 minutes, as compared to 10 minutes for counter check-in by customers who have complex entry requirements or are required to submit additional travel documents where self-check-in may not be possible.



SIA Check-in Kiosk



Scoot Check-in Kiosk

ENSURING CUSTOMER SATISFACTION THROUGH SERVICE EXCELLENCE (CONTINUED)

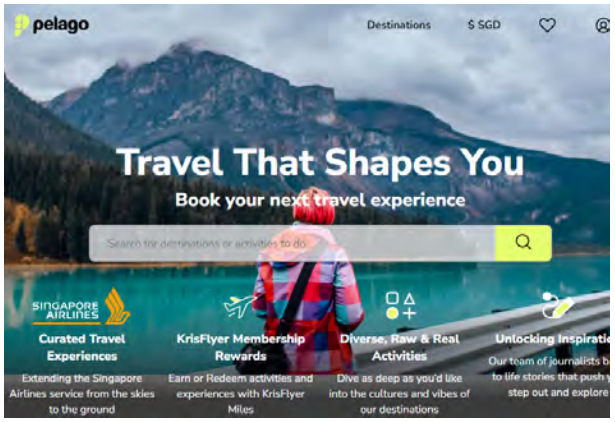
CASE STUDY

Singapore Airlines



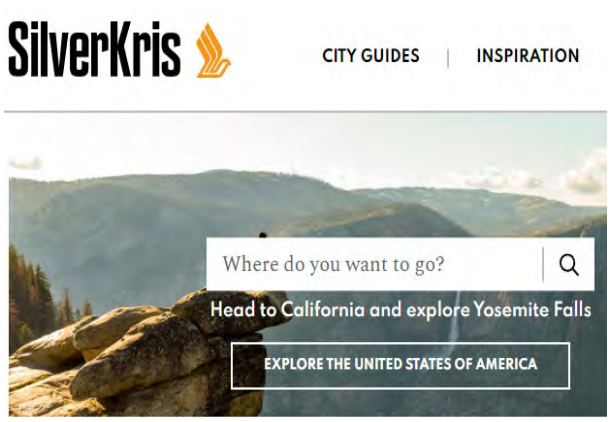
New Partnership with Golden Door – Enhancing Customer Wellness on World's Longest Flights

In October 2021, SIA announced a partnership with world-renowned health and wellness retreat Golden Door, based in California, the United States (US). With healthy travel a priority for many travellers, this partnership will bring a new roster of health-focused meals, exercise, and well-being options to SIA customers on board its flights between Singapore and the US. The first menus and wellness content from the partnership were made available on flight SQ37, the direct service from Los Angeles to Singapore, in January 2022. The programme will be progressively extended to SIA's non-stop services from New York, San Francisco, and Seattle to Singapore.



Introducing Pelago – A Travel Experience Digital Platform

As an opportunity to broaden our e-commerce landscape, SIA launched Pelago in June 2021 as a platform to extend the SIA experience from the sky to the ground. The one-stop portal acts as a unified hub for discovering, planning, and booking different experiences from a plethora of curated experiences and activities, which include theme park admission, food and drink tours, and wellness treatments. As part of the SIA family, Pelago also offers KrisFlyer membership rewards. This allows customers to pay with miles on the platform and earn miles with every booking made.



Revamped SilverKris.com – Improving User Experience

In FY2021/22, SilverKris.com was enhanced to introduce new features designed to offer readers a more personalised and user-friendly experience. Reconceived as an all-digital platform, the new SilverKris serves as the inspiration hub for travellers all around the Singapore Airlines network. We leverage a network of writers, photographers, and videographers to produce on-the-pulse features, intriguing interviews, insider-curated city guides and beautiful videos. This is aimed to remind readers that there is a world waiting to be explored with the Airline. With booking widgets on every page, SilverKris aims to close the distance not just between places, but between dreaming and doing. In addition to an extensive coverage on hotels, restaurants and attractions, SilverKris also focuses on a sophisticated range of topics, from architecture and urban planning to technological advancements that have the power to change the world. The portal also serves as a definitive source for Singapore Airlines initiatives, news and other updates.

ENSURING CUSTOMER SATISFACTION THROUGH SERVICE EXCELLENCE (CONTINUED)

CASE STUDY

Singapore Airlines (continued)

KrisShop – Promoting Local Artists and Sustainable Brands

Through the KrisShop concept stores, collections of high-quality local and sustainable products are curated for our customers. *With Love, SG* puts homegrown brands in the spotlight, while *KrisShop Discovers* showcases designs that reflect cultures and heritages around the world, and *KrisShop Green* features a range of eco-friendly products.

In FY2021/22, *KrisShop Cares* was launched to allow travellers to shop for curated products and artworks while supporting social organisations in Singapore[48]. KrisShop currently promotes 10 brands and over 370 products to a global audience under *KrisShop Cares*. At least 85% of the proceeds goes back to these social organisations.

















[48] *Social organisations include social enterprises, brands supporting artists with special needs, and not-for-profit organisations.*

ENSURING CUSTOMER SATISFACTION THROUGH SERVICE EXCELLENCE (CONTINUED)

CASE STUDY

Singapore Airlines (continued)

SIA@Home - Bringing the SIA Experience to Customers' Homes

The SIA@Home dining packages are aimed at bringing SIA's First Class and Business Class experience to customers as a curated home-dining experience for two. With menus created by our International Culinary Panel and wine pairings selected by our wine panel, along with an interactive 360-degree aircraft cabin video, curated playlists for each menu and optional luxury tableware, the full experience caters to customers who miss the SIA in-flight experience. In addition, a book-the-chef option allows customers to have a chef present to reheat, plate, and serve the meals. Since its launch in October 2021, more than 1,850 packages have been sold, the most popular of which has been the SIA Signature Satay Package.







Featured chefs from SIA's International Culinary Panel (ICP): Georges Blanc from France, Matt Moran from Australia, Yoshihiro Murata from Japan, Sanjeev Kapoor from India, and Zhu Jun from China.





ENSURING CUSTOMER SATISFACTION THROUGH SERVICE EXCELLENCE (CONTINUED)

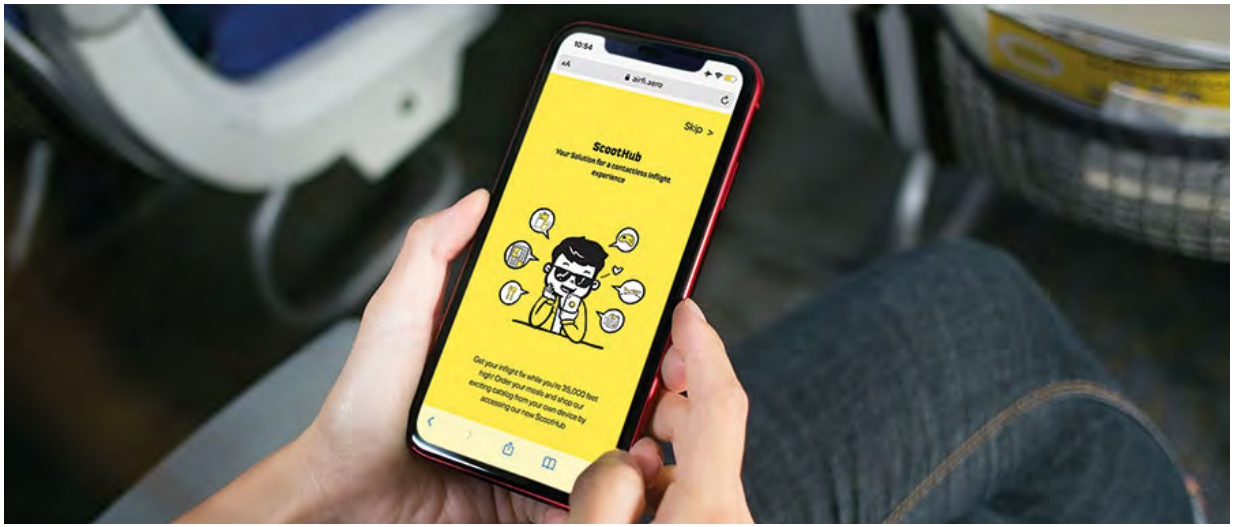
CASE STUDY

Scoot

Introducing ScootHub, a Digital In-flight Portal to Meet Customer Needs

ScootHub is an in-flight digital portal that passengers can access from their mobile devices. It was launched in December 2020 to transform the low-cost carrier in-flight experience. Through the portal, passengers can order food and beverages from Scoot Café, play games, browse inspirational travel content, and more. Payment can be made via credit card on the portal, and cabin crew will deliver the purchases to customers on board the flight.

With the transactional aspects of in-flight service digitised and open to self-service by customers, Scoot's cabin crew can focus on providing quality service to customers. In addition, ScootHub minimises contact between passengers and crew and eliminates the risk of Covid-19 surface transmission via physical seatback catalogues. The transition from physical to digital in-flight menus and magazines have greatly contributed to Scoot's environmental sustainability efforts.



Implementing More Self-Service Options for Customers' Convenience

Scoot has expanded its range of automated online self-service options in FY2021/22. This reduces processing time, improves overall customer experience, and alleviates the strain on our manpower resources. Customer service processes that have been converted to automated self-service options include flight refunds and missing baggage tracking. This has been useful in responding to the surge in Covid-19-related refund requests in a timely manner.

In the unfortunate event that checked luggage goes missing, travellers can track their case status directly through Scoot's third-party baggage tracking service, after filing a baggage report. To simplify the recovery process, travellers can also update their delivery and contact information to receive notifications on the status of their baggage recovery.

Offering Sweeter Rewards to Customers Through Scoot Insider

Scoot's exclusive members-only programme, Scoot Insider, has over a million members and is available to all customers globally at no cost. Members enjoy improved experience on the Scoot website, as well as exclusive member-only promotions and discounts on their birthday. KrisFlyer members can also sync their KrisFlyer account in Scoot Insider to earn and redeem miles on their Scoot flights.

From 1 January 2021, Scoot customers have been able to earn Elite miles which count towards the KrisFlyer membership tiers Elite Silver and Elite Gold. Elite miles earned from flying with Scoot within each calendar year will also earn KrisFlyer Milestone Rewards, a scheme which rewards loyal customers with exclusive privileges.

Enhanced Insurance for Covid-19 Travel

Scoot has also enhanced its travel insurance coverage, Scootsurance, underwritten by AXA Insurance, to include Covid-19 cover. It is offered at the same price as before, for flights departing Singapore. More information on Scootsurance can be found on Scoot's website.

CUSTOMER PRIVACY 418-1

We recognise the importance of safeguarding the privacy of our customers' personal data.

SIA complies with data protection laws, including the Personal Data Protection Act of Singapore, as it cultivates confidence among customers who entrust us with their personal data. SIA regularly reviews and updates its policies, guidelines, and processes for compliance with applicable global privacy laws. User data will be collected, used, disclosed, and processed in accordance with the relevant data protection principles under the applicable laws including limiting the use of the data to stated purposes. Where data is provided to third parties, third parties may only use the data in accordance with the applicable legal requirements. Customer data such as personal particulars and travel history are treated as strictly confidential. Complaints, queries, withdrawal of consent, data subject requests including those for access and corrections are handled according to established internal organisational processes. More information on how we deal with and safeguard customer data can be found in our customer privacy policy at our website.

Processes are regularly reviewed and enhanced based on customer feedback and complemented with consultations with the Legal department to ensure strict compliance with the applicable data protection laws. Privacy impact assessments are carried out when assessed to be required under the applicable laws, and regular audits are conducted to ensure that our employees comply with our customer data protection policies. Annually, SIA employees are also required to complete training on data protection.

SIA strives to maintain high levels of cyber security to defend our critical assets from, and minimise the impact of, cyber attacks. We also continue to invest in our cyber security to refresh our protection, detection, and response across processes, systems and people. Cyber security starts from the very beginning of any IT initiative, covering the entire life cycle by embedding security in design, development, deployment and decommission.

The Board has oversight on cyber security and reviews cyber risks and mitigations. The CEO and the Management Committee are updated regularly on cyber security and provides direction and guidance on cyber security strategy, posture and initiatives.





CONNECTING COMMUNITIES

Forging meaningful, stronger relationships with our stakeholders

From the investing community to our partners, aviation communities and those we serve

Where we weave Singapore's social fabric with a global shared heritage

We sustain our connections with the world

Because we believe in flying the extra mile, with a higher purpose

SUPPLIERS 103-1 103-2 103-3

Developing strong relationships with our suppliers is essential for SIA's continued success, as much of our impact on our society and the environment occurs through our supply chain. All of our suppliers play a crucial role in charting the aviation industry's path towards socio-economic and environmental sustainability. We recognise the importance of sustainable procurement, and actively collaborate with our suppliers to further our sustainable development efforts.

OUR MANAGEMENT APPROACH

Key Engagement Activities

Engagement Mode	Frequency
Service Audits and Assessments	Regular
Meetings (Dialogues, Discussions, Project Milestone Meetings, Teleconferences, etc.)	Regular
Trade Fairs, Forums	Regular

Key Policies, Processes, and Procedures

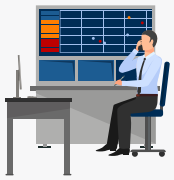
- Procurement policies and processes
- Suppliers' Code of Conduct

SIA's Ambition

We treat suppliers with respect, emphasise fairness in our relationships, and work together towards sustainable business practices.



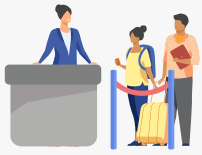
In-flight Catering



Technology Systems



Aviation Maintenance and Materials



Ground Handling



Aviation Fuel



Aircraft Fleet and Engines

FY2021/22 in Numbers

>$8.7 billion

total expenditure for supplier services

>9,430

suppliers globally

Supporting the UN SDGs

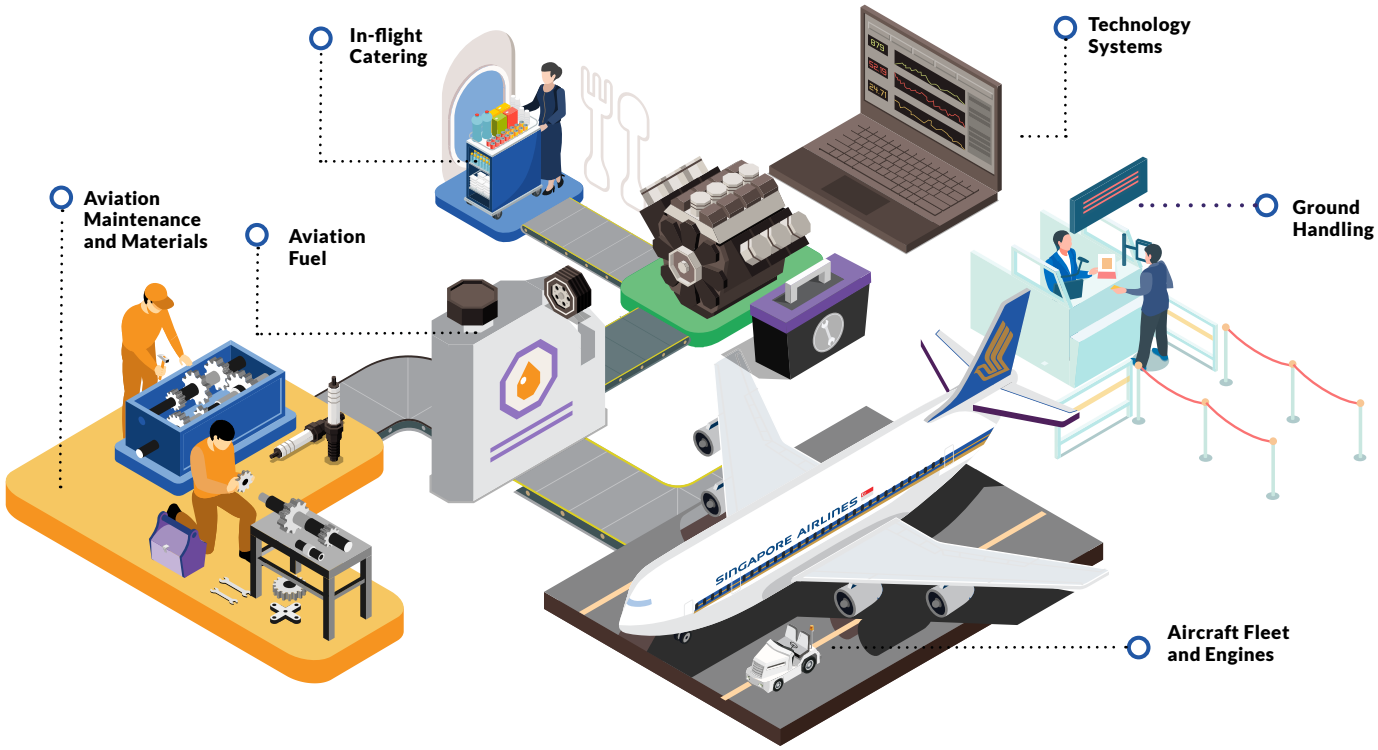
17 PARTNERSHIPS FOR THE GOALS

OUR SUPPLY CHAIN 102-9

We adopt a risk-based approach to ensure that our supply chain is sustainable and resilient.

Our Key Suppliers

SIA has almost 9,500 suppliers globally. They supply goods, materials, or services directly to SIA. Our supply chain can be broadly classified into six main categories:



In FY2021/22, the total expenditure for suppliers' services engaged by the SIA Group was over $8.7 billion, with most of our expenditure going towards aircraft fleet and engines, aviation fuel, aviation maintenance and materials, ground handling, as well as in-flight catering.

Our top 10 suppliers based on expenditure, listed in alphabetical order, are as follows:

1. Air BP Limited
2. Airbus SAS
3. Boeing Commercial Airplanes
4. Chevron Singapore Pte Ltd
5. ExxonMobil Petroleum & Chemical BVBA
6. Rolls-Royce Holdings PLC
7. SATS Ltd
8. Shell Eastern Petroleum (Pte) Ltd
9. SIA Engineering Company Ltd
10. Singapore Petroleum Company

INTEGRATING SUSTAINABILITY

We can secure a sustainable future by strengthening our supply chain.

Embedding Sustainability Within Our Procurement Process

308-1 414-1

We integrate environmental, social, and governance considerations into our procurement process. We also manage supply chain risks and upkeep high sustainability performance standards through our SCOC. All contracted suppliers are obliged to comply with the SCOC, failing which, may result in penalties such as termination of contracts.

During the bidding and submission stage, new and existing suppliers may submit relevant environmental and safety certifications or standards that will support their proposals.



1 Request for Quotations, Tenders, and Proposals

- As part of the Request for Proposal (RFP) process, it is mandatory to meet SCOC requirements.

2 Bidding and Submission Process

- Vendors are required to declare their SCOC compliance in their bid submission.

3 Evaluation and Selection

- Review of price and quality of products and services.
- Review of supplier's background and track records, including any known SCOC breaches.

4 Award of Contract

- All suppliers are required to comply with SIA's SCOC, which forms part of their contract.
- Business units continually monitor the performance of suppliers, and to engage suppliers in the event of a known breach.

MANAGING OUR SUPPLY CHAIN RISKS

We seek to manage sustainability risks across our supply chain.

Suppliers' Code of Conduct 308-1 414-1

Through the introduction of SIA's SCOC, we aim to mitigate any social, economic, and environmental risks by setting minimum standards of behaviour for our suppliers. The SCOC was developed in accordance with our business values to promote sustainable development. It is also based on the Ten Principles of the UN Global Compact.

All suppliers are required to comply with the SCOC when they sign a contract with SIA. The SCOC is publicly available to all suppliers via our website. All contracts signed with suppliers include a clause referencing the SCOC. In the event a supplier is unable to include the SCOC in their contract, a review is carried out by the Sustainability Office, and a waiver can only be approved by Vice President Sustainability or his/her alternate. Through the introduction of the SCOC, SIA aims to have oversight of appointed suppliers' conduct, and mitigate any potential impact they may have to the environment they operate in. In FY2021/22, there were no reported cases of SCOC breaches.

1. Compliance With Laws and Regulations

- Accounting practices
- Competition compliance
- Intellectual property
- Disclosure

2. Ethics and Conflict of Interest PR-10

- Anti-corruption
- Financial integrity
- Confidentiality
- Relationship of business partners with company

3. Safety and Quality

- Health and safety
- Quality of products and services

4. Environment PR-7 PR-8 PR-9

- Compliance with laws and regulations
- Engagement in environmental management processes

5. Labour Standards PR-1 PR-2 PR-3 PR-4 PR-5 PR-6

- Equal opportunity
- Non-discrimination
- Minimum age child labour/ forced labour
- Working hours
- Wage standards

6. Subcontractors and Other Service Providers

- Compliance with Code of Conduct
- On-time payment

7. Communication, Documentation and Inspection

- Employee awareness of Code of Conduct
- Language translation

MANAGING OUR SUPPLY CHAIN RISKS (CONTINUED)

Reinforcing Our Supply Chain by Promoting Best Practices with Our Suppliers

Sustainable business practices involve maintaining responsible supply chains that minimise the environmental and social impact, as well as risks in the communities they operate in. As part of our sustainable procurement strategy, SIA seeks to engage suppliers who adopt sustainable business practices, and encourages suppliers to submit environmental-friendly proposals, which are favourably considered during the product assessment and selection stage.



MANAGING OUR SUPPLY CHAIN RISKS (CONTINUED)

Ensuring Resilience in Our Supply Chain Through the Pandemic COV-19

The Covid-19 pandemic has had an unprecedented impact on the global supply chain. During this period, navigating supply chain disruptions and managing our supply chain risks have never been more important. SIA recognises the role we must play to ensure the continuous flow of essential goods around the world, while maintaining strong relationships with our suppliers and business partners.



Navigating Supply Chain Disruptions

To mitigate heightened risks of supply chain disruptions and supplier insolvencies, we have adapted our procurement strategy and introduced risk management measures to ensure the resilience of our supply chain. Maintaining close and regular engagement with our suppliers have been a key priority to enable us to achieve cost savings and operational stability.



Working with Aircraft Manufacturers

SIA recognises that aircraft manufacturers are a core aspect of SIA's business and supply chain. In FY2020/21, we have reached agreements with Airbus and Boeing to revise our aircraft delivery schedule. As a result, some of the aircraft in the SIA Group's order book will be delivered over a longer period, with the delivery stream spread out beyond the immediate five years. This will enable the SIA Group to defer more than $4 billion of capital expenditure between FY2020/21 and FY2022/23 to later years, while aligning the addition of capacity to demand.

MANAGING OUR SUPPLY CHAIN RISKS (CONTINUED)



Cargo-only Flights on Passenger Aircraft

During this period when supply chains are being disrupted, SIA has sought to play our part by facilitating the continuous flow of essential goods and medical supplies around the world. SIA worked to maintain an effective air freight network despite the substantial reduction in passenger flights, which meant a loss in bellyhold capacity, during the pandemic.

In addition to maximising the usage of our freighter fleet, we also operated cargo charter flights with SIA and Scoot passenger aircraft, and introduced scheduled cargo-only flights on passenger aircraft to alleviate cargo capacity constraints. These efforts allowed SIA to cater to global supply chain needs, and ensure the continuous flow of essential goods and medical supplies.

As at FY2021/22, the SIA Group's cargo network covers 98 destinations (including Singapore), up from 72 in FY2020/21.

MANAGING OUR SUPPLY CHAIN RISKS (CONTINUED)

Preparing for Recovery

As we prepare for the gradual recovery of air travel, measures were implemented to ensure that we would be able to restart our operations smoothly, while we rebuild our network. Some of these measures include:

- Incorporating new requirements arising from the Covid-19 pandemic into the contracts, such as support for pharmaceutical cargo.
- Ensuring close coordination with stations to assess suppliers' readiness when we restart.
- Planning inventory using an agile approach that balances between the ability to support restart operations and cost management.

We also introduced a Safety Restart Checklist to assess the operational and safety readiness of our stations and Ground Handling Agents to ensure that our service providers maintain safety standards. This is to enable a smooth and safe restart of our ground operations when aviation activities pick up. The checklist serves as a guide for our overseas stations, and includes recommendations to conduct audits and checks on our service providers on their safety procedures.



WORKING WITH OUR SUPPLIERS ON SUSTAINABLE DEVELOPMENT

Singapore Airlines collaborates with our suppliers to integrate sustainability into our business.

Partnerships With Our Suppliers

The sustainable future of the aviation industry is propelled by organisations that are willing to take the first step to explore and collaborate on innovative new projects that are aligned with our goals. SIA strives to support such advancements by sourcing from suppliers with strong sustainable value propositions.

SIA collaborates with our suppliers on initiatives to provide socially and environmentally-friendly offerings amidst the pandemic. Some ongoing initiatives include the Farm-to-Plane programme with Aerofarm, SIA's KrisShop Cares concept store, our collaboration with COMO Shambhala to provide wholesome and nutritious in-flight meals, and with Lumitics, KrisLab, and SATS Ltd to reduce in-flight catering food waste through the use of artificial intelligence and digital technologies.

More notably, Lumitics was among 25 companies in the world to win an award under the Sustainable Consumption and Production goal of the United Nations start-up competition in early 2021. In March 2021, SIA deployed Lumitics' digital technology in our overseas stations to help reduce in-flight catering food waste.

We constantly embark on new collaboration opportunities with other suppliers. In FY2020/21, SIA and SATS Ltd collaborated to develop an eco-friendly meal concept for Economy Class customers on SIA flights under 3.5 hours[49]. The meal concept includes a wider range of main courses with more environmentally-friendly packaging and utensils. Leftovers on the tray, including the new service ware, can be processed by an offsite eco-digester into pellets that can be used as refuse-derived fuel, reducing 60% of catering waste.



Despite the challenges faced from the pandemic, we continue to collaborate with our suppliers on initiatives to provide socially and environmentally-friendly offerings.

[49] *Except flights between Singapore and Kuala Lumpur, Penang, and Medan.*

CASE STUDY



Farm-to-Plane Programme

In FY2021/22, the Farm-to-Plane programme expanded to its second airport in the United States of America, and now supplies fresh produce to SIA's operations at both Newark Liberty International Airport and John F. Kennedy International Airport. Greens for in-flight meals are now grown five miles from the airport, instead of being flown 3,000 miles from the West Coast.

SIA's AeroFarm greens are grown via a sustainable growing process termed "aeroponics", reliably yielding 30 harvests per year (as compared to three harvests per year in a conventional farm) without the use of pesticides, herbicides, and fungicides. As opposed to the use of soil, seeds are grown indoors on a specialty growing cloth medium under LED lights calibrated to provide the ideal spectrum for plant development. Under strict temperature and humidity controls, plant roots are misted with precise amounts of water and nutrients, and the formula and lighting can be adjusted to optimise the plant's nutritional value and maximise flavour. Plants typically grow from seeds to fully mature produce in as little as a few days, using 95% less water and a fraction of the fertilisers used in conventional farming. SIA's Farm-To-Plane programme continues to expand as we continue to collaborate with our partners.

SHAREHOLDERS 103-1 103-2 103-3

We strive to generate and distribute sustainable economic value to our shareholders and stakeholders, while ensuring long-term value creation.

OUR MANAGEMENT APPROACH

Key Engagement Activities

Engagement Mode	Frequency
Analyst and Media Briefings	Half year and full year
Announcement on Business Updates	First quarter and third quarter
Announcement on Financial Results	Half year and full year
Annual General Meeting	Yearly
Annual Report	Yearly
Sustainability Report	Yearly
Extraordinary General Meeting	As required
Investor Relations Channels (Email, Hotline, etc.)	Regular
Meetings or Virtual calls (Business Update Briefings, Investor Conferences, Roadshows, ad hoc engagements)	Regular
News Releases (Company Website, SGXNet, etc.)	As required

SIA's Ambition

We seek to maximise returns for long-term profitability, with the aim of creating sustainable shareholder value.

FY2021/22 in Numbers[50]

$2,820.1 million

total value added for distribution

Supporting the UN SDGs





[50] *For more information, please refer to the FY2021/22 SIA Annual Report.*

OUR SHAREHOLDERS 103-1 103-2 103-3

Singapore Airlines strives to maximise returns for long-term profitability, with the aim of creating sustainable shareholder value.

At SIA, we value dialogue with our shareholders and strive to strengthen our relationship with our key capital providers. Our investors acknowledge that while financial information may reflect short-term changes in profitability, it does not account for the intangibles that ensure the long-term sustainability of SIA. Providing holistic and robust non-financial information bridges this disconnect, and brings clarity to our investors on how SIA creates long-term value for them and our stakeholders.

Through the pandemic, SIA is grateful to have received the strong support of our shareholders, which has laid a strong foundation as we continue to remain nimble and agile.

Communication With Our Shareholders

We value our relationships with our stakeholders, and remain committed to strengthening trust with the investing community. SIA ensures that pertinent and price-sensitive information such as financial results are shared in a timely manner, to facilitate transparency and trust. We publish such information on various communications platforms. These include the Singapore Exchange Ltd (SGXNet), which hosts our disclosures; as well as our website, which hosts our quarterly business updates, news releases, monthly operating statistics, annual reports, sustainability reports, and other key facts and figures on the Company.

In addition to annual general meetings to engage with our shareholders, we hold analyst and media briefings to announce our half-yearly and full-year results. A full transcript and the webcast of the proceedings are made available on SGXNet and SIA's website the next working day. Due to continued physical meeting restrictions imposed as a result of the Covid-19 pandemic, the analyst and media briefings for the half year was held virtually, while the full year FY2021/22 results briefing was held in a hybrid format.

The Investor Relations department also meets with analysts and investors on a regular basis through investor conferences and roadshows, as well as ad hoc engagements. A dedicated investor relations email address at investor_relations@singaporeair.com.sg, and hotline at +65 6541 4885 are maintained for the investing community to reach out to the Company for queries.

Information on Shareholdings

Twenty Largest Shareholders (as at 2 June 2022)

	Name	Number of Shares	%
1	Napier Investments Pte. Ltd.	985,959,900	33.22
2	Temasek Holdings (Private) Limited	657,306,600	22.15
3	Citibank Nominees Singapore Pte Ltd	179,926,180	6.06
4	DBS Nominees Pte Ltd	148,206,179	4.99
5	DBSN Services Pte. Ltd.	81,408,266	2.74
6	Raffles Nominees (Pte) Limited	78,050,930	2.63
7	HSBC (Singapore) Nominees Pte Ltd	68,923,447	2.32
8	United Overseas Bank Nominees Private Limited	46,919,431	1.58
9	Phillip Securities Pte Ltd	20,204,290	0.68
10	OCBC Nominees Singapore Pte Ltd	18,054,208	0.61

	Name	Number of Shares	%
11	IFAST Financial Pte Ltd	15,306,143	0.52
12	OCBC Securities Private Limited	9,454,110	0.32
13	Tiger Brokers (Singapore) Pte. Ltd.	8,180,800	0.28
14	UOB Kay Hian Private Limited	7,801,642	0.26
15	DB Nominees (Singapore) Pte Ltd UOB Kay Hian Private Limited	5,680,856	0.19
16	BNP Paribas Nominees Singapore Pte Ltd	5,078,399	0.17
17	Maybank Securities Pte. Ltd	3,942,626	0.13
18	BPSS Nominees Singapore (Pte.) Ltd.	3,757,912	0.13
19	Morgan Stanley Asia (Singapore) Securities Pte Ltd	3,711,659	0.13
20	Societe Generale Singapore Branch	3,697,862	0.13

For more information on SIA's shareholdings, please refer to pages 222 to 223 in the FY2021/22 SIA Annual Report.

INCLUSIVE WEALTH FOR ALL STAKEHOLDERS

A future economy is one that inspires inclusive growth for everyone.

The aviation sector is a key pillar of Singapore's economy. Prior to the Covid-19 pandemic, the air transport sector supported around 12% of the country's gross domestic product, and directly and indirectly supported over 375,000 jobs[51]. The SIA Group is at the heart of the aviation ecosystem, with Singapore Airlines and Scoot accounting for more than half of the passenger throughput at Changi Airport pre-pandemic.

SIA recognises the role that we play to support sustainable development locally and globally. This starts with developing inclusive wealth for all stakeholders, an aggregate value of our six capitals – financial, human, social and relationship, intellectual, natural, as well as manufactured. The relationship between remuneration, performance, and value creation is illustrated on the right.

[51] *Civil Aviation Authority of Singapore (CAAS), Learn about Singapore's aviation.*

Value Creation Process at SIA

1 **Capital Inputs**

Using all forms of capital in the company to produce value

2 **Value Drivers**

Identifying key value drivers, performance measures, and targets

3 **Value Creation for Stakeholders**

Defining value creation outcomes, performance measures and targets

Inputs → Key Value Drivers and Key Performance Indicators → Value Creation and Outcomes

Inputs

- Financial Capital
- Human Capital
- Social and Relationship Capital
- Intellectual Capital
- Natural Capital
- Manufactured Capital

Key Value Drivers and Key Performance Indicators

Financials

The SIA Group's Return on Shareholders' Funds, SIA Company's Operating Profit Margin, Company's Passenger Load Factor, Staff Productivity, Group and Company EBITDAR Margin

Non-Financials

*Brand Strength, Market Share, Aircraft Utilisation, *Workplace Safety, *Employee Engagement, *Succession Planning, *Weak Audit Findings, Air Safety

*Sustainability-based Value Drivers

Value Creation and Outcomes

FOR SHAREHOLDERS

Achieving **Economic Value Added** by generating operating profit which meets the Cost of Invested Capital over the long term and successful transformation

Shareholders' wealth creation (based on absolute and relative Total Shareholder Return)

FOR OTHER STAKEHOLDERS

Sustainable value creation for other stakeholders (employees, customers, suppliers, communities)

Alignment with SIA Senior Management Compensation

Supported by SIA Senior Management Total Compensation Philosophy

- **Stakeholders and Business Alignment**
- **Motivate Right Behaviours**
- **Fair, Appropriate, and Market Competitive**
- **Effective Implementation**
- **Supports Sustainability Agenda**
- **Reflects SIA's Business Strategies and Core Values**

INCLUSIVE WEALTH FOR ALL STAKEHOLDERS (CONTINUED)

102-7 201-1

Supporting the sustainability agenda is one of the philosophies upon which SIA's Senior Management Remuneration Policy is based. The Board sets targets to ensure that senior management's performance is assessed based on value already created (i.e. outcomes), and value created or generated for the future (i.e. drivers).

Value generation is a measure of wealth created for our stakeholders. The table on the right shows the Group's value generated, value distribution by way of payments to employees, the government, and to those who have provided capital and value retained for future capital requirements.

For more information on the Statements of Value Added and its Distribution, please refer to page 59 in the FY2021/22 SIA Annual Report.

Direct Economic Value Generated[52]

$2,820.1 million

total value added for distribution in FY2021/22

Economic Value Distributed[53]

$1,473.6 million

value added for distribution to employees[54] in FY2021/22

$405.5 million

value added for distribution to suppliers of capital[55] in FY2021/22

$(155.5) million

value added for distribution to government[56] FY2021/22

Economic Value Retained

$1,096.5 million

value retained for future capital requirements[57] FY2021/22

[52] *Direct economic value generated is defined as total value added for distribution.*
[53] *Economic value distributed is defined as value added for distribution to employees, government, suppliers of capital and community investments.*
[54] *Value added for distribution to employees includes salaries and other staff costs.*
[55] *Value added for distribution to suppliers of capital includes interim and proposed dividends, finance charges and non-controlling interests.*
[56] *Value added for distribution to government includes corporation taxes paid to the government.*
[57] *Value retained for future capital requirements includes depreciation and amortisation and retained profit.*

ADAPTING OUR BUSINESS THROUGH THE PANDEMIC COV-19

Remaining resilient in the face of an unprecedented crisis.

Decisive Actions to Ensure Strong Financial Sustainability

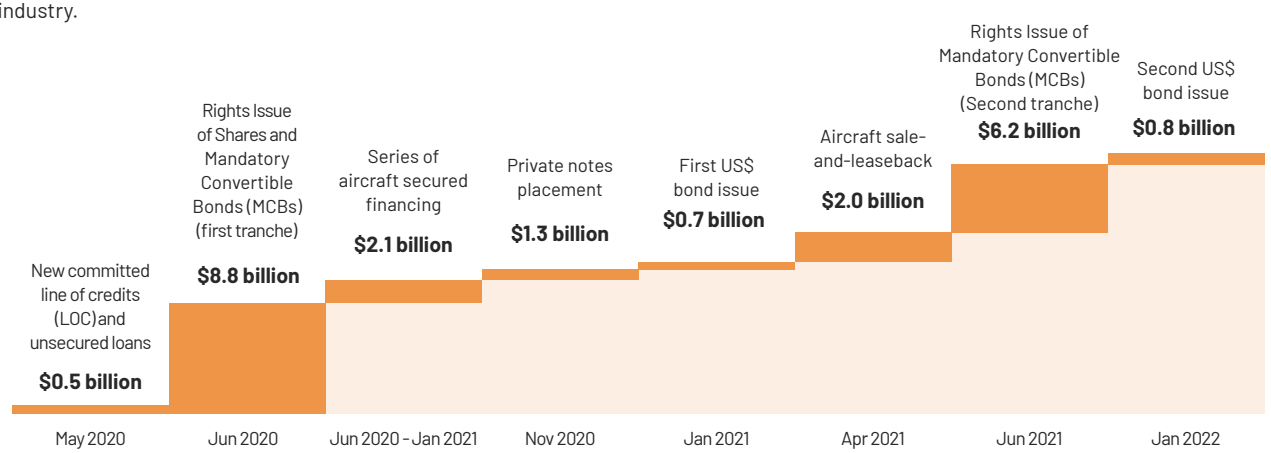
The Covid-19 pandemic led to the closure of international borders, impacting the demand for travel in 2020 and much of 2021. The Group's business was inevitably affected, with most of our fleet grounded and passenger capacity cut to cope with the challenging environment at the height of the pandemic.

We have taken decisive actions to build a strong financial position since the onset of Covid-19 pandemic. To sustain our business, we remained focused on managing our liquidity and cash requirements, and strengthening our balance sheet through capital raising. SIA has raised $22.4 billion in fresh liquidity since 1 April 2020 through various measures including proceeds from Rights issuances, bond issuances, secured financing, and aircraft sale-and-leaseback transactions.

Over the two years, we have progressively rebuilt our network and restored capacity in a calibrated manner. Singapore's launch and subsequent expansion of the VTL scheme was the game changer for the Group. It facilitated quarantine-free mass travel for the first time since the Covid-19 pandemic began, and significantly boosted the demand for flights to, from, and through Singapore. By deploying capacity and increasing services in an agile manner, SIA and Scoot were among the first to launch flights for all VTL points. This allowed the carriers to capture the pent-up demand for air travel as it returned.

As Singapore further relaxed border restrictions in April 2022 and key markets around the world continued to ease travel restrictions, strong recovery in travel demand was observed across all cabin classes. We will closely monitor the demand, remain nimble and alert to all opportunities that may arise, and adjust our capacity and services accordingly.

The Group's second three-year Transformation programme, which began in FY2020/21, continues to make good progress in revenue and cost initiatives, as well as in the areas of innovation and digital transformation. The SIA Group will remain agile and leverage opportunities to reinforce its leadership position in the airline industry.



$22.4 billion raised in additional liquidity since 1 April 2020

March 2020: Strict reduction on **discretionary expenditure**

March 2020: Introduced **staff measures**

September 2020: **Reduced 20% of staff positions**

February 2021: **Renegotiated aircraft contracts** to meet new requirements and **defer more than $4 billion near-term capital expenditure**

February 2022: **Swapped passenger aircraft orders** for A350F freighter orders to **manage capital expenditure**

Expenditure remains closely monitored

Strengthening Revenue-generating Capabilities

Despite the impact of the pandemic on passenger demand, SIA embarked on wide-ranging initiatives to diversify our revenue sources and strengthen our revenue generating capabilities by leveraging our brand and competencies.

In view of the supply chain disruptions globally, we proactively tapped on cargo demand to ensure a continuous flow of essential goods, catering to global supply chain needs. We introduced cargo-only flights on passenger aircraft to maximise the utilisation of existing freighter aircraft fleet, while providing incremental cargo capacity and network reach.

Since 2020, SIA has obtained regulatory approval for the carriage of cargo in the passenger cabin of passenger aircraft. This included cargo in the bellyhold, cargo in cabin seats, as well as cargo on cabin floor. To enable more cargo to be carried in passenger cabins, Premium Economy Class and Economy Class seats were removed from two SIA Boeing 777-300ER passenger aircraft, and all seats were removed from two Scoot Airbus A320neo passenger aircraft.

In addition, the SIA Group's combined cargo network (including freighter, passenger, and cargo-only flights on passenger aircraft) was expanded by adding new destinations and increasing frequencies to destinations in operation. As at 31 March 2022, the SIA Group's cargo network covers 98 destinations (including Singapore). With this expanded network and capacity, the SIA Group worked with various government agencies to keep airfreight supply lines for essential goods open.

ADAPTING OUR BUSINESS THROUGH THE PANDEMIC (CONTINUED)

Cold Chain Services

Launched in September 2018, THRUCOOL aims to offer speedy and reliable transportation of high-value, time-sensitive and temperature-controlled pharmaceutical cargo. SIA was the first airline in the Asia-Pacific region to be awarded the IATA Centre of Excellence for Independent Validators (CEIV) in Pharmaceutical Logistics Certification in 2017, and was re-certified in 2020. THRUCOOL currently serves over 98 destinations with a fleet of seven Boeing 747-400F freighter aircraft, and via the SIA Group's passenger aircraft fleet. SIA Cargo remains committed to improving THRUCOOL capabilities, as well as the continued expansion of its quality corridor network.

CASE STUDY

Enhancing Cold Chain Cargo Handling Capabilities With New Envirotainer Releye® RLP Container

In FY2021/22, SIA boosted its cargo handling capabilities with the addition of Envirotainer's state-of-the-art temperature controlled Releye® RLP and RAP containers. This allowed SIA to offer air freight customers a new technologically advanced cold chain solution, providing live monitoring access, volume optimisation for cost efficiency, and enhanced temperature stability.

The Envirotainer Releye® RLP and RAP containers have been approved for use on board SIA's freighter and passenger aircraft. The family of advanced temperature-controlled air freight containers provides three-pallet and five-pallet solutions that are powered by rechargeable batteries, and can maintain the shipment's integrity for over 170 hours on a single charge. Its fully integrated live monitoring system allows customers to track and monitor various aspects of the shipment's condition such as location, temperature, and humidity, as well as the battery levels of the unit.

With this, SIA offers a wider range of active and passive containers from leading temperature-controlled solution providers as part of its THRUCOOL cold chain service. The Airline was re-certified under IATA's CEIV Pharma programme in January 2020, and achieved Envirotainer's Qualified Envirotainer Provider Training and Quality Program (QEP) accreditation in November 2020. These accreditations further affirm SIA's stringent handling processes for pharmaceutical cargo, in line with the highest industry standards.



Besides pharmaceutical and healthcare shipments, SIA expanded its cold chain services capabilities and launched THRUFRESH in 2021 after becoming the first airline in South East Asia to obtain the IATA CEIV Fresh certification. This means that SIA meets the industry's highest standards of food safety, and prevents food waste along the supply chain. THRUFRESH incorporates dedicated cold chain procedures and facilities that enables the delivery of perishable products such as live seafood, chilled and frozen meat, fruits and vegetables, as well as fresh flowers, to its destination in a timely manner and maintaining its fresh condition.

ADAPTING OUR BUSINESS THROUGH THE PANDEMIC (CONTINUED)

Innovating to Retain World-class Leadership

To stay ahead of the competition, SIA continuously reviews existing products and services, evaluates our current performance, and explores any improvements or new opportunities to our business model. This includes enhancing our digital capabilities as part of our ongoing transformation efforts, and leveraging our wide range of competencies to offer training programmes to external businesses and organisations.

Improving Our Products and Services



New Narrowbody Aircraft Cabin Products

- Launched the new narrowbody products with lie-flat Business Class seats and the latest generation sleek and slim-line seats in Economy Class.
- The seat cushions and covers in Business Class use the same furnishings as those found on our medium-haul aircraft, providing a higher level of comfort for short-haul flights.
- The 737-8 cabin is designed with a special focus on ergonomics, helping to ensure that everything is within easy reach for customers.

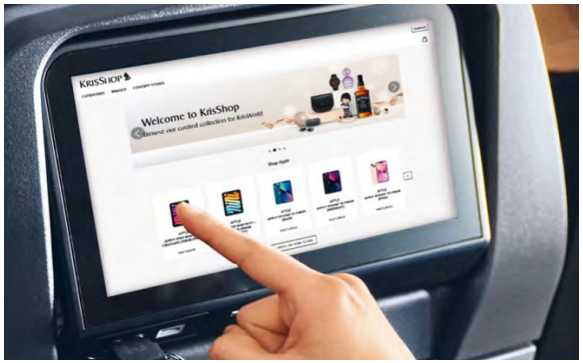
Advancing Our Digital Blueprint



Corporate Laboratories

- Launched two corporate laboratories with NUS and A*STAR to co-create innovative technologies.
- Covers seven diverse work packages from operations optimisation to revenue management.

Developing New Business Models



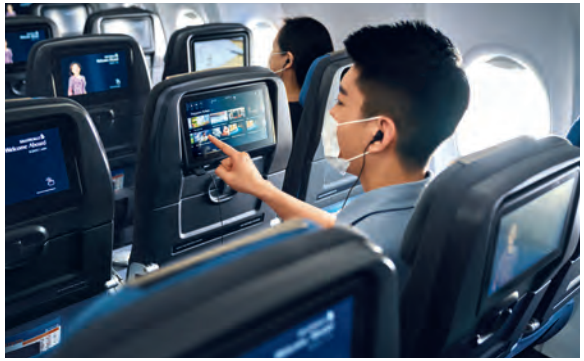
Pivot to e-Commerce at KrisShop

- Launched the first-of-its-kind live online shopping on board aircraft via the KrisShop e-commerce platform on the *KrisWorld* in-flight entertainment system.
- Customers enjoy duty-free prices on their orders that are delivered on their next Singapore Airlines flight or to their preferred address.

ADAPTING OUR BUSINESS THROUGH THE PANDEMIC (CONTINUED)

Innovating to Retain World-class Leadership (continued)

Improving Our Products and Services



Enhancing In-flight Entertainment and Connectivity

- The new narrowbody aircraft include Panasonic's X-Series seat-back in-flight entertainment, allowing all customers to enjoy the latest *KrisWorld* entertainment content. It features a new state-of-the-art 3D flight map, which includes over 20 distinct map views for various flight phases, such as 3D satellite imagery, local and global views.
- The fleet is also fitted with Panasonic's in-flight Wi-Fi service, as well as mobile data connectivity services.

Advancing Our Digital Blueprint



Staff-led Innovation

- Launched GROOM Trailblazer Programme, a week-long innovation training programme that guides staff through the innovation funnel from idea to prototype to pitching to management.
- Launched Cabin Crew digital Ecosystem through the ASCEND program.
  - » Awarded *Best Adoption – Enterprise* in 2021 Techblazer Awards.
  - » Saved approximately 1.4 million man-hours and reduced around 2.8 million sheets of paper.
  - » AI-based crew training system to improve announcement-making and conversational language skills.

Developing New Business Models



Growing the SIA Academy

- Within the first year of operations, the SIA Academy has trained over 1,500 course participants with classes confirmed into 2023.
- Positive feedback with over 93% satisfaction score achieved.
- Plans to expand in Singapore and key overseas markets.

ADAPTING OUR BUSINESS THROUGH THE PANDEMIC (CONTINUED)

CASE STUDY

New SIA-NUS Corporate Laboratory to Spur Digital Innovation in Singapore's Aviation Sector

SIA and NUS launched a new digital aviation corporate laboratory in January 2022. This will co-create innovative technologies and solutions that accelerate the digital transformation of Singapore's aviation sector, and help redefine the travel experience for customers.

The SIA-NUS Digital Aviation Corporate Laboratory was launched by Mr Heng Swee Keat, Deputy Prime Minister, Coordinating Minister for Economic Policies, and Chairman of the National Research Foundation Singapore (NRF). Situated at the Innovation 4.0 Building at NUS Kent Ridge campus, the $45 million facility is jointly set up by SIA and NUS, and supported by the NRF. This is the seventh corporate laboratory to be established at the University, as well as the 19th in Singapore.

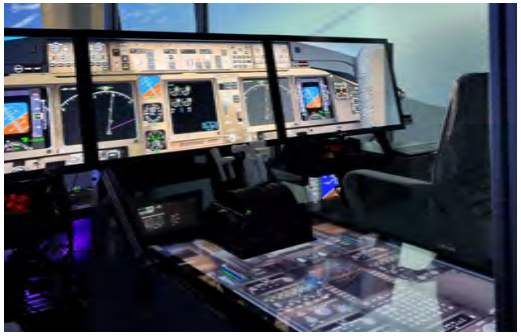
The Corporate Laboratory is the result of a robust partnership between NUS and SIA. The Airline launched its Digital Innovation Blueprint in 2018 to establish itself as a digital aviation and travel experience leader. This was followed by the signing of two Memoranda of Understanding between NUS and SIA, with the University becoming the Airline's knowledge partner.

The launch of the Corporate Laboratory comes at an opportune time as the global aviation industry tackles the challenges brought about by the Covid-19 pandemic. An acceleration of its digital Transformation programme will help to keep SIA nimble, and contribute towards the development of a digital aviation and travel technology community in Singapore.









LEADING THE NEW WORLD

Despite the ongoing challenges from the Covid-19 pandemic, SIA has made good progress with its ongoing three-year Transformation programme, and continues to chart a path forward through innovation.

SIA's Aspiration

We will emerge stronger and more resilient.



World-class Leader



Financial Sustainability



Dynamic and Resilient Team

In FY2020/21, SIA embarked on its latest three-year Transformation programme to bolster SIA's resilience and agility as it navigates the uncertainties, and seize growth opportunities in this new, fast-changing aviation environment. The three transformation pillars of being a world-class leader, achieving financial sustainability, and building a dynamic and resilient team underpins our efforts to emerge stronger from the Covid-19 pandemic. While the pandemic has brought about uncertainties and complexities, it also revealed the unwavering spirit in our people as we remained agile and innovative amidst the challenges. Redesigning the travel experience to seamlessly integrate health safety measures, and leveraging technology to enhance the Airline's products and services during the pandemic, are just some examples of how SIA adapted and reinvented itself to continue delivering a world-class travel experience to our customers.

To reinforce financial sustainability, SIA has embarked on wide-ranging initiatives to strengthen its revenue generation capabilities, and invested in new engines of revenue growth in non-airline revenue streams. SIA also worked closely with its partners in the aviation ecosystem to build more flexibility and scalability into its business, and secure greater efficiencies and synergies for the future.

SIA continued to invest in its workforce, and rolled out a comprehensive upskilling programme that aims to strengthen the resilience and preparedness of its people for the future. The drive to improve productivity with a continuous improvement mindset resulted in the implementation of over 200 initiatives that have saved more than 600,000 man-hours annually. This has enabled SIA to improve its workforce's efficiency, and refocus resources on higher-value activities to enhance operational efficiency and improve the overall customer experience.

As the landscape evolves and new norms are shaped, SIA will keep up with its transformation momentum and press on with its ongoing initiatives. Propelled by its resilient and dynamic workforce, the programme will ensure that the Airline forges ahead as a leader in the new world.

>250 initiatives

since FY2020/21 to achieve a more competitive cost base and stronger revenue generating capabilities

>200 initiatives

implemented to optimise business processes

>600,000 man-hours

saved from business process reviews and digital initiatives since the onset of the pandemic

For more information on SIA's Transformation programme, please refer to pages 12 to 13 in the FY2021/22 SIA Annual Report.

SOCIETY

Singapore Airlines aspires to be a purpose-led organisation that uses our business as a force for good. We believe in giving back to society and strengthening our relationships with the communities that we serve in Singapore and around the world. We seek to touch the lives of people, and contribute solutions to pressing global challenges through a range of programmes. These include the promotion of education, sports, and the arts, as well as environmental conservation.

OUR MANAGEMENT APPROACH

Key Engagement Activities

Engagement Mode	Frequency
Annual Report	Yearly
Sustainability Report	Yearly
Community Support Programmes (Corporate Donations, Ticket Sponsorships, Volunteerism, etc.)	Regular
Press Releases	As required

SIA's Ambition

We practise good corporate citizenship, contributing to and investing in the communities where we operate in.

Supporting the UN SDGs







COMMUNITY PROJECTS IN SINGAPORE 413-1

Promoting Education, Sports Excellence, and the Arts Through Local Community Development Projects

SIA believes in nurturing strong relationships with the communities that we serve and operate in. Support is extended to local community groups in the areas of education, sports excellence, the arts, and environmental stewardship, through a range of efforts such as corporate donations, ticket sponsorships, and staff volunteerism. Due to the global travel restrictions imposed as a result of the Covid-19 pandemic, most of SIA's sponsorship values were unclaimed in FY2021/22. SIA remains committed to our corporate beneficiaries, and will continue to support community efforts as we recover from the pandemic.



COMMUNITY

KrisFlyer and Make-A-Wish Singapore Partnership

KrisFlyer, the SIA Group's frequent flyer programme, partners Make-A-Wish Singapore to fulfil the wishes of children with life-threatening illnesses. KrisFlyer miles donated by members go toward supporting flights on SIA for beneficiaries. KrisFlyer members have been donating their KrisFlyer miles regularly since the inception of the partnership in 2017.

MINDS Partnership

Since 1992, SIA has partnered with the Movement for the Intellectually Disabled of Singapore (MINDS) by providing employment opportunities for the beneficiaries. We engaged beneficiaries from MINDS to service and pack our Economy Class headphones and earphones for use on our flights. This engagement was expanded to include our First Class headphones in 2021. Through their efforts, about 400,000 Economy Class earphones and 160,000 First Class headphones are serviced monthly.

Cerebral Palsy Alliance Singapore

SIA's Engineering Division continues to actively support and volunteer with the Cerebral Palsy Alliance Singapore (CPAS). In December 2021, a total of $3,000 was raised to purchase basic necessities for the beneficiaries of CPAS.

Donation of SilkAir In-flight Items

In 2021, SIA's Production Innovation department, together with Inflight Services and Design department collectively donated SilkAir in-flight items such as earphones and tablet stands to over 10 beneficiaries, which include the Willing Hearts organisation, Zion Home for the Aged, and Big at Heart.

Corporate Social Responsibility Day

In FY2021/22, SIA launched a Corporate Social Responsibility (CSR) Day, where employees can participate in community engagement activities organised by the Company or on their own personal basis. Under this programme, employees may opt to use their allocated CSR Day per annum to contribute to the community.

SIA continued to sponsor the following initiatives in FY2021/22:

- National Day Parade (NDP): In support of the NDP Parade 2021, SIA sponsored air freight cargo for the transportation of fun packs and related items. A group of SIA staff also participated in the parade as a virtual contingent, and our cabin crew were featured in the NDP 2021 music video.
- Singaporean of the Year: To recognise and celebrate Singaporeans who have stepped up amidst the pandemic to improve the lives of others, SIA sponsored complimentary flight tickets to the winners and finalists to commend them for the positive differences that they have made to society in their own unique way.

COMMUNITY PROJECTS IN SINGAPORE (CONTINUED)



ARTS

Growing Singapore's Arts Scene

We believe that creative pursuits are key to building a better world.

SIA sponsored the following organisations in FY2021/22, as part of our longstanding commitment to help grow the Singapore arts scene:

- Arts House Limited[58] (since 2022)
- LASALLE College of the Arts (since 1999)
- Singapore Chinese Orchestra (since 2002)
- Singapore Ballet Limited[59] (since 1988)
- Singapore Lyric Opera (since 1991)
- Singapore Symphony Orchestra (since 1979)

Our ticket sponsorships enable these organisations to send local talents overseas to perform and widen their horizons, or invite international artistes to perform in Singapore.



EDUCATION

Promotion of Environmental Stewardship Through Art and Design

We have partnered with educational institutions such as the Institute of Technical Education and Nanyang Academy of Fine Arts to promote environmental stewardship and instil a culture of upcycling amongst youths. This was done through the donation of parts and materials from retired aircraft for use in their art and design programme.



SPORTS

Recognising Sporting Excellence in Singapore

SIA recognises the value of a strong sports ecosystem in Singapore to forge bonds within our community, build team spirit, and foster a greater sense of belonging.

We sponsored the following organisations in FY2021/22:

- Singapore National Olympic Council (since 1999): Ticket sponsorship for the Singapore Sports Awards (Sportsman, Sportswoman, Sportsboy and Sportsgirl of the Year)
- Singapore Sports School (since 2002): Ticket sponsorship for student athletes representing Singapore for competitions

[58] *Sponsorship agreement was formerly with National Arts Council from 1994-2021, and has been transferred to Arts House Limited since 2022.*
[59] *Formerly known as Singapore Dance Theatre.*

COMMUNITY PROJECTS IN SINGAPORE (CONTINUED)

Supporting the Singapore Community During the Covid-19 Pandemic COV-19

As a global airline, SIA believes that we have a part to play in providing support to the communities we serve during times of crisis. Even as demand for travel picks up, we continued with various initiatives in FY2021/22 to support countries in their battle against the Covid-19 pandemic, allowing staff within the SIA Group to step up and contribute back to the community.

Ambassador Programmes

>2,000

volunteers as Ambassadors



Photo Credit: Khoo Teck Puat Hospital



Ambassador Programmes

During the Covid-19 pandemic, many of our operating crew volunteered to support the nation's efforts in combating the pandemic by playing crucial roles in the healthcare, transport, and social service sectors. As at 31 March 2022, over 2,000 cabin crew and pilots had responded to the call of duty, serving as Care, Transport, Safe Distancing, and Contact Tracing Ambassadors in nursing homes, hospitals, as well as train stations in Singapore. In their various capacities, our crew have touched the lives and hearts of Singaporeans during this time of need. Their efforts have helped to fly SIA's flag high, displaying the SIA brand of service excellence and warmth.

COMMUNITY PROJECTS IN SINGAPORE (CONTINUED)

Community Service Projects

>1,470

SIA and Scoot employees volunteered their time and participated in various community service projects in Singapore

>10

beneficiary organisations

26 charities

benefitted from the Miles of Good campaign







#SIAcares Volunteering Programmes

- Under the #SIAcares initiative, several volunteering and donation programmes were launched to lend support and appreciation to various frontline and essential workers, as well as the needy during the pandemic.

Serving the Local Community

- Over the past year, around 1,350 SIA employees volunteered at organisations such as Ang Mo Kio Family Services Centre, Free Food for All, Thye Hua Kwan Moral Charities, Temasek Foundation, and Willing Hearts, among others. For example:
  - » Staff supported flagship CSR projects of North-West Community Development Council and North-East Community Development Council in distributing essential packs and refurbishment of rental units under Project Refresh.
  - » In partnership with Touch Ubi Hostel, a stay-in-residential programme for adults with mild intellectual disabilities, pilots from the Flight Operations Division sponsored and distributed mandarin oranges and red packets to bring cheer to over 30 beneficiaries.
  - » Employees also participated in mask distribution drives in heartland malls in support of Temasek Foundation's Stay Prepared programme, which aims to enhance society resilience amidst the pandemic.
- More than 120 Scoot employees volunteered their time to give back to the communities in need over the past year. For example:
  - » Scoot Staff Union (STSU) in partnership with STSU Advisor, Scoot Union leader, Scoot Management, Grassroot and volunteers co-funded and delivered care packs containing groceries, daily necessities, and art supplies to underprivileged families, elderly and children.
  - » A company-wide donation drive was conducted over Chinese New Year to encourage staff to donate their unused items for upcycling instead of throwing them away during spring cleaning. Scoot partnered with Bridge the Digital Divide and Save That Pen to refurbish the items and distribute them to beneficiaries. In particular, working laptops, mobile phones, and pen casings were essential to needy families embarked on home-based learning activities and work-from-home schemes during the Covid-19 pandemic. The donated items also helped migrant workers to keep in contact with their families and loved ones when they were unable to travel home.
  - » Scoot also hosted a Christmas party for underprivileged primary school students. Scoot's flight and cabin crew shared insights about their careers in the aviation sector, and the students were gifted with items sponsored by staff. The students were also given the opportunity to pick their own gift such as clothing, shoes and stationeries, from selected shops within Jewel Changi Airport.
  - » Staff were also involved in the monthly packing of food packs with Food from the Heart throughout the year.

Miles of Good Campaign

- SIA's Miles of Good campaign held in 2020 and 2021 enabled KrisFlyer members based in over 25 countries to donate their miles to frontline and essential workers, who served the public during the Covid-19 pandemic. In addition, the donated miles could go to SIA's charities of choice, where beneficiaries were able to redeem books, toys and medical supplies. In total, more than 15.1 million miles were donated to 26 charities under the campaign over the past two years.

COMMUNITY PROJECTS AROUND THE WORLD 413-1

Staying True to Our Cause, Reaching Out to Those in Need

Our overseas stations are passionate and committed in reaching out to their communities. As a global airline, we continue to work with charities in support of various initiatives and causes.

UNITED KINGDOM

Supporting UK's Frontliners

SIA launched an initiative where KrisFlyer members within the UK can donate their KrisFlyer miles towards frontliners. Under the Miles of Good prgramme, hygiene products were purchased and distributed to UK's homeless charities.

>60,000 KrisFlyer miles donated in FY2021/22

AUSTRALIA

The Smith Family

Since 2012, SIA has been supporting The Smith Family, a national independent charity helping disadvantaged children in Australia, with the tools and financial support to help them thrive at school and break the cycle of poverty. We support the Smith Family through our fundraising efforts and a series of activities such as The Smith Family's Dream Run and our Miles for Good Campaign.

A$12,000 raised and more than 860 soft toys donated in FY2021/22

INDIA

The NeeV Centre

Together with TajSATS, SIA's Delhi team arranged a day of excitement for 19 Grade 9 students from The NeeV Centre by holding a tour of the TajSATS meal preparation facilities. The students also enjoyed a nutritious lunch and an SIA goodie bag containing stationery, multipurpose pouches, and a thumb drive.

Benefited 19 students from The NeeV Centre



INDIA

Prathyasha – Home of Hope for Children with HIV AIDS

SIA's Chennai team and their families brought the Chritsmas cheer to the children of Prathyasha by raising INR 50,000 for the home and replacing their washing machine. Each child was also given shopping vouchers to exchange for gifts.

Benefited 20 children from Prathyasha

COMMUNITY PROJECTS AROUND THE WORLD (CONTINUED)

CHINA

China-Dolls Centre for Rare Disorders

China-Dolls Centre for Rare Disorders (CCRD) is a non-governmental organisation that provides support to individuals suffering from osteogenesis imperfecta and rare diseases. SIA conducted a Lucky Bag Online Charity Sale campaign with CCRD in July 2021. Proceeds from the charity sale were donated to CCRD to help the beneficiaries.

> RMB59,870 raised in FY2021/22



TAIWAN, CHINA

Eden Social Welfare Foundation



Since 2018, SIA has been supporting Eden Social Welfare Foundation, a charitable trust founded to serve persons with disabilities, as well as socially marginalised groups. In FY2021/22, SIA raised funds for beneficiaries of the foundation through the sales of SIA batik motif EasyCard and PreciousMoments® Singapore Girl porcelain figurines in KrisShop, with the miles donated from Miles of Good Campaign.

> NT$850,000 raised in FY2021/22

EXTENDING OUR SUPPORT TO GLOBAL EFFORTS IN THE FIGHT AGAINST COVID-19 COV-19

We support the global fight against the Covid-19 pandemic by ensuring the continuous flow of vaccines, essential goods, and supplies in FY2021/22.



Covid-19 Vaccine Carriage

>87 million

vaccine doses transported to countries within the Asia-Pacific region

SIA continued to support the safe and timely transportation of Covid-19 vaccines. The vaccines carried by the SIA Group is incorporated under the COVAX programme. We delivered these vaccines to countries such as Bhutan, Laos, Papua New Guinea, Solomon Islands, the Philippines, and Timor Leste, under the UNICEF Humanitarian Airfreight Initiative.

In January 2022, we transported Covid-19 therapeutics such as the Pfizer Paxlovid pills for the first time on flights from Brussels to Sydney via Singapore. As of February 2022, SIA has transported over 87 million doses of Covid-19 vaccines throughout the Asia-Pacific region.

Transportation of Essential Supplies

305 tonnes of World Food Programme shipments delivered

To keep air freight supply lines open for essential goods such as medical supplies, PPE, pharmaceuticals, and fresh foods, SIA expanded our freighter and cargo-only flights on passenger aircraft to support the air transportation of these goods during the pandemic. This includes our participation in international programmes to facilitate exports of high-value and perishable goods to key markets and vice versa, under Australia's International Freight Assistance Mechanism, and the Singapore-New Zealand Airfreight Partnership.

In FY2021/22, SIA continued to support the Temasek Foundation and the United Nations World Food Programme (UN WFP) by transporting essential medical supplies and humanitarian items to countries in need. Under SIA's renewed pledge to support the UN WFP in May 2021, SIA transported a total of 305 tonnes of supplies on 16 flights to countries such as Bhutan, Papua New Guinea, and Timor Leste.

Our partnerships with Changi Foundation, along with other members of the Singapore aviation community, provided support to Indonesia's efforts in the battle against Covid-19. Our collective efforts saw the safe delivery of over 1,000 oxygen concentrators, cannulas, and connectors, which were flown on board two SIA flights to Jakarta in August 2021, to help with the treatment of Covid-19 patients.



Repatriation Charters

>30 repatriation flights chartered during the pandemic

Since the start of the pandemic, SIA has been working closely with Singapore and foreign governments to deliver humanitarian assistance, and facilitated more than 30 repatriation charter flights to destinations such as Australia, Bangladesh, India, Thailand, and Vietnam. As borders gradually re-opened in FY2021/22, SIA continued to support the cross-border movement of people by reinstating more flights to increase connectivity.





CONNECTING THE FUTURE

Implementing solutions to reduce our environmental footprint

Doing all we can to future-proof the wonders of travel

For the adventurers of tomorrow and the generations to come

We sustain our connections with nature

Because we believe in conserving our planet and the destinations we serve

ENVIRONMENT 103-1 103-2 103-3

The SIA Group is committed to achieving net zero carbon emissions by 2050, reinforcing our long-standing strategy of working towards decarbonisation and environmental sustainability across our operations. We collaborate with like-minded partners and the aviation ecosystem to push the envelope, and find innovative solutions that help us meet our targets on our decarbonisation journey and mitigate our environmental impact.

CLIMATE CHANGE | WASTE | NOISE | OTHER POLLUTANTS | WATER | BIODIVERSITY

OUR MANAGEMENT APPROACH

SIA's Ambitions

We are committed to environmental sustainability and responsible operations in support of the aviation industry's climate goals.

Target	Due	Status
Carbon		
To achieve net zero carbon emissions by 2050	2050	On track
Energy		
To achieve the Building and Construction Authority (BCA) Green Mark Platinum rating for both SIA Training Centre and TechSQ	FY2022/23	On track
To harvest and use solar energy at all SIA-owned buildings in Singapore	FY2022/23	On track
To meet SIA Supplies Centre's energy demand with 100% renewable energy, of which at least 50% is self-generated from its rooftop solar panels	FY2025/26	On track
To obtain BCA Green Mark accreditation for SIA-owned buildings in Singapore	FY2026/27	On track
To reduce energy consumption in SIA-owned buildings by 10%, from FY2019/20 levels	FY2029/30	On track
Water		
To reduce potable water consumption in SIA-owned buildings by 10%, from FY2019/20 levels	FY2029/30	On track

Key Policies, Processes, and Systems

- Adopted IATA's Climate Targets and Four-Pillar Strategy
- ISO 14001:2015 Environmental Management System (for Engineering Division and Flight Operations Division)

Supporting the UN SDGs



FY2021/22 in Numbers

109,250 TJ
of energy consumed for all SIA operations

9.60 LTK/AG
overall fuel productivity for fleet

112 kWh/m²
electricity intensity for SIA buildings and offices in Singapore

4.7 GWh
of renewable energy generated at SIA's Airline House, SIA Training Centre and TechSQ

7.81 million tonnes CO_2e
total Scope 1 and 2 GHG emissions

50,369 tonnes CO_2
estimated GHG emissions saved as a result of our fuel reduction and efficiency measures across our fleet

964 tonnes
of waste generated at SIA buildings in Singapore

132 tonnes
total waste recycled at SIA buildings in Singapore

35 tonnes
of waste recycled from our flights

0.55 m³/m²
water intensity for SIA buildings and offices in Singapore

24,531 m³
rainwater harvested at Airline House, SIA's headquarters in Singapore

100%
of our fleet meets ICAO Chapter 4 noise standards

100%
of our passenger aircraft fleet meets the 2004 ICAO CAEP/6, while the newer generation aircraft meets the stricter CAEP/8 emissions standards for NOx

98,555 hectares
of lowland tropical forest covered by the ecosystem restoration concession under the Harapan Rainforest Initiative

CLIMATE CHANGE

From extreme weather events to rising sea levels, we continue to experience the adverse effects of climate change, which places both humanity and ecosystems at stake. This is projected to intensify over the next decade as GHG emissions continue to rise. The 2022 Intergovernmental Panel on Climate Change (IPCC) report states that the impact on our climate will continue to worsen if we do not take action now. Minimising global warming could reduce the environmental impact, ensuring the sustainability of people, economies, and ecosystems around the world. However, this would require rapid and far-reaching changes across multiple industries, and a globally coordinated approach to reduce GHG emissions.

Our Net Zero Carbon Emissions Ambition

The SIA Group continued to push boundaries and seek opportunities to progress in our environmental sustainability journey. Collaborating with like-minded stakeholders and fostering strong partnerships is critical to SIA's sustainability journey as we need the collective action and consensus of the aviation ecosystem.

In May 2021, we pledged to achieve net zero carbon emissions by 2050, and will leverage multiple levers to achieve this goal. These include investing in new generation aircraft, achieving higher operational efficiency, adopting low-carbon technology such as sustainable aviation fuels (SAF), and sourcing for high quality carbon offsets.

The SIA Group launched its Voluntary Carbon Offset Programme in June 2021, empowering customers to fly carbon neutral by purchasing quality carbon offsets to mitigate their travel carbon footprint. These contributions support verified projects that reduce carbon emissions, protect endangered species, and empower developing communities.

We continued to partner like-minded stakeholders and our aviation ecosystem to explore and implement innovative solutions. In February 2022, we were the first airline to sign the Global SAF Declaration, reaffirming our commitment to promote the acceleration of SAF development, production, and adoption.

SIA, together with CAAS and Temasek, embarked on a year-long pilot and purchased jet fuel blended with SAF to be delivered to Changi Airport for use on all SIA and Scoot flights by end-July 2022. Beyond operationalising the use of SAF at Singapore Changi Airport, the pilot will provide insights on the end-to-end cost components, potential pricing structures for cost recovery, and support future policy considerations for SAF deployment. The use of the SAF over the one-year pilot is expected to reduce about 2,500 tonnes of carbon dioxide emissions. In addition to the deployment of SAF on flights, SAF credits will also be sold, providing corporate customers, travellers, as well as freight forwarders, an avenue to mitigate their carbon footprint. By purchasing these credits, they can also help to stimulate demand for SAF, support the development of the nascent SAF industry, and advance the adoption of SAF for aviation sustainability.

Today, investing in new aircraft remains the most effective and direct way for airlines to reduce their carbon emissions. The SIA Group operates one of the youngest fleets in the world, with an average age of six years and three months. These comprise technologically advanced new generation models such as Airbus' A350-900 and A320neo Family, as well as Boeing's 787 Family, and 737-8. These are up to 25% more fuel efficient than previous generation aircraft, and have lower carbon emissions compared to older models.

There is also a relentless focus on increasing fuel efficiency through improvements in operational procedures. For example, the SIA Group has invested in engineering improvement packages for airframes and engines which help to reduce drag and improve engine efficiency. Our airlines continuously aim to improve fuel productivity through initiatives such as reducing fuel usage through aircraft weight management, and optimisation of flight routes. Innovations in technology and data analytics will also pave the way for more significant improvements, and we will continue to engage research institutions to explore such ideas.

Singapore Airlines has been an active member of the Sustainable Aviation Fuel Users Group (SAFUG) since 2011. We are also a member of Singapore's International Advisory Panel (IAP), comprising local and international leaders. Convened by CAAS, the IAP seeks to collectively develop the Singapore Sustainable Air Hub Blueprint, which aims to facilitate industry and ecosystem partnership opportunities to develop practical pathways to make greener air travel; viable and accessible for all. Through our active participation across the three key areas of airport, airline, and air traffic management, we will help lay the foundation for critical enablers that are needed to support and drive sector-wide decarbonisation efforts, namely, policy and regulation, industry development, infrastructure planning and provision and jobs and skills.

The SIA Group remains committed to conserving the planet's finite resources by finding ways to reduce waste, both on the ground and in the air. Some initiatives include using sustainable alternative materials, improving our water conservation efforts, and adopting renewable energy.

Our Sustainability Policy can be found on page 15 of this report.

SIA's Climate Action Pledge

Singapore Airlines is dedicated to our long-term responsibility to protect the environment while providing air transportation services of the highest quality. We have in place various programmes to implement sustainable practices across our operations in a responsible manner to manage issues such as carbon emissions, noise, waste, as well as energy and water consumption. We pledge to continue to explore new sustainable practices in all areas of our operations. SIA adopts IATA's Four-Pillar Strategy to address climate change and seeks opportunities to reduce the carbon footprint of our operations. We incorporate the five Rs (Refuse, Reduce, Reuse, Repurpose, and Recycle) in our daily activities to improve our waste management practices and maximise efficient use of resources. We promote eco-friendly habits among our staff and stakeholders and raise awareness on the importance of taking action to reduce our impact on the environment.

CLIMATE CHANGE (CONTINUED)

Supporting IATA's Climate Targets and Four-Pillar Strategy PR-7 PR-8 PR-9

Despite contributing only approximately 2% of global anthropogenic GHG emissions[60], the aviation industry recognises the pressing need to address the challenges posed by climate change. The global air transport industry has adopted a long-term climate goal of net zero carbon emissions by 2050. The re-opening of international borders and the increase in travel demand paves the way for the aviation industry to restore global connectivity, and provides opportunities to work towards its decarbonisation goals. Underpinning the aviation industry's commitment towards reducing emissions in the medium- to long-term, as well as the climate goal of net zero carbon emissions by 2050, is IATA's Four-Pillar Strategy, which was introduced in 2009. SIA adopts IATA's Four-Pillar Strategy in our operations to improve the performance of our aircraft fleet, and to meet both the aviation industry and SIA's aligned ambition of net zero carbon emissions by 2050.

IATA's CLIMATE TARGETS

An average improvement in fuel efficiency of 1.5% per year from 2009 to 2020
A cap on net aviation CO_2 emissions from 2020 (carbon-neutral growth)
A commitment to achieving net-zero carbon emissions from operations by 2050

IATA's FOUR-PILLAR STRATEGY

PILLAR 1
Improved technology, including the deployment of Sustainable Aviation Fuels

SIA's Commitment:

We are committed to our fleet renewal programme and to operating a modern and fuel-efficient fleet that generates lower emissions and less noise.

We invest in engineering improvement packages for airframes and engines. This helps to reduce drag and improve engine efficiency.

We will drive the adoption of SAF in the industry.

PILLAR 2
More efficient aircraft operations

SIA's Commitment:

We improve fuel productivity and reduce fuel usage through aircraft weight management and optimisation of flight routes.

PILLAR 3
Infrastructure improvements, including modernised air traffic management systems

SIA's Commitment:

We partner with air navigation service providers to find opportunities to reduce emissions from fuel burn during all flight phases.

We collaborate with stakeholders in air traffic management (ATM) to explore ways to improve airspace efficiency incrementally.

We believe that innovation and data analytics will pave the way for more significant improvements, and continue to engage research institutions to explore such ideas.

PILLAR 4
A single global market-based measure to fill the remaining emissions gap

SIA's Commitment:

We participate in a single global market-based measure (MBM) in the form of the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) to address the growth in emissions in the aviation industry beyond 2020.

[60] *IATA, "Fact Sheet on Climate Change & CORSIA".*

CLIMATE CHANGE (CONTINUED)

Aligning to Reporting Regulations

SIA will be required to make disclosures based on the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) on a comply or explain basis from FY2022/23, based on upcoming SGX requirements. This would subsequently be mandatory for the transportation sector from FY2024/25. Going forward, SIA will conduct a climate risk assessment and scenario analysis, in line with TCFD's recommendations.



Climate-related Risks and Opportunities 102-11 PR-7 PR-8 PR-9

Governance and Risk Management

The review of climate-related risks is part of SIA's Enterprise Risk Management framework, which is overseen by the Board's Safety and Risk Committee (BSRC). Further details on the established risk governance and reporting structure can be found in the Governance section on pages 21 to 22 of this report. In addition, climate-related risks and mitigation are also considered at various forums such as the Board's Customer Experience, Technology and Sustainability Committee (CETSC), as well as the Sustainability Steering Committee (SSC), which involve senior management and the relevant business units.

SIA identifies climate-related risks and opportunities through various channels, both internally and externally. Specifically, these reviews include the annual Group-wide Risk Management Review exercise involving stakeholder-driven risk assessment, as well as ongoing discussions with industry and business partners. As both transition and physical risks could impact the financial, operational, and strategic aspects of SIA's operations, the review and mitigation of such risks are integral to shaping our long-term business strategy.

Identification and Mitigation of Climate-related Risks

As climate change issues continue to gain importance, various policies and measures are introduced to progressively drive the aviation industry's transition towards a sustainable and low-carbon economy. SIA supports the Carbon Offset Reduction Scheme for International Aviation (CORSIA) as the only global Market-Based Measure (MBM) to achieve carbon-neutral growth beyond 2020, and fully supports the ongoing efforts towards meeting the requirements in the CORSIA Monitoring, Reporting and Verification (MRV) system.

SIA recognises that climate change issues are constantly evolving, which brings about transition risks. The potential emergence of uncoordinated climate policies and mandates on SAF at the regional or national level may create market distortion and lead to increased compliance cost. To mitigate these risks, SIA works closely with CAAS, IATA, and industry partners to ensure the successful implementation of CORSIA, and to advocate policies that encourage the large-scale adoption of SAF. In addition, we acknowledge that there are potential reputational risks tied to changing stakeholder expectations and consumer behaviour. In response to these challenges, we actively engage all stakeholders to reduce our GHG emissions and environmental footprint.

Beyond transitional risks, climate change could also bring about acute and chronic physical risks. Acute physical risks such as the rise in the frequency, severity, and uncertainty of extreme weather events could result in increased frequency of in-flight re-routings, delays, and cancellations. Chronic physical risks such as rising global temperatures and sea levels will also have longer-term strategic and operational impact to the entire aviation industry. With these risks in mind, SIA continues to develop and update our crisis response and business continuity plans to minimise potential business disruptions. SIA actively participates in external multi-agency airport emergency exercises to validate existing crisis management response plans, capabilities, and the management of communications with external stakeholders. In addition, the review of climate change scenarios potentially leading to operations disruptions are also considered.

MANAGEMENT OF ENERGY AND EMISSIONS 302-4 305-5 PR-7 PR-8 PR-9

Pillar 1: Improved technology, including the deployment of Sustainable Aviation Fuels

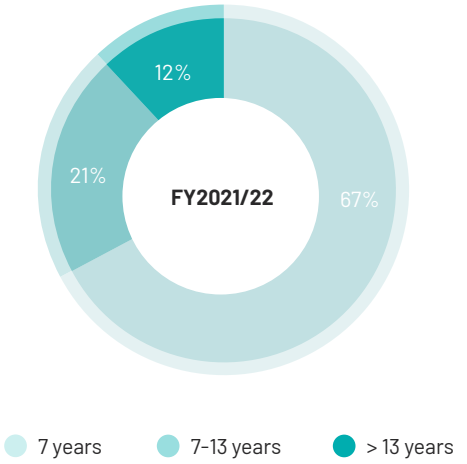
Investing in Modern and Fuel-efficient Aircraft

Our investment in modern and fuel-efficient aircraft helps to reduce our Scope 1 GHG emissions. In line with the SIA's fleet renewal programme, we have one of the youngest operating aircraft fleet in the world, comprising 183 aircraft with an average age of six years and three months. We continue to invest in more fuel-efficient aircraft such as the Airbus A350s and Boeing 787s, which are on average around 25% more fuel efficient than the older generation aircraft that they replace on similar missions. SIA has also made a substantial investment in new generation fuel-efficient aircraft, including the Boeing 777-9 large widebody passenger aircraft and A350F freighter, which it will take delivery in the coming years. SIA will be the launch operator of the A350F, which will burn up to 40% less fuel than our current freighters, reducing carbon emissions by 400,000 tonnes annually.

Average Fleet Age (years), as of 31 March 2022

	FY2017/18	FY2018/19	FY2019/20	FY2020/21	FY2021/22
Singapore Airlines (Passenger Aircraft)	7.4	6.6	5.4	5.1	**5.6**
Singapore Airlines (Freighter Aircraft)	14.3	15.3	16.3	17.3	**18.3**
Scoot	4.7	5.1	5.7	5.9	**6.1**

Total Fleet of 183 Aircraft, by Age Group (%)



CASE STUDY

Singapore Airlines Firms Up Order for Seven Airbus A350F Freighters

Singapore Airlines has firmed up an order for seven Airbus A350F freighter aircraft, with options for five more aircraft. SIA will be the first to operate this new generation widebody freighter aircraft when deliveries begin in the fourth quarter of 2025. These new aircraft will replace SIA's seven Boeing 747-400F freighters, and will burn up to 40% less fuel on similar routes, reducing SIA's carbon emissions by around 400,000 tonnes annually. This supports the SIA Group's goal of achieving net zero carbon emissions by 2050.

The range and payload of the A350F will provide SIA with greater flexibility in its freighter deployment, bolstering its cargo business and cementing its leading position in the sector.

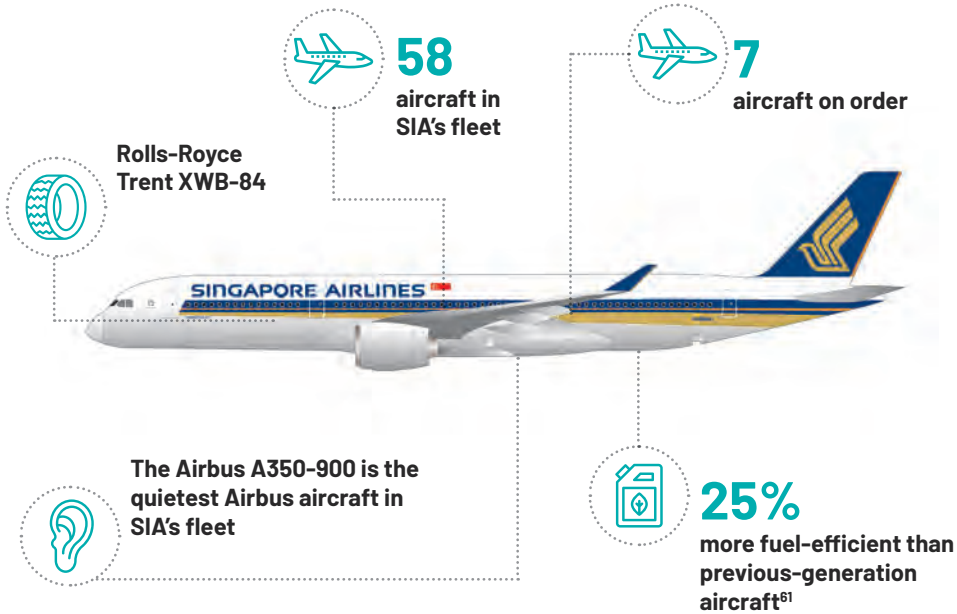


Photo Credit: Airbus

MANAGEMENT OF ENERGY AND EMISSIONS (CONTINUED)

AIRBUS A350-900

The Airbus A350-900 is built with carbon-fibre reinforced plastic, making it lighter and more fuel-efficient with reduced maintenance requirements.



BOEING 787-10

The Boeing 787-10 is the largest variant of the Dreamliner series. It is built with the latest technologies in aerodynamics with features such as raked wing tips and low drag empennages.

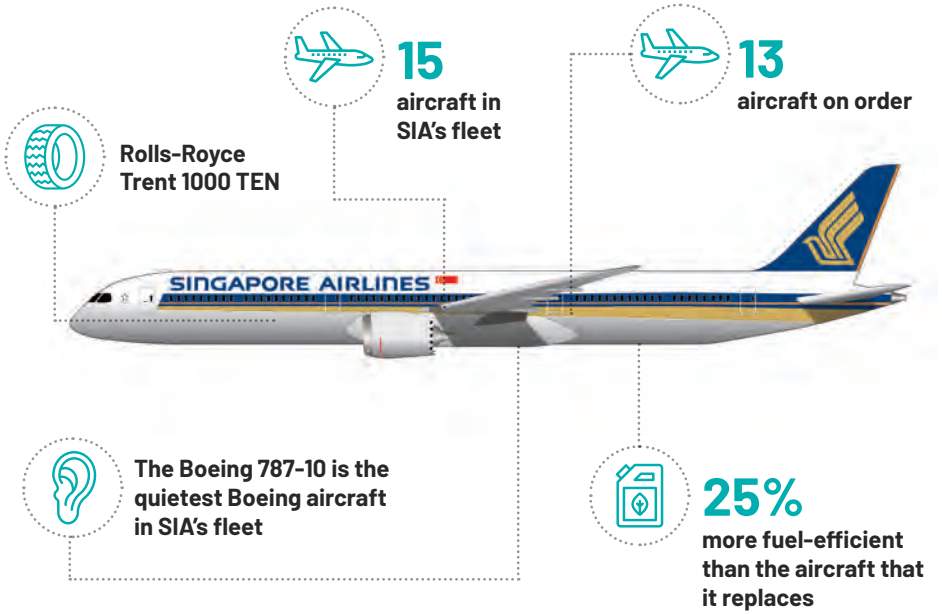


Image Credit: Yucca Studio and SPHM

[61] *According to Original Manufacturer's website.*

MANAGEMENT OF ENERGY AND EMISSIONS (CONTINUED)

AIRBUS A350F

The Airbus A350F freighter aircraft uses advanced aerodynamics and fuel efficiency technology to maximise efficiency in terms of fuel burn, carbon dioxide emissions, and economics. It uses over 70% advanced materials such as composites, titanium, and modern aluminium alloys to create a lighter and more fuel-efficient aircraft, while increasing resistance to corrosion and reducing maintenance requirements.

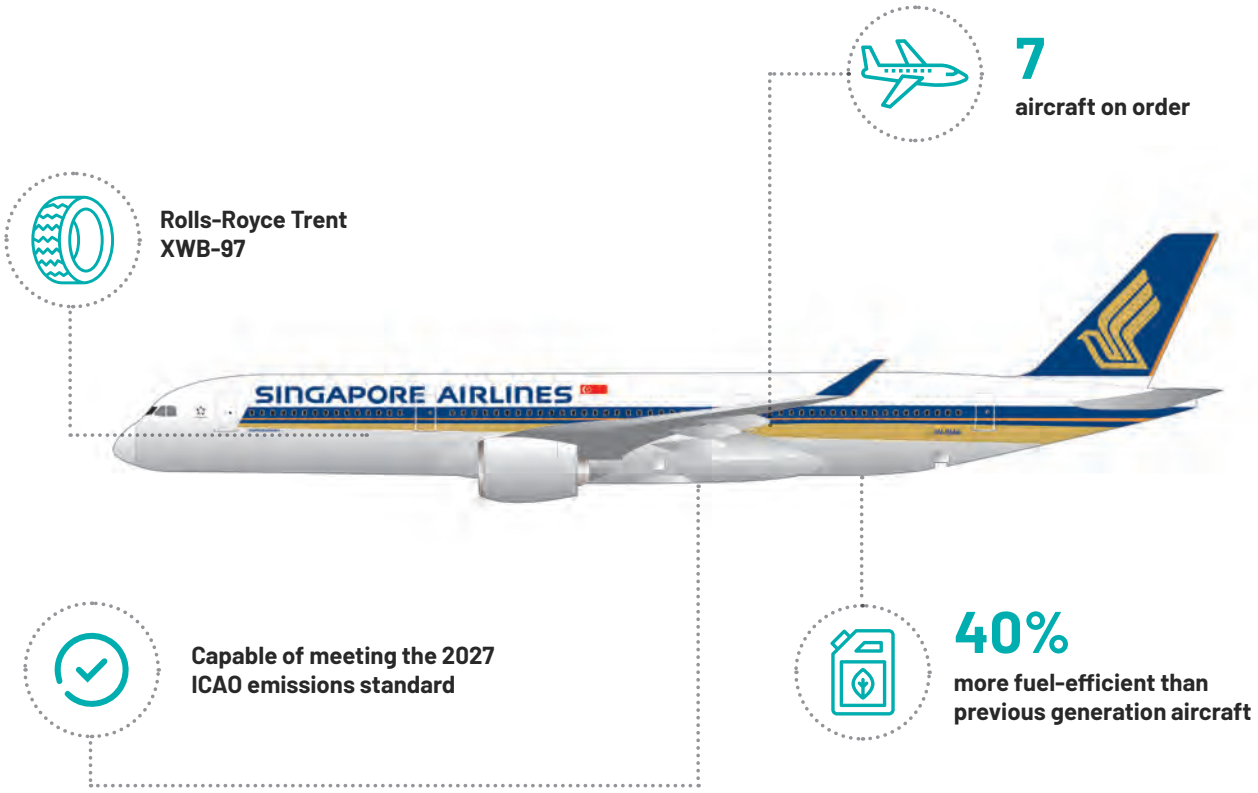


Image Credit: Yucca Studio and SPHM

MANAGEMENT OF ENERGY AND EMISSIONS (CONTINUED)

Working Towards Decarbonisation with Sustainable Aviation Fuels

In FY2021/22, we have progressed significantly in the deployment of SAF in Singapore. SIA sees SAF as a strategic solution and key in-sector lever to achieve our long-term decarbonisation ambition. Compared to conventional jet fuel, SAF can potentially reduce lifecycle GHG emissions by at least 80%[62]. Since 2011, we have embarked on a journey to adopt SAF. Moving forward, our aim is to support the commercialisation of SAF across our network, as well as the development of an integrated SAF supply chain at Singapore Changi Airport.

Approximately
414 tonnes CO_2
GHG emissions savings to date

2011

Joining the Sustainable Aviation Fuel Users Group (SAFUG)

SIA joined SAFUG in 2011, which was established to accelerate the development and commercialisation of SAF. Through this platform, stakeholders including airlines, original equipment manufacturers (OEMs), and verification bodies can exchange knowledge, experiences and best practices, equipping members with the latest developments on SAF. These engagements paved the way for our first deployment of SAF in May 2017.

2017

Implementing the World's First Green Package Flights

SIA operated a series of 12 green package flights, incorporating the use of SAF, fuel-efficient aircraft, and optimised air traffic management (ATM) measures. This was done in collaboration with the CAAS and then Ministry of the Environment and Water Resources (MEWR) over a three-month period on our non-stop San Francisco-Singapore route.

More information on our green package flights can be found on page 104 in our FY2020/21 SIA Sustainability Report.

2018

Working Towards the Commercialisation of SAF

Leveraging the traction gained from SIA's green package flights, a Singapore delegation with representatives from CAAS, CAG, Economic Development Board (EDB), and SIA went on an SAF study trip to Swedavia Airport in Stockholm and Geneva Airport in 2018. Through this trip, Singapore's aviation industry stakeholders were able to gain valuable insights on the key policies and business environment conditions needed to accelerate the deployment of SAF.

2020

Collaborating with Swedavia

In January 2020, SIA entered into a year-long partnership with Swedish airport operator, Swedavia. As part of Swedavia's SAF Incentive Scheme, we began to use a blend of jet fuel and SAF on our flights between Stockholm and Moscow. Supplied by Air BP Sweden and produced by Neste, this SAF was produced from used cooking oil, which is blended with regular jet fuel and delivered to the aircraft via the Stockholm Arlanda Airport's hydrant system. This resulted in approximately 47 tonnes of CO_2 GHG emissions savings in FY2020/21. Through our ongoing collaboration with Swedavia over the past year, SIA has developed a better understanding of the logistics and economics around the deployment of renewable fuels, placing SIA in a better position to scale up the adoption of SAF in the future.

2021

Singapore SAF Supply Chain Feasibility Study

In partnership with CAG and Singapore governmental agencies, a feasibility study was commissioned to identify the sustainability performance, economic costs, and requirements for the development, deployment and commercialisation of SAF at Changi Airport. The study indicated that SAF deployment in Singapore will require active collaboration of all industry stakeholders. Specifically, while government-led policy support can be impactful, complementary industry-led programmes are needed to address operational, logistical, and economic considerations.

2022



Singapore SAF Pilot

SIA, together with CAAS and Temasek embarked on a year-long pilot to study and operationalise the deployment of blended SAF at Singapore Changi Airport. In February 2022, we firmed up orders for 1.25 million litres of neat SAF, which will be blended with refined jet fuel and delivered to Changi Airport for use on SIA and Scoot flights from the third quarter of 2022. This pilot is expected to reduce about 2,500 tonnes of carbon dioxide emissions. It will also validate SAF integration options in Singapore, and provide insights on economic and commercial factors that will help to shape future policies to accelerate and scale up the adoption of SAF.

In addition, SIA was the first airline to sign the Global SAF Declaration at the February 2022 Singapore Airshow, along with key players such as Airbus, Rolls-Royce, and Safran. This highlights our commitment to promote the acceleration of the development, production, and consumption of SAF.

[62] *IATA, "Sustainable Aviation Fuels Fact Sheet".*

MANAGEMENT OF ENERGY AND EMISSIONS (CONTINUED)

Pillar 2: More efficient aircraft operations

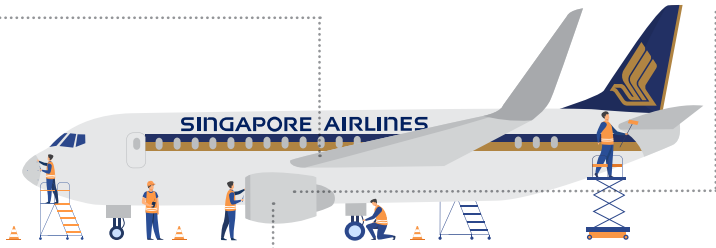
SIA implements various fuel productivity and savings initiatives across our engineering, flight, and ground operations to reduce our carbon footprint. We also leverage digital technologies to identify and implement further fuel productivity initiatives.

Environmental Management System

To ensure SIA's operational activities do not result in significant negative impact to the environment, SIA has in place an Environmental Management System (EMS), which is certified to ISO 14001:2015. The scope of the EMS covers the Engineering Division and Flight Operations Division in Singapore, for the provision and management of aviation and engineering support services. The EMS ensures that SIA's operations comply with the relevant local and international environmental regulations. Internal and external audits are carried out annually to ensure compliance with the requirements. Any findings from the audit procedures are highlighted at the Environmental Management Committee meetings for corrective actions, and continual improvements.

Engineering Operations[63]

- **Tailored water uplift** based on flight duration, fleet type, and historical data of water consumption
  - A customised amount of water is uplifted for each flight, reducing the weight from excess water being uplifted
  - Ongoing digital project to enable dynamic water uplift which take into consideration flight loads, allowing for more efficient water refilling operations and a more accurate calculation of Zero Fuel Weight (ZFW). SIA aims to roll out this project in near future for A350 fleet, with gradual implementation to other fleets
  - As of 31 March 2022, 840 tonnes of fuel was saved in FY2021/22, equivalent to 2,646 tonnes of CO_2 GHG emissions.



- **Others**
  - Optimising Airbus A350 engines based on flight sectors served
  - Utilising more fuel-efficient aircraft and engines for long-haul flights to reduce the amount of fuel burnt during a flight
  - Modification of Boeing 787-10 Trent 1000 engine software to implement optimised climb

- **Weight reduction initiatives** to reduce weight, leading to a reduction in fuel consumption. Examples of items removed include:
  - Footrests on selected aircraft, resulting in a potential weight reduction ranging from 120kg to 300kg per aircraft on all affected long-haul flights
  - Cabin crew's three-piece table on selected aircraft, resulting in a potential weight reduction of 12kg per aircraft, or 324kg fleetwide
  - In-flight collateral (e.g. hardcopy menu, KrisShop and KrisWorld magazine) as part of digitalisation
  - Service meal items such as wine cages, cheese boards, and fruit baskets due to changes in service and meal presentation
  - Pantry weight reductions ranging from 400kg to 1,500kg across all fleets have been observed

CASE STUDY

Optimised Engine Washing

Engine washing removes dirt, which when accumulated, can result in reduced engine efficiency and an increase in fuel burn. Using historical utilisation and forecasted deterioration, engine washing is performed at optimised intervals to maximise fuel burn reduction and savings. Since FY2018/19, this initiative has been implemented for Rolls-Royce Trent XWB and Trent 1000 engines on the A350 and Boeing 787-10 aircraft respectively. The implementation on Trent 900 engines for the A380 aircraft is still being explored. As of 31 March 2022, 148 tonnes of fuel, equivalent to 466 tonnes of CO_2 GHG emissions, were saved from optimised engine washing in FY2021/22.

[63] *Fuel savings from tailored water uplift is available only for Airbus A350-900 and Boeing 787-10 aircraft.*

MANAGEMENT OF ENERGY AND EMISSIONS (CONTINUED)

Flight Operations

Measures for our flight operations include initiatives aimed at optimising flight plans, routes, and management.



Implementing Operational Excellence

Ensuring efficient routing through:

- Reviewing route planning procedures to optimise route efficiency.
- Investing in an enhanced flight planning system that enables pilots to optimise flight routes while considering fuel efficiencies, and ensuring compliance with airspace closures.
- Leveraging data analytics to make informed operational decisions.

FY2021/22 was especially challenging to apply efficient routing systems as geopolitical challenges and instability resulted in SIA planning longer routes to avoid high-risk areas. Nevertheless, active sourcing of alternative routing was still performed to reduce fuel burn.

Ensuring fuel efficiency through:

- Monitoring fuel usage to ensure an optimal level of uplifted fuel.
- Optimising contingency fuel to reduce fuel uplift. However, due to increased risk of flight diversions resulting from Covid-19 restrictions in most countries, more fuel was uplifted for contingency situations during the year.
- Utilising more fuel-efficient aircraft and engines for long-haul flights to reduce the amount of fuel burnt during a flight.
- Optimal flaps settings are used during take-off to reduce the amount of fuel burnt.



Collaboration Across Divisions

- Pilots follow green operational procedures developed by our Flight Operations Division to enable more efficient flights and reduce fuel usage. Examples include reducing flap landing, engaging idle reverse thrust during landing, and Reduced Engine Taxi In (RETI), where only one engine is utilised when taxiing on the runway.
  - » To address safety concerns, a decision was made to temporarily suspend RETI in FY2021/22 due to changes in the operational environment. Due to the larger number of aircraft parked at airports, there was lesser space for ground manoeuvres, resulting in higher risk of aircraft contact. This has since been reinstated in mid-April 2022.
- Engaging crew through fleet meetings and e-learning tools to promote fuel-efficient practices such as RETI and Continuous Descent Approach.
- Extending the fuel efficiency programme across divisions, sharing data and working closely to implement a more consolidated approach to optimising flight plans and routes.



Engaging the Eco-system

- Working closely with ATM experts to improve airspace congestion.
- Participating in international forums and discussions to identify more efficient routes and supporting research into ATM.
- Working with CAAS on Arrival Sequencing into Singapore Terminal Manoeuvring Area (ASIST), Flexi Airspace and Continuous Descent Operations (CDO), and Cost Index Adjustment.

MANAGEMENT OF ENERGY AND EMISSIONS (CONTINUED)

Ground Operations

Measures for our ground operations include reducing fuel usage during ground operations.



Reducing Reliance on Aircraft Auxiliary Power Units

- Deploying mobile ground power units and pre-conditioned units during night stops and long transits to reduce reliance on aircraft Auxiliary Power Units (APU).
- During turnaround times on ground, the excessive use of the aircraft APU can result in unnecessary fuel burn. By monitoring APU usage via automated alerts as well as through our collaboration with SIAEC, fuel burn can be reduced. APU usage is currently monitored on the Boeing 777 aircraft fleet, and the extension to other fleets are being explored. As of 31 March 2022, 580 tonnes of fuel have been saved since FY2015/16.



Improving Aircraft Zero Fuel Weight (ZFW) Used to Plan Fuel Uplift

- ZFW is the total weight of the aircraft and all its contents, minus the total weight of the usable fuel on board. Unusable fuel is included in ZFW. By improving ZFW accuracy, the correct amount of fuel is uplifted.
- Implementing measures to improve aircraft ZFW accuracy such as the deployment of the ZFW Monitoring Dashboard enables our Airport Operations department to monitor the ZFW more closely.

Adoption of Digital Technologies

SIA recognises that digital technologies are key enablers to facilitate emissions reduction across our engineering, flight, and ground operations. We adopt data analytics and digital platforms to measure aircraft performance, as well as to identify and prioritise measures to better support our fuel efficiency strategies.



Analytical Tools

- Using fuel efficiency analytical tools such as the Rolls-Royce Fuel Efficiency Management System to evaluate, measure, and identify more fuel efficiency opportunities.
- As part of an ongoing initiative with Airbus, we adopted a suite of tail-centric digital solutions to optimise the monitoring of air-conditioning performance in all flight phases. By analysing operational data and taking into account factors such as fuel burn data and location of departure bays, operational improvements have been introduced to optimise processes and reduce fuel uplift[64]. Moving forward, the excess fuel uplift will be refined based on prevailing operational data.



Digital Platforms

- Using iPads and deployment of applications to equip pilots with up-to-date operational data and optimisation guidance to facilitate more fuel-efficient operations.

[64] *In FY2021/22, fuel uplift of taxiing on Changi Runway 3 were altered to suit the dynamics of the runway. Changi Runway 3, which began operations in December 2020, is furthest from the terminal building, and requires airlines to plan fuel to cater to the longer taxi distance.*

MANAGEMENT OF ENERGY AND EMISSIONS (CONTINUED)

Pillar 3: Infrastructure improvements, including modernised air traffic management systems

Optimisation of air routes through efficient air traffic management is key to helping airlines reduce fuel use and carbon dioxide emissions.



Innovation and Data Analytics

SIA aims to assist with the improvements in air route optimisation to cope with traffic growth, while striving to reduce fuel use and emissions. We do this by engaging CAAS and other aviation stakeholders to explore the use of innovation and data analytics.



Partnerships with Stakeholders

SIA actively collaborates with stakeholders such as airlines, airports, air navigation service providers, and governments on Air Traffic Management to explore ways to incrementally improve airspace efficiency.

CASE STUDY

Progress on Optimising Operations

In FY2021/22, the Total Mission Management (TMM) team continued to collaborate with SIA's Flight Operations Division and CAAS to improve operational efficiencies. At the same time, opportunities in implementing green operating procedures utilising a data driven approach were explored. This was achieved through the development of data analytics tools with Rolls-Royce for insights on flight data, as well as regular meetings with CAAS to assess Air Traffic Management (ATM) performance, and discuss initiatives to improve the Singapore air hub's flight efficiency.

Arrival Sequencing into Singapore Terminal Manoeuvring Area

Singapore's airspace is often congested. As such, flights may be required to hold for longer periods of time before landing, resulting in extra fuel burnt. To reduce the arrival holding periods, TMM worked with CAAS and SIA's Flight Operations Division to sequence flights before they enter into the Singapore airspace, so as to provide adequate separation between flight arrivals and reduce the arrival holding duration.

Approximately **1,936 tonnes of fuel savings** equivalent to 6,098 tonnes of CO_2 GHG emissions saved

Flexi Airspace

The route structure for flights arriving into Singapore are reviewed, introducing direct tracks on applicable flight routes to achieve better route efficiency.

Approximately **456 tonnes of fuel savings** equivalent to 1,436 tonnes of CO_2 GHG emissions saved

Continuous Descent Operations

Flights arriving into Singapore are usually subjected to step descent when air traffic density is high, resulting in more fuel burnt. While air traffic has considerably lowered due to the Covid-19 pandemic, TMM has been engaging CAAS to establish a procedure to reduce step descent for SIA flights entering the Singapore airspace, to further reduce fuel burnt.

Approximately **648 tonnes of fuel savings** equivalent to 2,041 tonnes of CO_2 GHG emissions saved

Cost Index Adjustment

Cost Index (CI) is a ratio that defines the time-related cost versus cost of fuel when operating an aircraft. This figure is calculated at the pre-flight stage to determine the economical speed for the flight. As part of the Cost Index Adjustment process, TMM monitors the flight time, and adjusts the CI at the flight planning stage to achieve on-time-performance while conserving fuel by utilising a lower CI when flights are predicted to arrive ahead of schedule.

Approximately **602 tonnes of fuel savings** equivalent to 1,896 tonnes of CO_2 GHG emissions saved

Through close collaboration with regulators and our Flight Operations Division, we were able to achieve fuel savings of approximately 3,642 tonnes in FY2021/22, which is equivalent to 11,472 tonnes of CO_2 GHG emissions saved.

MANAGEMENT OF ENERGY AND EMISSIONS (CONTINUED)

Pillar 4: A single global market-based measure to fill the remaining emissions gap

The aviation industry has been experiencing an increase in carbon dioxide emissions, and ICAO predicts that without additional measures, emissions from the aviation industry could increase by more than 30%[65] by 2050. As part of the ICAO's Member States commitment towards carbon neutral growth from 2020, the Member States have adopted a global MBM, known as CORSIA.

CORSIA seeks to offset the share of carbon dioxide emissions from international flights above their 2020 levels by comparing emissions from 2021 against a baseline of 2019's CO_2 emissions. Due to the Covid-19 pandemic, which resulted in a period of low flying in FY2020/21, the ICAO Council decided to use 2019 emissions as a baseline instead of 2020 for the pilot phase from 2021 to 2023. The voluntary pilot period for the CORSIA scheme was set in motion in 2021, and will become mandatory for all airlines from 2027.

SIA recognises that CORSIA plays an integral role in helping the aviation industry achieve its target in a cost-efficient manner. Singapore is voluntarily participating in CORSIA between 2021 and 2026, before the mandatory implementation of the scheme. SIA supports the implementation of CORSIA by meeting the Monitoring, Reporting, and Verification (MRV) requirements. We began monitoring and reporting our CO_2 emissions on an annual basis from January 2019.

[65] *IATA, "CORSIA: final decisions before take-off".*

CASE STUDY

Empowering Action on Climate Change Through Carbon Offsetting

SIA is committed to reducing our carbon emissions. To be a sustainable airline, partnerships are key to helping us remain true to our commitment. Through the SIA Group's voluntary carbon offset programme, which was launched in June 2021, SIA empowers our customers to take meaningful action to protect the environment. For the first six months from the launch of this programme, SIA and Scoot had matched the offsets that our customers purchased.

The programme enables Singapore Airlines and Scoot customers, as well as SIA Cargo partners and corporate clients, to calculate and offset carbon emissions associated with their journey and their air freight shipments via dedicated microsites. The programme will be further enhanced in FY2022/23 to allow SIA customers to use their KrisFlyer miles and HighFlyer points to offset their carbon emissions. All contributions are used to fund accredited environmental projects in Asia that will help reduce or avoid carbon emissions.

Starting Your Carbon Offset Journey

1. Visit SIA's sustainability page and click on "Offset Your Next Flight Now"
2. Select your origin, destination, and cabin class
3. Click on "Calculate your Emissions"
4. Purchase your carbon offsets and fly carbon neutral

We have curated a portfolio of carbon offset projects that protect rainforests, support renewable energy technology, and sustainably improve the livelihoods of local communities. Each project is independently accredited and meets rigorous standards to ensure the integrity of its benefits. The SIA Group's voluntary carbon offset programme is delivered in partnership with Tasman Environmental Markets, an established carbon offset provider specialising in aviation emissions.

Projects Supported Under the SIA Group's Voluntary Carbon Offset Programme



Rainforest Preservation
Preserve vital rainforests in Indonesia, protect endangered species such as the orangutan, and support the development of local villages.



Solar Power
Develop solar energy projects across India that generate renewable electricity and support the sustainable development of local economies.



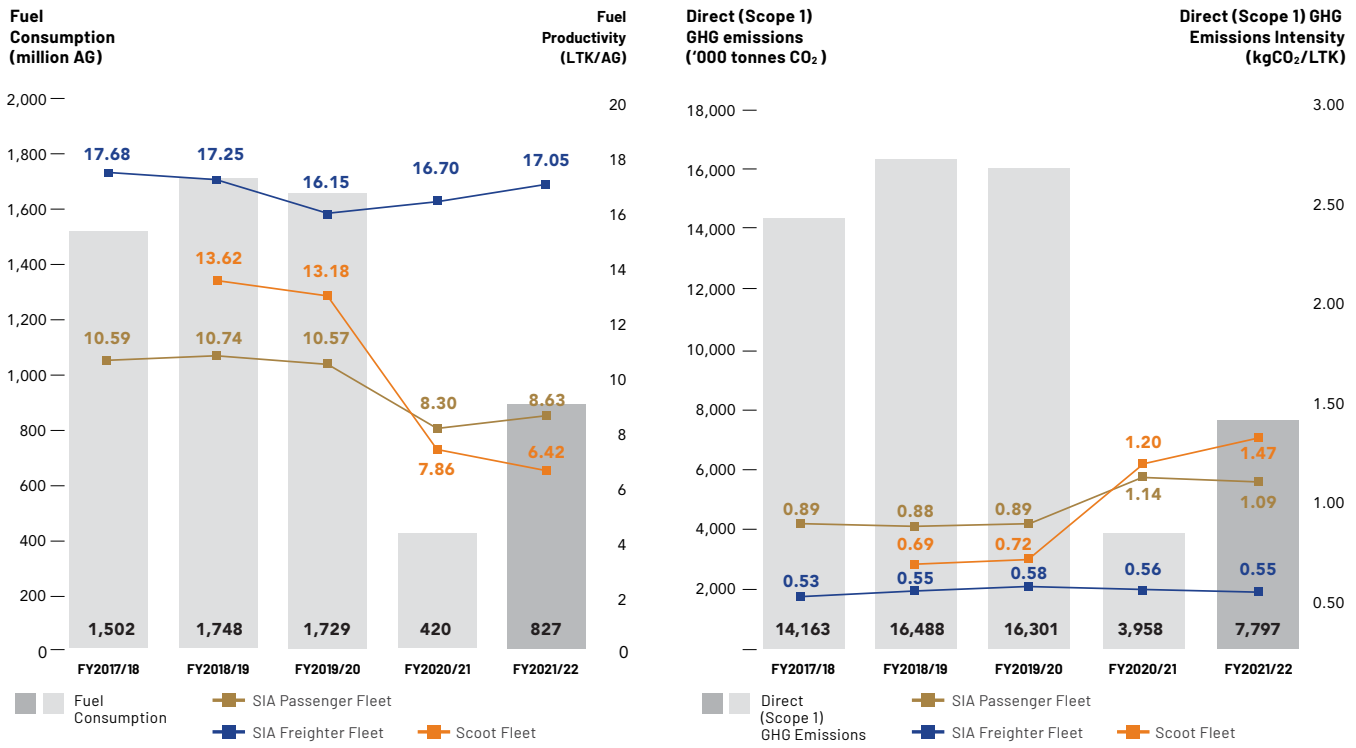
Cleaner Cooking
Distribute efficient, clean burning cookstoves that reduce smoke pollution and the associated health risks for villagers in Nepal.

Find out more about the projects supported on our website.

MANAGEMENT OF ENERGY AND EMISSIONS (CONTINUED)

Performance of SIA's Flight Operations[66]

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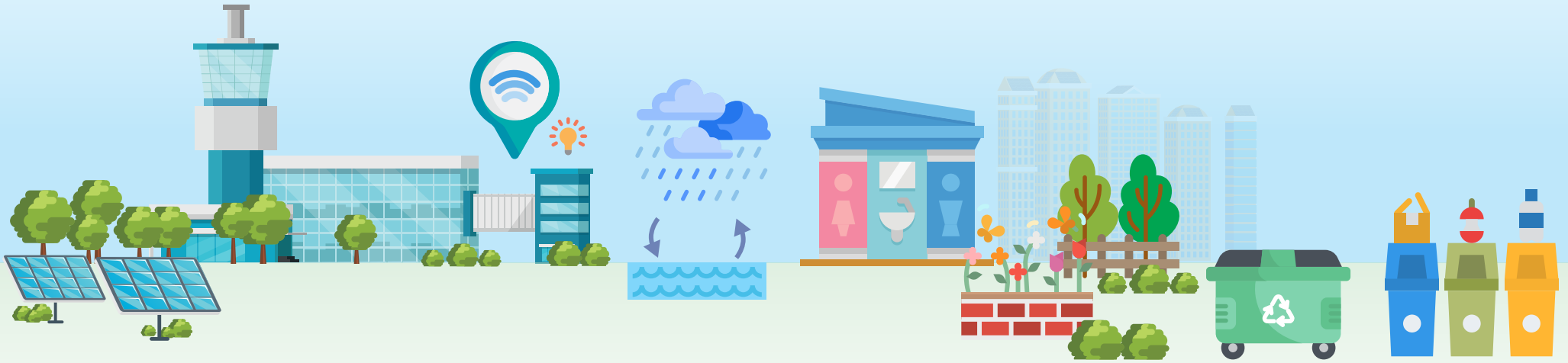
SIA's total fleet fuel consumption saw an increase of 97% from 420 million AG in FY2020/21 to 827 million AG in FY2021/22. This corresponds with the 97% increase in our Direct (Scope 1) GHG emissions from 3,957,889 tonnes CO_2 in FY2020/21 to 7,796,899 tonnes CO_2 in FY2021/22. The increase in fuel consumption from flights is mainly due to the gradual resumption of air travel as more countries open up their borders to travellers. In addition, high vaccination rates observed in various countries have given customers the confidence to resume air travel.

Underscoring our commitment to reduce emission contributions from flight operations, we continued to implement fuel reduction and efficiency measures across our aircraft fleet to reduce our GHG emissions. This enabled us to achieve an estimated GHG emissions savings of 50,369 tonnes CO_2 in FY2021/22.

[66] *Please refer to pages 154 to 167 of the Appendix for definitions and methodologies, and reasons for and effect of restatements.*

SIA's CONTRIBUTION TO THE SINGAPORE GREEN PLAN 2030

In line with the Singapore Green Plan 2030, as well as SIA's Sustainability Policy and Climate Action Pledge, we continue to explore and implement new sustainable practices across our operations.



Green Energy

Adoption of renewable energy through the installation of 20,000 solar panels, total capacity of 8.2 megawatt-peak (MWp)

Airline House
SIA Training Centre
TechSQ

Green Infrastructure and Buildings

Adoption of energy efficient LED high bay light, as well as the use of lifts equipped with high efficiency motors and regenerative drives

Airline House
SIA Training Centre
TechSQ
SIA Supplies Centre

Green Citizenry, Reducing Water Consumption

Harvesting rainwater for flushing purposes and watering of external landscape, as well as harvesting ground water for flushing and irrigation purposes

Airline House

Green Citizenry, Reducing Waste to Landfill

Deployment of recycling bins, including those for e-waste, in all SIA-owned buildings

Airline House
SIA Training Centre
TechSQ
SIA Supplies Centre

ENERGY AND WATER CONSERVATION ON THE GROUND

Energy Conservation

Buildings are a major driver of global energy demand, accounting for approximately 39% of energy related global GHG emissions[67]. Of this, 28% relates to operational GHG emissions associated with energy used to operate the building or infrastructure. SIA aims to transition into a decarbonised environment through retrofitting and renovation efforts to facilitate reduction in resource usage and improved performance.

Energy Reduction Initiatives

SIA's electricity consumption data includes electricity consumed at its properties and offices. A large amount of energy consumption is due to the air-conditioning systems, lightings and lifts. SIA reviews the performance of major building equipment including the plans for refurbishment or upgrading on an annual basis. In FY2021/22, along with the existing initiatives, we continued to implement energy reduction initiatives and explore new technologies including:

- Upgrading and adjusting operating parameters of our chiller plants and air-handling units (AHU)
- Reducing unnecessary usage of utilities such as air conditioners, lighting and IT hardware via the following initiatives in SIA's data centres
  - » Energy efficient air-conditioning and computer hardware, virtualisation of servers, datacentre cabling, which was certified as a Singapore Green Building Product.
- Progressively replacing lightings with more energy efficient light-emitting diode (LED) light fittings
  - » All conventional metal halide high bay lights in the SIA Supplies Centre have been retrofitted with energy efficient LED high bay lights in FY2021/22. The use of energy efficient LED high bay lights is expected to save 330,000kWh annually, equivalent to 135 tonnes of annual CO_2 savings. In addition, less frequent replacement of lights is needed as LED high bay lights have a longer average life span, about twice more than that of metal halide lights.
- Replacement of lifts to improve energy efficiency
  - » The replacement of goods and passenger lifts in the SIA Supplies Centre was completed in FY2021/22. The new lift system uses a higher efficiency motor, as well as regenerative drive to harvest gravitational energy. This translates into approximately 35% energy savings annually.
- Ongoing plans to replace chiller plants with energy efficient ones
  - » A tender exercise has been launched for the replacement of chiller plant systems in the SIA Training Centre and TechSQ. To maximise operating efficiency, existing chiller systems, which were no longer operating at its optimal performance and efficiency, will be combined into a bigger and more efficient chiller system. The combined chiller system is expected to save more than 700,000kWh of energy annually, equivalent to 286 tonnes of annual CO_2 savings. The new chiller system is expected to be commissioned in the fourth quarter of FY2022/23.



[67] *Global Alliance for Buildings and Construction & International Energy Agency, "Global Status Report 2018".*

ENERGY AND WATER CONSERVATION ON THE GROUND

Adoption of Renewable Energy

In addition to our energy reduction initiatives, we remain committed to increasing the adoption of renewable energy. In 2020, SIA and SIAEC signed a power purchase agreement with Sembcorp Solar, a wholly-owned subsidiary of Sembcorp Industries, to install and operate rooftop solar panels on SIA Group's premises. The solar panels help to power onsite operations at various locations, with surplus power generated channelled to Singapore and the Changi Airport Group's electrical grids.

Under the agreement, Sembcorp Solar would install, own, and operate over 20,000 solar panels at SIA's Airline House, SIA Training Centre, TechSQ, five of SIAEC's hangars, and its Engine Test Facility in Singapore. With a total installed capacity of 8.2 megawatt-peak (MWp), this will be the largest combined solar-power energy project for the aviation industry in Singapore.

Despite the delays in construction activities due to the pandemic, the project was completed in FY2020/21. As of FY2021/22, the installed solar panels are capable of delivering 10,200MWh of clean energy per annum, of which 5,415MWh belongs to SIA.

> 20,000
Solar panels installed at SIA's Airline House, SIA Training Centre, TechSQ, five of SIAEC's hangars, and its Engine Test Facility

Installed capacity of
8.2 MWp

Expected generating capacity
10,200 MWh
of clean energy per annum[68]

Equivalent to powering
2,290
four-room apartments in Singapore for a year

Equivalent to offsetting
4,300 tonnes
of CO_2 emissions a year

Equivalent to planting over
52,000
trees

Greener Transportation

To manage GHG emissions from SIA's ground operations, all diesel- and petrol-powered vehicles in our fleet are required to comply with the National Environmental Agency's (NEA) requirements on motor vehicle emissions. In addition, our vehicles undergo regular inspections such as the Chassis Dynamometer Smoke Test annually to ensure the smoke opacity limit meets local standards. Employees are also reminded to adhere to anti-idling engine regulations and switch off idle engines to conserve fuel and promote cleaner air.

Improving Building Infrastructure

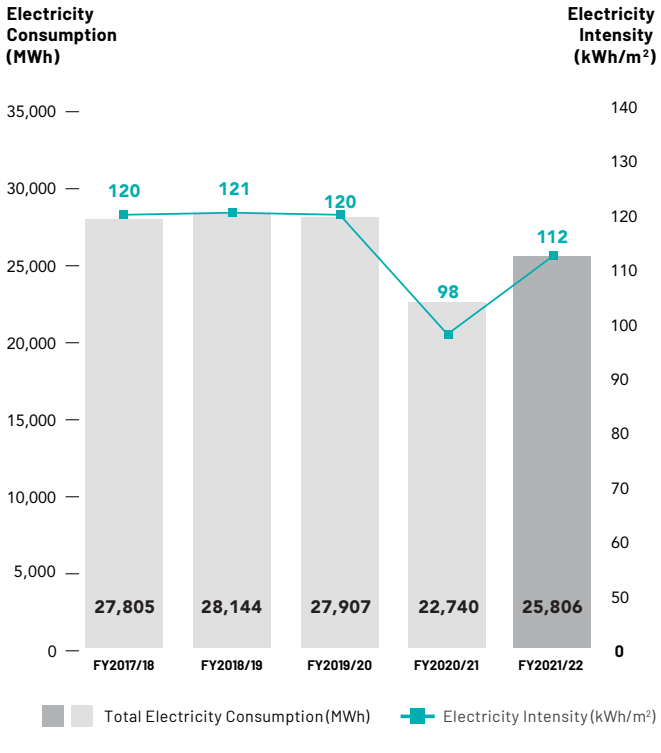
The BCA Green Mark Certification Scheme is an internationally recognised green building certification scheme applicable to the tropical climate. By FY2022/23, we aim to achieve Green Mark Platinum rating for both the SIA Training Centre and TechSQ, which demonstrates the highest level of environmental performance. By FY2026/27, SIA aims to achieve BCA Green Mark Certification for all SIA-owned buildings in Singapore. This certification is a recognition of our efforts in pursuing sustainability development in the built environment.

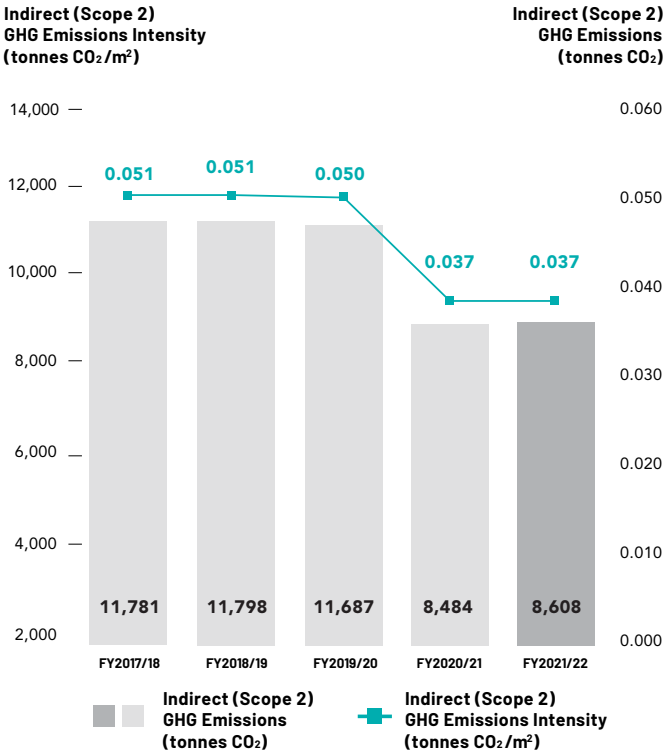
[68] *Includes clean energy generated at SIA's Airline House, SIA Training Centre, TechSQ, five of SIAEC's hangars, and the Engine Test Facility.*

MANAGEMENT OF ENERGY AND EMISSIONS (CONTINUED)

Performance of SIA's Buildings and Offices[69]

302-1 302-3 302-4 305-1 305-4 305-5





The total electricity consumption at our buildings and offices[70] increased by 13% from 22,740MWh in FY2020/21 to 25,806MWh in FY2021/22, as the switch to a hybrid working environment required more electric appliances such as lighting and air conditioning to be switched on. Correspondingly, our electricity intensity increased by 14% from 98kWh/m² in FY2020/21 to 112kWh/m² in FY2021/22. As a result of SIA's rooftop solar panels, 4,709MWh (22% of total electricity consumption) was derived from renewable energy sources.

Our energy indirect (Scope 2) GHG emissions increased by 1% from 8,484 tonnes CO_2 in FY2020/21 to 8,608 tonnes CO_2 in FY2021/22, while the indirect emissions intensity (Scope 2) intensity increased by 2% to 37kg CO_2/m^2. The disproportionate increase in emissions is attributed to the use of renewable energy.

Apart from committing to attain the BCA Green Mark Certification, SIA also aims to achieve a 10% reduction in electricity consumption of our four buildings from FY2019/20 levels, by FY2029/30. In terms of renewable energy, SIA seeks to harvest and use solar energy at all SIA-owned buildings in Singapore, which will be done via the installation of rooftop solar panels. In particular, we aim for the SIA Supplies Centre to be powered by 100% renewable energy sources by FY2025/26, of which at least 50% is self-generated from rooftop solar panels.

[69] *Please refer to pages 154 to 167 of the Appendix for definitions and methodologies, and reasons for and effect of restatements.*
[70] *Locations include SIA's four buildings (Airline House, SIA Supplies Centre, SIA Training Centre, and TechSQ) and offices.*

MANAGEMENT OF ENERGY AND EMISSIONS (CONTINUED)

Water Conservation PR-7 PR-8 PR-9

We recognise that the world is facing a water crisis, exacerbated by rapid population growth and the effects of climate change. Today, over two billion people live in countries experiencing high levels of water stress[71] and over two billion people lack access to safely managed drinking water[72]. Within Singapore, access to a reliable water source has been an ongoing challenge since the country's founding days. Water is a basic human right, which SIA seeks to safeguard for our future generations.

SIA's Water Conservation Efforts 303-1 303-2

Most of the water usage in SIA's buildings are related to air-conditioning and sanitary appliances. As such, most of our water management initiatives relates to the reduction of usage through water-saving devices and the harvesting of rainwater and ground water. The water used at SIA's buildings are provided by the Public Utilities Board (PUB) of Singapore. No industrial effluents are generated from our commercial activities, and all waste water from sanitary and washing are discharged to government-operated water reclamation plants for treatment. Surface water is channelled to open drains and processed at the Government Water Treatment Plant.

In line with Singapore's Ministry of Sustainability and the Environment's (MSE) Clean Water Policy, SIA strives towards continual improvement of water management and more efficient usage of water across our buildings. Existing and ongoing water conservation and improvement initiatives include:

- Harvesting rainwater that are suitable for flushing purposes and watering of external landscape. As Airline House is built on reclaimed land with high water table, ground water collected is channelled and pumped out to the main sewer line to reduce the pressure against the floor slab. This in turn channelled into the rainwater tank to be reused. In FY2021/22, 494m^3 of rainwater was conserved as a result of rainwater harvesting efforts.
- Recycling of ground water at Airline House for flushing and irrigation purposes. The total water collected approximates to 24,531m^3 in FY2021/22. Together with the rainwater harvested, the total water harvested amount to 88% of the total Airline House demand for non-potable water.
- Launching studies on the collection and reusing of condensate water from air-conditioning units and treatment of surface water for cooling towers to reduce our dependency on potable water.
- Installing water saving taps and foam soap dispensers in our washrooms.
- Displaying educational posters provided by PUB in shower rooms and public hand wash areas in the canteen to encourage water conservation.
- Conducting regular water audits and submission of water efficiency management plan to the PUB annually.
- Partnering a leading waste management contractor for wastewater treatment for the aircraft maintenance activities in SIAEC's hangars.
- Replacement of manual flush valves and water taps with sensor-operated models with at least three ticks based on the PUB Water Efficiency Labelling Scheme (WELS). This initiative is scheduled to be completed by the end of 2022.

Moving forward, SIA will progressively replace the current sanitary wares with sensor-based models in our upcoming washroom renovations to minimise water wastage.

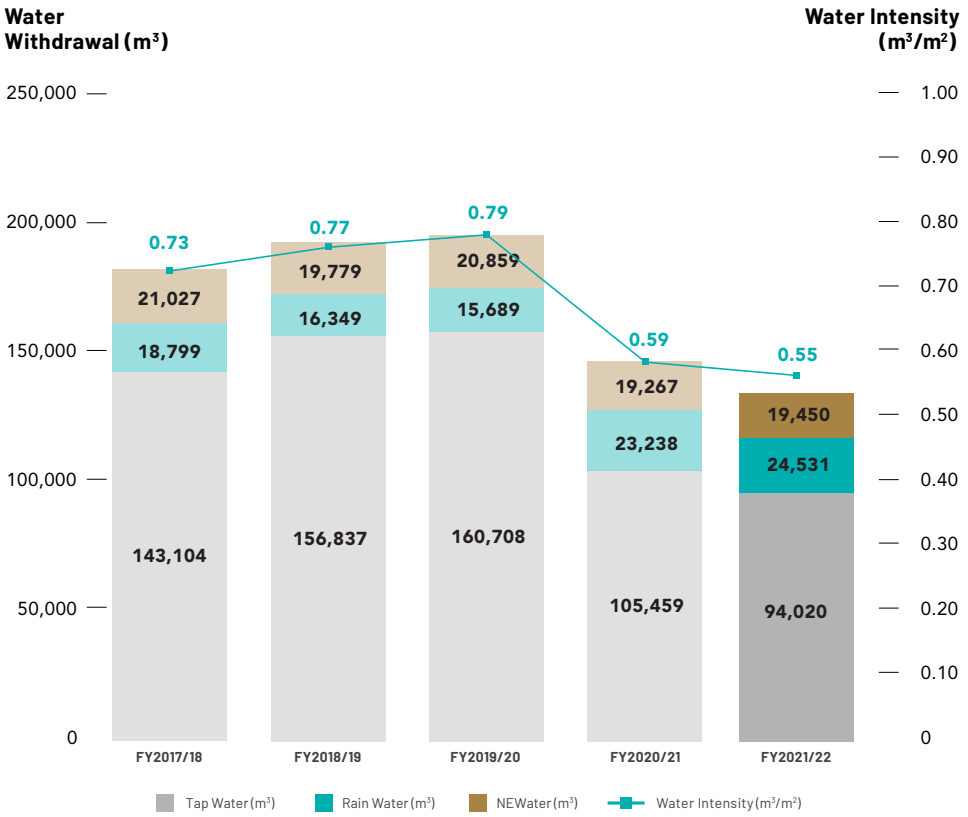
In recognition of our water conservation efforts during the year, we have attained the PUB Water Efficiency Building (WEB) Certificates for four SIA-owned buildings, namely Airline House, SIA Training Centre, TechSQ, and the SIA Supplies Centre.



[71] *United Nations, "Water Scarcity".*
[72] *World Health Organisation, "Water Supply, Sanitation and Hygiene Monitoring".*

MANAGEMENT OF ENERGY AND EMISSIONS (CONTINUED)

Water Performance of SIA's Properties and Offices[73]



Water withdrawn from our buildings and offices decreased by 6.8% from 147,964m³ in FY2020/21 to 138,001m³ in FY2021/22. Water intensity figures also saw a decrease of 6.7% from 0.59m³/m² in FY2020/21 to 0.55m³/m² in FY2021/22. The changes in water withdrawn and water intensity were due to low building occupancy as a result of continued work-from-home arrangements.

Apart from the attainment of the BCA Green Mark Certification, which includes a water-reduction criteria, SIA aims to achieve a 10% reduction in potable water consumption of our four buildings from FY2019/20 levels, by FY2029/30.

[73] *IATA, "Aircraft Cabin Waste Project Report". Ministry of Environment & Water Resour*

WASTE MANAGEMENT

306-1 306-2 PR-7 PR-8 PR-9

The world is facing a mounting waste issue. Waste generation is expected to drastically outpace population growth by 2050. Against a backdrop of rapid urbanisation and consumerism, global annual waste generation is expected to increase to over three billion tonnes over the next 30 years, up from around two billion tonnes today[74].

In August 2019, Singapore launched the inaugural Zero Waste Masterplan, which maps out the country's key strategies to build a sustainable, resource-efficient, and climate-resilient nation. This includes reducing the amount of waste sent to Singapore's landfill, and encouraging the adoption of sustainable production and consumption practices.

As part of our commitment to minimise our environmental footprint through a prudent waste hierarchy, we practise the five Rs – Refuse, Reduce, Reuse, Repurpose, and Recycle – across our operations, both on the ground and in the air.



REFUSE

Refusing the use of single-use disposables such as plastics and straws

REDUCE

Reducing the use of materials and waste generated

REUSE

Minimising disposables and replacing cabin items with more reusable and sustainable alternatives

REPURPOSE

Repurposing and upcycling of materials that have lost its functionality

RECYCLE

Making a conscious effort to recycle waste such as electronics and plastics purposefully

SIA adopts a four-pronged approach to manage waste:

- Reducing waste generation through the adoption of digital technologies and introducing waste and materials reduction initiatives across our operations
- Reducing waste disposal through recycling, reusing, and repurposing of materials
- Implementing operational improvements to reduce waste generation and disposal
- Building partnerships with like-minded industry partners to explore new collaboration opportunities

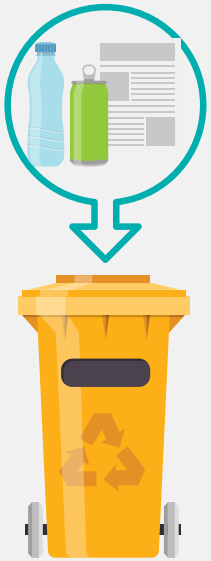
[74] *ces, "Singapore's Zero Waste Masterplan". Please refer to the Appendix for definition*

WASTE MANAGEMENT (CONTINUED)

In-flight Waste Management

The sustainable management of aircraft cabin waste comprises two waste-streams: cleaning waste and catering waste..

Aircraft Cabin Waste





Cleaning Waste

Cleaning waste is waste collected as a result of cleaning operations within the aircraft. These include amenity kits, earphones, lavatory waste, plastic bottles, textiles, as well as litter left behind by travellers.

Catering Waste

Catering waste is generated by in-flight meals and beverages distributed on board the flight. These include food and beverages (both partly consumed and untouched), as well as packaging that are returned to the galley carts, static bins, or compactor boxes.

A study by IATA estimated that the aviation industry generated 6.1 million tonnes of cabin waste in 2018, and this is expected to double in the next decade[75]. In FY2021/22, an average of 352.7kg of waste was generated per flight, with the average traveller generating 1.4kg of cabin waste per flight[76].

SIA does not collect, store, or dispose cabin waste. These activities are performed by contracted cleaners and caterers, and are subjected to the relevant national waste management controls. Nonetheless, SIA remains committed to play our part in reducing and managing cabin waste in a more sustainable manner. SIA is working with our caterers worldwide to explore various initiatives, and to conduct waste audits to gain a better understanding of the make-up of our waste. These allow us to step up our efforts in segregating and recycling of waste, promoting circular economy concepts where possible.

Since 2019, a Sustainability Taskforce set up within the Cabin Crew Division takes charge of ideating and implementing sustainability-related initiatives to reduce waste and encourage environmental-friendly practices among stakeholders. The Sustainability Taskforce is also in charge of monitoring and tracking the progress of implemented initiatives. The key highlight would be the successful launch of the Cabin Crew Sustainability Campaign #EveryEffortCounts, in February 2022, in collaboration with the Creative Circle, a cabin crew extracurricular activities group. The event included a series of activities such as quizzes, and showcased how various waste items could be repurposed into handicraft. Sustainability tips for in-flight, office, and home were also shared to engage both cabin crew and ground staff.

Values of waste management adopted by SIA are incorporated into the annual Reduce Wastage Campaign organised by the Cabin Crew Division to highlight the importance of one's contribution towards protecting our environment. It also helped to develop environmental consciousness among employees. The campaign also included the sharing of tips and best practices for waste management in one's home, office, and aircraft. Collectively, a targeted effort is made to reduce cabin waste.

We have also embarked on several initiatives to better understand SIA's cabin waste footprint and identify potential waste reduction opportunities. Since July 2020, we have been working with SATS Ltd to monitor the amount of food waste generated on SIA's inbound flights. This include conducting waste audits on our flights. Through such audits, SIA found that the majority of our cabin waste was catering waste, of which most were food and beverage waste. This reaffirms the need for us to continually source for solutions to reduce food wastage through initiatives such as our collaboration with Lumitics, KrisLab, and SATS Ltd. By monitoring and understanding our waste footprint, we hope to be able to develop a more structured and targeted approach to manage our cabin waste in SIA.

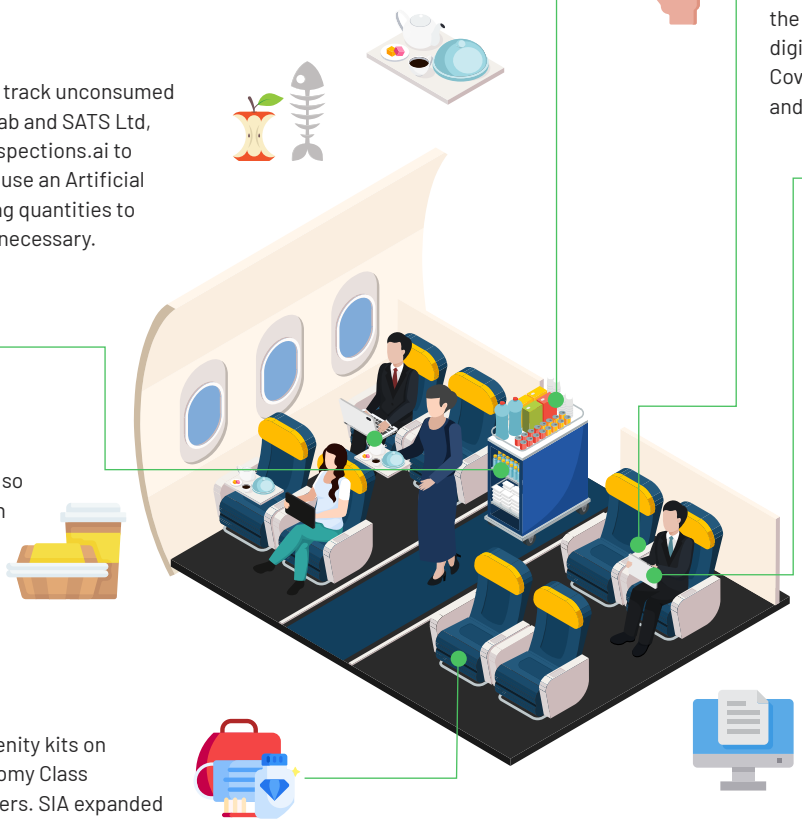
[75] *IATA, "Cabin Waste Handbook".*
[76] *IATA, "Aircraft Cabin Waste Project Report".*

WASTE MANAGEMENT (CONTINUED)

Managing In-flight Catering and Cleaning Waste

SIA reduces our in-flight catering and cleaning waste by:

- Collaborating with partners and caterers to improve our menu design and preparation processes through machine learning, research and development
- Digitalising our in-flight services and work processes
- Encouraging the reduction in consumption of in-flight amenities
- Replacing plastic materials with alternative packaging materials



Using technology to study food waste

Our ongoing collaboration with Lumitics allows SIA to track unconsumed meals via a scanning technology. Together with KrisLab and SATS Ltd, SIA has started working on a proof of concept with inspections.ai to study partially consumed main courses. The aim is to use an Artificial Intelligence model to minimise food waste by adjusting quantities to bring on board, or tweaking menus and dishes where necessary.

Pre-ordering meals to reduce food waste

SIA enhanced the pre-ordering of meals and enabled customers to indicate if they wish to skip meals even before they board their flights. This initiative was launched in November 2020, and customers could do so by managing their booking on SIA's website or through the mobile app. This, alongside the pre-ordering of meals, allows for more accurate uplifting of meals, thereby reducing food waste.

Reducing waste from in-flight amenities

Since FY2019/20, SIA started offering its in-flight amenity kits on a request basis to Premium Economy Class and Economy Class customers, instead of distributing them to all customers. SIA expanded this initiative for our Business Class customers in April 2020.

Recycling our in-flight waste

An in-flight initiative was introduced in September 2020 to segregate polyethylene (PET) plastic bottles used on board for recycling. The bottles will be recycled into blankets, which will be sold on KrisShop. Due to lack of resources arising from the Covid-19 pandemic, this initiative was suspended between May 2021 and December 2021, and has since resumed for selected flights out of Australia. SIA is looking to expand this initiative to other mid- to long-haul flights.

Digitising reading literature

All hardcopy literature (newspapers, magazines, etc.) and menus were removed from our seatback pockets, and made available in our e-Library on the SingaporeAir mobile app and Digital Menu respectively in FY2020/21. The digitising of our reading literature and in-flight menu was expedited due to the Covid-19 pandemic, as SIA sought to minimise interaction between customers and crew, so as to manage the risk of Covid-19 transmission on board flights.

Digitising work processes

Through the Sustainability Taskforce, SIA implemented several initiatives to digitise our in-flight work processes to improve productivity and reduce paper usage. Some of these initiatives include:

- Phasing out hard copy comment forms and encouraging customers to submit feedback online via email or the feedback page on our website. Customer complaints can then be tracked and investigated online.
- Engineering Division accepts electronic signatures for most documents and processes.
- Digital copies of the Cabin Safety Equipment Checklist and Aircraft Quick Reference Guide for Cabin Crew.
- Ceasing the submission of Onboard Service Lists (OSL) since May 2020. Cabin crew access passenger list and details via the B.E.S.T application, while ground staff utilise the electronic OSL portal for an overview of customer requests and details for each flight.

Currently, we are:

- Reviewing onboard work processes to reduce the printing of Onboard Service Lists used for meal order taking on board
- Phasing out physical copies of Safety and Emergency Procedures cards
- Eliminating hardcopy documents of the Aircraft Certificate File, found on board every aircraft, with digital copies on the eCert app

WASTE MANAGEMENT (CONTINUED)

CASE STUDY

THE UPCYCLING PROJECT by SINGAPORE AIRLINES

The Upcycling Project

The Upcycling Project brings together homegrown and international brands in a creative collaboration with SIA to produce a range of exclusive lifestyle and fashion products, breathing new life into materials such as aircraft parts and in-flight service items from SIA's retired commercial aircraft. Through collaboration with 15 Singapore-based organisations and selected global retail brands, these parts were upcycled and repurposed to create unique retail products and art pieces, such as pouches and wallets made from life vests, and furniture made from the Airline's Business Class seats and cabin windows. Notable brands include Bynd Artisan, CHARLES & KEITH, Supermama, and Tocco Toscano.

These products are available on KrisShop, as well as via the individual brands' online and retail outlets.









WASTE MANAGEMENT (CONTINUED)

Packaging

Complying With Stricter Packaging Legislations

Under the Mandatory Packaging Reporting (MPR) framework of the Resource Sustainability Act, producers of packaged products have to submit packaging data and 3R (Reduce, Reuse, Recycle) plans to the National Environment Agency. This framework aims to raise awareness of environmental and economic benefits tied to packaging reduction, and to spur companies to actively reduce the use of packaging, in line with SIA's commitment to reduce environmental footprint. SIA's in-flight packaging waste is exempted from the MPR as all in-flight caterings (meals, amenities, etc.) are disposed overseas, while inbound catering packaging waste are sent for incineration under the International Catering Waste regulations. The MPR aims to tackle packaging waste generated domestically, which is applicable to SIA as it includes packaging waste incurred from corporate gifts. SIA has been in compliant with the MPR rules, having collected relevant material information of our packaging products such as material type, percentage of recycled content, as well as corresponding weights.

Using Alternative Packaging Materials for Amenities

Children's toys are wrapped with recyclable paper packaging instead of plastic polybags since FY2019/20. For the past year, SIA has been exploring the use of sustainable polybag packaging for the SIA teddy bears. In addition, the use of bubble wrap to package KrisShop's home delivery orders were replaced with Kraft and die-cut paper, amounting to about 7.4 tonnes of plastic reduction in KrisShop's operations in FY2021/22.

Using Alternative Packaging Materials for Food and Drinks

In FY2020/21, we replaced plastic water bottles on Scoot's flights with a more sustainable Tetra-pack alternative made mainly from paper and Forest Stewardship Council (FSC)-certified packaging material. In addition, Scoot has replaced plastic drink stirrers with wooden stirrers in FY2021/22.

SIA continued to work with SATS Ltd to implement an eco-friendly dining concept on short-haul SIA flights in Economy Class, replacing single-use plastic packaging with alternative sustainable materials such as FSC-certified paper for meal boxes and cups, and bamboo and paper-based alternatives for dessert boxes and cutlery packs. These features can reduce weight by up to 60%, and eliminate almost all single-use plastics. In addition, food waste and the accompanying meal boxes can be sent to an eco-digester, where it can be converted to pellets and used as refuser-derived fuel (RDF), potentially reducing catering waste by 60%.



WASTE MANAGEMENT (CONTINUED)

CASE STUDY

SIA South Korea Team Participates in Plastic-use Reduction Campaign #GoGoChallenge

In line with SIA's long-standing commitment to sustainability and achieving net zero carbon emissions by 2050, SIA's South Korea team participated in the #GoGoChallenge, a social media campaign by South Korea's Ministry of Environment. This campaign encourages participants to reduce single-use products, promoting the use of reusable products. The #GoGoChallenge campaign is conducted in a relay format, where the selected participant promises a single action (a 'do' or 'do not') to reduce daily plastic usage on their social media platform.

The SIA South Korea team conducted an in-house contest to gather ideas to lower the use of plastic products amongst colleagues, ultimately pledging to take on multiple actions to reduce plastic usage. This included bringing reusable utensils, opting out of disposable plastic cutlery for food deliveries to the office, and using reusable cups instead of disposable ones. This campaign was actively promoted through local social media channel, Kakao, highlighting the SIA Group's commitment to minimise our environmental footprint.



WASTE MANAGEMENT (CONTINUED)

Performance of SIA's Flight Operations

SIA started monitoring the total amount of waste generated and recycled in our flight operations in FY2021/22. General waste from catering and cleaning services are collected and disposed by our ground handling and catering partner, and waste data was eventually gathered from an online and centralised database. A biannual waste audit is also conducted to ensure the authenticity of the numbers provided. Similarly, recyclable waste is collected and managed by the catering partner, and all data is obtained from a centralised database.

In FY2021/22, the total amount of waste generated in our flight operations was 115 tonnes. We recycled a total of 35 tonnes of glass waste, achieving a recycling rate of 30%. Before the pandemic, other types of recycled waste collected include magazines and newspapers. The collection of recycled waste will resume as demand for air travel increases, and plastic bottles will also be collected in the coming years.

Ground Waste Management

SIA strives to align our approach with Singapore's Zero Waste aspirations, which include reducing waste sent to Singapore's Semakau Landfill each day by 30%, and increasing our overall recycling rate to 70% by 2030[77]. In FY2021/22, SIA continued with the implementation of various waste reducing and recycling initiatives to minimise waste from three main waste streams: food waste, electrical and electronic waste (e-waste), as well as paper and plastics.

REDUCE

Reducing Paper One Name Card at a Time

As part of our transition to a digital and paperless age, SIA introduced digital name cards for all SIA Group staff in the form of a QR code, which is stored within the 1SQ mobile app. This will enable external parties to scan the QR code and save a SIA staff's information such as their name, designation, telephone, and email address into their phone contact list. This initiative began in July 2019, and is projected to be able to save approximately of 59 reams of paper annually.

Reducing Plastic Waste Across the Organisation

SIA's Engineering Division has multiple ongoing initiatives since FY2020/21 to reduce plastic and paper waste generated. These initiatives include:

- Installing and using air bubble machines to reduce wastage by producing only the amount of bubble wrap needed for the packing of aircraft spare parts.
- Switching from the use of 80 microns LDPE plastic bags to 60 microns LDE plastic bags for the packing of aircraft spare parts.
- Digitising forms and approval processes to reduce paper waste. This resulted in a reduction of 916 reams of paper used during the year of implementation in FY2020/21.

REUSE

Reusing Aircraft Parts for Safety Training

Safety training for pilots and cabin crew are conducted using retired aircraft equipment, such as slide rafts and smoke hoods, from FY2021/22. Retired aircraft parts were reused for training purposes as they were functional, despite them not meeting regulatory requirements for flight use. These equipment were restored before being approved for training use by SIA's Flight Operations Division.

REPURPOSE

Repurposing Aircraft Amenities and Retired Aircraft Parts

Following SilkAir's integration into SIA, several SilkAir-branded items such as earphones and tablet stands were donated to beneficiaries. SilkAir-branded earphones were also included in the National Day Parade care packages distributed to migrant workers in Singapore. This was done in in collaboration with various organisations such as the Ministry of Manpower, the Dormitory Association of Singapore, and other grassroots organisations, and non-governmental organisations. More information on our beneficiaries can be found on page 114 of this report.

In addition, The Upcycling Project was launched in August 2021, where retired aircraft parts and materials were repurposed. More information can be found in the case study on page 145 of this report

RECYCLE

Recycling Electronic Waste at our Offices

To encourage a culture of recycling e-waste, SIA implemented an initiative called "Let's Erase e-Waste" in 2016. In FY2021/22, 409kg of e-waste was collected and recycled through Cimelia Resource Recovery Pte Ltd. An awareness on the proper treatment and disposal of e-waste was developed among employees through various educational programmes and the introduction of e-waste recycling bins at our Singapore offices. A total of 6.8 tonnes of e-waste has been recycled through this initiative since 2016.

[77] *Ministry of Environment & Water Resources, "Singapore's Zero Waste Masterplan".*

WASTE MANAGEMENT (CONTINUED)

Performance of SIA's Properties[78]

Total waste generated by our buildings[79] in Singapore increased by 10% from 880 tonnes in FY2020/21 to 964 tonnes in FY2021/22. Having started monitoring the total amount of waste recycled at our buildings since FY2020/21, we recycled a total of 132 tonnes of waste in FY2021/22, equivalent to 14% of total waste. The breakdown of recycled waste includes paper, plastics, ferrous metals and glass materials. In FY2020/21, we also started disclosing two other materials, textile and wood, which can be found in the table below.

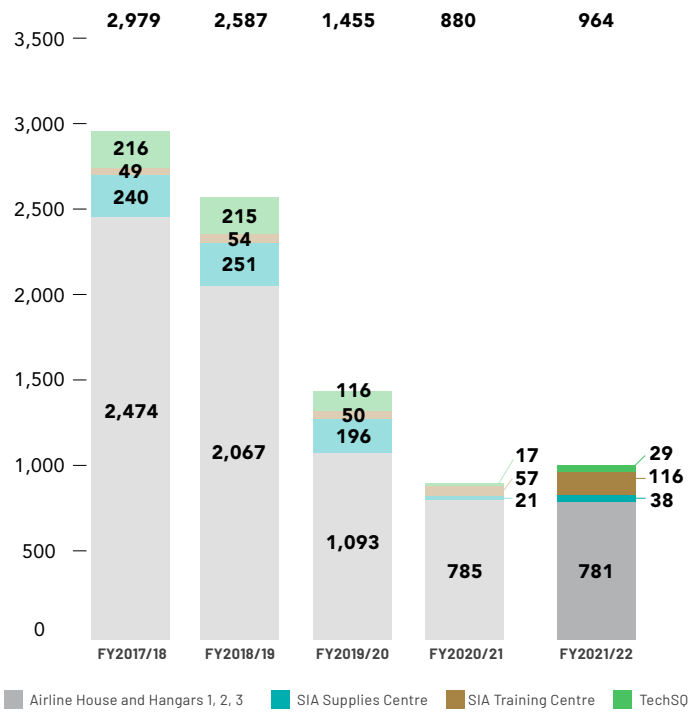
General waste is collected and managed by general waste collectors licensed by NEA, and is either sent directly to an incineration plant, or to a material recovery facility for further sorting and destruction. Dedicated recycling bins are available at our properties for recyclables. They would be sent to a material recovery facility where sorting and dismantling would occur, and thereafter sent to off-takers specialising in various types of recyclable products. All incoming and outgoing materials from the material recycling facility are recorded via the weighbridge system. The weight of waste for both general waste and recyclable waste streams are recorded and provided by licensed waste collectors, who will share the numbers with SIA.

Total Waste Recycled at Buildings in FY2021/22, by Location and Waste Type (tonnes)

	Paper	Plastic	Ferrous Metal	Glass	Textile	Wood	Total
Airline House and Hangars 1, 2, 3	71.78	10.34	14.36	0.00	0.00	2.91	99.39
SIA Training Centre	1.83	0.03	0.02	0.27	1.67	24.90	28.72
TechSQ	3.16	0.03	0.01	0.01	0.00	0.00	3.23
SIA Supply Centre	0.79	0.01	0.01	0.00	0.00	0.00	0.81
Total Waste Recycled (tonnes)	**77.55**	**10.40**	**14.45**	**0.28**	**1.67**	**27.81**	**132.16**

Total of **132 tonnes** of waste in FY2021/22, equivalent to **14%** of total waste

Total Waste Generated at Buildings (tonnes)



[78] *Please refer to the Appendix for definitions and methodologies.*
[79] *Locations covered include SIA's four buildings (Airline House, SIA Supplies Centre, SIA Training Centre, and TechSQ) and Hangars 1, 2 and 3, which are under SIAEC's operational control. Data for Hangars 1, 2 and 3 are included as data could not be segregated.*

NOISE PR-7 PR-8 PR-9

Aircraft engines are a major source of noise pollution, especially during the landing and take-off cycle. Excessive noise can also be detrimental to the physical and mental health of people and wildlife, both on land and in the skies. It is also one of the main causes of adverse community reactions during airport operations[80]. While inherent to the nature of the industry, SIA is continually exploring ways to reduce our noise pollution and the impact on local communities situated near the airports where we operate in.

ICAO's international standards for aircraft noise was adopted in 1971. Since then, standards have been progressively made more stringent. In 2006, ICAO introduced stricter noise standard, the ICAO Annex 16, Volume 1, Chapter 4 Standards, as part of its Balanced Approach to Aircraft Noise Management, to reduce noise at source. The continual improvements in noise certification standards ensure that aircraft manufacturers will continue to incorporate the latest noise reduction technology into aircraft designs, and airlines will prioritise procuring aircraft which meet the industry standard.

SIA seeks to minimise our noise pollution through compliance with ICAO noise standards, investments in newer and quieter aircraft, continuous improvements to existing fleets, and adopting appropriate noise abatement procedures in the airport vicinity. With the replacement of SIA's Boeing 747-400F freighter aircraft with the new generation Airbus A350F aircraft from 2025, the newer aircraft[81] not only complies with the ICAO Annex, but also meet certain airports' more stringent noise level requirements as stipulated by the local authority. As of FY2021/22, every aircraft in SIA's fleet meets the latest ICAO Chapter 4 noise standard. SIA has also ordered 31 Boeing 777-9s, which will have up to 15 dB noise levels below Stage 4 Aircraft Noise Standards margin.

OTHER POLLUTANTS PR-7 PR-8 PR-9

In addition to GHG emissions, the combustion of jet fuel also results in other emissions such as nitrogen oxides (NOx), sulphur oxides (SOx), carbon monoxide (CO), unburned hydrocarbons (HC), smoke, particulate matter (PM) and other trace compounds that affect air quality. Over the years, improved engine designs have gradually reduced emissions of NOx and CO and have almost eliminated emissions of HC and smoke[82].

ICAO sets the international standards for NOx, CO_2, hydrocarbons and exhaust levels from aircraft engine emissions under ICAO Annex 16, Volume III. This standard is applicable to new aircraft designs as of 2020, as well as new deliveries of current in-production aircraft types from 2023. SIA supports the new CO_2 standard set by ICAO, to meet the aviation industry's long-term commitment to reduce GHG emissions.

SIA seeks to minimise our NOx footprint through compliance with ICAO's emissions standards for NOx. The NOx standard, endorsed in 2004, is applicable to new engines manufactured from 2008 and requires certification to CAEP/6 standards. A subsequent NOx standard, endorsed in 2010, is applicable to new engines manufactured from 2014 and requires certification to CAEP/8 standards. As of FY2021/22, the SIA Group's passenger aircraft fleet meets the 2004 ICAO CAEP/6 Emissions Standards. Newer generation aircraft types, such as the A350 family and 787 family, meet the more stringent CAEP/8 standards.

100%
of SIA's aircraft fleet meets the latest ICAO Chapter 4 noise standard

100%
of our passenger aircraft fleet meets the 2004 ICAO CAEP/6, while the newer generation aircraft meets the stricter CAEP/8 emissions standards for NOx



[80] *ICAO, "Aircraft Noise".*
[81] *Based on A350-1000 as proxy since the first delivery of A350F will only take place in fourth quarter of 2025.*
[82] *IATA, "Local Air Quality".*

BIODIVERSITY 304-3 PR-8

The Harapan Rainforest Initiative

Forests are home to more than 80% of Earth's terrestrial biodiversity, and around 1.6 billion people depend on them for their livelihood. Yet, deforestation continued to occur at an alarming rate of approximately 10 million hectares per year between 2015 and 2020[83]. Today, the UN estimates that over a million animal and plant species are threatened with extinction[84], largely driven by anthropogenic environmental degradation and destruction.

SIA recognises that preserving our connection with nature is key to sustainable development. Since 2010, we have been involved in forest conservation by being the exclusive airline partner for the large-scale green initiative in Hutan Harapan, aimed at protecting one of the world's most threatened and biodiverse ecosystems.

The Harapan Rainforest Initiative, also known as Hutan Harapan, is an ecosystem restoration concession covering more than 98,555 hectares of lowland tropical rainforest in Sumatra, Indonesia. The area is rich in biodiversity and remains an important habitat for over 1,350 documented animal species, including the critically endangered Sumatran tiger and Sumatran elephant, as categorised by the International Union for Conservation of Nature (IUCN) Red List.

This initiative is driven by a consortium of four organisations, namely Burung Indonesia, the Royal Society for the Protection of Birds, BirdLife International, and the Nature and Biodiversity Conservation Union. With strong support from the Indonesian Government, the Harapan Rainforest Initiative has been able to continually expand its biodiversity efforts and support the indigenous communities, among other initiatives. Some of the key developments and outcomes from Hutan Harapan in FY2021/22 are highlighted in this section.

Forest Fire Prevention in Hutan Harapan

Threats of forest and land fires are prevalent in Indonesia, especially during prolonged periods of dry season. The construction of two fire monitoring towers in Jambi and South Sumatra allows the Hutan Harapan patrol teams to pay close attention to their surrounding forest conditions and to detect hot spots in real time. Fire prevention activities has enabled the team to be more prepared and able to respond effectively to potential forest fires, while limiting their spread and damage in the rainforest.

The fire monitoring tower does not only function as a venue to monitor hotspots. It also serves as an ecotourism facility in Hutan Harapan. Visitors to Huta Harapan can enjoy the forest landscape, view the sunrise or sunset, and even conduct birdwatching from the top of the monitoring tower.



Photo Credit: BirdLife International

Biodiversity Monitoring in Hutan Harapan

Forest biodiversity can be threatened by forest destruction, degradation, and fragmentation, along with species specific threats such as diseases, poaching, and wildlife trafficking. Hutan Harapan's approach to biodiversity monitoring is to identify species of conservation concern (key species) in the ecosystem restoration area, monitor them, and provide information on species-specific threats for improved management. Species are monitored in a manner that suits the behaviour of the species and site accessibility, such as occupancy surveys, index counts, and population estimates.

By monitoring species, data on the health of the species and the integrity of the ecosystems will be captured and will be used to ensure that population dynamics of key species are closely monitored, and any changes are discovered quickly. Conservation and protection responses will also fit with the needs required, such as the protection of important biodiversity areas and provision of benefits to people. Donors will better understand the impact of their funding and allow governments to track delivery of national biodiversity strategies and their contribution to the goals of multi-lateral environmental agreements.

A critical element of the long-term success of the key species monitoring is developing the commitment and capacity of local communities that have a stake in biodiversity conservation. The biodiversity monitoring work will be integrated into the community partnership, women's empowerment and forest protection work.

[83] *Food and Agriculture Organization of the United Nations and United Nations Environment Programme.*
[84] *Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services.*

BIODIVERSITY (CONTINUED)

Protecting Helmeted Hornbill

There are 304 bird species in Hutan Harapan, many of which are protected and endangered. Hornbills are considered to be one of the world's most charismatic birds due to their large size, prominent beak, elaborate headgear, and their noisy behaviour. The presence of hornbills is an indicator that the forest is healthy. Helmeted Hornbills (Rhinoplax vigil), in particular, prefer pristine lowland tropical rainforest with an abundant supply of fruiting trees. As fruit eaters, hornbills perform a valuable role as seed dispersers, which helps to maintain a healthy forest. However, the Helmeted Hornbill population is threatened by the illegal demand for the hornbill's ivory, pushing the bird to the brink of extinction.

In order to better understand their population numbers and their habitat, Helemeted Hornbill conservation efforts have been ongoing since 2019, in cooperation with Birdlife International, and funded by National Geography and Ernst Kleinwort Charitable Trust. This includes conducting biodiversity surveys in Hutan Harapan. Although a firm estimation of their population numbers has yet to be obtained, their call has been recorded on two occasions and visual sightings have been recorded. As the surveys continue, Hutan Harapan is increasing its capacity to monitor the Helmeted Hornbill and other bird species with the installation of the AudioMoth, an environmental and wildlife acoustic monitoring tool, that will assist in monitoring their numbers and contribute to improving conservation strategies.

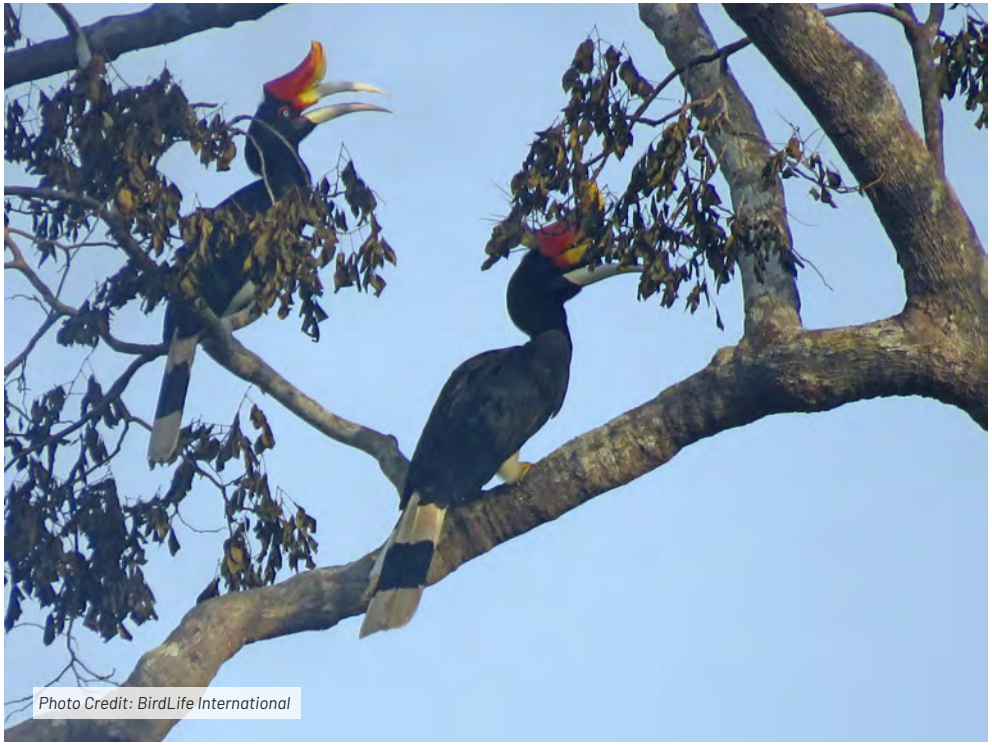


Photo Credit: BirdLife International

Business Development in Hutan Harapan

Business partnerships with communities in and around Hutan Harapan not only address immediate livelihood needs, but also promote and support the broader adoption and more effective use of integrated landscape approaches to address issues such as sustainability, climate resilient production of food and fibre, watershed management, biodiversity conservation, and climate mitigation. These business partnerships help to prevent the ensuant of conflicts with local communities as they have a stake in the forest's protection and conservation.

Currently, Hutan Harapan is working with BirdLife International and manufacturers such as Pirelli and BMW to develop rubber agroforests in Hutan Harapan. The project works with 136 families in an area that has around 140 hectares of rubber plantation. Farmers will be trained to use pure certified planting material with good agricultural practices, improving the tapping skills of farmers. Cooperatives will also be established to provide an independent platform for farmers to make decisions, facilitating value chain equity. In addition, activities are present to strengthen Batin Sembilan women's leadership, business development skills, and hence their role in biodiversity conservation and forest protection.

Working with communities to develop their own business is only one aspect of Hutan Harapan's business development strategy. Hutan Harapan began to develop its own businesses, which are allowed under government regulations and are aligned with Hutan Harapan's vision and mission. Hutan Harapan is focusing on the cultivation of vanilla and patchouli, both of which are estimated to generate income in two to five years' time. Both commodities at still at the pilot stage, where the quality of harvest has not yet been tested. Hard lessons have already been learned about cultivation and maintenance. Nevertheless, both commodities are performing well thus far, and Hutan Harapan has already begun exploring business partnerships with potential buyers.

BIODIVERSITY (CONTINUED)

Transitioning to a New Normal in Hutan Harapan

In 2021, Covid-19 continued to dominate the headlines in Indonesia, with a surge in cases in mid-2021 forcing the government to re-impose restrictions on travel, gatherings, malls, and schools. Hutan Harapan did not escape from the surge in infections as a number of staff became ill with Covid-19 during the same period. Health and safety measures continue to be in place to ensure the safety of all staff entering the camp. Although the threat of Covid-19 appears to have receded, the resultant economic damage and social and ecological disruption has not been resolved.

This offers new opportunities and possibilities to address the better management of forests, not only biodiversity conservation, but also for other functions that forests can provide, such as climate stability and food security. Hutan Harapan has a critical role to play in delivering these benefits in a time of disruption. The pandemic continues to highlight the importance of Hutan Harapan's work in restoring forest ecosystems. The relationship between the destruction of nature and increase in disease outbreaks has been emphasised by researchers. This further emphasises the need to prevent deforestation and maintain biodiverse ecosystems to reduce human-wildlife interactions and limit the spread of viruses, preventing the onset of future pandemics.

Covid-19 Vaccination Programme

The Batin Sembilan indigenous people were introduced to the importance of the Covid-19 vaccination in combating the spread of Covid-19 within the community. Although there have been no reports of the Batin Sembilan people in Hutan Harapan contracting Covid-19, they were prioritised to receive Covid-19 vaccinations by the District's Covid-19 Task Force, as they are considered a vulnerable group. Healthcare services are extremely limited for them, and they must travel up to two hours to obtain access to better quality medical facilities. A total of 19 individuals from the Batin Sembilan group have been fully vaccinated, and no severe symptoms from the vaccinations were observed.

Education for the Batin Sembilan Children in the Midst of the Pandemic

The Covid-19 pandemic has not curbed the enthusiasm of the Batin Sembilan children and Besamo School teachers from learning and teaching. Before the pandemic, the Batin Sembilan children gathered and studied in the Besamo school room. After the pandemic, two Besamo school teachers developed a teaching and learning strategy where they visited children at their homes. There were 15 Batin Sembilan children in basic education in 2021. Reading, writing, counting, and colouring are main activities for the students. When the new Besamo school building was ready to be utilised in late 2021, the children and their parents enthusiastically welcomed school activities in the school. In FY2021/22, no Covid-19 cases were reported in the Batin Sembilan community in Hutan Harapan.



Photo Credit: BirdLife International



Photo Credit: BirdLife International

BIODIVERSITY (CONTINUED)

Buckingham Palace Declaration

Wildlife crime is a billion-dollar business and over the years, increasing transport connectivity across the world has led to the rapid expansion of wildlife trade globally, threatening the survival of many wildlife species. The aviation sector is heavily exploited by this crime, with a yearly average of 20,000 illegal wildlife seizures occurring in airports all around the world. This brings about serious economic, legal, reputational and safety risks to the aviation industry. Illegal wildlife trafficking is not only harmful to biodiversity but causes the death of animals and wildlife rangers who protect the animals from poachers.

The United for Wildlife Transport Taskforce was established in 2014 to facilitate the transport sector to examine its role in the illegal wildlife trade and to break the illegal wildlife trade chains. On 15 March 2016, the United for Wildlife Transport Taskforce member organisations signed up to the recommendations developed over 12 months, with the first ever signing of a declaration at Buckingham Palace.

The Buckingham Palace Declaration is a landmark agreement that commits the signatories to take steps to shut down the routes exploited by traffickers of the illegal wildlife trade moving their products. The declaration aims to remove the vulnerabilities in transportation and customs to tackle the criminals currently exploiting them. The Declaration contains 11 commitments to raise standards across the transportation industry with a focus on information sharing, staff training, technological improvements, and resource sharing with companies and organisations around the world.

Today, with more than 100 signatories, of which more than 50 are airlines including Singapore Airlines, we have pledged to do our part to combat illegal wildlife trade.



BIODIVERSITY (CONTINUED)

Doing Our Part to Raise Awareness on Illegal Wildlife Trade

Illegal wildlife trade is a complex problem that requires the cooperation of multiple stakeholders including the authorities, transport companies, airport staff, and the public. SIA believes that education is vital for change to happen and plays our part by raising awareness about the implications around illegal wildlife trade to the employees and public. SIA's first Illegal Wildlife Trafficking Awareness Workshop for SIA and Changi Airport staff was held in 2017, in collaboration with IATA, the Agri-Food and Veterinary Authority of Singapore, and Wildlife Reserves Singapore, and with the training being conducted by TRAFFIC, a leading non-governmental organisation working globally on trade in wild animals and plants. We continued to work with Changi Airport and TRAFFIC for a subsequent staff training workshop in 2019, specifically for check-in agents and ground handlers.

At the *Inside Singapore Airlines* event held in FY2020/21, which welcomed more than 2,000 members of public, an educational booth was dedicated to raise awareness on illegal wildlife trade as part of the sustainability showcase in the tour. Members of the public could interact with the prototypes of rhinoceros horns, elephant tusks and pangolin scales, as well as a mannequin which shows how a traveller is able to smuggle illegal wildlife items on one's body. Common ways that traffickers hide illegal wildlife or products are in their baggage, air freight, or on themselves under their clothing.

SIA's efforts towards staff training and education have also been showcased in the *United for Wildlife South East Asia and Australasia Chapter meeting* held in 2021. We continue to encourage members of the public not to purchase exotic illegal pets and products of illegal wildlife items such as ivory, which may lead to of the extinction of some of these species.



Smuggling of illegal wildlife trade through cargo, checked-in luggage, or on passengers' bodies.



Commonly trafficked items such as rhinoceros horns, elephant tusks, and pangolin scales.

LIST OF KEY ABBREVIATIONS AND ACRONYMS

AAMP	Airline Alcohol Management Programme
AAPA	Association of Asia Pacific Airlines
AATP	Airport Alcohol Testing Programme
AESU	Air-Transport Executive Staff Union
AG	American Gallon
ALH	Airline House
ALPA-S	Air Line Pilots' Association Singapore
ANR	Air Navigation Regulations
AOC	Air Operator Certificate
APEX	Airline Passenger Experience Association
APP	Arson Prevention Plan
ASC	Air Safety Committee
ASPIRE	Asia and Pacific Initiative to Reduce Emissions
ATM	Air Traffic Management
BCA	Building and Construction Authority
B.E.S.T	Beyond Excellence Service through Technology
BSRC	Board Safety and Risk Committee
CA	Customer Affairs
CAAS	Civil Aviation Authority of Singapore
CAG	Changi Airport Group
CCS	Customer Contact Services
CEx	Customer Experience
CEIV	Centre of Excellence for Independent Validators
CEM	Customer Experience Management
CEO	Chief Executive Officer
CERT	Company Emergency Response Team
CETSC	Customer Experience, Technology and Sustainability Committee
CIP	Customer Insights Portal
CLC	Corporate Learning Centre
CMG	Crisis Management Group
CO	Carbon monoxide
CO_2	Carbon dioxide
CO_2e	Carbon dioxide equivalent
COP	Communication on Progress
COQMR	Corporate Operational Quality Management Review
CORSIA	Carbon Offset and Reduction Scheme for International Aviation
CPAS	Cerebral Palsy Alliance Singapore
CSR	Corporate Social Responsibility
DBS	DBS Bank
DJSI	Dow Jones Sustainability Index
EDB	Economic Development Board
ERP	Emergency Response Plan
ESG	Environmental, Social, Governance
ETSP	Enhanced Training Support Package
FEP	Fire Emergency Plan
FRM	Fatigue Risk Management
FSC	Forest Stewardship Council
FSM	Fire Safety Manager
GDP	Gross Domestic Product
GHG	Greenhouse Gas
GRI	Global Reporting Initiative
HACCP	Hazard Analysis and Critical Control Points
HC	Hydrocarbons
HDB	Housing Development Board
IATA	International Air Transport Association
ICAO	International Civil Aviation Organization
ILO	International Labour Organization
ILT	Instructor-led Training
IOSA	IATA Operational Safety Audit
IPCC	Intergovernmental Panel on Climate Change
ISO	International Organization for Standardization
kg	Kilogram
kWh	Kilowatt-hour
L	Litre
LOSA	Line Operations Safety Audit
LTK	Load tonne-kilometre
m^2	Square metre
m^3	Cubic metre
MBM	Market-Based Measure
MC	Management Committee
MEWR	Ministry of the Environment and Water Resources (Singapore)
MSE	Ministry of Sustainability and the Environment (Singapore)
MINDS	Movement for the Intellectually Disabled of Singapore
MOM	Ministry of Manpower (Singapore)
MPR	Mandatory Packaging Report
MRV	Monitoring, Reporting and Verification
MSG	Monosodium Glutamate
MWh	Megawatt-hour
NEA	National Environment Agency (Singapore)
NOx	Nitrogen Oxides
NPS	Net Promoter Score
NTUC	National Trades Union Congress
NUS	National University of Singapore
OCS	Organisational Climate Survey
OEMs	Original Equipment Manufacturers
OHSMS	Occupational Health and Safety Management System
OSH	Occupational Safety and Health
PDPC	Personal Data Protection Commission
PM	Particulate matter
PPE	Personal Protective Equipment
Pte Ltd.	Private Limited
QMS	Quality Management System
RCMC	Risk and Compliance Management Committee
RDF	Refuse-derived Fuels
RM	Risk Management
RSPB	Royal Society for the Protection of Birds
SAF	Sustainable Aviation Fuels
SAFUG	Sustainable Aviation Fuel Users Group
SAG	Safety Action Groups
SCDF	Singapore Civil Defence Force
SCOC	Suppliers' Code of Conduct
SCQ	Service Culture and Quality
SDG	Sustainable Development Goals
SEMS	Security Management System
SFA	Singapore Food Agency
SGX	Singapore Exchange
SGXNet	Singapore Exchange Net
S-I-A	Staff-Ideas-in-Action
SIAEC	Singapore Airlines Engineering Company
SIASU	Singapore Airlines Staff Union
SID	Singapore Institute of Directors
SMEU	Social Media Engagement Unit
SO	Sustainability Office
SOx	Sulphur Oxides
SSC	Sustainability Steering Committee
SSC	SIA Supplies Centre
SSQ	Safety, Security and Quality
SSW	Safety and Security Week
SSWC	Sustainability Strategic Working Committee
STC	SIA Training Centre
TCFD	Task Force on Climate-Related Financial Disclosures
TJ	Terajoule
TMM	Total Mission Management
TSR	Total Shareholder Return
TSQ	TechSQ
UN	United Nations
UNEP	United Nations Environment Programme
UNWFP	United Nations World Food Programme
VNPL	Voluntary No Pay Leave
VoC	Voice of Customer
VTL	Vaccinated Travel Lane

DEFINITIONS AND METHODOLOGIES

GENERAL

Mode of Narration

Throughout this Sustainability Report, "Singapore Airlines", "SIA", "we", "us" and "our" are generally used to make reference to Singapore Airlines Limited (the Company) and its employees, unless otherwise stated. The term "Parent Airline Company" refers to "Singapore Airlines", unless the context otherwise requires. "SIA Group" is used to make reference to Singapore Airlines Limited and its subsidiaries and employees, unless otherwise stated.

The companies in which Singapore Airlines Limited directly and indirectly owns investments are separate legal entities. More information on the SIA Group, including its corporate structure and subsidiary information, can be found in the FY2021/22 SIA Annual Report.

Reporting Scope

All sustainability data and information presented in our report primarily relates to two of our reportable businesses – Singapore Airlines and Scoot – unless otherwise stated. In FY2021/22, SilkAir ceased its operations and has been fully integrated into Singapore Airlines. Due to the transitional period, SilkAir may continue to be referenced at various points in this report and will be included in past year data unless otherwise stated. The sustainability data and information relating to SIA Engineering Company (SIAEC) is disclosed separately in SIAEC's Sustainability Report published annually by our subsidiary.

More information on our reportable businesses can be found in the FY2021/22 SIA Annual Report.

More information on the boundaries for key social and environmental data can be found on pages 158 to 164.

Future-looking Statements

Aside from statements of historical fact, this Sustainability Report contains statements that are future-looking in nature relating to SIA's sustainability management approach. These are identified by terms and phrases such as "aim", "ambition", "anticipate", "believe", "continue", "expect", "goal", "maintain", "objective", "plan", "seek" and "target" and could also be expressed by way of future or conditional verbs such as "could", "should", "would". These statements are based on assumptions and expectations at the time of publication, and are subject to risks and uncertainties determined by factors beyond the control of SIA. As we operate in a continually changing environment, readers are cautioned not to place undue reliance on forward-looking statements.

OPERATING STATISTICS

Passenger Operations	**Revenue passenger-km**	Passenger traffic - Number of passengers carried multiplied by distance flown (in km)
	Available seat-km	Passenger capacity - Measured by number of available seats multiplied by distance flown (in km)
	Passenger load factor	Revenue passenger-km expressed as a percentage of available seat-km
	Passenger yield	Passenger revenue from scheduled services divided by revenue passenger-km
	Revenue per available seat-km	Passenger revenue from scheduled services divided by available seat-km
	Passenger unit cost	Passenger operating expenditure divided by available seat-km
Cargo Operations	**Cargo load**	Cargo and mail load carried (in tonnes) multiplied by distance flown (in km)
	Gross capacity	Cargo capacity production (in tonnes) multiplied by distance flown (in km)
	Cargo load factor	Cargo and mail load (in tonne-km) expressed as a percentage of gross capacity (in tonne-km)
	Cargo yield	Cargo and mail revenue from scheduled services divided by cargo load (in tonne-km)
	Cargo unit cost	Cargo operating expenditure divided by gross capacity (in tonne-km)
Overall Operations	**Overall load**	Passenger, cargo and mail load carried (in tonnes) multiplied by distance flown (in km)
	Overall capacity	Passenger and cargo capacity production (in tonnes) multiplied by distance flown (in km)
	Overall load factor	Overall load (in tonne-km) expressed as a percentage of overall capacity (in tonne-km)
	Overall yield	Passenger, cargo and mail flown revenue from scheduled services divided by overall load (in tonne-km)
	Overall unit cost	Operating expenditure divided by overall capacity

DEFINITIONS AND METHODOLOGIES (CONTINUED)

GOVERNANCE

Corruption

Corruption definition: An abuse of entrusted power for private gain, which can be instigated by individuals or organisations.

Confirmed incident of corruption definition: An incident of corruption that has been found to be substantiated. Confirmed incidents of corruption do not include incidents of corruption that are still under investigation in the reporting period.

Boundary: Confirmed incidents of corruption covers SIA and Scoot's global operations. Number of employees completing anti-corruption training covers SIA and Scoot's global operations. As Scoot's anti-corruption training programme only started in April 2021, Scoot's data was excluded from the reporting scope of previous years.

Conflict of Interest

Conflict of interest definition: A situation where an individual is confronted with choosing between the requirements of his or her function and his or her own private interests.

Grievance Mechanism

Grievance mechanism definition: A system consisting of procedures, roles and rules for receiving complaints and providing remedy.

Non-compliance

Incidents of non-compliance definition: Incidents of violation that occur within the reporting period.

Significant fines definition: Significant fines refer to those above US$10,000.

Boundary: Incidents of non-compliance and significant fines incurred covers SIA and Scoot's global operations.

EMPLOYEES

Employees

Employees definition: An individual who is in an employment relationship with the organisation. All employee data relates to the year's headcount as at 31 March 2022.

Employee categories: SIA's employee profile can be broadly broken down by function (i.e. Ground Staff, Cabin Crew and Pilots) and level (i.e. Senior Management, Managers, Executives, Other Employees), in line with our human resources system.

The employee levels are defined below.

Senior Management – Senior Vice President and above, this includes Executive Vice President and the Chief Executive Officer

Mangers – Manager, Senior Manager, Vice President to Divisional Vice President

Executives – Executive, Senior Executive to Assistant Manager

Other Employees – Associates, Senior Associates, Pilots and Cabin Crew

Worker who is a non-employee definition: An individual whose work, or workplace, is controlled by the organisation. This Sustainability Report has been scoped to include key contractors only (cleaners, maintenance, landscaping, warehouse operations), unless otherwise stated.

Boundary: Total employees reported covers the SIA Group's global operations. In FY2021/22, SilkAir ceased its operations and has been fully integrated into SIA hence, the employee profile breakdown reported for FY2021/22 only covers SIA and Scoot's global operations. Past year data for FY2020/21, FY2019/20, FY2018/19 includes SIA, SilkAir and Scoot's global operations unless otherwise stated. Past year data for FY2017/18 only covers SIA and Scoot's global operations due to SilkAir's data unavailability. A five-year dataset from FY2017/18 to FY2021/22 for SIA, Scoot and SilkAir (until FY2020/21) is provided in this year's report.

Restatement: Total employee figures in FY2018/19 were restated due to the addition of Scoot's data. As a result, there was a slight increase in total employees in SIA Group for FY2018/19.

Employment Type and Contract

Employment Type:

- **Full-time definition:** An employee whose working hours are defined according to national legislation and practice regarding working time. Based on Singapore's Employment Act by MOM, a full-time employee is an individual required under his/her contract of service to work for not less than 35 hours a week.
- **Part-time definition:** An employee whose working hours are less than 'full-time' as defined above. Based on Singapore's Employment Act by MOM, a part-time employee is one who is under a contract of service to work less than 35 hours a week.

Boundary: Since the integration of SilkAir into SIA, the employee profile breakdown reported for FY2021/22 only covers SIA and Scoot's global operations. Past year data for FY2020/21, FY2019/20, FY2018/19 includes SIA, SilkAir and Scoot's global operations unless otherwise stated. Past year data for FY2017/18 only covers SIA and Scoot's global operations due to SilkAir's data unavailability. A five-year dataset from FY2017/18 to FY2021/22 for SIA, Scoot and SilkAir (until FY2020/21) is provided in this year's report.

Employment contract:

- **Employment contract definition:** Refers to employment contract as recognised under national law or practice that can be written, verbal, or implicit (that is, when all the characteristics of employment are present but without a written or witnessed verbal contract).
- **Permanent contract definition:** A contract with an employee, for full-time or part-time work, for an indeterminate period.
- **Temporary contract definition:** A contract that is of limited duration and is terminated by a specific event (e.g. end of a project or work phase, or return of replaced employees).

Boundary: The employee profile breakdown by employment contract follows the same boundary as **Employment Type**.

Restatement: A restatement was made, please refer to the respective section in the appendix for more details.

DEFINITIONS AND METHODOLOGIES (CONTINUED)

EMPLOYEES (CONTINUED)

New Hires and Turnover

New hires definition: Employees who joined the organisation during the year.

In FY2021/22, a new disclosure for internal and external hire was included.

Internal hires definition: The internal movement of employees or the sourcing of existing employees within SIA Group, which can include lateral movements and team transfers.

External hires definition: Hires from outside of SIA Group

New hire rate methodology: Number of new hires over number of employees at the end of the reporting period, expressed as a percentage. This can be computed by the respective demographic cuts (e.g. new hire rate for employees <30 years old is computed by number of new hires (<30 years old) over number of employees (<30 years old), expressed as a percentage).

Turnover definition: Employees who left the organisation during the year. Due to confidentiality constraints, reported turnover relates purely to voluntary attrition, and does not include involuntary turnover such as dismissal, completion of contract, etc.

Turnover rate methodology: Number of turnover over number of employees at the end of the reporting period, expressed as a percentage. This can be computed by the respective demographic cuts (e.g. turnover rate for males is computed by number of turnover (males) over number of employees (males), expressed as a percentage).

Boundary: New hire and turnover numbers and rates reported follow the same boundary as **Employment Type**.

Restatement: A restatement was made, please refer to the respective section in the appendix for more details.

Parental Leave

Parental leave definition: Leave granted to male and female employees on the grounds of the birth of a child. This includes maternity, paternity, shared parental leave and childcare leave.

Return to work rate methodology: Number of employees who returned to work after parental leave ended, over number of employees who took parental leave, expressed as a percentage.

Retention rate methodology: Number of employees who returned to work after parental leave ended and who were still employed 12 months after their return to work, over number of employees who took parental leave, expressed as a percentage.

Boundary: Return to work rate and retention rates reported follow the same boundary as **Employment Type**.

Restatement: A restatement was made, please refer to the respective section in the appendix for more details.

Training Hours

Training hours definition: Number of hours used for staff learning and development.

Average training hours methodology: Training hours were derived based on the assumption that one training day is equivalent to eight training hours. Training days are calculated using total number of training days attended by employees, divided by number of employees as at 31 March. This can be computed by the respective demographic cuts (e.g. average number of training days for cabin crew is computed by number of training days attended by cabin crew over the number of cabin crew, expressed as a percentage).

Boundary: Average training hours reported follow the same boundary as **Employment Type**.

SAFETY

Occupational Health and Safety Management Systems (OHSMS)

OHSMS definition: Occupational Health and Safety Management Systems refers to a set of interrelated or interacting elements to establish an occupational health and safety policy and objectives, and to achieve those objectives.

This definition is based on the International Labour Organization (ILO), Guidelines on Occupational Safety and Health Management Systems, ILO-OSH 2001, 2001.

Boundaries:

- SIA's Occupational Health and Safety Management System is based on Workplace Safety and Health Act and certified under ISO 45001: 2018 OHSMS Standard. It covers all employees, workplaces and contractors working at SIA workplaces in Singapore.
- SIA's Quality Management System is based on CAAS Air Navigation Regulations and certified under ISO 9001:2015 Quality Management System. It covers all operations and employees in Singapore.
- SIA's Security Management System is based on Airport Police Division Security Directive for Aircraft Operators, ICAO International Standards and Recommended Practices Annex 17 – Security and IOSA Standards Manual. It covers all security operations, employees and applicable security providers globally.
- SIA's Flight Safety Management System is based on CAAS Air Navigation Regulation, ICAO International Standards and Recommended Practices Annex 19 – Safety Management and IOSA Standards Manual. It covers all operations and employees globally.

Aircraft Incident

Aircraft incident definition: An occurrence, other than an accident, associated with the operation of an aircraft which affects or could affect operational safety.

Serious incident definition: Incident involving circumstances indicating that there was a high probability of an accident and associated with the operation of an aircraft which takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked

These definitions are based on ICAO Annex 13, Aircraft Accident and Incident Investigation.

Hazard

Hazard definition: Any source of situation with the potential to cause injury or ill health in the workplace. This includes types of dangerous occurrences as per defined by MOM's list of Dangerous Occurrences in the Workplace Safety and Health Act (Chapter 354A), Section 4(1).

This definition is based on the ILO Guidelines on Occupational Safety and Health Management Systems.

DEFINITIONS AND METHODOLOGIES (CONTINUED)

SAFETY (CONTINUED)

Man-hours Worked

Man-hours worked definition: Total scheduled number of hours worked for the year ended 31 March.

Boundary: Since the integration of SilkAir into SIA, the employee man-hours worked reported for FY2021/22 only covers SIA and Scoot's global operations. Past year data for FY2020/21, FY2019/20, FY2018/19, FY2017/18 includes SIA, SilkAir and Scoot's global operations unless otherwise stated. Due to data unavailability, Scoot's FY2018/19 data was excluded from the reporting scope. A five-year dataset from FY2017/18 to FY2021/22 for SIA, Scoot and SilkAir (until FY2020/21) is provided in this year's report.

Workers who are non-employees (scope to key contractors only) man-hours worked reported covers SIA and Scoot's global operations. Past year data includes data from SilkAir's global operations before the integration.

Work-related Incidents

Work-related incidents definition: An unexpected and unplanned occurrence arising out of or in the course of work that could or does result in injury or ill health or death. As per MOM's definition, it could also be a Dangerous Occurrence, an Occupational Disease or:

- Traffic accidents that happen at the workplace or in the course of work, e.g. a traffic accident while commuting to work on company transport.
- Accidents that are incidental to or from work, e.g. slipping and falling within the workplace but when not performing official work duties.
- Conditions of a medical nature, such as heart attacks or strokes, that may be triggered by work.

This definition is based on ISO 45001:2018 and MOM's Guidelines.

Work-related Fatality

Work-related fatality definition: Refers to a work-related injury that results in a fatality/death while performing work that is controlled by the organisation or that is being performed in a workplace controlled by the organisation.

This definition is based on GRI 403: Occupational Health and Safety 2018.

Methodology: Work-related fatality rates were calculated based on 1,000,000 hours worked.

Boundary: Number and rate of work-related fatalities reported for employees and workers who are non-employees (scope to key contractors only) follow the same boundary as **Man-hours Worked**.

Work-related Injury and Ill-health

Work-related injury and ill-health definition: Negative impacts on health arising from exposure to hazards at work.

This definition is based on the ILO Guidelines on Occupational Safety and Health Management Systems, ILO-OSH 2001, 2001

- **Recordable work-related injury definition:** A work-related injury that results in any of the following: death, hospitalisation for at least 24 hours, more than 3 days of medical leave from work (whether consecutive or not). Likewise for cabin crew, we record a work-related injury should our cabin crew be issued medical leave for 4 days or more (whether consecutive or not) for the related/same injury.
  - » **Methodology:** Recordable work-related injury rates were calculated based on 1,000,000 hours worked.
  - » **Boundary:** Number and rate of work-related fatalities reported covers for employees and workers who are non-employees (scope to key contractors only) follow the same boundary as **Man-hours Worked**.
- **Recordable high consequence work-related injury definition:** A work-related injury that results in a fatality or in an injury from which the individual cannot, does not, or is not expected to recover fully to pre-injury health status within 6 months.

  This definition is based on GRI 403: Occupational Health and Safety 2018.
  - » **Methodology:** Recordable high consequence work-related injury rates were calculated based on 1,000,000 hours worked.
  - » **Boundary:** Number and rate of work-related fatalities reported for employees and workers who are non-employees (scope to key contractors only) follow the same boundary as **Man-hours worked**.
- **Recordable work-related ill-health definition:** A work-related ill-health (including diseases, illnesses and disorders) that is contracted.

  The coverage is based on the occupational diseases under Singapore's Workplace Safety and Health Act or Work Injury Compensation Act.
  - » **Methodology:** Recordable high consequence work-related injury rates were calculated based on 1,000,000 hours worked.
  - » **Boundary:** Number and rate of work-related fatalities reported for employees and workers who are non-employees (scope to key contractors only) follow the same boundary as **Man-hours worked**.

Work-related Injury Type

Work-related injury type definition: Incident types reported include the following main categories: caught in/between objects; cut/stabbed by objects; exposure to electric current; exposure to extreme temperatures; over-exertion/strenuous movements; slips, trips and falls; strike against objects; struck by falling objects; struck by moving objects etc.

This is based on Singapore's MOM major and minor injury incident types.

DEFINITIONS AND METHODOLOGIES (CONTINUED)

CUSTOMERS

Customer Privacy

Customer privacy definition: Right of the customer to privacy and personal refuge. Customer privacy includes matters such as the protection of data; the use of information or data for their original intended purpose only, unless specifically agreed otherwise; the obligation to observe confidentiality; and the protection of information or data from misuse or theft.

Breach of Customer Privacy

Breach of customer privacy definition: Non-compliance with existing legal regulations and (voluntary) standards regarding the protection of customer privacy.

Boundary: Cases of customer privacy breaches which resulted in mandatory notification to the Personal Data Protection Commission Singapore covers SIA and Scoot's global operations.

SUPPLIERS

Suppliers

Suppliers definition: Refers to an organisation or person that provides a product or service used by SIA's operations and is characterised by a direct or indirect commercial relationship with SIA.

Supplier categories: SIA's suppliers can be broadly classified into six main categories

- Aviation fuel
- Aviation maintenance and materials
- In-flight catering
- Technology systems
- Ground handling
- Aircraft fleet and engines

Number of suppliers and expenditure for suppliers' services boundary: Covers SIA and Scoot's suppliers globally.

Boundaries:

- Total supplier expenditure includes expenditure by SIA and Scoot's head offices and overseas stations.
- Total number of suppliers includes suppliers engaged by SIA and Scoot's head offices and overseas stations.

Suppliers' Code of Conduct

Supplier Code of Conduct boundary: All suppliers are required to adhere to SIA's Suppliers' Code of Conduct, which is part of our contracts with suppliers.

ENVIRONMENT

Energy Consumption

Energy consumption definitions and boundaries:

- **Electricity consumption:** Total electricity consumed within the organisation, expressed in watt-hours, joules or multiples. Unless otherwise stated, this relates to the purchased electricity consumption of SIA's four properties – Airline House (ALH), SIA Training Centre (STC), TechSQ (TSQ), SIA Supplies Centre (SSC) and offices. Due to data unavailability, it excludes purchased electricity at Scoot's offices.
- **Fuel consumption:** Total fuel consumed within the organisation, expressed in American gallons (AG), joules or multiples. Unless otherwise stated, this relates to diesel/petrol consumption of ground support vehicles and equipment for SIA's operations in Singapore; jet fuel consumption of SIA Group's passenger and freighter fleet.
  - » Since the integration of SilkAir into SIA, energy consumption reported for FY2021/22 only cover SIA's passenger fleet, SIA's freighter fleet, and Scoot's operations. Past year data for FY2018/19, FY2019/20, FY2020/21 includes SIA's passenger and freighter fleet, SilkAir and Scoot's global operations unless otherwise stated. Past year data for FY2017/18 only covers SIA and SilkAir's global operations due to Scoot's data unavailability.
- **Renewable energy consumption:** Total renewable energy from SIA's solar photovoltaic systems consumed within the organisation expressed in watt-hours, joules or multiples. Includes solar energy generation at SIA's Airline House, SIA Training Centre, and TechSQ.

Conversion factors:

Emission Source	Conversion Factors	Unit	Conversion Numbers
Electricity	Conversion to energy units	kWh to TJ	0.0000036
Diesel	Fuel density for gas/diesel oil	kg/litre	0.84
	Net calorific value for gas/diesel oil	GJ/tonne	43.0
Petrol	Fuel density for motor gasoline	kg/litre	0.74
	Net calorific value for motor gasoline	GJ/tonne	44.3
Jet Kerosene	Fuel density for jet kerosene	kg/litre	0.79
	Net calorific value for jet kerosene	GJ/tonne	44.1

Above values relating to diesel, petrol and jet kerosene were derived from 2006 IPCC Guidelines for National Greenhouse Gas Inventories.

Restatements: Restatements were made, please refer to the respective section in the appendix for more details.

DEFINITIONS AND METHODOLOGIES (CONTINUED)

ENVIRONMENT (CONTINUED)

Greenhouse Gas (GHG) Emissions

GHG definition and boundary: GHG emissions refer to gas that contributes to the greenhouse effect by absorbing infrared radiation. Unless otherwise stated, GHG emissions reported follow the same boundary as **Energy Consumption**.

The GHG Protocol Corporate Accounting and Reporting Standard is adopted. SIA accounts for GHG emissions using the operational control criteria and reports its direct (Scope 1) and electricity indirect (Scope 2) GHG emissions.

- **Direct (Scope 1) GHG emissions:** Direct GHG emissions occur from sources that are owned or controlled by SIA, expressed in kilograms of carbon dioxide ($kgCO_2$) or multiples. These include emissions from combustion in owned or controlled vehicles aforementioned for SIA's operations in Singapore. Emission factors used are as follows:

Emission Source	Conversion Factors	Unit	Conversion Numbers
Diesel	CO_2 Emission Factor	kg CO_2/GJ	74.1
	CH_4 Emission Factor	kg CH_4/GJ	0.0039
	Global Warming Potential for CH_4	-	28
	N_2O Emission Factor	kg N_2O/GJ	0.0039
	Global Warming Potential for N_2O	-	265
Petrol	CO_2 Emission Factor	kg CO_2/GJ	69.3
	CH_4 Emission Factor	kg CH_4/GJ	0.0038
	Global Warming Potential for CH_4	-	28
	N_2O Emission Factor	kg N_2O/GJ	0.0057
	Global Warming Potential for N_2O	-	265
Jet Kerosene	CO_2 Emission Factor	tonnes CO_2/tonnes of jet fuel	3.15

For diesel and petrol, CO_2, methane (CH_4) and nitrous oxide (N_2O) were included in the GHG calculation. Default emissions factors were sourced from the 2006 IPCC Guidelines for National Greenhouse Gas Inventories while the global warming potential (GWP) values were sourced from the 2014 IPCC Fifth Assessment Report (AR5).

For jet fuel, CO_2 was included in the GHG calculation. Direct GHG emissions were calculated using the net calorific value and default emissions factor from the 2006 IPCC Guidelines for National Greenhouse Gas Inventories. The emissions factor of 3.15 tonnes CO_2/tonne of jet fuel is also the internationally recognised constant representing the amount of CO_2 produced from combustion of a tonne of aviation fuel.

Greenhouse Gas (GHG) Emissions (continued)

- **Electricity indirect (Scope 2) GHG emissions:** Indirect GHG emissions from the generation of purchased electricity consumed by SIA's properties (total gross floor area) and offices (total leased area) aforementioned, expressed in kilograms of carbon dioxide ($kgCO_2$) or multiples. These emissions physically occur at the facilities where electricity is generated.

  A location-based method is adopted to reflect the average emissions intensity of the national grid on which energy consumption occurs. For consistency, the Grid Emission Factor (GEF) used for the reporting year is sourced from the latest published factor at time of publication, sourced from the Singapore Energy Statistics (SES), the Energy Market Authority's (EMA) annual publication on energy statistics in Singapore.

  Emission factors were sourced from Energy Market Authority's Grid Emission Factor annual publication on energy statistics in Singapore, last updated on September 2021. SIA adopted the Average Operating Margin (OM) figures which measures Singapore's system-wide emissions factor.

Emission Source	SIA's reporting year	Emission factor	Unit	References
Electricity Generation (Singapore Grid)	FY2021/22	0.4080	$kgCO_2$/kWh	EMA, Singapore GEF 2020
	FY2020/21	0.4085	$kgCO_2$/kWh	EMA, Singapore GEF 2019
	FY2019/20	0.4188	$kgCO_2$/kWh	EMA, Singapore GEF 2018
	FY2018/19	0.4192	$kgCO_2$/kWh	EMA, Singapore GEF 2017
	FY2017/18	0.4237	$kgCO_2$/kWh	EMA, Singapore GEF 2016

- **Other indirect (Scope 3) GHG emissions:** Other indirect GHG emissions that are a consequence of SIA's activities, but occur from sources that are not owned or controlled by SIA. This is presently not reported – SIA will be identifying and may be reporting on its indirect (Scope 3) GHG emissions in future reporting periods.

  Restatements: Restatements were made, please refer to the respective section in the appendix for more details.

DEFINITIONS AND METHODOLOGIES (CONTINUED)

ENVIRONMENT (CONTINUED)

Intensity Ratios

Intensity ratios definition: Intensity ratios define resource consumption or emissions in the context of a specific metric.

- **Flight operations intensity ratio methodology:** Fuel productivity is expressed in load tonne-kilometre per American gallon (LTK/AG). In FY2021/22, we have also disclosed fuel productivity expressed in litres per 100 passenger-kilometre for passenger fleet, and litres per tonne-kilometre for cargo fleet. Direct (Scope 1) GHG emissions intensity is expressed in kilograms of carbon dioxide per load tonne-kilometre ($kgCO_2$/LTK) or multiples. The organisation-specific metric (the denominator) used was load tonne-kilometre.

  Restatement: A restatement was made, please refer to the respective section in the appendix for more details.

- **Buildings and offices intensity ratio methodology:** Electricity intensity is expressed in kilowatt-hours per square metre (kWh/m^2) or multiples. Electricity indirect (Scope 2) GHG emissions intensity is expressed in kilograms of carbon dioxide per square metre ($kgCO_2$/ m^2) or multiples. Water intensity is expressed in cubic metres per square metres (m^3/ m^2). The organisation-specific metric (the denominator) used was the total floor area by which SIA has operational control over.

Water and Effluents

Definition of water withdrawn: Total water drawn for the organisation's use, expressed in cubic metre (m^3) or multiples. All water withdrawn by SIA is water drawn from the PUB, a third-party water provider in Singapore. Water provided by PUB is considered freshwater as Singapore's quality of drinking water is regulated by the Environmental Public Health (EPH) (Water Suitable for Drinking) (No.2) Regulations 2019 which follows the World Health Organisation (WHO) Guidelines for Drinking-water Quality (≤1,000 mg/L Total Dissolved Solids).

- **Third-party water definition:** Water drawn from a third-party. In Singapore, water is sourced from the PUB. Data is broken down by Tap water and NEWater.
- **Surface water definition:** Water that occurs naturally on Earth's surface. This includes harvested rainwater.

Category	Source	Details	Boundary
Third-party water	**Tap water**	Singapore's national tap water supply comprises a mix of four sources – (i) water from local catchment, (ii) imported water, (iii) desalinated water and (iv) NEWater* * During dry periods, NEWater is added to Singapore's reservoirs to blend with raw water. The raw water from the reservoir is treated at the waterworks before it is supplied to consumers as tap water.	SIA's four properties (ALH, STC, TSQ, SSC) and offices • Includes SIAEC's water withdrawal at Hangar 1, as data could not be segregated • Excludes water withdrawal at Scoot's offices due to data unavailability at this time
	NEWater	NEWater is high-grade reclaimed water produced from treated used water that is further purified using advanced membrane technologies and ultra-violet disinfection. As it is ultra-clean, it is mainly used for air-conditioning cooling purposes at SIA's buildings. NEWater is delivered to SIA via a dedicated pipe network.	SIA's property (STC)
Surface water	**Rainwater harvested**	Collection and storing of rainwater from surfaces on which rain falls.	SIA's property (ALH)

These definitions are based on GRI 303: Water and Effluents 2018.

Definition of effluents: Refers to treated or untreated wastewater that is discharged such as any liquid, including particles of matter and other substances in suspension in the liquid, which is the outflow from any trade, business or manufacture or of any works of engineering or building construction.

This definition is based on the Alliance for Water Stewardship (AWS), AWS International Water Stewardship Standard, Version 1.0, 2014 and Singapore's Sewerage and Drainage Act (Chapter 294)

DEFINITIONS AND METHODOLOGIES (CONTINUED)

ENVIRONMENT (CONTINUED)

Waste

Waste definition: Refers to anything that the holder discards, intends to discard, or is required to discard expressed in kilograms (kg) or multiples and excludes effluents. SIA does not produce any hazardous waste from our operations.

This definition is based on the United Nations Environment Programme (UNEP), Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, 1989.

- **Waste directed to disposal:** Any operation which is not recovery, even where the operation has, as a secondary consequence, led to the recovery of energy. It is the end-of-life management of discarded products, materials, and resources in a sink or through a chemical or thermal transformation that makes these products, materials, and resources unavailable for further use. (e.g. incineration with/without energy recovery, landfilling).

  This definition is based on the European Union (EU), Waste Framework Directive, 2008.

- **Waste diverted from disposal:** Any operation wherein products, components of products, or materials that have become waste are prepared to fulfil a purpose in place of new products, components, or materials that would otherwise have been used for that purpose. (e.g. reuse, recycling).

  This definition is based on the UNEP, Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, 1989.

  Restatement: Due to an addition of a new recycled waste material (glass bottles), restatements were made for Total Waste Diverted From Disposal (tonnes) values in FY2017/18, FY2018/19, and FY2019//20.

Category	Source	Details	Boundary
Waste directed to disposal	**Waste-to-energy (WTE) incineration**	In Singapore, licensed waste contractors transport incinerable waste to the WTE plants for incineration. Heat from combustion generates superheated steam in boilers, and the steam drives turbogenerators to produce electricity. Ferrous scrap metal contained in the ash is recovered and recycled. Ash is sent for disposal at the offshore Semakau Landfill.	SIA's four properties (ALH, STC, TSQ, SSC) • Includes SIAEC's waste disposal from Hangar 1, 2 and 3, as data could not be segregated • Excludes waste disposal at Scoot's offices due to data unavailability • Data on cabin waste from passenger fleets are available from FY2021/22
Waste diverted from disposal	**Recycling**	Recycling is the reprocessing of products or components of products that have become waste, to make new materials. At properties, recyclables are broken down by paper, plastic, ferrous and glass. For cabin waste from passenger fleets, recyclables are broken down by glass bottles, newspapers, magazines.	SIA's four properties (ALH, STC, TSQ, SSC) and cabin waste from flight operations • Includes SIAEC's waste disposal from Hangar 1, 2 and 3, as data could not be segregated • Data on recycled waste for properties are only available from FY2019/20

SUPPLEMENTARY SUSTAINABILITY DATA

All supplementary sustainability data are to be read with the definitions and methodologies segment on pages 157 to 164.

GOVERNANCE

Completion of Anti-corruption Training, by Employee Type and Region[85] 205-2

FY2019/20	Non-management	Management[86]	Total
Total Employees Required to Complete, by Employee Type	**5,046**	**448**	**5,494**
Total Employees Completed, by Employee Type and Region	**4,835 (95.8%)**	**428 (95.5%)**	**5,263 (95.8%)**
Singapore (Head Office)	2,608	347	2,955
The Americas	144	10	154
Europe	429	28	457
North Asia	583	13	596
South East Asia	474	10	484
South West Pacific	347	11	358
West Asia and Africa	250	9	259
FY2020/21	**Non-management**	**Management**	**Total**
Total Employees Required to Complete, by Employee Type	**4,897**	**440**	**5,337**
Total Employees Completed, by Employee Type and Region	**4,778 (97.6%)**	**435 (98.9%)**	**5,213 (97.7%)**
Singapore (Head Office)	2,203	336	2,539
The Americas	124	13	137
Europe	458	29	487
North Asia	597	13	610
South East Asia	699	20	719
South West Pacific	332	15	347
West Asia and Africa	365	9	374
FY2021/22	**Non-management**	**Management**	**Total**
Total Employees Required to Complete, by Employee Type	**6,279**	**641**	**6,920**
Total Employees Completed, by Employee Type and Region	**6,089 (97.0%)**	**604 (94.2%)**	**6,693 (96.7%)**
Singapore (Head Office)	3,834	505	4,339
The Americas	127	8	135
Europe	390	22	412
North Asia	540	24	564
South East Asia	591	21	612
South West Pacific	293	16	309
West Asia and Africa	314	8	322

[85] *Number of employees completing anti-corruption training covers SIA and Scoot's global operations since SilkAir has been fully integrated into SIA in FY2021/22. As Scoot's anti-corruption training programme only started in April 2021, Scoot's data was excluded from the reporting scope of previous years.*
[86] *Management refers to those who are holding managerial positions and above, and management pilots.*

SUPPLEMENTARY SUSTAINABILITY DATA (CONTINUED)

EMPLOYEES[87]

Employee Profile 102-8 405-1

Total Employees					
	FY2017/18	FY2018/19	FY2019/20	FY2020/21	FY2021/22
Employees in the SIA Group					
Employees in the SIA Group	25,552	27,605	28,707	23,603	**21,973**
Employees, by Subsidiary					
Singapore Airlines	14,718	16,316	17,204	14,956	**14,125**
SilkAir	1,574	1,484	1,389	608	**-**
Scoot	2,466	2,799	2,766	2,001	**2,203**
SIA Engineering Company (SIAEC)	4,669	4,540	4,559	4,332	**3,964**
SIAEC's Subsidiaries	1,945	2,195	2,476	1,356	**1,330**
Tradewinds Tours & Travel	40	44	51	46	**42**
Cargo Community Network	75	76	77	77	**70**
Singapore Flying College	61	66	82	76	**62**
SAGI	4	3	3	3	**3**
KrisShop	-	82	100	100	**119**
Encounters	-	-	-	48	**55**

Employees by Gender and by Age Group										
	FY2017/18		FY2018/19		FY2019/20		FY2020/21		FY2021/22	
Singapore Airlines, SilkAir and Scoot Employees										
Singapore Airlines, SilkAir (for FY2018/19, FY2019/20, FY2020/21) and Scoot Employees	17,184	100%	20,599	100%	21,359	100%	17,565	100%	**16,328**	**100%**
Employees, by Gender										
Male	8,023	46.7%	9,663	46.9%	10,055	47.1%	8,733	49.7%	**8,388**	**51.4%**
Female	9,161	53.3%	10,936	53.1%	11,304	52.9%	8,832	50.3%	**7,940**	**48.6%**

[87] *Employee profile breakdown reported covers SIA and Scoot's global operations for FY2021/22 due to the integration of SilkAir. Past year data for FY2020/21, FY2019/20, FY2018/19 includes SIA, SilkAir and Scoot's global operations, and FY2017/18 only covers SIA and Scoot's global operations. Scope excludes Singapore Airlines staff seconded to other companies but includes staff seconded to Singapore Airlines. Due to rounding, percentages presented may not add up precisely to the absolute totals indicated. Prior year's total employee figures in FY2018/19 were restated due to the addition of Scoot's data. As a result, there was a slight increase in total employees in SIA Group for FY2018/19.*

SUPPLEMENTARY SUSTAINABILITY DATA (CONTINUED)

EMPLOYEES (continued)

Employee Profile (continued)

	FY2017/18		FY2018/19		FY2019/20		FY2020/21		FY2021/22	
Employees, by Age Group										
<30 y.o.	6,057	35.2%	7,664	37.2%	8,099	37.9%	4,929	28.1%	**3,779**	**23.1%**
30-50 y.o.	8,551	49.8%	9,983	48.5%	10,207	47.8%	9,752	55.5%	**9,550**	**58.5%**
>50 y.o.	2,576	15.0%	2,952	14.3%	3,053	14.3%	2,884	16.4%	**2,999**	**18.4%**

Employees, by Employee Function and by Gender[88]

	FY2017/18		FY2018/19		FY2019/20		FY2020/21		FY2021/22	
Ground Staff										
Total	4,949	28.8%	5,887	28.6%	6,178	28.9%	5,536	31.5%	**5,698**	**34.9%**
Male	1,932	11.2%	2,473	12.0%	2,610	12.2%	2,359	13.4%	**2,502**	**15.3%**
Female	3,017	17.6%	3,414	16.6%	3,568	16.7%	3,177	18.1%	**3,196**	**19.6%**
Cabin Crew										
Total	9,658	56.2%	10,391	50.4%	10,832	50.7%	8,558	48.7%	**7,801**	**47.8%**
Male	3,541	20.6%	3,727	18.1%	3,900	18.3%	3,321	18.9%	**3,096**	**19.0%**
Female	6,117	35.6%	6,664	32.4%	6,932	32.5%	5,237	29.8%	**4,705**	**28.8%**
Pilots										
Total	2,577	15.0%	2,837	13.8%	2,960	13.9%	2,863	16.3%	**2,829**	**17.3%**
Male	2,550	14.8%	2,796	13.6%	2,915	13.6%	2,825	16.1%	**2,790**	**17.1%**
Female	27	0.2%	41	0.2%	45	0.2%	38	0.2%	**39**	**0.2%**

[88] *This is a new disclosure in FY2021/22 hence, the five-year dataset will only include SIA and Scoot's global operations since SilkAir has been integrated into SIA.*

SUPPLEMENTARY SUSTAINABILITY DATA (CONTINUED)

EMPLOYEES (continued)

Employee Profile (continued)

Employees, by Employee Function and by Age Group

	FY2017/18		FY2018/19		FY2019/20		FY2020/21		FY2021/22	
Ground Staff										
Total	4,949	28.8%	6,396	31.1%	6,562	30.7%	5,752	32.7%	**5,699**	**34.9%**
<30 y.o.	1,002	5.8%	1,427	6.9%	1,427	6.7%	998	5.7%	**977**	**6.0%**
30-50 y.o.	2,539	14.8%	3,325	16.1%	3,511	16.4%	3,318	18.9%	**3,278**	**20.1%**
>50 y.o.	1,408	8.2%	1,644	8.0%	1,624	7.6%	1,436	8.2%	**1,444**	**8.8%**
Cabin Crew										
Total	9,658	56.2%	11,053	53.7%	11,514	53.9%	8,880	50.6%	**7,801**	**47.8%**
<30 y.o.	4,897	28.5%	5,997	29.1%	6,310	29.5%	3,717	21.2%	**2,688**	**16.5%**
30-50 y.o.	4,142	24.1%	4,418	21.4%	4,446	20.8%	4,364	24.8%	**4,250**	**26.0%**
>50 y.o.	619	3.6%	638	3.1%	758	3.5%	799	4.5%	**863**	**5.3%**
Pilots										
Total	2,577	15.0%	3,150	15.3%	3,283	15.4%	2,933	16.7%	**2,828**	**17.3%**
<30 y.o.	158	0.9%	240	1.2%	362	1.7%	214	1.2%	**114**	**0.7%**
30-50 y.o.	1,870	10.9%	2,240	10.9%	2,250	10.5%	2,070	11.8%	**2,022**	**12.4%**
>50 y.o.	549	3.2%	670	3.3%	671	3.1%	649	3.7%	**692**	**4.2%**

SUPPLEMENTARY SUSTAINABILITY DATA (CONTINUED)

EMPLOYEES (continued)

Employee Profile (continued)

Employees, by Employee Level and by Gender[89]

	FY2017/18		FY2018/19		FY2019/20		FY2020/21		FY2021/22	
Senior Management										
Total	27	0.2%	25	0.1%	25	0.1%	25	0.1%	**26**	**0.2%**
Male	23	0.1%	21	0.1%	20	0.1%	21	0.1%	**21**	**0.1%**
Female	4	0.02%	4	0.02%	5	0.02%	4	0.02%	**5**	**0.03%**
Managers										
Total	471	2.7%	538	2.6%	564	2.6%	556	3.2%	**563**	**3.4%**
Male	308	1.8%	359	1.7%	383	1.8%	369	2.1%	**376**	**2.3%**
Female	163	0.9%	179	0.9%	181	0.8%	187	1.1%	**187**	**1.1%**
Executives										
Total	1,461	8.5%	1,810	8.8%	2,043	9.6%	1,797	10.2%	**1,974**	**12.1%**
Male	779	4.5%	961	4.7%	1,069	5.0%	967	5.5%	**1,074**	**6.6%**
Female	682	4.0%	849	4.1%	974	4.6%	830	4.7%	**900**	**5.5%**
Other Employees										
Total	15,225	88.6%	16,742	81.3%	17,338	81.2%	14,579	83.0%	**13,765**	**84.3%**
Male	6,913	40.2%	7,655	37.2%	7,953	37.2%	7,148	40.7%	**6,917**	**42.4%**
Female	8,312	48.4%	9,087	44.1%	9,385	43.9%	7,431	42.3%	**6,848**	**41.9%**

[89] *This is a new disclosure in FY2021/22 hence, the five-year dataset will only include SIA and Scoot's global operations since SilkAir has been integrated into SIA.*

SUPPLEMENTARY SUSTAINABILITY DATA (CONTINUED)

EMPLOYEES (continued)

Employee Profile (continued)

Employees, by Employee Level and by Age Group[90]

	FY2017/18		FY2018/19		FY2019/20		FY2020/21		FY2021/22	
Senior Management										
Total	27	0.2%	25	0.1%	25	0.1%	25	0.1%	**26**	**0.2%**
<30 y.o.	0	0.00%	0	0.00%	0	0.00%	0	0.00%	**0**	**0.00%**
30-50 y.o.	15	0.1%	12	0.1%	12	0.1%	13	0.1%	**13**	**0.1%**
>50 y.o.	12	0.1%	13	0.1%	13	0.1%	12	0.1%	**13**	**0.1%**
Managers										
Total	471	2.7%	538	2.6%	564	2.6%	556	3.2%	**563**	**3.4%**
<30 y.o.	4	0.02%	1	0.00%	2	0.01%	4	0.02%	**1**	**0.01%**
30-50 y.o.	323	1.9%	382	1.9%	402	1.9%	425	2.4%	**411**	**2.5%**
>50 y.o.	144	0.8%	155	0.8%	160	0.7%	127	0.7%	**151**	**0.9%**
Executives										
Total	1,461	8.5%	1,810	8.8%	2,043	9.6%	1,797	10.2%	**1,974**	**12.1%**
<30 y.o.	434	2.5%	567	2.8%	632	3.0%	420	2.4%	**502**	**3.1%**
30-50 y.o.	820	4.8%	1,010	4.9%	1,184	5.5%	1,144	6.5%	**1,236**	**7.6%**
>50 y.o.	207	1.2%	233	1.1%	227	1.1%	233	1.3%	**236**	**1.4%**
Other Employees										
Total	15,225	88.6%	16,742	81.3%	17,338	81.2%	14,579	83.0%	**13,765**	**84.3%**
<30 y.o.	5,619	32.7%	6,401	31.1%	6,856	32.1%	4,192	23.9%	**3,276**	**20.1%**
30-50 y.o.	7,393	43.0%	7,864	38.2%	7,941	37.2%	7,918	45.1%	**7,890**	**48.3%**
>50 y.o.	2,213	12.9%	2,477	12.0%	2,541	11.9%	2,469	14.1%	**2,599**	**15.9%**

[90] *This is a new disclosure in FY2021/22 hence, the five-year dataset will only include SIA and Scoot's global operations since SilkAir has been integrated into SIA.*

SUPPLEMENTARY SUSTAINABILITY DATA (CONTINUED)

EMPLOYEES (continued)

Employee Profile (continued)

Employees, by Nationality and by Employee Level[91]

	FY2017/18		FY2018/19		FY2019/20		FY2020/21		FY2021/22	
Senior Management										
Total	27	0.2%	25	0.1%	25	0.1%	25	0.1%	**26**	**0.2%**
Singaporean	24	0.1%	21	0.1%	21	0.1%	22	0.1%	**26**	**0.2%**
Malaysian	1	0.01%	2	0.01%	2	0.01%	2	0.01%	**0**	**0.00%**
Indian	0	0.00%	0	0.00%	0	0.00%	0	0.00%	**0**	**0.00%**
Others	2	0.01%	2	0.01%	2	0.01%	1	0.01%	**0**	**0.00%**
Managers										
Total	471	2.7%	538	2.6%	564	2.6%	556	3.2%	**563**	**3.4%**
Singaporean	380	2.2%	430	2.1%	445	2.1%	442	2.5%	**452**	**2.8%**
Malaysian	24	0.1%	24	0.1%	27	0.1%	25	0.1%	**26**	**0.2%**
Indian	12	0.1%	14	0.1%	21	0.1%	20	0.1%	**19**	**0.1%**
Others	55	0.3%	70	0.3%	71	0.3%	69	0.4%	**66**	**0.4%**
Executives										
Total	1,461	8.5%	1,810	8.8%	2,043	9.6%	1,797	10.2%	**1,974**	**12.1%**
Singaporean	1,144	6.7%	1,390	6.7%	1,541	7.2%	1,341	7.6%	**1,490**	**9.1%**
Malaysian	51	0.3%	58	0.3%	67	0.3%	66	0.4%	**76**	**0.5%**
Indian	42	0.2%	66	0.3%	108	0.5%	88	0.5%	**107**	**0.7%**
Others	224	1.3%	296	1.4%	327	1.5%	302	1.7%	**301**	**1.8%**
Other Employees										
Total	15,225	88.6%	16,742	81.3%	17,338	81.2%	14,579	83.0%	**13,765**	**84.3%**
Singaporean	9,680	56.3%	10,087	49.0%	10,216	47.8%	9,412	53.6%	**8,967**	**54.9%**
Malaysian	2,252	13.1%	2,577	12.5%	2,827	13.2%	1,996	11.4%	**1,845**	**11.3%**
Indian	341	2.0%	462	2.2%	459	2.1%	396	2.3%	**384**	**2.4%**
Others	2,952	17.2%	3,616	17.6%	3,836	18.0%	2,775	15.8%	**2,569**	**15.7%**

[91] *This is a new disclosure in FY2021/22 hence, the five-year dataset will only include SIA and Scoot's global operations since SilkAir has been integrated into SIA.*

SUPPLEMENTARY SUSTAINABILITY DATA (CONTINUED)

EMPLOYEES (continued)

Employee Profile (continued)

Employees, by Employment Type (Full-time and Part-time) and by Gender

	FY2017/18		FY2018/19		FY2019/20		FY2020/21		FY2021/22	
Full-time										
Total	17,118	99.6%	20,531	99.7%	21,303	99.7%	17,518	99.7%	**16,283**	**99.7%**
Male	8,012	46.6%	9,655	46.9%	10,051	47.1%	8,731	49.7%	**8,383**	**51.3%**
Female	9,106	53.0%	10,876	52.8%	11,252	52.7%	8,787	50.0%	**7,900**	**48.4%**
Part-time										
Total	66	0.4%	68	0.3%	56	0.3%	47	0.3%	**45**	**0.3%**
Male	11	0.1%	8	0.04%	4	0.02%	2	0.01%	**5**	**0.03%**
Female	55	0.3%	60	0.3%	52	0.2%	45	0.3%	**40**	**0.2%**

Employees, by Employment Type (Permanent and Contract) and by Gender

	FY2017/18		FY2018/19		FY2019/20		FY2020/21[92]		FY2021/22	
Permanent										
Total	8,743	50.9%	10,591	51.4%	10,423	48.8%	9,252	52.7%	**9,024**	**55.3%**
Male	5,423	31.6%	7,008	34.0%	6,845	32.0%	6,160	35.1%	**6,052**	**37.1%**
Female	3,320	19.3%	3,583	17.4%	3,578	16.8%	3,092	17.6%	**2,972**	**18.2%**
Contract										
Total	8,441	49.1%	10,008	48.6%	10,936	51.2%	8,313	47.3%	**7,304**	**44.7%**
Male	2,167	12.6%	2,655	12.9%	3,210	15.0%	2,573	14.6%	**2,336**	**14.3%**
Female	6,274	36.5%	7,353	35.7%	7,726	36.2%	5,740	32.7%	**4,968**	**30.4%**

[92] *A restatement of total number of permanent and temporary contract employees by gender in FY2020/21 was made after the improvement of Scoot's data compilation methodologies.*

SUPPLEMENTARY SUSTAINABILITY DATA (CONTINUED)

EMPLOYEES (continued)

Employee Profile (continued)

Employees, by Employment Type (Permanent and Contract) and by Region

	FY2017/18		FY2018/19		FY2019/20		FY2020/21[93]		FY2021/22	
Permanent										
Total	8,743	50.9%	10,591	51.4%	10,423	48.8%	9,252	52.7%	**9,024**	**55.3%**
Singapore	6,836	39.8%	7,819	38.0%	7,514	35.2%	6,948	39.6%	**6,908**	**42.3%**
The Americas	102	0.6%	156	0.8%	172	0.8%	138	0.8%	**127**	**0.8%**
Europe	398	2.3%	495	2.4%	544	2.5%	430	2.4%	**407**	**2.5%**
North Asia	468	2.7%	700	3.4%	675	3.2%	590	3.4%	**531**	**3.3%**
South East Asia	378	2.2%	640	3.1%	702	3.3%	494	2.8%	**436**	**2.7%**
South West Pacific	331	1.9%	405	2.0%	416	1.9%	325	1.9%	**311**	**1.9%**
West Asia and Africa	230	1.3%	376	1.8%	400	1.9%	327	1.9%	**304**	**1.9%**
Contract										
Total	8,441	49.1%	10,008	48.6%	10,936	51.2%	8,313	47.3%	**7,304**	**44.7%**
Singapore	8,401	48.9%	9,961	48.4%	9,852	46.1%	8,253	47.0%	**7,228**	**44.3%**
The Americas	4	0.02%	3	0.01%	18	0.1%	2	0.01%	**2**	**0.01%**
Europe	12	0.1%	19	0.1%	38	0.2%	17	0.1%	**18**	**0.1%**
North Asia	14	0.1%	11	0.1%	389	1.8%	29	0.2%	**49**	**0.3%**
South East Asia	0	0.00%	2	0.01%	592	2.8%	1	0.01%	**2**	**0.01%**
South West Pacific	1	0.01%	1	0.00%	12	0.1%	1	0.01%	**1**	**0.01%**
West Asia and Africa	9	0.1%	11	0.1%	35	0.2%	10	0.1%	**4**	**0.02%**

[93] *A restatement of total number of permanent and temporary contract employees by region in FY2020/21 was made after the improvement of Scoot's data compilation methodologies.*

SUPPLEMENTARY SUSTAINABILITY DATA (CONTINUED)

EMPLOYEES (continued)

New Hires 401-1

New Hires	FY2017/18		FY2018/19		FY2019/20		FY2020/21		FY2021/22	
New Hires (Total)										
Total	1,726	100%	3,125	100%	2,723	100%	136	100%	**779**	**100%**
New Hires, by Gender										
Male	618	35.8%	1,151	36.8%	1,095	40.2%	75	55.1%	**416**	**53.4%**
Female	1,108	64.2%	1,974	63.2%	1,628	59.8%	61	44.9%	**363**	**46.6%**
New Hires, by Age Group										
<30 y.o.	1,340	77.6%	2,546	81.5%	2,107	77.4%	72	52.9%	**432**	**55.5%**
30-50 y.o.	354	20.5%	544	17.4%	576	21.2%	58	42.6%	**308**	**39.5%**
>50 y.o.	32	1.9%	35	1.1%	40	1.5%	6	4.4%	**39**	**5.0%**
New Hires, by Region[94]										
Singapore	1,546	89.6%	2,839	90.8%	2,179	80.0%	110	80.9%	**675**	**86.6%**
The Americas	22	1.3%	45	1.4%	33	1.2%	4	2.9%	**20**	**2.6%**
Europe	27	1.6%	45	1.4%	48	1.8%	3	2.2%	**12**	**1.5%**
North Asia	46	2.7%	68	2.2%	122	4.5%	2	1.5%	**23**	**3.0%**
South East Asia	49	2.8%	60	1.9%	218	8.0%	13	9.6%	**19**	**2.4%**
South West Pacific	24	1.4%	42	1.3%	79	2.9%	1	0.7%	**24**	**3.1%**
West Asia and Africa	12	0.7%	26	0.8%	44	1.6%	3	2.2%	**6**	**0.8%**

[94] *Due to a human transcription error, a restatement has been made for new employee hires by region in FY2020/21.*

SUPPLEMENTARY SUSTAINABILITY DATA (CONTINUED)

EMPLOYEES (continued)

New Hires (continued)

	FY2017/18		FY2018/19		FY2019/20		FY2020/21		FY2021/22	
New Hires, by Employee Level[95]										
Senior Management	4	0.2%	2	0.1%	1	0.04%	3	2.2%	**0**	**0.00%**
Management	23	1.3%	48	1.5%	44	1.6%	12	8.8%	**30**	**3.9%**
Executives	251	14.5%	383	12.3%	403	14.8%	72	52.9%	**455**	**58.4%**
Other Employees	1,448	83.9%	2,635	84.3%	2,235	82.1%	17	12.5%	**294**	**37.7%**
New Hires, by Employment Type (Full-time and Part-time)[96]										
Full-time	1,724	99.9%	3,057	99.6%	2,722	99.9%	143	99.3%	**776**	**99.6%**
Part-time	2	0.1%	11	0.4%	3	0.1%	1	0.7%	**3**	**0.4%**
Recruitment Type (Internal and External Hires)[97]										
Total	2,076	100%	3,775	100%	3,083	100%	528	100%	**1,190**	**100%**
Internal Hires	359	17.3%	712	18.9%	404	13.1%	384	72.7%	**500**	**42.0%**
External Hires	1,717	82.7%	3,063	81.1%	2,679	86.9%	144	27.3%	**690**	**58.0%**

[95] *This is a new disclosure in FY2021/22 hence, the five-year dataset will only include SIA and Scoot's global operations since SilkAir has been integrated into SIA.*
[96] *This is a new disclosure in FY2021/22 hence, the five-year dataset will only include SIA and Scoot's global operations since SilkAir has been integrated into SIA.*
[97] *This is a new disclosure in FY2021/22 hence, the five-year dataset will only include SIA and Scoot's global operations since SilkAir has been integrated into SIA. Internal hires refer to internal movement of employees or the sourcing of existing employees within SIA Group, which can include lateral movements and team transfers.*

SUPPLEMENTARY SUSTAINABILITY DATA (CONTINUED)

EMPLOYEES (continued)

Turnover 401-1

Turnover										
	FY2017/18		FY2018/19		FY2019/20		FY2020/21		FY2021/22	
Turnover (Total)										
Total	1,245	100%	2,205	100%	1,377	100%	1,154	100%	**1,809**	**100%**
Turnover, by Gender										
Male	370	29.7%	757	34.3%	409	29.7%	388	33.6%	**616**	**34.1%**
Female	875	70.3%	1,448	65.7%	968	70.3%	766	66.4%	**1,193**	**65.9%**
Turnover, by Age Group										
<30 y.o.	492	39.5%	1,138	51.6%	860	62.5%	660	57.2%	**847**	**46.8%**
30-50 y.o.	704	56.5%	779	35.3%	475	34.5%	448	38.8%	**918**	**50.7%**
>50 y.o.	49	3.9%	288	13.1%	42	3.1%	46	4.0%	**44**	**2.4%**
Turnover, by Region										
Singapore	1,093	87.8%	1,883	85.4%	993	72.1%	1,043	90.4%	**1,624**	**89.8%**
The Americas	14	1.1%	37	1.7%	18	1.3%	10	0.9%	**28**	**1.5%**
Europe	20	1.6%	62	2.8%	37	2.7%	23	2.0%	**23**	**1.3%**
North Asia	57	4.6%	79	3.6%	138	10.0%	31	2.7%	**40**	**2.2%**
South East Asia	33	2.7%	59	2.7%	126	9.2%	21	1.8%	**46**	**2.5%**
South West Pacific	17	1.4%	56	2.5%	39	2.8%	22	1.9%	**33**	**1.8%**
West Asia and Africa	11	0.9%	29	1.3%	26	1.9%	4	0.3%	**15**	**0.8%**
Turnover, by Employee Level[98]										
Senior Management	4	0.3%	1	0.05%	0	0.00%	0	0.00%	**0**	**0.00%**
Management	27	2.2%	37	1.7%	29	2.1%	15	1.3%	**44**	**2.4%**
Executives	126	10.1%	191	8.7%	154	11.2%	205	17.8%	**413**	**22.8%**
Other Employees	1,088	87.4%	1,841	83.5%	1,111	80.7%	625	54.2%	**1,352**	**74.7%**

[98] *This is a new disclosure in FY2021/22 hence, the five-year dataset will only include SIA and Scoot's global operations since SilkAir has been integrated into SIA.*

SUPPLEMENTARY SUSTAINABILITY DATA (CONTINUED)

EMPLOYEES (continued)

Parental Leave Statistics 401-3

Parental Leave Statistics

	FY2017/18			FY2018/19			FY2019/20			FY2020/21			FY2021/22		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Employees who were entitled to parental leave[99]	2,274	1,042	3,316	2,623	1,499	4,122	2,677	1,279	3,956	2,765	1,343	4,108	**2,463**	**995**	**3,458**
Employees who took parental leave	1,503	923	2,426	1,748	1,234	2,982	1,903	1,236	3,139	1,295	1,075	2,370	**1,386**	**810**	**2,196**
Employees who returned to work after parental leave ended	1,501	734	2,235	1,548	1,206	2,754	1,895	1,018	2,913	1,285	856	2,141	**1,381**	**802**	**2,183**
Employees who returned to work after parental leave ended and who were still employed 12 months after returning to work	1,459	695	2,154	1,486	1,168	2,654	1,839	975	2,814	1,232	799	2,031	**1,308**	**729**	**2,037**
Retention rate of employees who took parental leave	97.1%	75.3%	88.8%	85.0%	94.7%	89.0%	96.6%	78.9%	89.6%	95.1%	74.3%	85.7%	**94.4%**	**90.0%**	**92.8%**
Return to work rate of employees who took parental leave	99.9%	79.5%	92.1%	88.6%	97.7%	92.4%	99.6%	82.4%	92.8%	99.2%	79.6%	90.3%	**99.6%**	**99.0%**	**99.4%**

Average Training Hours[100] 404-1

Average Training Hours

	FY2017/18	FY2018/19	FY2019/20	FY2020/21	FY2021/22
Average Training Hours by Employee Function					
Ground Staff	16	32	31	51	37
Cabin Crew	75	111	101	80	56
Pilots	45	44	45	37	35

[99] *A restatement of total number of employees who were entitled to parental leave in FY2019/20 and FY2020/21 was made after the improvement of Scoot's data compilation methodologies.*
[100] *Training hours were derived based on the assumption that one training day is equivalent to 8 training hours.*

SUPPLEMENTARY SUSTAINABILITY DATA (CONTINUED)

SAFETY

Work-related Injuries

Work-related Injuries, Employees	FY2017/18	FY2018/19	FY2019/20	FY2020/21	FY2021/22
Estimated number of man-hours worked (hours)	16,538,918	18,843,922	22,856,786	11,768,518	**18,835,417**
Number (and rate) of fatalities as a result of work-related injuries	0	0	0	0	**0**
Number (and rate) of high-consequence work-related injuries	0	0	0	0	**0**
Number (and rate) of recordable work-related injuries	113 (6.8)	212 (11.3)	606 (26.5)	51 (4.3)	**60 (3.2)**
Main types of work-related injuries	• Slip, trips and falls • Struck by falling objects such as cabin baggage			• Over-exertion and strenuous movements • Exposure to extreme temperatures such as scalds	

Work-related Injuries, Workers Who are Non-employees	FY2017/18	FY2018/19	FY2019/20	FY2020/21	FY2021/22
Scope of workers who are non-employees	Key contractors only (cleaners, maintenance, landscaping, warehouse operations)				
Estimated number of man-hours worked (hours)	1,498,647	1,213,404	1,294,689	1,421,863	**1,281,554**
Number (and rate) of fatalities as a result of work-related injuries	0	0	0	0	**0**
Number (and rate) of high-consequence work-related injuries	0	0	0	0	**0**
Number (and rate) of recordable work-related injuries	0	0	2 (1.5)	0	**1 (0.8)**
Main types of work-related injuries	Nil	Nil	Slips, trips and falls	Nil	**Slips, trips and falls**

SUPPLEMENTARY SUSTAINABILITY DATA (CONTINUED)

SAFETY (continued)

Work-related Ill-health

Work-related Ill-health, Employees

	FY2017/18	FY2018/19	FY2019/20	FY2020/21	FY2021/22
Number of fatalities as a result of work-related ill-health	0	0	0	0	**0**
Number of recordable work-related ill-health	0	13	0	21	**6**
Main types of work-related ill-health	Nil	Noise-induced deafness	Nil	Noise-induced deafness	**Noise-induced deafness**

Work-related Injuries, Workers Who are Non-employees

	FY2017/18	FY2018/19	FY2019/20	FY2020/21	FY2021/22
Scope of workers who are non-employees	Key contractors only (cleaners, maintenance, landscaping, warehouse operations)				
Number of fatalities as a result of work-related ill-health	0	0	0	0	**0**
Number of recordable work-related ill-health	0	0	2 1.5	0	**1 0.8**
Main types of work-related ill-health	Nil	Nil	Nil	Nil	**Nil**

SUPPLEMENTARY SUSTAINABILITY DATA (CONTINUED)

ENVIRONMENT

Energy and Emissions (continued)

Operating Statistics

	FY2017/18	FY2018/19	FY2019/20	FY2020/21	FY2021/22
SIA Group					
Passengers Carried (thousand)	33,659	36,095	35,800	596	**3,890**
Revenue Pax-km (million)	129,798.3	140,838.1	140,998.5	2890.6	**20,664.5**
Available Seat-km (million)	159,381.0	169,606.6	171,211.2	21,721.2	**68,570.3**
Singapore Airlines (Passenger Fleet)					
Passengers Carried (thousand)	19,505	20,738	20,906	457	**3,388**
Revenue Pax-km (million)	95,855.0	102,571.9	104,134.6	2,581.6	**19,177.7**
Available Seat-km (million)	118,126.7	123,486.2	127,165.8	19,253.7	**58,748.1**
Singapore Airlines (Freighter Fleet)					
Cargo and Mail Carried (million kg)	1,301.2	1,298.3	1,205.0	734.0	**1,045.9**
Cargo Load (million tonne-km)	7,260.3	7,006.5	6,389.2	4,111.9	**5,941.0**
Gross Capacity (million tonne-km)	11,126.7	11,210.4	10,778.2	4,795.1	**7,195.3**
SilkAir[101]					
Passengers Carried (thousand)	4,687	4,902	4,440	57	**-**
Revenue Pax-km (million)	8,343.5	8,940.3	8,195.4	87.4	**-**
Available Seat-km (million)	11,365.9	11,731.8	10,599.6	239.3	**-**
Scoot					
Passengers Carried (thousand)	9,467	10,455	10,454	82	**502**
Revenue Pax-km (million)	25,599.8	29,325.9	28,668.5	221.6	**1,486.8**
Available Seat-km (million)	29,888.4	34,388.6	33,445.8	2228.2	**9,822.2**

[101] *SilkAir data will not be provided in FY2021/22 since SilkAir has been integrated into SIA.*

SUPPLEMENTARY SUSTAINABILITY DATA (CONTINUED)

ENVIRONMENT (continued)

Energy and Emissions (continued)

Flight Operations

	FY2017/18	FY2018/19	FY2019/20	FY2020/21	FY2021/22
SIA Group					
Fuel Consumption (million AG)	1,501.8	1,748.4	1,728.6	419.7	**826.8**
Fuel Consumption (TJ)[102]	198,278.8	230,836.1	228,215.4	55,410.5	**109,156.6**
Fuel Productivity (LTK/AG)	10.98	11.37	11.13	10.44	**9.60**
Overall Fuel Productivity for Passenger Fleet (Litres/100 passenger-km)	4.06	4.43	4.39	40.74	**13.11**
Overall Fuel Productivity for Cargo Fleet (Litres/tonne-km)	0.06	0.05	0.05	0.10	**0.07**
Direct (Scope 1) GHG Emissions ('000 tonnes CO_2)	14,162.8	16,488.3	16,301.1	3,957.9	**7,796.9**
Direct (Scope 1) GHG Emissions Intensity ($kgCO_2$/LTK)	0.86	0.83	0.85	0.90	**0.98**
Singapore Airlines (Passenger Fleet)					
Fuel Consumption (million AG)	1,296.1	1,332.7	1,334.3	290.5	**656.9**
Fuel Productivity (LTK/AG)	10.59	10.74	10.57	8.30	**8.63**
Fuel Productivity (Litres/100 passenger-km)	5.12	4.92	4.85	42.60	**12.97**
Direct (Scope 1) GHG Emissions ('000 tonnes CO_2)[103]	12,222.9	12,567.5	12,582.5	2,739.6	**6,194.4**
Direct (Scope 1) GHG Emissions Intensity ($kgCO_2$/LTK)	0.89	0.88	0.89	1.14	**1.09**
Singapore Airlines (Freighter Fleet)					
Fuel Consumption (million AG)	110.8	99.1	92.8	108.6	**110.9**
Fuel Productivity (LTK/AG)	17.68	17.25	16.15	16.70	**17.05**
Fuel Productivity (Litres/tonne-km)	0.06	0.05	0.05	0.10	**0.07**
Direct (Scope 1) GHG Emissions ('000 tonnes CO_2)	1044.7	934.3	874.7	1023.9	**1,046.1**
Direct (Scope 1) GHG Emissions Intensity ($kgCO_2$/LTK)	0.53	0.55	0.58	0.56	**0.55**

[102] *Due to human transcription error, a restatement has been made for Direct (Scope 1) GHG Emissions Intensity ('000 tonnes CO_2) value for Singapore Airlines (Passenger Fleet)'s operations in FY2018/19 and FY2019/20.*
[103] *Due to human transcription error, a restatement has been made for Direct (Scope 1) GHG Emissions Intensity ($kgCO_2$/LTK) value for SilkAir's operations in FY2019/20.*

SUPPLEMENTARY SUSTAINABILITY DATA (CONTINUED)

ENVIRONMENT (continued)

Energy and Emissions (continued)

	FY2017/18	FY2018/19	FY2019/20	FY2020/21	FY2021/22
SilkAir[104]					
Fuel Consumption (million AG)	94.9	95.6	87.4	2.0	-
Fuel Productivity (LTK/AG)	8.48	8.99	8.86	5.09	-
Fuel Productivity (Litres/100 passenger-km)	4.31	4.05	4.04	8.61	
Direct (Scope 1) GHG Emissions ('000 tonnes CO_2)	895.2	901.7	824.2	18.8	-
Direct (Scope 1) GHG Emissions Intensity ($kgCO_2$/LTK)[105]	1.11	1.05	1.06	1.85	-
Scoot[106]					
Fuel Consumption (million AG)	-	221.1	214.2	18.6	**59.0**
Fuel Productivity (LTK/AG)	-	13.62	13.18	7.86	**6.42**
Fuel Productivity (Litres/100 passenger-km)	-	2.85	2.83	31.83	**15.02**
Direct (Scope 1) GHG Emissions ('000 tonnes CO_2)	-	2,084.8	2019.6	175.7	**556.4**
Direct (Scope 1) GHG Emissions Intensity ($kgCO_2$/LTK)	-	0.69	0.72	1.20	**1.47**

[104] SilkAir data will not be provided in FY2021/22 since SilkAir has been integrated into SIA.
[105] Due to restatements made for Fuel Consumption (TJ) values for flight operations, a restatement has been made for Energy Consumption from Flight Operations (TJ) value, and as a result, the Total Energy Consumption within SIA (TJ) value in FY2017/18.
[106] Energy and emissions data for Scoot is available only from FY2018/19 due to the merger of Tigerair under the Scoot brand in July 2017.

SUPPLEMENTARY SUSTAINABILITY DATA (CONTINUED)

ENVIRONMENT (continued)

Energy and Emissions (continued)

Buildings, Offices and Ground Operations

	FY2017/18	FY2018/19	FY2019/20	FY2020/21	FY2021/22
Buildings and Offices (Electricity)					
Electricity Consumption (GWh)	27.8	28.1	27.9	20.8	**21.1**
Electrical Energy Consumption (TJ)	100.10	101.3	100.5	74.8	**76.0**
Renewable Energy Consumption (GWh)	-	-	-	2.0	**4.7**
Renewable Energy Consumption (TJ)	-	-	-	7.1	**17.0**
Electricity Intensity (kWh/m^2)	119.90	121.36	120.34	98.06	**111.98**
Energy Indirect (Scope 2) GHG Emissions (tonnes CO_2)	11,780.8	11,797.8	11,687.4	8,484.4	**8,607.7**
Energy Indirect (Scope 2) GHG Emissions Intensity (tonnesCO_2/m^2)	0.05	0.05	0.05	0.04	**0.04**
Ground Operations (Diesel)					
Diesel Consumption (litres)	2,532.6	5,215.5	10,013.9	10,152.3	**10,744.8**
Diesel Consumption (TJ)	0.1	0.2	0.4	0.4	**0.4**
Direct (Scope 1) GHG Emissions from Diesel (tonnes CO_2e)	6.9	14.2	27.2	27.6	**29.2**
Ground Operations (Petrol)					
Petrol Consumption (litres)	18,410.6	22,142.2	20,869.6	12,740.0	**18,860.9**
Petrol Consumption (TJ)	0.6	0.7	0.7	0.4	**0.6**
Direct (Scope 1) GHG Emissions from Petrol (tonnes CO_2e)	42.8	51.5	48.5	29.6	**43.8**

SUPPLEMENTARY SUSTAINABILITY DATA (CONTINUED)

ENVIRONMENT (continued)

Energy and Emissions (continued)

Summary of Energy and Emissions Performance

	FY2017/18	FY2018/19	FY2019/20	FY2020/21	FY2021/22
Total Energy Consumption within SIA[107]					
Energy Consumption from Flight Operations (TJ)	198,279	230,836	228,215	55,410	**109,157**
Energy Consumption from Buildings and Offices (TJ)	100	101	100	82	**93**
Energy Consumption from Ground Operations (TJ)	0.7	0.9	1.1	0.8	**1.0**
Total Energy Consumption within SIA (TJ)	198,380	230,938	228,317	55,493	**109,250**
Total Scope 1 and 2 GHG Emissions[108]					
Direct (Scope 1) GHG Emissions from Flight Operations (tonnes CO_2e)	14,162,770	16,488,292	16,301,099	3,957,889	**7,796,899**
Direct (Scope 1) GHG Emissions from Ground Operations (tonnes CO_2e)	50	66	76	57	**73**
Energy Indirect (Scope 2) GHG Emissions from Properties and Offices (tonnes CO_2e)	11,781	11,798	11,687	8,484	**8,608**
Total Direct (Scope 1) GHG Emissions (tonnes CO_2e)	14,162,819	16,488,357	16,301,175	3,957,947	**7,796,972**
Total Energy Indirect (Scope 2) GHG Emissions (tonnes CO_2e)	11,781	11,798	11,687	8,484	**8,608**
Total Scope 1 and 2 GHG Emissions (tonnes CO_2e)	14,174,600	16,500,155	16,312,863	3,966,431	**7,805,579**

Water 303-3

Summary of Water Performance at our Buildings and Offices

	FY2017/18	FY2018/19	FY2019/20	FY2020/21	FY2021/22
Water Withdrawal, by Source					
Tap Water (m^3)	143,104	156,837	160,708	105,459	**94,020**
Rainwater (m^3)	18,799	16,349	15,689	23,238	**24,531**
NEWater (m^3)	21,027	19,779	20,859	19,267	**19,450**
Total Water Withdrawal (m^3)	182,930	192,965	197,256	147,964	**138,001**
Water Intensity					
Water Intensity (m^3/m^2)	0.73	0.77	0.79	0.59	**0.55**

[107] *Due to restatements made for Fuel Consumption (TJ) values for flight operations, a restatement has been made for Direct (Scope 1) GHG Emissions from Flight Operations (tonnes CO_2e) value, and as a result, the Total Direct (Scope 1) GHG Emissions (tonnes CO_2e) value and Total Scope 1 and 2 GHG Emissions (tonnes CO_2e) value in FY2017/18.*

[108] *Due to improvements in calculation methodologies, restatements have been made for Direct (Scope 1) GHG Emissions from Flight Operations (tonnes CO_2e) value, and as a result, the Total Direct (Scope 1) GHG Emissions (tonnes CO_2e) value and Total Scope 1 and 2 GHG Emissions (tonnes CO_2e) value in FY2018/19 and FY2019/20.*

SUPPLEMENTARY SUSTAINABILITY DATA (CONTINUED)

ENVIRONMENT (continued)

Waste

Summary of Waste Generated, Diverted and Disposed of at our Buildings

	FY2017/18	FY2018/19	FY2019/20	FY2020/21	FY2021/22
Total Waste Generated (tonnes), Non-hazardous Waste					
Airline House and Hangars 1, 2, 3	2,474	2,067	1,093	785	**781**
SIA Supplies Centre	240	251	196	21	**38**
SIA Training Centre	49	54	50	57	**116**
TechSQ	216	215	116	17	**29**
Total Waste Generated (tonnes)	2,979	2,587	1,455	880	**964**
Total Waste Diverted from Disposal (tonnes), Non-hazardous Waste – Recycling					
Airline House and Hangars 1, 2, 3	-	-	70.4	66.1	**99.4**
SIA Supplies Centre	-	-	5.4	0.5	**28.7**
SIA Training Centre	-	-	0.6	1.4	**3.2**
TechSQ	-	-	0.5	0.4	**0.8**
Total Waste Diverted from Disposal (tonnes)	-	-	76.9	68.4	**132.2**
Total Waste Directed to Disposal (tonnes), Non-hazardous Waste – Waste-to-Energy (WTE) Incineration					
Airline House and Hangars 1, 2, 3	-	-	1,023	719	**681**
SIA Supplies Centre	-	-	191	21	**9**
SIA Training Centre	-	-	49	55	**113**
TechSQ	-	-	115	16	**28**
Total Waste Diverted from Disposal (tonnes)	-	-	1,378	811	**832**

Summary of Waste Diverted from Disposal at our Flight Operations

	FY2017/18	FY2018/19	FY2019/20	FY2020/21	FY2021/22
Total Waste Diverted from Disposal (tonnes), Non-hazardous Waste – Recycling[109]					
Glass bottles	275	283	282	-	**35**
Newspapers	326	240	121	-	**-**
Magazines	270	268	267	38	**-**
Total Waste Diverted from Disposal (tonnes)	871	791	670	38	**35**
Total Waste Directed to Disposal (tonnes), Non-hazardous Waste – Waste-to-Energy (WTE) Incineration[110]					
General Waste (tonnes)	-	-	-	-	**80**

[109] Due to an addition of a new recycled waste material (glass bottles), restatements have been made for Total Waste Diverted From Disposal (tonnes) value in FY2017/18, FY2018/19, and FY2019//20.
[110] Due to data unavailability of cabin waste disposed in past years, value of General Waste disposed (tonnes) will only be available from FY2021/22 onwards.

GRI CONTENT INDEX 102-55

The GRI Content Index has been prepared in accordance with the GRI Standards: Core option. It summarises the GRI Standards Disclosures we have selected for reporting and directs readers to the appropriate references in this Sustainability Report and other publicly available resources published by SIA. The full GRI Standards is available on the GRI website.

References:

AR: SIA Annual Report FY2021/22 **SR:** SIA Sustainability Report FY2021/22

GENERAL DISCLOSURES

GRI Standards Disclosures		Reference(s) & Remarks
Organisational profile		
102-1	Name of the organisation	Singapore Airlines Limited
102-2	Activities, brands, products, and services	**SR: 5-9**
102-3	Location of headquarters	**SR: Back Cover**
102-4	Location of operations	**SR: 6**
102-5	Ownership and legal form	**AR: 124, 156, 222-223**
102-6	Markets served	**SR: 6**
102-7	Scale of the organisation	**SR: 6, 8, 27 , 106 AR: 113-114, 143-147**
102-8	Information on employees and other workers	**SR: 28-34, 166-177**
102-9	Supply chain	**SR: 95**
102-10	Significant changes to the organisation and its supply chain	**SR: 7, 13 AR: 8-16, 116-121**
102-11	Precautionary principle or approach	**SR: 125 AR: 70-72 , 85-88**
102-12	External initiatives	**SR: 3, 16**
102-13	Membership of associations	**SR: 5**
Strategy		
102-14	Statement from senior decision-maker	**SR: 1-2, 14**
Ethics and integrity		
102-16	Values, principles, standards, and norms of behaviour	**SR: 5, 23**
102-17	Mechanisms for advice and concerns about ethics	**SR: 25**
Governance		
102-18	Governance structure	**SR: 14 AR: 75-77**
102-19	Delegating authority	**SR: 14**
102-20	Executive-level responsibility for economic, environmental, and social topics	**SR: 14**
102-22	Composition of the highest governance body and its committee	**SR: 20 AR: 72-77, 90-96**
102-23	Chair of the highest governance body	**SR: 20 AR: 73-74, 91**
102-24	Nominating and selecting the highest governance body	**AR: 76**
102-25	Conflicts of interest	**AR: 72**

GRI Standards Disclosures		Reference(s) & Remarks
Governance (continued)		
102-26	Role of the highest governance body in setting purpose, values, and strategy	**SR: 14, 20 AR: 72, 75-77**
102-30	Effectiveness of risk management processes	**SR: 21 AR: 70-71, 85-88**
102-31	Review of economic, environmental, and social topics	**SR: 14**
102-32	Highest governance body's role in sustainability reporting	**SR: 14**
102-33	Communicating critical concerns	**AR: 89**
102-35	Remuneration policies	**SR: 40 AR: 78-85**
102-36	Process for determining remuneration	**AR: 78-85**
Stakeholder engagement		
102-40	List of stakeholder groups	**SR: 11-13, 16**
102-41	Collective bargaining agreements	**SR: 40**
102-42	Identifying and selecting stakeholders	**SR: 15**
102-43	Approach to stakeholder engagement	**SR: 11-13, 19, 26, 35, 55, 74, 94, 103, 113**
102-44	Key topics and concerns raised	**SR: 16**
Reporting practice		
102-45	Entities included in the consolidated financial report	**SR: 4 AR: 3, 91-96 , 98**
102-46	Defining report content and topic Boundaries	**SR: 15**
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102-48	Restatement of information	**SR: 158-164**
102-49	Changes in reporting	**SR: 4**
102-50	Reporting period	**SR: 4**
102-51	Date of most recent report	**SR: 4**
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TOPIC-SPECIFIC DISCLOSURES (continued)

GRI Standards Disclosures		Reference(s) & Remarks
 **Material topic: Governance**		
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103-1	Explanation of the material topic and its boundary	SR: 19-25
103-2	The management approach and its components	SR: 19-25
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GRI 205 (2016): Anti-corruption		
205-2	Communication and training about anti-corruption policies and procedures	SR: 24
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GRI 307 (2016): Environmental compliance		
307-1	Non-compliance with environmental laws and regulations	SR: 25
GRI 415 (2016): Public Policy		
415-1	Political contributions	SR: 23
GRI 416 (2016): Customer health and safety		
416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	SR: 25
 **Material topic: Employees**		
GRI 103 (2016): Management approach		
103-1	Explanation of the material topic and its boundary	SR: 26-54
103-2	The management approach and its components	SR: 26-54
103-3	Evaluation of the management approach	SR: 26-54
GRI 202 (2016): Market presence		
202-2	Proportion of senior management hired from the local community	SR: 27, 29
GRI 401 (2016): Employment		
401-1	New employee hires and employee turnover	SR: 27, 33-34, 174-176
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	SR: 41
401-3	Parental leave	SR: 41-42, 177

GRI Standards Disclosures		Reference(s) & Remarks
GRI 402 (2016): Labor/Management Relations		
402-1	Minimum notice periods regarding operational changes	SR: 41
GRI 404 (2016): Training and education		
404-1	Average hours of training per year per employee	SR: 43, 177
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405-1	Diversity of governance bodies and employees	SR: 27-34, 166-177 AR: 91-96
 **Material topic: Safety**		
GRI 103 (2016): Management approach		
103-1	Explanation of the material topic and its boundary	SR: 55-73
103-2	The management approach and its components	SR: 55-73
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GRI 403 (2018): Occupational health and safety		
403-1	Occupational health and safety management systems	SR: 57
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403-3	Occupational health services	SR: 69-70, 72
403-4	Worker participation, consultation, and communication on occupational health and safety	SR: 56, 60-62, 69-70
403-5	Worker training on occupational health and safety	SR: 60-66, 68-71
403-6	Promotion of worker health	SR: 60-62, 70
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	SR: 56, 63-66, 68-71
403-8	Workers covered by an occupational health and safety management system	SR: 57-59
403-9	Work-related injuries	SR: 72, 178
403-10	Work-related ill-health	SR: 73, 179
GRI 416 (2016): Customer health and safety		
416-1	Assessment of the health and safety impacts of product and service categories	SR: 57
416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	SR: 25, 67

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TOPIC-SPECIFIC DISCLOSURES (continued)

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Material topic: Customer-focus		
GRI 103 (2016): Management approach		
103-1	Explanation of the material topic and its boundary	SR: 74-92
103-2	The management approach and its components	SR: 74-92
103-3	Evaluation of the management approach	SR: 74-92
GRI 418 (2016): Customer privacy		
418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data	SR: 92 In FY2021/22, KrisShop notified the Personal Data Protection Commission of Singapore (PDPC) of a data breach due to a phishing attack. Immediate remedial action was taken in respect of the incident, and the affected data subjects were notified in accordance with the applicable legal requirements. The PDPC has completed its investigations into the incident and will not be taking any further action.
Material topic: Suppliers		
GRI 103 (2016): Management approach		
103-1	Explanation of the material topic and its boundary	SR: 94-102
103-2	The management approach and its components	SR: 94-102
103-3	Evaluation of the management approach	SR: 94-102
GRI 308 (2016): Supplier environmental assessment		
308-1	New suppliers that were screened using environmental criteria	SR: 96-97
GRI 414 (2016): Supplier social assessment		
414-1	New suppliers that were screened using social criteria	SR: 96-97
Material topic: Shareholders		
GRI 103 (2016): Management approach		
103-1	Explanation of the material topic and its boundary	SR: 103-112
103-2	The management approach and its components	SR: 103-112
103-3	Evaluation of the management approach	SR: 103-112
GRI 201 (2016): Economic performance		
201-1	Direct economic value generated and distributed	SR: 106

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GRI 103 (2016): Management approach		
103-1	Explanation of the material topic and its boundary	SR: 121-155
103-2	The management approach and its components	SR: 121-155
103-3	Evaluation of the management approach	SR: 121-155
GRI 302 (2016): Energy		
302-1	Energy consumption within the organisation	SR: 135, 139, 181-184
302-3	Energy intensity	SR: 135, 139, 181-184
302-4	Reduction of energy consumption	SR: 126-139
GRI 303 (2018): Water and effluents		
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303-2	Management of water discharge-related impacts	SR: 140
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GRI 304 (2016): Biodiversity		
304-3	Habitats protected or restored	SR: 151-155
GRI 305 (2016): Emissions		
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305-2	Energy indirect (Scope 2) GHG emissions	SR: 139, 181-184
305-4	GHG emissions intensity	SR: 135, 139, 181-183
305-5	Reduction of GHG emissions	SR: 128-139
GRI 306 (2020): Waste		
306-1	Waste generation and significant waste-related impacts	SR: 142-149
306-2	Management of significant waste-related impacts	SR: 142-149
306-3	Waste generated	SR: 148-149 , 185
306-4	Waste diverted from disposal	SR: 148-149 , 185
306-5	Waste directed to disposal	SR: 185
GRI 307 (2016): Environmental compliance		
307-1	Non-compliance with environmental laws and regulations	SR: 25
Additional topic: Society		
GRI 413 (2016): Local communities		
413-1	Operations with local community engagement, impact assessments, and development programmes	SR: 114 -119



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We welcome feedback on this report and any aspect of our sustainability performance.
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