

**SINGAPORE  
AIRLINES**



A STAR ALLIANCE MEMBER 



# SUSTAINABILITY REPORT

FY2022/23

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## MESSAGE BY CEO

2-22

**We remained focused on our sustainability goals even as we emerged from the pandemic, implementing environmental, social, and governance initiatives across our operations during the year. We have made tangible progress in conducting our businesses in a more sustainable manner, ensuring that sustainability remains a key part of the SIA Group's strategy.**

This was an exceptional 12 months for the Singapore Airlines (SIA) Group, as the easing of global border restrictions restored Singapore's air connectivity to the world. The preparations that we made at the height of the Covid-19 pandemic, coupled with the resilience of the entire organisation, allowed us to expand our network in an agile manner to meet the surging demand for international air travel.

At the end of FY2022/23, Group capacity had increased to 73% of pre-pandemic levels, passenger numbers were up six-fold from the year before, and load factors reached a record 85.4%. This enabled the Group to report record revenues, operating profits, and net profits for the year.

### **Sustainability: The Cornerstone of Our Growth Journey**

We remained focused on our sustainability goals even as we emerged from the pandemic, implementing environmental, social, and governance (ESG) initiatives across our operations during the year. We have made tangible progress in conducting our businesses in a more sustainable manner, ensuring that sustainability remains a key part of the SIA Group's strategy.

In January 2023, we appointed Ms Lee Wen Fen, SIA's Senior Vice President Corporate Planning, concurrently as our Chief

Sustainability Officer. Ms Lee had already been leading various major sustainability initiatives on behalf of the Group prior to the official appointment. As the Chief Sustainability Officer, she has been tasked with overseeing and steering the Group's sustainability strategy, and ensuring that our ESG goals are at the heart of the SIA journey.

Long-term success, however, requires collective action and deeper collaboration with partners across the aviation ecosystem. In collaboration with several stakeholders in Singapore over the last 12 months, we embarked on several initiatives to generate lasting values for the SIA Group, and help to build a more resilient and sustainable aviation industry for future generations.

### **Tackling the Climate Crisis and Contributing Back to Communities**

The SIA Group's ESG initiatives are focused around three pillars: achieving net zero carbon emissions by 2050, reducing waste across our operations, and making a positive impact on society.

Multiple decarbonisation pathways are required for us to successfully achieve the ambitious goal of net zero carbon emissions by 2050. These include continued investments in new generation aircraft, achieving higher operational efficiencies, adopting low-carbon

technologies such as Sustainable Aviation Fuels (SAF), and sourcing for high-quality carbon offsets.

Today, operating a young and modern fleet of aircraft is the most immediate and direct way in which an airline can reduce its carbon emissions. The SIA Group operates one of the youngest fleets globally with an average age of six years and nine months, significantly lower than the global average of 15 years and eight months<sup>1</sup>. This primarily comprises new generation passenger aircraft such as the Airbus A350s and Boeing 787s, which burn up to 25% less fuel than older generation aircraft on similar missions.

We have also made a significant investment in our aircraft order book, which comprises modern aircraft including the Airbus A350F freighters. SIA will be the launch operator for the A350F, which is projected to use up to 40% less fuel than the Boeing 747-400F freighters on similar missions, and reduce our carbon emissions by an estimated 400,000 tonnes annually.

A critical lever in our long-term decarbonisation strategy is the adoption of sustainable fuels. As part of a one-year pilot with the Civil Aviation Authority of Singapore (CAAS) and GenZero, an investment platform wholly owned by Temasek, the Group bought 1,000 tonnes of neat SAF that



<sup>1</sup> According to CAPA data, as at 1 June 2023.

## MESSAGE BY CEO (CONTINUED)

was blended with refined jet fuel. These were uplifted on SIA and Scoot flights departing from Changi Airport in July 2022, the first time that SAF has been used on commercial flights out of Singapore.

Under the pilot, 1,000 SAF credits were generated and made available for sale, offering our corporate customers and freight forwarders an avenue to reduce their carbon footprint while stimulating demand for SAF. More broadly, this pilot aims to study the operationalisation of SAF through Changi Airport's hydrant system. It would help to shape future policies and initiatives that could support the scaling up of SAF adoption in Singapore.

SIA will continue to collaborate with governments, the airline industry, and partners such as aircraft manufacturers, technology providers, and fuel suppliers, both in Singapore and around the world, to help accelerate the development, production, and adoption of SAF. We call on our industry partners to work together to push the envelope and find innovative solutions, which will enable us to collectively tackle the climate crisis and achieve net zero carbon emissions by 2050.

Beyond SAF, we continue to pursue fuel productivity and savings initiatives across our engineering, flight, and ground operations. We also encourage our customers to join the sustainability journey by offsetting the carbon emissions generated from their flights through the SIA Group's Voluntary Carbon Offset Programme.

Within Singapore, SIA actively participates in discussions convened by CAAS to develop a Sustainable Air Hub Blueprint for the country. This will help to develop practical pathways towards greener air travel that is viable and accessible to all, in collaboration with our ecosystem partners.

Recognising the need to conserve the planet's finite resources, we continue to pursue ways to reduce waste across our operations. We have installed solar panels on the rooftop of our office buildings in Singapore. These solar panels generate almost 25% of our electricity needs for these buildings.

Multiple water conservation initiatives have been implemented, an important step in Singapore where water is a highly scarce resource. We are also switching to eco-friendly materials for our in-flight offerings, where possible.

We also strive to leverage our business as a force for good, and have a positive impact on the communities that we serve. SIA has been a partner in a rainforest conservation initiative in Sumatra, Indonesia for the last 13 years, helping to restore the ecosystem, protect critically endangered animals, and support indigenous communities. Our colleagues from around the world actively engage in activities that allow us to give back to society and directly help local communities. We also facilitate global humanitarian relief efforts by transporting essential items as air cargo to the point of need.

### Strengthening Staff Engagement and Governance

There has been increasing attention from external stakeholders, including shareholders, investors, customers, and regulators, on the sustainability performance of companies including SIA. Enhancing our internal processes and systems will help us to meet these heightened expectations. This involves a greater focus on measuring, tracking, and monitoring our sustainability-related initiatives, and maintaining a robust governance structure.

To galvanise and involve all SIA Group employees, we organised a three-day sustainability-themed global learning festival in March 2023 to reinforce the importance of our long-

term goals. Experts from Singapore and around the world were invited to share their insights on sustainability issues, as well as their experiences in incorporating ESG initiatives into their business operations. We will organise more of such activities in the coming years.

### Navigating the Future

While the SIA Group has experienced a rapid recovery from the pandemic, we need to keep an eye on other issues that could potentially have an impact on our business. These include escalating geopolitical tensions, slowing economic growth, elevated energy prices, and persistently high inflation. Competition is also expected to intensify, particularly as other airlines increase capacity on their international routes. There may also be challenges related to new regulations, including those pertaining to sustainability and decarbonisation.

Despite these, the SIA Group remains resolute in advancing our sustainability goals. We know that these are a priority for our shareholders, customers, and staff. Aviation plays a critical role in connecting the world and supporting global economic growth, and we aim to contribute towards a sustainable air travel industry. We look forward to sharing more in our report next year.

With regards,

**Goh Choon Phong**  
Chief Executive Officer  
Singapore Airlines

# ABOUT THIS REPORT

This is the 11<sup>th</sup> Sustainability Report of Singapore Airlines Limited (SIA) and its subsidiaries. Since voluntarily publishing its first Sustainability Report in 2013, SIA has remained committed to disclosing its sustainability-related information in a transparent and timely manner.

At SIA, every act counts towards the Airline's sustainability goals. This is a priority for the SIA Group, and it understands that sustainability is important to its customers, stakeholders, shareholders, and employees. The SIA Group recognises the role it plays in sustainable development, and works closely with all stakeholders to integrate sustainability across its operations. As part of this effort, SIA engages in sustainability reporting to better communicate its management's approach, and the performance of material economic, environmental, social, and governance topics with its stakeholders. This also enables SIA to identify opportunities to better measure, monitor, and manage these sustainability topics across the organisation.

## Reporting Framework and Initiatives

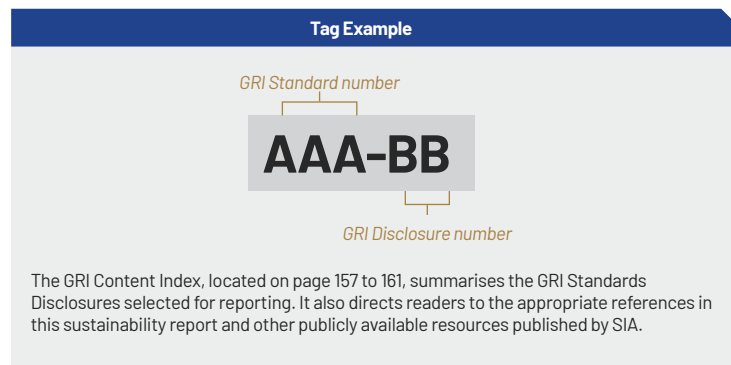
### Singapore Exchange (SGX) Sustainability Reporting Listing Rules and Guide

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

### Global Reporting Initiative (GRI)

This report has been prepared in accordance with the GRI Universal Standards 2021. The GRI Standards were selected as it represents the global best practice for reporting on an organisation's sustainability impacts.

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



### Taskforce for Climate-related Financial Disclosures (TCFD) Recommendations

A set of disclosures on climate risks and opportunities has been included in this report, based on the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). This is in line with SGX's phased approach to mandatory climate reporting for all issuers on a "comply or explain" basis from FY2022/23. The TCFD Content Index, located on page 162, summarises the TCFD disclosures reported, and directs readers to the appropriate references in this sustainability report and other publicly available resources published by SIA.

### United Nations (UN) Global Compact



SIA is a signatory to the Ten Principles of the UN Global Compact. The report serves as SIA's Active Communication on Progress (COP), which details efforts to embed the Ten Principles into its business strategies and operations.

The following are the tags used throughout the 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 this report, the key contributions to the SDGs are mapped out through the management of SIA's material sustainability topics.

The following are the icons used in the report whenever a section aligns with an SDG:

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

# ABOUT THIS REPORT (CONTINUED)

## Reporting Period 2-3

The reporting period covers SIA's financial year 2022/23 (FY2022/23) from 1 April 2022 to 31 March 2023. Data and information from past reporting cycles have been included where available. This report is published annually on a timely basis, with the last report published in June 2022.

## Reporting Scope 2-2

The SIA Group's business is organised and managed separately according to the nature of services provided. All sustainability data and information presented in this report relate to two of reportable businesses – SIA and Scoot – unless otherwise stated.




Sustainability data and information relating to Singapore Airlines Engineering Company (SIAEC), a subsidiary, is disclosed separately in SIAEC's Sustainability Report, which is published annually.

## Reporting Quality 2-5

While SIA has not sought external assurance for its sustainability report, there are systems in place to assess the quality of the data and information reported. Since its first Sustainability Report published in 2013, SIA has worked with external consultants to perform an annual gap analysis to improve the quality of the report.

In accordance with Rule 711B of the SGX Listing Manual, an external consultant was also appointed to conduct a review on the sustainability reporting processes for identified key material topics (material ESG factors) in this sustainability report. All recommendations were followed up by SIA's Internal Audit Division to ensure that SIA's Management has implemented them in a timely manner for the FY2022/23 Sustainability Report, with the results reported to SIA's Audit Committee.

In compliance with the International Civil Aviation Organization (ICAO), as well as the European Union and the United Kingdom's Emissions Trading System (ETS), SIA's carbon emissions reporting is subjected to external assurance by an accredited verifier.

Organisation	Description of Services	Coverage in this SR
	SIA provides passenger and cargo air transportation with a focus on the full-service passenger segment. Following the successful integration of SilkAir into SIA in September 2021, SIA's operational information includes data from SilkAir.	●
	Scoot provides passenger air transportation with a focus on the low-cost passenger segment.	●
	SIAEC provides airframe maintenance and overhaul services, line maintenance, technical ground handling services and fleet management. It also manufactures aircraft cabin equipment, refurbishes aircraft galleys, provides technical and non-technical handling services, and repair and overhaul of hydro-mechanical aircraft equipment.	●
<b>Others</b>	Other services provided by the SIA Group, such as tour activities and sale of merchandise, have been aggregated under the segment 'Others'.	●

● In scope    ● Not in scope

This report should be read in tandem with the [SIA Annual Report FY2022/23](#) and [SIAEC Sustainability Report FY2022/23](#) for a more comprehensive overview of the SIA Group's sustainability performance.




# ABOUT SINGAPORE AIRLINES

Since its establishment in 1947, SIA's commitment to service excellence, product leadership, and network connectivity has distinguished it as a world-class international airline.

Despite the unprecedented challenges faced during the Covid-19 pandemic, SIA adapted and emerged stronger, seizing opportunities to reinforce its position as a global leader during the year.

## FY2022/23 Numbers for the SIA Group<sup>2</sup>



**26.49 million**  
passengers carried



**85.4%**  
passenger load factor



**133,032 million**  
capacity (available seat-kilometres)



**195**  
fleet size<sup>3</sup>



**113,628 million**  
passenger traffic (revenue passenger-kilometres)



**114**  
destinations<sup>4</sup>

## Core Values 2-23



**Excellence**



**Care**



**Safety**



**Integrity**



**Customer-focus**



**Teamwork**

## Mission Statement

SIA 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.

## Principal Activities 2-6

The SIA Group's principal activities consist of passenger and cargo air transportation, engineering services, as well as other services such as tour activities and sale of merchandise.

## Memberships 2-28

SIA is 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. SIA is also represented in various committees and working groups as part of its memberships in these groups.

## SIA's Sustainability Journey

SIA began its sustainability journey in the early 1990s to build environmental awareness. The Group published its first sustainability report in 2013, ahead of SGX introducing sustainability reporting on a "comply or explain" basis in June 2018.

Over the years, SIA continued to enforce its sustainability strategy. It established a dedicated Sustainability Office in 2019, and progressively strengthened its ESG performance. Notably, SIA pledged to achieve net zero carbon emissions by 2050 in May 2021, and was the first airline to sign the Global Sustainable Aviation Fuel declaration in February 2022, committing to accelerate the development, production, and consumption of SAF. In 2021, SIA also embarked on a one-year joint feasibility study on SAF supply chain in Singapore with CAAS, Temasek, Changi Airport Group (CAG) and other stakeholders. Following this, SIA undertook another one-year partnership with CAAS and GenZero to operationalise the use of SAF in Singapore in 2022.

For more details on SIA's sustainability initiatives, please refer to previous [sustainability reports](#).

<sup>2</sup> As of 31 March 2023. For more information, please refer to the SIA Annual Report FY2022/23.

<sup>3</sup> Includes seven SIA freighter aircraft, and excludes two of SIA passenger aircraft that have been delivered but have yet to enter into service.

<sup>4</sup> Figure refers to the total number of unique destinations (including Singapore) served by passenger and freighter aircraft operated by the SIA Group of airlines as of 31 March 2023. 109 destinations served by passenger aircraft and 19 destinations served by freighter aircraft. Excludes destinations we have temporarily stopped flying to due to either the Covid-19 pandemic or other operational reasons.

# FLEET MANAGEMENT AND NETWORK

2-1 2-6 3-3

As of 31 March 2023, the Singapore Airlines Group's passenger and freighter network covered 114 destinations<sup>5</sup>.

Destination	Airline	Destination	Airline	Destination	Airline	Destination	Airline
<b>THE AMERICAS</b>		Fuzhou	▶	Ho Chi Minh City	▶ ▶	Christchurch	▶
Anchorage	▶	Guangzhou	▶ ▶ ▶	Ipoh	▶	Darwin	▶
Dallas / Fort Worth	▶	Hangzhou	▶	Jakarta	▶ ▶	Gold Coast	▶
Houston	▶	Hong Kong SAR	▶ ▶ ▶	Kota Kinbalu	▶	Melbourne	▶ ▶ ▶
Los Angeles	▶ ▶	Jeju	▶	Krabi	▶	Perth	▶ ▶
New York (John F. Kennedy)	▶	Macao SAR	▶	Kuala Lumpur	▶ ▶	Sydney	▶ ▶ ▶
New York (Newark Liberty)	▶	Nagoya	▶	Kuantan	▶	<b>WEST ASIA AND AFRICA</b>	
San Francisco	▶	Nanjing	▶	Kuching	▶	Ahmedabad	▶
Seattle	▶	Osaka	▶ ▶	Langkawi	▶	Amritsar	▶
Vancouver	▶	Osaka	▶ ▶	Lombok	▶	Bengaluru	▶ ▶
<b>EUROPE</b>		Qingdao	▶	Makassar	▶	Cape Town	▶
Amsterdam	▶ ▶	Sapporo	▶	Manado	▶	Chennai	▶ ▶
Athens	▶	Seoul	▶ ▶	Manila	▶ ▶	Coimbatore	▶
Barcelona	▶	Shanghai	▶ ▶ ▶	Medan	▶	Colombo	▶
Berlin	▶	Taipei	▶ ▶	Miri	▶	Delhi	▶
Brussels	▶ ▶	Tianjin	▶	Pekanbaru	▶	Dhaka	▶
Copenhagen	▶	Tokyo (Haneda)	▶	Penang	▶ ▶	Dubai	▶
Frankfurt	▶	Tokyo (Narita)	▶ ▶	Phnom Penh	▶	Hyderabad	▶ ▶
Istanbul	▶	Zhengzhou	▶	Phuket	▶ ▶	Jeddah	▶
London	▶ ▶	<b>SOUTH EAST ASIA</b>		Siem Reap	▶	Johannesburg	▶ ▶
Manchester	▶	Balikpapan	▶	Singapore	▶ ▶ ▶	Kathmandu	▶
Milan	▶	Bandar Seri Begawan	▶	Surabaya	▶ ▶	Kochi	▶
Munich	▶	Bangkok	▶ ▶	Vientiane	▶	Kolkata	▶
Paris	▶	Cebu	▶ ▶	Yangon	▶	Male	▶
Rome	▶	Chiang Mai	▶	Yogyakarta	▶	Mumbai	▶ ▶
Zurich	▶	Clark	▶	<b>SOUTH WEST PACIFIC</b>		Nairobi	▶
<b>NORTH ASIA</b>		Da Nang	▶	Adelaide	▶	Sharjah	▶
Beijing	▶	Davao	▶ ▶	Auckland	▶ ▶	Tiruchirappalli	▶
Chengdu	▶	Denpasar (Bali)	▶ ▶	Brisbane	▶	Trivandrum	▶
Fukuoka	▶	Hanoi	▶ ▶	Cairns	▶	Visakhapatnam	▶
		Hat Yai	▶				

**Singapore Airlines**

**74 destinations**

**Scot**

**58 destinations**

**Singapore Airlines (Freighter Aircraft)**

**19 destinations**

Details on our route network can be found on [SIA](#) and [Scot's](#) websites respectively.

**Legend**

- ▶ Singapore Airlines
- ▶ Scot
- ▶ Singapore Airlines (Freighter Aircraft)

<sup>5</sup> Figure refers to the total number of unique destinations (including Singapore) served by passenger and freighter aircraft operated by the SIA Group of airlines as of 31 March 2023. There are 109 destinations served by passenger aircraft and 19 destinations served by freighter aircraft. Excludes destinations the SIA Group have temporarily stopped flying due to either the Covid-19 pandemic or other operational reasons.



## FLEET MANAGEMENT AND NETWORK (CONTINUED)

### Network Changes 2-6

In FY2022/23, air travel rebounded strongly as borders continued to open up. In response to the easing of travel restrictions in its key markets, SIA and Scoot rapidly restored passenger services in its respective networks. The Group was able to raise its passenger capacity to 79% of pre-Covid levels by March 2023, following the progressive reopening of Singapore's borders from 1 April 2022.

The robust recovery in travel tourism led to SIA adding new services and increasing frequencies to markets globally. As a result, the Group restored its passenger network to 109 destinations, or 80% of its pre-Covid network. As of 31 March 2023, SIA operated 913 weekly services to 74 destinations, including Singapore. Scoot operated 481 weekly frequencies to 58 destinations, including Singapore.

Authorities around the world continued to relax their international border restrictions in FY2022/23. On 13 February 2023, Singapore lifted its remaining Covid-19 border measures, where inbound travellers were not required to show proof of vaccination status, negative pre-departure test result, or travel insurance. The SIA Group will continue to build and adapt its network in an agile and nimble manner, as it emerges from the pandemic.

### Fleet Information<sup>6</sup> 2-6

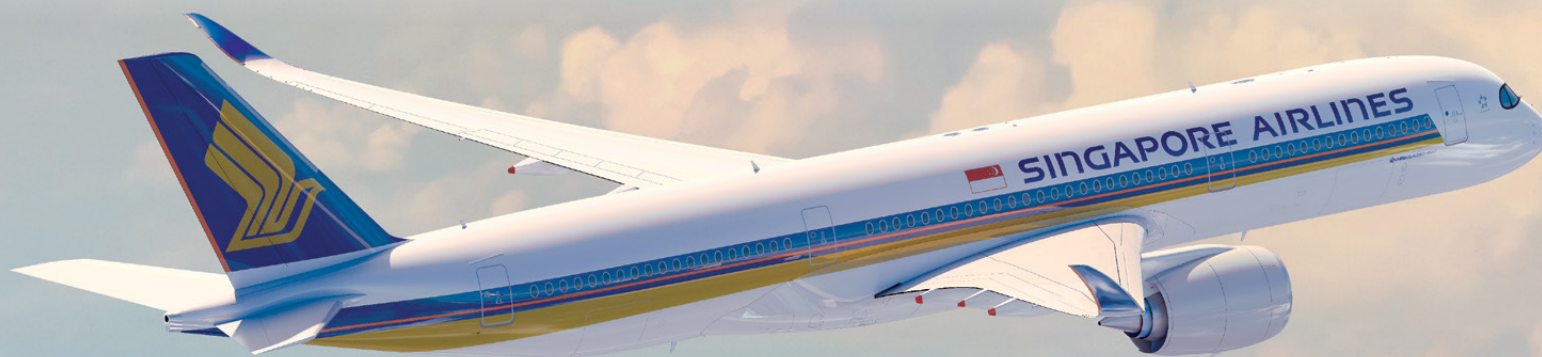
**The SIA Group's 195-strong fleet<sup>7</sup> is one of the most modern and fuel-efficient in the world.**

The SIA Group remains committed to operating a modern and fuel-efficient fleet.

To enhance its regional network connectivity and unlock new growth opportunities, Scoot signed a Letter of Intent in February 2023 to add nine new Embraer E190-E2 aircraft to its fleet. Scoot will be the first carrier in Singapore to operate the Embraer E190-E2, which will be deployed on short- and medium-haul flights of up to five hours. This complements the larger Airbus A320 Family and Boeing 787 aircraft in Scoot's fleet, serving thinner routes to non-metro destinations out of Singapore. The first E190-E2 is expected to be delivered in 2025, with the other eight to be progressively introduced by the end of 2025.

In March 2023, the SIA Group reached an agreement with Boeing to adjust its aircraft order book. This involved swapping three Boeing 787-9s for three Boeing 787-10s, and cancelling orders for eight Boeing 737-8s. These adjustments are in line with the Group's long-term fleet renewal strategy to support its projected operational requirements.

The SIA Group will continue to review its aircraft fleet needs to operate the right vehicles to the right markets, to improve operational efficiencies and reduce emissions, as well as to strengthen Singapore's position as a leading air hub.



<sup>6</sup> Information as of 31 March 2023.

<sup>7</sup> Operating fleet includes aircraft that have been parked temporarily, and excludes aircraft that have been delivered but have yet to enter commercial service.

# FLEET MANAGEMENT AND NETWORK (CONTINUED)








## The SIA Group Aircraft Fleet<sup>8</sup>

The average age of the SIA Group's operating fleet is six years and nine months as of 31 March 2023.

**Singapore Airlines (Passenger Aircraft)**

AVERAGE FLEET AGE



**6** years **2** months | **133** in fleet **63** on order

<p>AIRBUS A350-900</p> <p><b>61</b> in fleet<sup>9</sup> <b>3</b> on order</p> 	<p>AIRBUS A380-800</p> <p><b>12</b> in fleet</p> 
<p>BOEING 737-8</p> <p><b>15</b> in fleet<sup>10</sup> <b>13</b> on order</p> 	<p>BOEING 737-800 NG</p> <p><b>7</b> in fleet</p> 
<p>BOEING 777-300ER</p> <p><b>23</b> in fleet</p> 	<p>BOEING 777-9</p> <p><b>31</b> on order</p> 
<p>BOEING 787-10</p> <p><b>15</b> in fleet <b>16</b> on order</p> 	

**Singapore Airlines (Freighter Aircraft)**

AVERAGE FLEET AGE






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

<p>AIRBUS A350F</p> <p><b>7</b> on order</p> 	<p>BOEING 747-400F</p> <p><b>7</b> in fleet</p> 
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**Scoot (Passenger Aircraft)**

AVERAGE FLEET AGE

**6** years **8** months | **55** in fleet **31** on order

<p>AIRBUS A320CEO</p> <p><b>20</b> in fleet</p> 	<p>AIRBUS A320NEO</p> <p><b>6</b> in fleet <b>12</b> on order</p> 
<p>AIRBUS A321NEO</p> <p><b>9</b> in fleet <b>6</b> on order</p> 	<p>BOEING 787-8</p> <p><b>10</b> in fleet <b>3</b> on order</p> 
<p>BOEING 787-9</p> <p><b>10</b> in fleet <b>1</b> on order</p> 	<p>EMBRAER E190-E2</p> <p><b>9</b> on order</p> 

Aircraft images courtesy of Yucca Studio and SPHM.

<sup>8</sup> Operating fleet includes aircraft that have been parked temporarily, and excludes aircraft that have been delivered but have yet to enter commercial service.

<sup>9</sup> Excludes one Airbus A350-900 that has been delivered, but has yet to enter commercial service.

<sup>10</sup> Excludes one Boeing 737-8 that has been delivered, but has yet to enter commercial service.

# SUSTAINABILITY GOVERNANCE

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## Board Statement 2-22

The Board recognises the importance of sustainability. It steers the Management Committee (MC) in ensuring that SIA's long-term value creation is achieved with Environmental, Social, and Governance (ESG) 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.

## SIA's Sustainability Governance Structure and Composition 2-9 2-12 2-13 2-14 2-17

To achieve its sustainability goals, the Group has established clear lines of accountability to enable it to make effective and meaningful decisions. Under the guidance of the Board and MC, the Sustainability Office (SO) manages day-to-day sustainability matters and spearheads the Group's sustainability initiatives and agenda.

### Board of Directors

The Board's Customer Experience, Technology, and Sustainability Committee (CETSC) provides guidance on sustainability management by developing a strategic roadmap for ESG factors. Sustainability risks are overseen and assessed by the Board's Safety and Risk Committee (BSRC), as part of the [SIA Risk Management Framework](#). In addition, the Board's Audit Committee (AC) reviews all significant audit findings reported by the appointed external consultant. These include the review of sustainability reporting processes, recommendations made and Management's responses thereto, as well as the implementation status of audit recommendations.

The Board is regularly updated by the CETSC, the Sustainability Steering Committee (SSC), and the MC on material ESG factors, sustainability disclosures, regulatory developments, and progress on sustainability initiatives. The CETSC holds quarterly meetings to review key sustainability matters that may impact business strategies and plans. Any changes to Board statements, material ESG factors, and SIA's strategic roadmap are also reviewed and validated during these sessions.

SIA acknowledges the importance for Board members to have sufficient understanding on sustainability issues to effectively discharge their duties and carry out their role of sustainability governance. In FY2022/23, in line with the updated SGX requirements for financial years beginning on or after 1 January 2022, all Directors have completed training on sustainability matters as prescribed by SGX. This training will help widen their sustainability knowledge and keep them abreast of the latest regulatory developments and topics related to sustainability.

*For more information on Board responsibilities, composition, and diversity, please refer to page 12 to 15 and page 68 to 74 of the SIA Annual Report FY2022/23.*

### Management Committee

SIA's Chief Executive Officer (CEO), assisted by the MC, makes strategic proposals to the Board and oversees the execution of the Board's decisions, with direct oversight of the Sustainability Office. The MC is also responsible for the periodic review and assessment of the potential and actual impact of SIA's

activities on the economy, environment, and people. The MC, supported by the Sustainability Office, also conducts an annual review of material ESG factors arising from changes in business activities, targets and performance, initiatives, and oversees the publication of the Sustainability Report. The MC updates the CETSC on significant developments and key sustainability matters.

To lead the SIA Group's sustainability agenda, Senior Vice President Corporate Planning, Ms Lee Wen Fen, was concurrently appointed as the Group's first Chief Sustainability Officer (CSO) on 1 January 2023. Ms Lee has led various sustainability initiatives on behalf of the Group, most notably the SAF pilot with CAAS and Temasek to study and operationalise the deployment of SAF in Singapore.

### Sustainability Steering Committee

Chaired by the CSO, the Sustainability Steering Committee (SSC) comprises Senior Vice Presidents directly involved in sustainability matters, who work together to spearhead SIA's sustainability pursuits. The SSC, through the Sustainability Office, provides updates 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 (BUs), drives SIA's sustainability strategies and initiatives. The SSWC reviews the effectiveness and execution of sustainability initiatives across the Group.

### Sustainability Office

Led by Vice President Sustainability, the Sustainability Office is responsible for managing day-to-day sustainability matters at SIA. It is involved in policy planning and the coordination of Group-wide sustainability efforts, engaging partners and suppliers in these efforts. In addition to its role as the secretariat for the SSC and SSWC, the Sustainability Office is also responsible for reporting sustainability matters to the respective board and management committees once every quarter, as well as to the Board and the MC where necessary.

## SUSTAINABILITY POLICY, COMMITMENT, AND STRATEGY 2-23 2-24

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 its 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 the sustainable use of energy and resources, and conservation of biodiversity<sup>11</sup>.

### Supporting our Communities

- We practise good corporate citizenship and contributes 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 network.
- **Employees** - We value our employees and care for their safety, wellbeing and career development, while also 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 emphasises fairness in our relationships with them. The SIA Suppliers' Code of Conduct sets a comprehensive framework that our suppliers are required to adhere to.

Our sustainability commitments outlined above ensures responsible business conduct is implemented across our business.



### Enabling Responsible Business Conduct

- SIA has developed a set of corporate policies to ensure that ethical conduct is practised across the Company's activities, and business relationships where applicable. These policies include Employees' Code of Conduct, Suppliers' Code of Conduct, Anti-corruption and Anti-bribery policy, Whistleblowing policy, Anti-modern Slavery and Human Trafficking statement, and Risk Management framework that are approved at Senior Management level or above. SIA's corporate policies are adapted across the SIA Group based on business needs.
- More information on the SIA's corporate policies can be found in the Governance and Suppliers chapters on page 108 and 115 respectively, which are also available on the corporate [website](#)<sup>12</sup>.




*For more details on how policy commitments are embedded throughout SIA's business activities and operations, please refer to the individual chapters and the management of material topics.*

<sup>11</sup> SIA applies the precautionary principle in its climate change strategy to reduce and mitigate its potential and actual negative impacts. The precautionary principle is set out in the Principle 15 of the UN Rio Declaration on Environment and Development. It states: 'Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.'




<sup>12</sup> Employees' Code of Conduct and Anti-Corruption policy are not publicly available due to confidentiality.

# STAKEHOLDER ENGAGEMENT 2-29

SIA recognises that its stakeholders play a huge part in the shared journey towards achieving long-term success in the area of sustainability, and has established an internal task force to respond to stakeholders' concerns. Through regular engagement with all stakeholders, SIA gains a better understanding of their key concerns, expectations, and topics of interest, guiding it in its sustainability practices and strategies.

Stakeholder	Engagement Platforms	Topics of Interest	SIA's Response
<b>Shareholders</b> 	Regular analyst and media briefings on financial results, and frequent dialogues	<ul style="list-style-type: none"> <li>Economic performance and long-term value creation</li> </ul>	<ul style="list-style-type: none"> <li>Providing timely and consistent disclosures on pertinent, price-sensitive, and trade-sensitive information to enable transparent assessment of the Company's value</li> <li>Active participation in dialogues and engagements to keep shareholders and the investing community abreast of latest developments</li> </ul>
<b>Employees</b> 	Regular meetings and townhall sessions, annual employee surveys, internal communications activities, and ad hoc engagement sessions	<ul style="list-style-type: none"> <li>Workplace health and safety, and work environment-related concerns</li> <li>Career planning and development schemes, and available resources</li> <li>Employee policies, well-being, welfare, and activities</li> <li>Performance of the Airline and the SIA Group</li> </ul>	<ul style="list-style-type: none"> <li>Fostering a strong safety culture through initiatives such as Safety and Security week</li> <li>Updating employees on relevant topics, helping them with their personal development and career growth, as well as incorporating employee feedback in SIA's policy reviews</li> <li>Promoting a healthy work environment, informed by regular feedback, through the revamp and upgrade of its risk management framework and enhancement of its safety policies and procedures</li> </ul>
<b>Customers</b> 	Regular engagements through various digital and print communication channels, customer feedback surveys and focus groups	<ul style="list-style-type: none"> <li>Quality and variety of SIA's products and services</li> <li>End-to-end customer journey</li> </ul>	<ul style="list-style-type: none"> <li>Maintaining open lines of communication with customers to understand their needs and identify opportunities to improve the quality and variety of products and services</li> <li>Improving service quality and customer satisfaction scores by taking into consideration feedback from customer surveys, and providing appropriate service recovery to maintain customer's confidence in SIA</li> <li>Leveraging data analytics to improve customer insights gathered across various touchpoints, and monitor customer sentiments and experiences</li> </ul>

## STAKEHOLDER ENGAGEMENT (CONTINUED)

Stakeholder	Engagement Platforms	Topics of Interest	SIA's Response
<b>Suppliers and Partners</b> 	Regular and ad hoc meetings with suppliers and partners	<ul style="list-style-type: none"> <li>Suppliers' performance and practices</li> <li>Suppliers' waste management strategies, including data collection and operational concerns</li> </ul>	<ul style="list-style-type: none"> <li>Maintaining regular engagement with suppliers and partners to ensure smooth operations in the supply chain</li> <li>Developing a more efficient and better customer experience by acting on feedback from stakeholders</li> <li>Developing waste management strategies that balances sustainability needs and operational constraints</li> </ul>
<b>Community</b> 	Regular community engagement through corporate donations, sponsorships, and staff volunteerism	<ul style="list-style-type: none"> <li>Contributions and support towards social and environmental causes in local communities where SIA serves around the world</li> </ul>	<ul style="list-style-type: none"> <li>Implementing one Corporate Social Responsibility (CSR) Day per calendar year for all Singapore-based SIA employees, and up to eight hours of volunteering time-off per month for Singapore-based Scoot employees, to contribute back to the community through staff volunteerism</li> <li>Maintaining a CSR portal for Singapore-based SIA employees to participate in monthly activities to support corporate beneficiaries such as the youth, low-income, and disabled</li> <li>Monitoring employee participation, community service projects, and the number of beneficiaries supported</li> </ul>
<b>Unions, Trade Associations, and Industry Experts</b> 	Regular briefings, dialogues, and townhall sessions	<ul style="list-style-type: none"> <li>Industry collaboration and promotion of sustainable growth</li> <li>Workforce improvement, positioning SIA to meet challenges</li> <li>Compliance with applicable laws and regulations</li> </ul>	<ul style="list-style-type: none"> <li>Maintaining close coordination and collaboration with the Singapore Government, authorities, unions, and trade associations</li> <li>Participation in Star Alliance, IATA, AAPA, SAFUG, Air Transport Action Group (ATAG), and Roundtable on Sustainable Biomaterials (RSB)</li> </ul>

Please refer to the subsequent sections for more information on shareholders, and the individual chapters for more details on how SIA engages with its stakeholders.

# MATERIALITY

3-1

3-2

3-3

## SIA identifies and prioritises the sustainability topics that matter most to the Group and its stakeholders.

SIA's relationship with entities across its value chain has an impact on its stakeholders and the environment. SIA conducted its inaugural Materiality Assessment in 2013, covering its operations in Singapore to assess the Company's sustainability impacts, as well as concerns and expectations of its key stakeholders. A review of material topics was undertaken in 2017.

In FY2022/23, SIA conducted a materiality assessment to refresh its material topics taking into account recent industry developments, changing stakeholder expectations, and air travel recovery. Through research on relevant sustainability matters, as well as internal and external stakeholder surveys, the final material topics were prioritised, validated, and endorsed by CETSC. Compared to the earlier assessments, the new list of topics is more detailed and better facilitates the management of potential ESG issues. Nonetheless, the broad coverage of material topics remained consistent with the seven material areas identified in 2017.

The full materiality assessment process and the 14 material topics identified are summarised in the following section.

### SIA Materiality Assessment Process

#### 1. Identification

Preliminary sustainability matters are identified based on market research, regulatory requirements, and leading sustainability practices, along with an internal review of SIA's business strategy.

#### 2. Assessment and Ranking

Through an unbiased and anonymous survey, internal and external stakeholders are engaged to assess and rank the likelihood and impact of each topic identified on SIA's business and operations.

#### 3. Prioritisation and Validation

Topics are prioritised and mapped onto a matrix based on the likelihood and impact of the topic. The matrix is presented to the Board and the MC for validation and endorsement.





#### 4. Review

Sustainability topics are reviewed by the Board and the MC annually. A re-assessment of material topics was conducted in FY2022/23.

### SIA Material Topics FY2022/23

- Economic Performance and Value Creation
- Fleet Management and Network
- Energy and Greenhouse Gas (GHG) Emissions Management
- Resilience to Climate Change
- Packaging, Materials, and Waste Management
- Flight Safety and Security
- Brand Management and Reputation
- Customer Experience and Satisfaction
- Employee Health, Safety, and Well-being
- Corporate Governance and Ethics
- Compliance with Laws and Regulations
- Crisis Management
- Data Privacy and Cyber Security
- Sustainable Supply Chain Management



















# MATERIALITY (CONTINUED)

Chapter	Material Topic	Goals and Targets	Potential Negative and Positive Impact on Economy, Environment, People	Relevant SDGs
Introduction	<b>Economic Performance and Value Creation</b> 	<ul style="list-style-type: none"> <li>Maximise returns for long-term profitability, with the aim of creating sustainable shareholder value</li> </ul>	The aviation sector facilitates passenger and cargo air transportation, and supports international trade and global economic growth. It creates jobs, improving the livelihoods of local communities. However, poor economic performance may limit research and development efforts, as well as investments in technological advancements, potentially impeding the progress to decarbonise the hard-to-abate, emissions intensive sector.	 
	<b>Fleet Management and Network</b> 	<ul style="list-style-type: none"> <li>Maintain a modern and fuel-efficient fleet, and grow the Group's network connectivity</li> </ul>	Enhancing fleet management and network can improve operational efficiencies and increase global connectivity, bringing about socio-economic benefits to local communities. However, an increase in the demand for air traffic would increase carbon emissions, given that alternative propulsion and fuels are not commercially viable in the short- and medium-term.	  
Environment	<b>Energy and GHG Emissions Management</b> 	<ul style="list-style-type: none"> <li>Achieve net zero carbon emissions by 2050</li> <li>Achieve industry's carbon neutral growth 2020 through participation in Carbon Offset and Reduction Scheme for International Aviation (CORSIA)</li> <li>Achieve a 10% reduction in energy consumption from SIA-owned buildings from FY2019/20 levels, by FY2029/30</li> </ul>	Efforts to improve energy-efficiency operations will reduce overall emissions, supporting climate change mitigation efforts. However, the heavy reliance on fossil fuels in the aviation industry will contribute to environmental degradation.	   
	<b>Resilience to Climate Change</b> 	<ul style="list-style-type: none"> <li>Achieve Building and Construction Authority (BCA) Green Mark accreditation for SIA-owned buildings in Singapore by FY2026/27</li> </ul>	Efforts to strengthen climate resilience brings about opportunities to create jobs and adopt alternative low-carbon, resource-efficient technologies. However, the lack of adequate measures to manage the impact of extreme weather conditions and heat stress could result in operational disruptions, posing risks to the health and safety of workers and travellers.	   
	<b>Packaging, Materials, and Waste management</b> 	<ul style="list-style-type: none"> <li>Conduct annual reporting of packaging materials used and 3R plan to the National Environment Agency (NEA) under the Mandatory Packaging Reporting (MPR) scheme</li> </ul>	Effective waste management practices can help to reduce the amount of waste generated, protect public health, and promote sustainable consumption patterns. However, improper handling and management of waste could have significant impacts on local communities living near landfills, and can result in ecosystem pollution, affecting wildlife.	     

**Legend:**  Economic  Environment  Social  Governance























# MATERIALITY (CONTINUED)

Chapter	Material Topic	Goals and Targets	Potential Negative and Positive Impact on Economy, Environment, People	Relevant SDGs
Safety	<b>Flight Safety and Security</b> 	<ul style="list-style-type: none"> <li>Conduct an IATA Operational Safety Audit (IOSA) once every two years</li> <li>Conduct a Hazard Identification and Risk Assessment (HIRA) for workplace once every three years</li> <li>Conduct at least two fire evacuation drills for each office location in Singapore annually</li> </ul>	Improved health, safety, and security standards in the aviation sector can reduce the risk of incidents and maintain stakeholders' confidence. However, any occurrence of incidents could lead to injuries, loss of lives, and wide-spread security breaches with repercussions on the aviation industry.	  
	<b>Brand Management and Reputation</b> 	<ul style="list-style-type: none"> <li>Endeavour to provide customers with the highest quality air transportation experience through service excellence and proactive customer engagement</li> </ul>	Building a responsible, positive brand reputation can attract more customers and strengthen relations with stakeholders. On the flip side, poor brand reputation can increase exposure to risks of litigation and liability which could have an indirect negative impact on aviation and wider economy the sector supports.	  
Customers	<b>Customer Experience and Satisfaction</b> 		Cultivating a positive and inclusive customer experience can increase customer sentiment and loyalty in tandem with an uptick in value-driven consumption choices. On the other hand, a negative customer experience can result in the loss of trust and confidence in the company or aviation sector.	 
Employees	<b>Employee Health, Safety and Well-being</b> 	<ul style="list-style-type: none"> <li>At least 25% female employees in senior positions (VPs and above) by FY2025/26</li> <li>At least 25% increase in the number of female pilots from FY2020/21 levels, by FY2025/26</li> <li>100% completion of the UPLIFT suite for SIA ground staff by FY2022/23</li> </ul>	Improving workplace health and safety standards, and promoting employee well-being, diversity, and training within the aviation sector can promote a healthier, motivated, and productive workforce. On the other hand, inadequate management of employees' well-being and working conditions can lead to the exploitation of employees and the violation of human rights.	     

**Legend:**  Economic  Environment  Social  Governance

# MATERIALITY (CONTINUED)

Chapter	Material Topic	Goals and Targets	Potential Negative and Positive Impact on Economy, Environment, People	Relevant SDGs
Governance	<b>Corporate Governance and Ethics</b> 	<ul style="list-style-type: none"> <li>At least 95% of the Group's employees to complete the anti-corruption web-based training by due date, annually</li> </ul>	Robust corporate governance and risk management practices provide a platform for businesses to make informed decisions, building confidence in stakeholders. If not properly managed, it can raise serious concerns on business ethics, which impacts the company's reputation, as well as the ability to attract customers and talents, making it a challenge to remain relevant in the market.	 
	<b>Compliance with Laws and Regulations</b> 	<ul style="list-style-type: none"> <li>Strives to ensure compliance with regulatory laws and corruption</li> </ul>	Promoting a fair business environment, and implementing appropriate practices and minimum standards for operations help to support the maintenance and growth of the aviation sector. On the other hand, failure to adhere to the laws and regulations could impact business, industry, economy, and society as a whole, including disruptions to supply chains.	  
	<b>Crisis Management</b> 	<ul style="list-style-type: none"> <li>Conduct an annual crisis management exercise</li> </ul>	Effective crisis management can improve relationships and trust with stakeholders. Having an inadequate crisis management system will not only cause disruptions to operations, but could lead to catastrophic events with cascading effects on the environment and surrounding communities.	  
	<b>Data Privacy and Cyber Security</b> 	<ul style="list-style-type: none"> <li>Conduct regular cybersecurity tabletop exercises</li> <li>Conduct annual training for staff on customer data protection</li> </ul>	Establishing a robust data protection system can prevent identity theft and other fraudulent activities that impact customers and secondary business connections and networks. Failure to uphold stringent standards and lack of transparency on the use of customer data exposes customers to risks of breaches in personal data privacy.	
Suppliers	<b>Sustainable Supply Chain Management</b> 	<ul style="list-style-type: none"> <li>Strives to collaborate with suppliers to work towards a sustainable supply chain</li> </ul>	Improvements made to social and labour conditions across the value chain can ensure that workers are treated fairly while contributing to the economic prosperity of local communities. The incorporation of environmental considerations while sourcing can ensure that international, national, and industrial level sustainable development goals are met. However, if not properly managed, it could lead to supply chain disruptions and increased exposure to the risks of human rights abuses and growing supply chain emissions.	     

**Legend:** Economic (light blue), Environment (light green), Social (light orange), Governance (light purple)

# SHAREHOLDERS

SIA strives to generate and distribute economic value to its shareholders and stakeholders sustainably, while ensuring long-term value creation.

## SIA's MANAGEMENT APPROACH



### Key Engagement Activities

Engagement Mode	Frequency
Analyst and Media Briefings	Half-yearly or as required
Announcement on Business Updates	First quarter and third quarter
Announcement on Financial Results	Half-yearly or as required
Annual General Meeting	Yearly
Annual Report, Sustainability Report	Yearly
Extraordinary General Meeting	As required
Investor Relations Channels (Email, Hotline)	Regular
Meetings or Virtual calls (Post-result and Business Update Briefings, Investor Conferences, Roadshows)	Regular
News Releases (SGXNet, Company Website)	As required



### SIA's Ambition

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

### FY2022/23 in Numbers

**\$8,154.6 million**  
total value added for distribution

### Supporting the UN SDGs



## SHAREHOLDERS (CONTINUED)

### Economic Performance and Value Creation 3-3 201-1

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

Through the provision of holistic and robust financial and non-financial information, SIA's investors and shareholders can obtain a clear picture of how the Group creates long-term value for itself and its stakeholders. Despite the challenges faced in recent years, SIA is grateful for the strong support of its shareholders, which has laid a strong foundation for the Group's long-term success.

### Communications With Shareholders

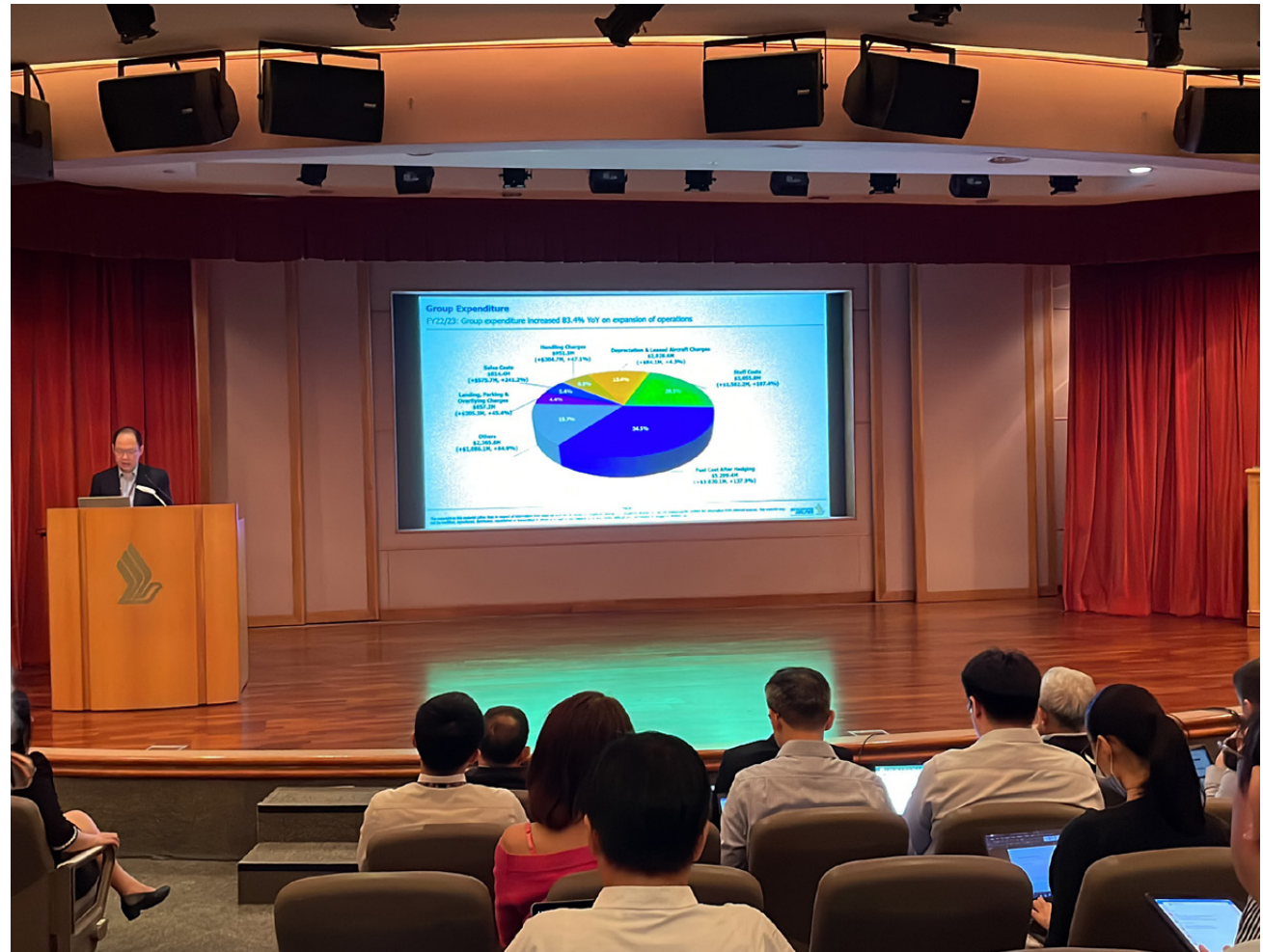
SIA is committed to continually strengthen its relationship with the investing community and believes in the timely and consistent disclosure of pertinent, price-sensitive, and trade-sensitive information to enable a transparent assessment of the Company's value. The Company holds analyst and media briefings when announcing its half-year and full-year results.

The Company gradually resumed physical briefings for analysts and media in FY2022/23, allowing overseas-based analysts and media to participate virtually. The audio webcasts are uploaded onto the Company's website under the [Investor Relations](#) section, and transcripts of the Question and Answer segment are published on SGXNet and the [Analyst Briefing](#) webpage.

All financial results as well as price-sensitive and trade-sensitive information are released in a timely manner through various platforms, including disclosures via SGXNet and news releases posted on the Company's website. SIA's website is an important source of information for shareholders and the investing community. Quarterly business updates, half-year and full-year results announcements, news releases, presentation slides, monthly operating statistics, annual reports, sustainability reports, and other key facts and figures about the Company are available on the website.

The Company values dialogue with the investing community, and the Investor Relations department frequently engages with analysts and investors through conference calls and emails. The team also actively participates in investor conferences to keep the investing community abreast of relevant developments. A dedicated investor relations email address ([investor\\_relations@singaporeair.com.sg](mailto:investor_relations@singaporeair.com.sg)) is maintained for shareholders and investors to reach out to the Company for queries.

For more information on SIA's shareholdings, please refer to page 217 and 218 in the SIA Annual Report FY2022/23.



# SHAREHOLDERS (CONTINUED)

## Inclusive Wealth for All Stakeholders

The economy of the future should generate inclusive growth for all.

The aviation sector is a key pillar of Singapore's economy. Prior to the Covid-19 pandemic, the aviation sector contributed 12% of Singapore's gross domestic product<sup>13</sup> and provided over 375,000 jobs<sup>14</sup>. The SIA Group is at the heart of the aviation ecosystem, with SIA and Scoot accounting for a significant amount of passenger transits at Singapore Changi Airport.

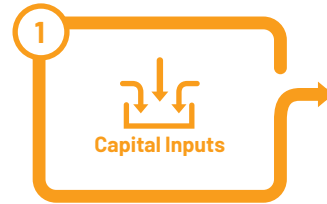
SIA recognises the role it plays in advancing sustainable development locally and globally, and seeks to promote inclusive wealth for all stakeholders. This comprises the aggregate value of the six capitals – financial, human, social and relationship, intellectual, natural, and manufactured. The relationship between remuneration, performance, and value creation is illustrated in diagram on the right. Supporting the sustainability agenda is one of the philosophies upon which SIA's Senior Management Remuneration Policy is based. The Board selects 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 SIA's stakeholders. The table on the following page 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.

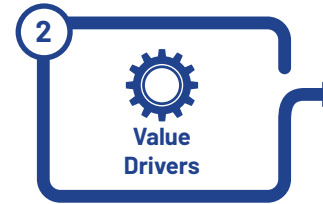
For more information on the Statements of Value Added and its Distribution, please refer to page 55 in the SIA Annual Report FY2022/23.

<sup>13</sup> Civil Aviation Authority of Singapore (CAAS). [Learn about Singapore's aviation.](#)  
<sup>14</sup> IATA, [The Importance of Air Transport to Singapore.](#)

### Value Creation Process at SIA



Using all forms of capital in the company to produce value



Identifying key value drivers, performance measures, and targets



Defining value creation outcomes, performance measures and targets

#### 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

## SHAREHOLDERS (CONTINUED)

### Direct Economic Value Generated<sup>15</sup> 201-1



**\$8,154.6 million**

total value added for distribution in FY2022/23

### Economic Value Distributed<sup>16</sup>



**\$3,055.8 million**

value added for distribution to employees<sup>17</sup> in FY2022/23



**\$1,555.3 million**

value added for distribution to suppliers of capital<sup>18</sup> in FY2022/23



**\$480.0 million**

value added for distribution to government<sup>19</sup> in FY2022/23



### Economic Value Retained

**\$3,063.5 million**

value retained for future capital requirements<sup>20</sup> in FY2022/23

<sup>15</sup> Direct economic value generated is defined as total value added for distribution.

<sup>16</sup> Economic value distributed is defined as value added for distribution to employees, government, suppliers of capital and community investments.

<sup>17</sup> Value added for distribution to employees includes salaries and other staff costs.

<sup>18</sup> Value added for distribution to suppliers of capital includes interim and proposed dividends, finance charges and non-controlling interests.

<sup>19</sup> Value added for distribution to government includes corporation taxes paid to the government.

<sup>20</sup> Value retained for future capital requirements includes depreciation and amortisation, impairment and retained profit.

## SHAREHOLDERS (CONTINUED)

### Transforming to Lead the New World

SIA embarked on its latest three-year Transformation programme in FY2020/21 to bolster its resilience and agility, as it navigated uncertainties and seized growth opportunities in a fast-changing aviation environment. FY2022/23 marks the third and final year of the Transformation programme, which aims to position SIA for long-term success and sustainability.

The three transformation pillars of being a world-class leader, achieving financial sustainability, and building a dynamic and resilient team, underpin SIA's efforts to remain innovative and agile to adapt to the evolving industry landscape. Redesigning the travel experience to seamlessly integrate health and safety measures, and leveraging technology to enhance SIA's products and services, are some examples of how the Group reinvented itself to continue delivering a world-class travel experience in the midst of the pandemic.

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

SIA continues to invest in its workforce and has rolled out comprehensive upskilling programmes that aim to strengthen the resilience and preparedness of its people. The drive to improve productivity resulted in the implementation of over 250 initiatives that have saved more than 550,000 man-hours over the course of the three-year Transformation Programme. This has enabled SIA to improve its workforce efficiency and refocus resources on higher-value activities to enhance operational efficiencies and improve the overall customer experience.

Recognising the need for continuous transformation to stay ahead in today's rapidly changing business environment, SIA continues to prioritise developing a culture of innovation and agility across the organisation. By enhancing its innovation capabilities and agility, SIA aims to build an organisation that can continue to address emerging trends and seize new opportunities to remain at the forefront of the industry, sustainably delivering value to customers, employees, and stakeholders in the long term.

The SIA Group's Transformation programme has strengthened its foundations to navigate future challenges.

**>250 initiatives**

embarked on to achieve a more competitive cost base and stronger revenue generating capabilities



**>200 initiatives**

implemented to optimise business processes



**>550,000 man-hours**

saved from business process reviews and digital initiatives

For more information on SIA's Transformation journey, please refer to pages 10 and 11 in the SIA Annual Report FY2022/23.

### CASE STUDY

#### Streamlining Procurement Processes Through Automation

Since the inception of SIA's Transformation programme in 2020, the Procurement department has made significant progress in optimising and automating existing work processes. By leveraging Robotic Process Automation (RPA) solutions, the department automated repetitive and time-consuming tasks such as data extraction and report creation, allowing staff to focus on higher-value tasks. In addition, the department has taken proactive measures to streamline existing work processes and integrate digital tools, ranging from contract management to cost planning, to enhance staff efficiency and productivity. As the demand for air travel rebounds, the integration of automation and digitalisation will continue to play a crucial role in empowering staff to deliver value-added work.

#### Digitalising Flight Operations

Despite the operational challenges faced during the pandemic, the Flight Operations Division prioritised and leveraged technology to digitalise its daily operations. Over 2,500 man-hours were invested to build a comprehensive digital ecosystem encompassing 10 different applications that enhance pilots' operational resilience pre-flight, in-flight, and post-flight. Pilots are empowered to make better decisions, boosting their overall productivity, which led to significant manhour savings of over 140,000 hours per year, and a reduction of 43,000 sheets of paper used annually.



## SHAREHOLDERS (CONTINUED)

### Preserving Financing Strength and Resilience

At the onset of the Covid-19 pandemic in 2020, the Group acted swiftly and decisively to shore up liquidity and build its financial resilience. This strong liquidity position, and the confidence it engendered, enabled the Group to take a long-term view and make several strategic decisions ahead of the recovery in global air travel. SIA and Scoot retained most of their talented staff, who were ready to step up when called upon. A large proportion of the Group's aircraft fleet were kept operational, albeit at lower utilisation levels in the early phase of the recovery, ensuring that they were properly maintained and fully functional. The Group built up a strong base network in a deliberate and calibrated manner, ensuring that SIA and Scoot were in position to ramp up ahead of any return in passenger traffic.

As a result, when the demand for air travel surged in FY2022/23 after Singapore fully reopened its borders in April 2022, and as restrictions on international air travel eased globally, SIA and Scoot was first off the blocks to ramp up operations. Working collaboratively with key members of Singapore's aviation ecosystem, both carriers were among the first to launch flights and captured the pent-up demand. By the end of FY2022/23, Group passenger capacity reached 79% of pre-Covid levels. SIA and Scoot collectively carried 26.5 million passengers, up six-times from a year before.

As operations progressively recovered, the Group began to refine its liquidity posture, learning from its Covid-19 experience, and taking into consideration the prevailing market outlook and challenges. In December 2022, the Group fully redeemed the first tranche of the Mandatory Convertible Bonds (MCBs) that were issued in June 2020, with an accreted principal amount of approximately \$3.9 billion. Dividend payments were also reinstated at the half-year mark of FY2022/23, with an interim dividend of 10 cents per share, amounting to \$297 million, for the first half of FY2022/23. The interim dividend was paid to all shareholders on 22 December 2022.

The Group posted a strong set of results for FY2022/23. The operating and net profits of \$2.7 billion and \$2.2 billion respectively were the highest ever in the Group's 76-year history. Group revenue stood at a record \$17.8 billion on the back of a more than four-fold increase in passenger revenue year-on-year, as strong passenger demand led to a record full-year passenger load factor of 85.4% and a record unit passenger revenue of 10.0 cents (revenue per available seat-kilometre or RASK) for the Group. Cargo revenue was the second highest in the Group's history, despite the year-on-year moderation resulting from a decline in the demand for air freight and the dissipation of supply chain disruptions brought about by the Covid-19 pandemic.

At the end of FY2022/23, the Group's cash holdings were \$16.3 billion. In addition to the cash on hand, the Group continued to retain access to \$2.2 billion of committed lines of credit, all of which remain undrawn to date.

On 10 May 2023, as part of the ongoing recalibration of its Balance Sheet, the Group announced its intention to redeem 50% of the tranche of the MCBs that were issued in June 2021 (2021 MCBs), as part of the Rights Issue that was approved by shareholders in April 2020. The accreted principal amount payable, being 108.243% of the principal amount of the 2021 MCBs, will be approximately \$3.4 billion. This redemption is carried out on a pro-rata basis, with the redemption amount to be paid to eligible bondholders on 26 June 2023.

With the stellar financial performance, the Board of Directors recommended a final dividend of 28 cents per share for FY2022/23. Including the interim dividend of 10 cents per share paid on 22 December 2022, the total dividend for FY2022/23 amounted to 38 cents per share. Subject to shareholder approval at the Annual General Meeting on 27 July 2023, the final dividend will be paid on 18 August 2023 for shareholders as at 2 August 2023.

The SIA Group's record financial performance for FY2022/23 is a testament to its proactive strategic initiatives, pre-emptive preparation, and the hard work and dedication of its employees.

### Strengthening Foundation for the Future

The SIA Group continues to stay on course with its long-term strategic pillars:

#### Portfolio Strategy

The Group is committed to its portfolio strategy, with SIA and Scoot serving the full-service and low-cost market segment respectively. This ensures that the Group is able to deploy the right vehicles to the right markets. It also provides opportunities for cross-selling between the SIA and Scoot networks.

Following the easing of border restrictions in the region from the beginning of FY2022/23, Scoot's recovery accelerated with its low-cost model and regional foothold. In November 2022, Scoot's capacity recovery surpassed SIA, and is currently operating at around 90% capacity compared to pre-Covid levels.

#### Multi-hub Strategy

The Group is at the heart of Singapore's aviation ecosystem and anchors Singapore's air hub status. Beyond Singapore, the Group's multi-hub strategy complements its efforts to strengthen and grow the Singapore aviation hub. In November 2022, SIA and Tata Sons (Tata) announced the agreement to merge Air India and Vistara, with SIA investing a further \$360 million in Air India as part of the transaction. When completed, it will reinforce SIA's partnership with Tata and give SIA a 25.1% stake in an enlarged Air India group.

SIA and Tata aim to complete the merger by March 2024, subject to regulatory approvals. Through this merger, SIA will reinforce its partnership with Tata and acquire a strategic stake in an entity that is four to five times larger than Vistara. This will bolster SIA's presence in India, strengthen its multi-hub strategy, and allow it to continue participating directly in India's large and fast-growing aviation market.

#### Partnerships

The Group continues to grow its global network through partnerships with like-minded airlines. These are win-win arrangements, offering enhanced connectivity and wider travel options to customers, and driving traffic to the respective hubs. These partnerships also enable the Group to work closely with partners to support initiatives that facilitate and grow tourism, as well as support economic activities.



## SHAREHOLDERS (CONTINUED)

In November 2022, Virgin Australia resumed the sale of codeshare flights across SIA's network, enabling more seamless travel for customers between Australia, Asia, Africa, and Europe. In December 2022, SIA also signed a Memorandum of Understanding (MoU) with Thai Airways International (THAI) to progressively codeshare on each other's services. In the initial phase, THAI and SIA will codeshare on each other's flights between Singapore and Bangkok. THAI will also codeshare on SIA's flight services to South Africa and the Americas. Additional codeshare points in Europe, Thailand, India, and the South West Pacific region will also be explored. Similarly, SIA signed an MoU with Vietnam Airlines in February 2023 to explore opportunities for codeshare arrangements and facilitate better connectivity between Vietnam and Singapore, and to key markets around the world.



### CASE STUDY

#### DHL Express and Singapore Airlines Freighter Partnership

In March 2022, SIA and DHL Express signed a Crew and Maintenance agreement to deploy five Boeing 777 freighters in Singapore. SIA's pilots operate these aircraft, which are also maintained by SIA. Through this partnership, DHL is able to expand its express service that links the Asia-Pacific region with the Americas. This agreement also reinforces Singapore's position as a vital air cargo and e-commerce logistics hub.

The partnership took off with the delivery of the first aircraft in August 2022, followed by the second in October 2022. The remaining three aircraft are scheduled for delivery throughout 2023. With its long-range capabilities and impressive payload capacity, the 777 freighter enables SIA and DHL to optimise their cargo operations.



#### Additional Revenue Streams

The Group actively pursues new engines of growth to diversify its revenue base and create additional avenues for growth.

#### KRISFLYER

SINGAPORE AIRLINES GROUP

KrisFlyer, the SIA Group's loyalty programme, is an important component of the strategy to strengthen SIA's overall value proposition. Having transformed over the past few years, KrisFlyer members can now earn miles when they fly with SIA and Scoot. Miles can also be earned through KrisShop purchases, Kris+ for their daily lifestyle needs, and Pelago for their travel experiences. This strategy has shown encouraging results, with the membership base reaching 6.72 million members as of 31 March 2023, growing by 29.5% from the previous year. KrisFlyer has also driven SIA's partnerships and sale of miles with both air and non-air lifestyle partners globally, driving incremental transactions and revenue to the tune of over \$900 million in the FY2022/23, of which more than 80% came from third parties.



Kris+, the SIA Group's lifestyle rewards mobile application, continued to introduce more ways for KrisFlyer members to earn miles in their daily spend, and use miles to offset daily purchases in Singapore. As of 31 March 2023, there were more than 900 partner brands with over 4,200 outlets offering miles accrual and redemption opportunities and privileges spanning across dining, retail, activities, travel, and transportation verticals in Singapore and 17 other key markets including Australia, India, Indonesia, South Korea, and more.



Pelago is a global attractions and travel experience platform that extends the customer experience from the skies to the ground. Since its launch in October 2020, Pelago has expanded to 21 countries, 81 destinations, and over 2,500 experiences.



KrisShop, the Group's in-flight duty-free sales subsidiary, pivoted from an airline sales catalogue to an omnichannel lifestyle e-commerce platform during the pandemic. E-commerce will continue to be a growth engine for KrisShop going forward.

## SHAREHOLDERS (CONTINUED)

### Investments in Digital Capabilities

The SIA Group invests in digital capabilities to deliver business value through digital innovation. SIA's Digital Innovation Lab, KrisLab, is the creative test bed for employees to collaborate internally and with external partners, to develop ideas that would enable the SIA Group to embrace digitalisation in its business operations.

KrisLab has spearheaded efforts to develop industry-leading digital solutions and explore emerging technologies such as Blockchain, AR/VR, Automation, and Metaverse. KrisLab also drives open innovation in the ecosystem through collaboration with start-ups, small and medium-sized enterprises, and research laboratories.



**InnovFest 2022:** KrisLab participated in InnovFest 2022, a flagship technology innovation conference in Asia organised by the Infocomm Media Development Authority and Informa Tech. More than 1,500 visitors visited the KrisLab booth to find out more about the SIA's digital innovation programmes.



**Aviation Festival 2023:** As the Official Innovation Partner of Aviation Festival Asia 2023, SIA shared its vision to be the world's leading digital airline, as well as the Group's flagship programmes to engage with aviation solution providers, potential partners, and start-ups.

### Driving Co-Innovation to Deliver Business Value

#### SIA Accelerator

SIA's flagship business and technology validation programme aims to onboard innovative solvers to validate their solutions against defined outcomes. Selected start-ups or scale-ups have the opportunity to co-develop proof of concepts (POCs) that address the Group's business challenges. Over 25 POCs and five live implementations have been completed since the start of the programme in 2019.

This includes the launch of the world's first in-flight e-shopping experience on *KrisWorld*, where the application of air-to-ground connectivity technology enables customers to view live updates on product availability and access credit card authorisation.

#### SIA AppChallenge

An annual aviation innovation hackathon that is the largest event of its kind globally invites global start-ups, scale-ups, and students to submit solutions to tackle real business challenges faced by SIA's business units.

In FY2022/23, SIA hosted its eighth edition of the competition, which attracted over 450 start-ups from 55 countries, addressing 14 different challenge statements and three wildcard categories. Twelve teams were shortlisted and flown to Singapore to present their innovative ideas to the panel in-person. Winning ideas include a wireless-based firmware solution that provides precise determination of location, improving cargo tracking through the elimination of scanning individual items; as well as the application of real-time indoor localisation to push out customised notifications and offers to Kris+ users in the airport or shopping mall.

Selected finalists will get the opportunity to work on a pilot project with funding support through the SIA Accelerator Programme.

#### Research Partnerships in Deep Technology

KrisLab works with research institutions such as the Agency for Science, Technology and Research (A\*STAR) and National University of Singapore (NUS) to co-develop deep tech solutions for the travel and aviation industry. Research areas include artificial intelligence (AI), machine learning, predictive analysis, customers, and employee wellness.

One such partnership is the SIA-NUS Digital Aviation Corporate Laboratory launched in January 2022, with SIA contributing half of the total funding of the \$45 million research facility. The five-year research and development collaboration leverages NUS' research expertise to co-create and commercialise digital solutions for Singapore's aviation sector. These solutions include projects to enhance customer experience, raise SIA operating crews' competency, and improve crew wellness on board.

Further details on KrisLab's flagship programmes are available on the KrisLab [website](#).

# ENVIRONMENT

The SIA Group is committed to environmental sustainability and responsible operations to support the aviation industry’s climate goals. The Group is committed to achieving net zero carbon emissions by 2050, as part of its ongoing journey towards environmental sustainability across its operations. To realise this ambition, SIA collaborates with like-minded partners who are committed to decarbonisation in the aviation ecosystem, and develop innovative solutions that enable the Group to achieve its sustainability targets and mitigate its impact on the environment.

## SIA’s Targets

Target	Due	Status
<b>Carbon</b>		
To achieve net zero carbon emissions by 2050	2050	On track
<b>Energy</b>		
To achieve the BCA Green Mark Platinum rating for both the SIA Training Centre and TechSQ	FY2022/23	Achieved
To harvest and use solar energy at all SIA-owned buildings in Singapore	FY2023/24 <sup>21</sup>	Ongoing
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
<b>Water</b>		
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)

## The Year in Review

<b>12.77 million tonnes CO<sub>2</sub>e</b> of total Scope 1 and 2 GHG emissions	<b>39,901 tonnes CO<sub>2</sub>e</b> reduced from fuel savings and efficiency measures across its fleet	<b>11.80 LTK/AG</b> overall fuel productivity for fleet
<b>178,790 TJ</b> of total Energy Consumption within SIA Group	<b>4.4 GWh</b> of renewable energy consumed at SIA’s Airline House, SIA Training Centre and TechSQ	<b>124 kWh/m<sup>2</sup></b> electricity intensity for SIA buildings and offices in Singapore
<b>1,971 tonnes</b> of total waste generated from SIA flights	<b>300 tonnes</b> of waste recycled from SIA flights	<b>1,343 tonnes</b> of total waste generated at SIA buildings in Singapore
<b>175 tonnes</b> of waste recycled at SIA buildings in Singapore	<b>176,046 m<sup>3</sup></b> of total water consumption for the SIA Group buildings and offices in Singapore	<b>22,550 m<sup>3</sup></b> of rainwater collected and groundwater harvested at SIA’s Airline House

## Supporting the UN SDGs



<sup>21</sup> Timeline was extended to accommodate the additional time required for conducting a feasibility study aimed at expanding and redeveloping the SIA Supplies Centre.

# CLIMATE ACTION

## CLIMATE CHANGE RESILIENCE AND MITIGATION 3-3

The world can no longer ignore the reality of climate change, as record temperatures and rising sea levels threaten to irrevocably damage the environment. The [Intergovernmental Panel on Climate Change \(IPCC\)](#) has highlighted the need for urgent and deep GHG emission reductions to limit global warming. However, ensuring a liveable and sustainable future for all will require drastic changes across multiple industries, including the aviation sector.

### SIA's Net Zero Ambition

In May 2021, the SIA Group committed to achieving net zero carbon emissions by 2050. It continues to invest in new aircraft, improving operational efficiency, adopting low-carbon technology, and sourcing for high-quality carbon offsets.

Today, operating a young and modern aircraft fleet remains the most effective way to reduce carbon emissions. The Group operates one of the youngest fleets in the world, with an average age of six years and nine months. Furthermore, SIA focuses relentlessly on driving fuel efficiency through operational procedures and technology, including aircraft weight management and optimisation of flight routes.

SAF continues to dominate as a key decarbonisation lever in the aviation industry. SIA partnered with CAAS and GenZero, an investment platform wholly owned by Temasek, on a year-long pilot to advance the use of SAF in Singapore. Under this pilot, 1,000 tonnes of neat SAF was purchased and blended with refined jet fuel, and was uplifted onto SIA And Scoot flights departing from Singapore Changi Airport in July 2022. This use of SAF is expected to reduce carbon dioxide emissions by around 2,500 tonnes. This pilot also includes the sale of 1,000 SAF credits to corporate customers and freight forwarders, giving them the opportunity to reduce their carbon footprint, stimulate demand for SAF, support the development of the nascent SAF industry, and advance the adoption of SAF for aviation sustainability.

As the sustainability journey requires the participation of all stakeholders, SIA empowers its customers to fly carbon neutral by purchasing quality carbon offsets to mitigate their travel carbon footprint. These contributions from the Group's Voluntary Carbon Offset Programme support verified projects that reduce carbon emissions, protect endangered species, and empower developing communities.

The SIA Group also remains committed to conserving the planet's finite resources by finding ways to reduce waste, both on the ground and in the air. Some notable initiatives include using sustainable alternative materials, improving its water conservation efforts, and adopting renewable energy.

Recognising that collective action by the aviation ecosystem is critical to its sustainability journey, SIA partners like-minded stakeholders to develop innovative solutions to address climate change. To this end, the Group participates actively in industry development and ecosystem partnership opportunities to make greener air travel viable and accessible.

### SIA's Climate Action Pledge

SIA is dedicated to its long-term responsibility to protect the environment while providing air transportation services of the highest quality. SIA has in place various programmes to implement sustainable practices across its operations in a responsible manner to manage issues such as carbon emissions, noise, waste, as well as energy and water consumption. SIA pledges to continue exploring new sustainable practices in all areas of its operations. SIA adopts the aviation industry's Four-Pillar Strategy to address climate change and seeks opportunities to reduce the carbon footprint of its operations. SIA incorporates the five Rs (Refuse, Reduce, Reuse, Repurpose and Recycle) in its daily activities to improve its waste management practices and maximise efficient use of resources. SIA promotes eco-friendly habits among its staff and stakeholders and raise awareness on the importance of taking action to reduce its impact on the environment.

## CLIMATE ACTION (CONTINUED)

### SUPPORTING IATA'S CLIMATE TARGETS PR-7 PR-8 PR-9

The aviation industry has committed to a long-term climate goal of achieving net zero CO<sub>2</sub> emissions by 2050 since October 2021. This goal is underpinned by the IATA's Four-Pillar Strategy, which was introduced in 2009. These are aligned with SIA's net zero target, as well as its commitment to improve the operational performance of its fleet.

#### IATA'S CLIMATE TARGETS

To cap net aviation CO<sub>2</sub> emissions from 2020 (carbon neutral growth).

To achieve net zero carbon emissions from operations by 2050.

#### IATA'S FOUR-PILLAR STRATEGY



##### PILLAR 1

Improving technology, including the deployment of Sustainable Aviation Fuels

###### SIA's Commitment:

- Operate a modern and fuel-efficient fleet that generates lower emissions and less noise.
- Invest in engineering improvement packages for airframes and engines to improve engine efficiency.
- Drive the adoption of SAF in the industry.



##### PILLAR 2

Raising the efficiency of aircraft operations

###### SIA's Commitment:

- Improve fuel productivity and reduce fuel usage through aircraft weight management and the optimisation of flight routes.



##### PILLAR 3

Enhancing Infrastructure

###### SIA's Commitment:

- Partner with air navigation service providers to find opportunities to reduce emissions from fuel burn.
- Collaborate with stakeholders in air traffic management to explore ways to improve airspace efficiency.
- Engage with research institutions to explore innovation and data analytics for significant improvements.



##### PILLAR 4

Promoting a single global market-based measure to plug the emissions gap

###### SIA's Commitment:

- 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.
- Commit to achieving 85% of 2019 emissions as per CORSIA's baseline from 2024 until 2035 (end of CORSIA scheme).

#### SUPPORTING LOCAL TARGETS

##### SIA's Contribution to the Singapore Green Plan 2030

SIA's goals are aligned with the Singapore Green Plan 2030, which is in pursuit of net zero emissions by 2050. The Green Plan reinforces SIA's dedication to sustainability, encourages investment in sustainable solutions, and enhances its commitment to reducing its environmental impact. As part of this journey, the Group explores and adopts new sustainable practices across its operations, including investing in fuel-efficient aircraft, supporting the use of sustainable aviation fuels, and improving operational practices.

Details of the initiatives that SIA has implemented in recent years can be found in the sections of Energy Conservation on the Ground, Ground Waste Management, and Water Conservation in this chapter.

# CLIMATE ACTION (CONTINUED)

## MANAGEMENT OF ENERGY AND EMISSIONS 3-3 302-1 302-2 302-3 302-4 305-1 PR-7 PR-8 PR-9

### PILLAR 1: Improving technology, including the deployment of SAF

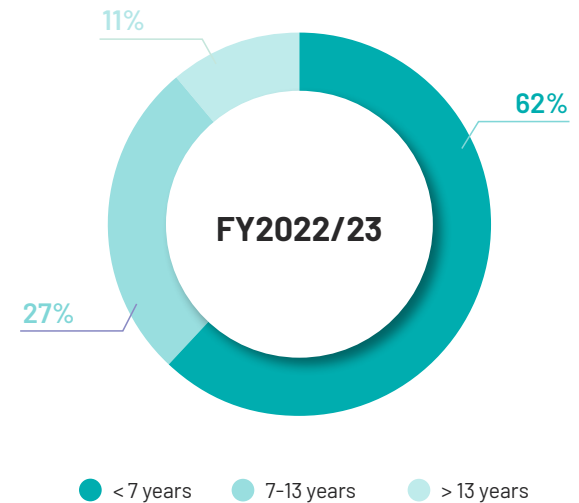
#### Investing in Modern and Fuel-efficient Aircraft

SIA's investment in modern and fuel-efficient aircraft has significantly reduced its energy consumption and Scope 1 GHG emissions. The Group operates one of the youngest aircraft fleets globally, comprising 195 aircraft with an average age of six years and nine months. SIA continues to invest in more fuel-efficient aircraft such as the Airbus A350s and Boeing 787s, which are around 25% more fuel efficient than older generation aircraft on similar missions. The Group has also made substantial investments in new generation fuel-efficient aircraft, including the Boeing 777-9 and A350F freighter, which it will receive in the coming years. SIA will be the launch operator of the A350F, which burns up to 40% less fuel than its current freighters, and is projected to reduce carbon emissions by around 400,000 tonnes annually.

#### Average Fleet Age (years), as of 31 March 2023

	FY2019/20	FY2020/21	FY2021/22	FY2022/23
Singapore Airlines (Passenger Aircraft)	5.4	5.1	5.6	<b>6.3</b>
Singapore Airlines (Freighter Aircraft)	16.3	17.3	18.3	<b>19.3</b>
Scoot	5.7	5.9	6.1	<b>6.7</b>

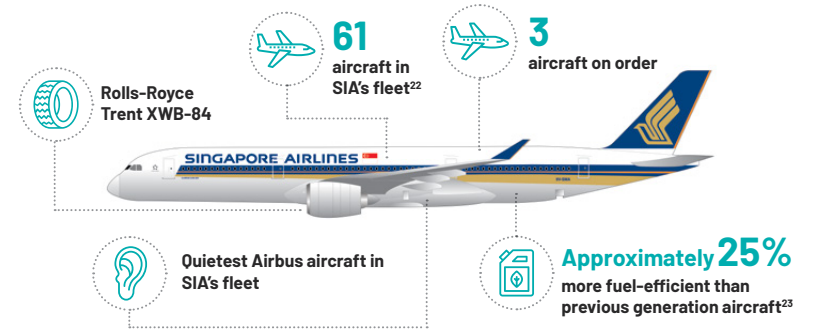
#### Total fleet of 195 aircraft, by age group (%)



# CLIMATE ACTION (CONTINUED)

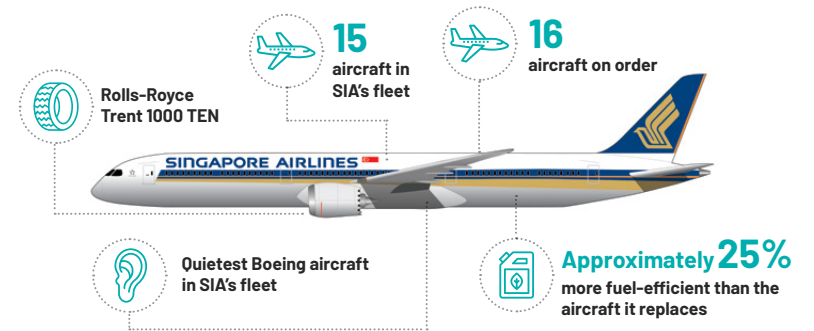
## AIRBUS A350-900

The Airbus A350-900 is built with carbon-fibre reinforced plastic, making it lighter and more cost-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, featuring raked wingtips and low drag empennages.



## 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 to create a lighter and more cost-efficient aircraft, while increasing resistance to corrosion and reducing maintenance requirements.

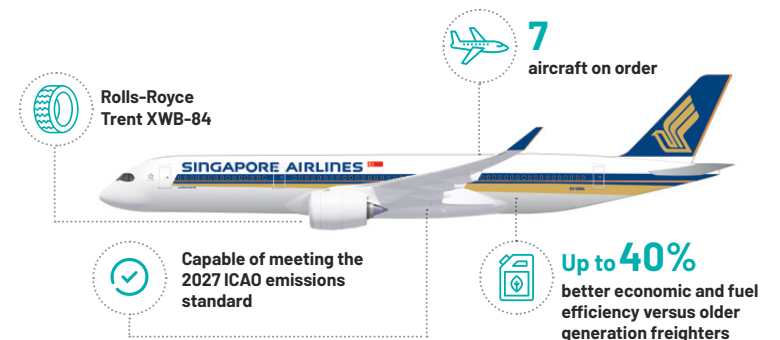


Image Credit: Yucca Studio and SPHM

<sup>22</sup> One A350-900 aircraft has been delivered and awaiting Entry-Into-Service (EIS) as of 31 March 2023.

<sup>23</sup> According to Original Manufacturer's [website](#).

# CLIMATE ACTION (CONTINUED)

## Driving Decarbonisation with Sustainable Aviation Fuels

The SIA Group made significant progress in deploying SAF in Singapore, supporting its long-term decarbonisation goals. SAF can potentially reduce lifecycle GHG emissions by at least 80%<sup>24</sup>, compared to conventional jet fuel. Since 2011, SIA has been committed to adopting SAF and aims to support the green fuel's commercialisation across its network, while developing an integrated SAF supply chain at Singapore Changi Airport.

**2011**

### Joined the Sustainable Aviation Fuel Users Group (SAFUG)

SIA became a member of SAFUG, which was established to accelerate the development and commercialisation of SAF. This platform helped to pave the way for the Group's first deployment of SAF in May 2017.

**2018**



### Learning from international industry stakeholders

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. 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**



### Year-long Partnership with Swedavia

As part of Swedavia's SAF Incentive Scheme, SIA began to use a blend of jet fuel and SAF on its flights between Stockholm and Moscow in 2020. This resulted in approximately 47 tonnes of CO<sub>2</sub>e GHG emissions savings in FY2020/21.

**2021**

### Feasibility study on SAF supply chain in Singapore

A one-year joint study with CAG and Singapore government agencies was conducted to identify the sustainability performance, economic costs, and requirements for the development, deployment, and commercialisation of SAF in Singapore. It was concluded that SAF deployment in Singapore will require active collaboration of all industry stakeholders.

**2017**



### Launched the world's first green package flights

SIA operated a series of 12 green package flights that incorporated

the use of SAF, fuel-efficient aircraft, and optimised air traffic management measures. This was done in collaboration with the CAAS over a three-month period on SIA's non-stop flights from San Francisco to Singapore.

### Signing of the Global SAF Declaration and advancing the use of SAF in Singapore

SIA together with Airbus, Rolls-Royce, and Safran signed the Global SAF Declaration at the 2022 Singapore Airshow. The declaration commits to a steady ramp up of the development, production, and consumption of SAF over the next ten years.

### One-year partnership with CAAS and Genzero to operationalise the use of SAF in Singapore

SIA partnered with CAAS and GenZero on a year-long pilot to advance the use of SAF in Singapore. Under this pilot, 1,000 tonnes of neat SAF was purchased and blended with refined jet fuel, and was uplifted onto SIA And Scoot flights departing from Singapore Changi Airport in July 2022. This use of SAF is expected to reduce carbon dioxide emissions by around 2,500 tonnes.

Besides validating SAF integration options, the pilot provided insights on economic and commercial factors for scaling up SAF adoption in Singapore. From the 1,000 tonnes of SAF used during the pilot, an equivalent of 1,000 SAF credits were also generated through the Roundtable of Sustainable Biomaterials' Book & Claim System, which provides corporate customers and freight forwarders an avenue to reduce their carbon footprint through the purchase of SAF credits.

**2022**



<sup>24</sup> IATA, "Sustainable Aviation Fuels Fact Sheet".



## CLIMATE ACTION (CONTINUED)

### PILLAR 2: Raising the efficiency of aircraft operations

To reduce its carbon footprint, SIA leverages technology to identify and implement fuel productivity solutions across its engineering, flight, and ground operations.

### Environmental Management System

SIA maintains an Environmental Management System (EMS), which is certified to ISO 14001:2015, to ensure that its operational activities do not significantly impact the environment adversely. The EMS covers the provision and management of aviation and engineering support services by SIA's Engineering Division and Flight Operations Division in Singapore, and guides its efforts to comply with local and international environmental regulations. Internal and external audits are conducted annually to ensure compliance.

### Engineering Operations



**Tailored water uplift**, where a customised amount of water is uplifted for each flight, reducing the overall aircraft weight without uplifting excess water<sup>25</sup>.

- Ongoing digital project to enable dynamic water uplift taking into account flight loads, allowing for more efficient water refilling operations and a more accurate calculation of zero-fuel weight.
- SIA has rolled this out on its A350 fleet, and will progressively implement this across its aircraft fleet.
- As of 31 March 2023, 3,191 tonnes of fuel were saved in FY2022/23, equivalent to 10,052 tonnes of CO<sub>2</sub>e GHG emissions.

**Weight reduction initiatives** resulting in an estimated reduction of 1,386 tonnes of fuel savings. Examples of initiatives include:

- Removal of footrests on selected aircraft, resulting in weight reduction ranging from 120kg to 300kg per aircraft with an estimated 1,190 tonnes of fuel saved in FY2022/23.
- Removal of Economy Class handsets from SIA's A350 fleet, resulting in weight reduction of 9kg per aircraft with an estimated nine tonnes of fuel saved in FY2022/23.
- Seat modifications made to improve seat features while reducing the weight per seat, resulting in weight reduction of 108kg per aircraft with an estimated 150 tonnes of fuel saved in FY2022/23.
- Removal of in-flight equipment and service items such as wine opener equipment from SIA's A350 aircraft and cabin crew's three-piece table from SIA's 777-300ER aircraft; as well as hard copy in-flight magazines and reading material. This resulted in an estimated weight reduction of 16kg across SIA's aircraft fleet, with an estimated 37 tonnes of fuel saved in FY2022/23.

### Other initiatives:

- Optimising 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.
- Performing engine washes at optimal intervals to maximise fuel burn reduction and savings. Around 154 tonnes of fuel has been saved from optimised engine washes in FY2022/23.
- Optimising fuel burn during an aircraft's climb-out phase through a digital solution developed by SITA, enabling pilots get the best rate of climb based on current weather conditions, terrain considerations, and other factors. This has helped reduce 2,871 tonnes of fuel in FY2022/23.



<sup>25</sup> Fuel savings from tailored water uplift is available only for the A350 and Boeing 787 aircraft types.

## CLIMATE ACTION (CONTINUED)

### Flight Operations

Some of the measures undertaken to reduce GHG emissions 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 overflight charges, and ensuring compliance with airspace closures.
- Leveraging data analytics to make informed operational decisions.

Ensuring fuel efficiency through:

- Monitoring fuel usage to ensure an optimal level of fuel to uplift.
- Optimising contingency fuel to reduce fuel uplift. However, due to the increased risk of flights being diverted due to Covid-19 restrictions in many 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. This resulted in around 446 tonnes of fuel being saved in FY2022/23.
- Optimal flap settings are used during take-off to reduce the amount of fuel burnt.



#### Collaboration Across Divisions

- Pilots follow green operational procedures developed by SIA's Flights Operations Division to enable more efficient flights and reduce fuel usage. Examples include reducing flap landing, engaging idle reverse thrust during landing, and shutting down one or several engines (depending on the number of engines the aircraft has) when taxiing on the runway, known as Reduced Engine Taxi In (RETI). This has generated 267 tonnes of fuel savings in FY2022/23.
- Engaging flight crew through fleet meetings and e-learning tools to promote fuel-efficient practices such as RETI and Continuous Descent Operations (CDO).
- Extending the fuel efficiency programme across the organisation, sharing data, and collaborating to implement a more consolidated approach to optimising flight plans and routes.



#### Engaging the Eco-system

- Working closely with air traffic management (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 ASIST (Arrival Sequencing into Singapore Terminal Manoeuvring Area), Flexi Airspace, CDO and Cost Index Adjustment.

## CLIMATE ACTION (CONTINUED)

### Ground Operations

SIA implemented measures such as reducing fuel usage in its ground operations to reduce its carbon footprint.



#### 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 (APUs).
- During turnaround times on the ground, the excessive use of the aircraft APU can result in unnecessary fuel burn. By monitoring APU usage via automated alerts and collaborating with SIAEC, fuel burn can be reduced. APU usage is currently monitored on the 777 and 787 fleet, with the possibility of extensions to other fleets. As of 31 March 2023, 369 tonnes of fuel has been saved since FY2015/16 due to this measure.



#### Improving Aircraft Zero-fuel Weight Used to Plan Fuel Uplift

- Zero-fuel Weight (ZFW) is the total weight of the airplane and all its contents, minus the total weight of the usable fuel on board. By improving ZFW accuracy, the correct amount of fuel can be uplifted.
- SIA has implemented measures to improve aircraft ZFW accuracy, such as the deployment of the ZFW Monitoring Dashboard that enables its Airport Operations department to more effectively monitor ZFW.

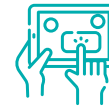
### Adoption of Digital Technologies

Digital solutions are key enablers to reduce emissions across SIA's engineering, flight, and ground operations. The Group has adopted data analytics and other digital solutions to measure aircraft performance, as well as to identify and prioritise measures to better support its fuel efficiency strategies.



#### Analytical Tools

- Using analytical tools such as the Rolls-Royce Fuel Efficiency Management System to evaluate, measure, and identify more opportunities to be fuel efficient.
- As part of an ongoing initiative with Airbus, SIA adopted a suite of tail-centric digital solutions to optimise the monitoring of air-conditioning performance during all flight phases. By analysing operational data, improvements have been introduced to optimise processes and reduce fuel uplifts.



#### Digital Platforms

- Pilots are equipped with iPads and digital applications to access timely operational data and optimisation guidance to facilitate more fuel-efficient operations.

## CLIMATE ACTION (CONTINUED)

### PILLAR 3: Infrastructure improvements, including modernised air traffic management systems

Optimisation of air routes through efficient air traffic management (ATM) is key to helping airlines reduce fuel use and CO<sub>2</sub>e emissions.



#### Innovation and Data Analytics

SIA supports improvements in air route optimisation to cope with traffic growth, while striving to reduce fuel use and emissions. It does this by engaging CAAS and other aviation stakeholders to explore the use of innovation and data analytics to address this issue.



#### Partnerships with Stakeholders

SIA collaborates with stakeholders such as airlines, airports, air navigation service providers and governments to explore ways of incrementally improving airspace efficiency.

## CASE STUDY

### Optimising Flight Operations

In FY2022/23, SIA's Total Mission Management (TMM) team continued to collaborate with SIA's Flight Operations Division and CAAS to improve operational efficiencies. The partners implemented a suite of green operational initiatives that helped to improve the efficiency of flight operations in Singapore's airspace.

This was achieved through the development of data analytics tools with Rolls-Royce to generate insights on flight data, as well as regular meetings with CAAS to assess ATM performance.

Through close collaboration with regulators and its Flight Operations Division, SIA was able to achieve fuel savings of approximately **3,983 tonnes** in FY2022/23, which is equivalent to **12,547 tonnes of CO<sub>2</sub> GHG emissions saved**.

#### Arrival Sequencing into Singapore Terminal Manoeuvring Area

The frequent congestion of Singapore airspace means that flights may be required to hold for longer periods before landing, resulting in extra fuel burnt. To reduce such holding periods, the TMM team worked with CAAS and SIA's Flight Operations Division to sequence flights before they enter the Singapore airspace to provide adequate separation between flight arrivals, while reducing the arrival holding duration.

Approximately **2,885 tonnes of fuel savings** equivalent to 9,087 tonnes of CO<sub>2</sub> GHG emissions saved

#### Flexi Airspace

The TMM team collaborates with CAAS and SIA's Flight Operations Division to review the route structure for flights arriving in Singapore, introducing direct tracks on applicable flight routes to achieve better route efficiency.

Approximately **298 tonnes of fuel savings** equivalent to 939 tonnes of CO<sub>2</sub> GHG emissions saved

#### Continuous Descent Operations

Flights arriving in Singapore are usually subjected to step descents when air traffic density is high, requiring more fuel to be used. The TMM team has been engaging CAAS to establish a procedure to reduce step descent for its flights entering Singapore airspace, reducing the amount of fuel burnt.

Approximately **321 tonnes of fuel savings** equivalent to 1,011 tonnes of CO<sub>2</sub> GHG emissions saved

#### Cost Index Adjustment

Cost Index (CI) is a ratio that defines the time-related cost versus fuel cost when operating an aircraft, and is used to determine the economical speed for a flight. The TMM team 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 projected to arrive ahead of schedule.

Approximately **479 tonnes of fuel savings** equivalent to 1,510 tonnes of CO<sub>2</sub> GHG emissions saved

# CLIMATE ACTION (CONTINUED)

## PILLAR 4: A single global market-based measure to plug the emissions gap

The aviation industry has been experiencing an increase in CO<sub>2</sub> emissions, and ICAO predicts that without additional measures, emissions from the aviation industry could increase by more than 30% 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 is the first global market-based scheme that applies to a sector. CORSIA complements the other elements of the basket of measures by offsetting the amount of CO<sub>2</sub> emissions that cannot be reduced through the use of technological improvements, operational improvements, and sustainable aviation fuels with emissions units from the carbon market to meet the ICAO aspirational goal of carbon neutral growth. It is not designed to replace these efforts nor would it make fuel efficiency an less of a day-to-day priority. Rather, CORSIA can help the sector achieve its climate targets in the short and medium-term by complementing emissions reductions initiatives within the sector.

The CORSIA baseline was originally the average of 2019 and 2020's emissions. However, the Covid-19 pandemic led to the closure of international borders, resulting in a sharp decrease in demand for air travel, which amounted to less than half of 2019 levels. In June 2020, the ICAO Council agreed to use 2019 emissions only as CORSIA's baseline for the period of 2021 to 2023. In October 2022, the ICAO Council set 85% of 2019 emissions as CORSIA's baseline from 2024 until the end of CORSIA scheme in 2035. This is a significantly more ambitious target than originally planned, and it was supported by the industry. The voluntary pilot period for the CORSIA scheme has been set in motion as of 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. SIA began monitoring and reporting its CO<sub>2</sub> emissions on an annual basis from January 2019.

Besides complying with CORSIA, SIA also complies with European Union Emissions Trading System (EU ETS) and United Kingdom Emissions Trading System (UK ETS), which are based on a "cap and trade system".

## Empowering Climate Change Through Voluntary Carbon Offsets

In June 2021, the SIA Group launched its Voluntary Carbon Offset Programme, which empowers travellers and cargo customers to play a part through the voluntary purchase of quality carbon offsets to mitigate the carbon footprint of their flights.

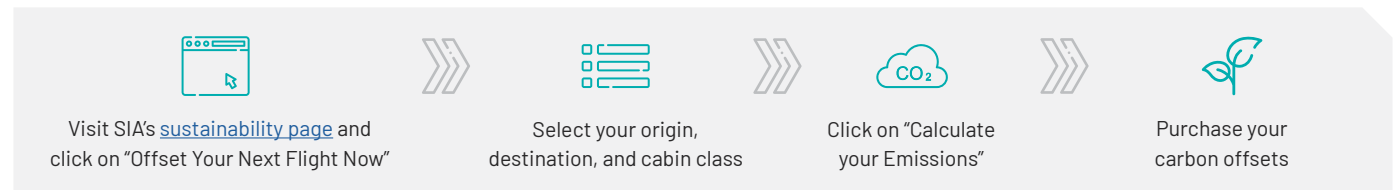
The programme was enhanced in FY2022/23 to allow individuals and corporates to redeem KrisFlyer miles and HighFlyer points respectively, for the voluntary purchase of carbon offsets.

SIA supports carbon offset projects that are verified by independent third parties according to international standards. Each project meets strict criteria to ensure the integrity of the emissions reductions derived, before the project is issued with carbon offsets, each with a unique serial number.

Contributions to the programme helps to protect forests in Indonesia, support renewable solar energy projects in India, and provide efficient, clean burning cook stoves in Nepal; bringing about environmental and socio-economic benefits to communities in Asia.

The programme is delivered in partnership with Tasman Environmental Markets (TEM), an established carbon offset provider specialising in aviation emissions.

The Group will continue to explore partnerships to source for high quality carbon offsets.



### Projects Supported Under the SIA Group's Voluntary Carbon Offset Programme



#### Rainforest Preservation

Preserving vital rainforests in Indonesia, protecting endangered species such as the orangutan, and supporting the development of local villages.



#### Solar Power

Developing solar energy projects across India that generate renewable electricity and support the sustainable development of local economies.



#### Cleaner Cooking

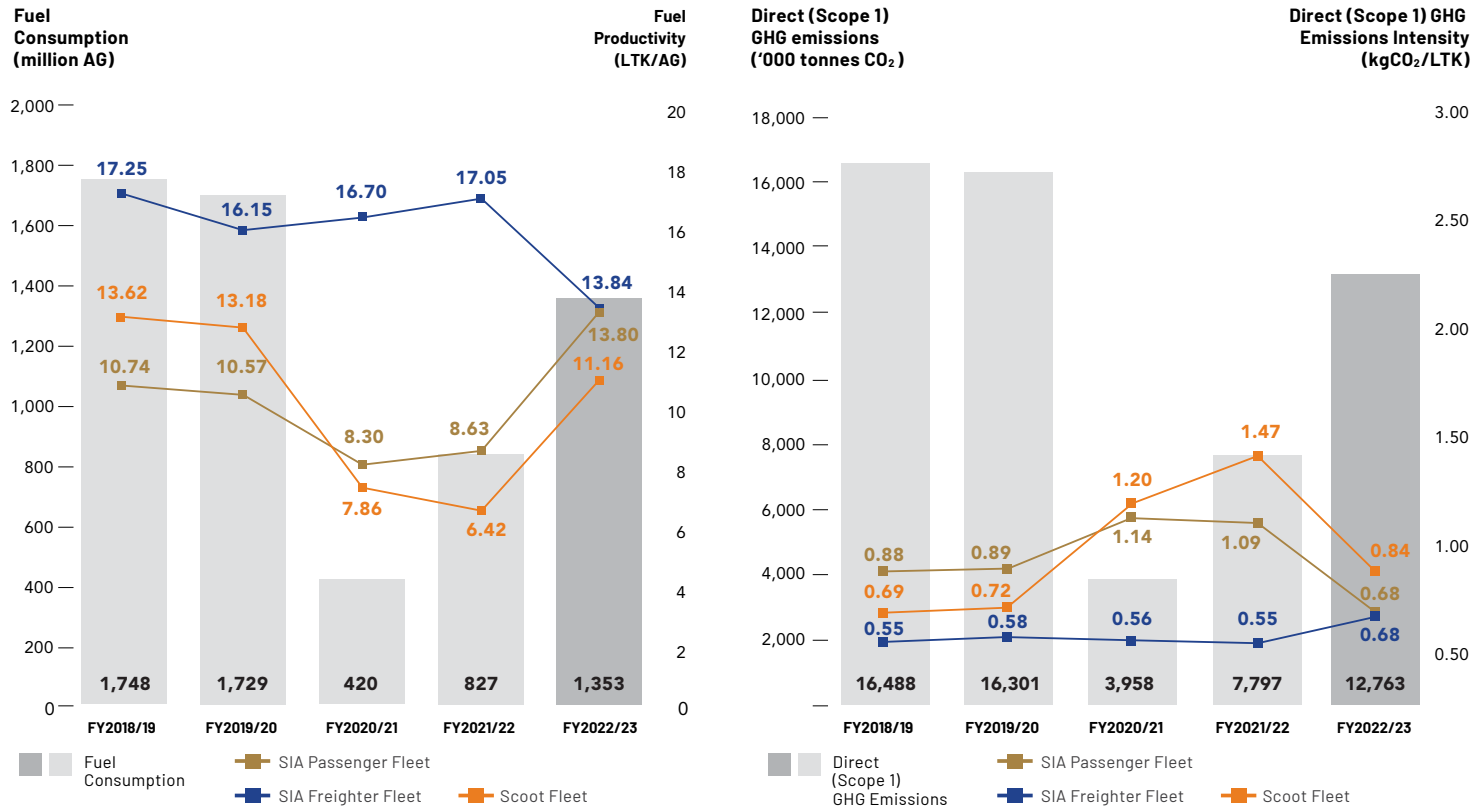
Distributing efficient, clean burning cookstoves that reduce smoke pollution and the associated health risks for villagers in Nepal.

Find out more about the projects supported on SIA's [website](#).

# CLIMATE ACTION (CONTINUED)

## THE SIA GROUP'S SCOPE 1 EMISSIONS FROM FLIGHT OPERATIONS<sup>26</sup>

302-1 302-3 302-4 305-1 305-4 305-5



The SIA Group's total fleet fuel consumption rose 64% from 827 million AG in FY2021/22 to 1,353 million AG in FY2022/23. This corresponds with the 64% increase in its Direct (Scope 1) GHG emissions from 7,797 tonnes CO<sub>2</sub>e in FY2021/22 to 12,763 tonnes CO<sub>2</sub>e in FY2022/23.

The increase in fuel consumption was mainly due to the resumption of air travel as more countries re-opened their borders.

Underscoring its commitment to mitigate emissions contributions from flight operations, SIA continued to implement fuel reduction and efficiency measures across its aircraft fleet to reduce its GHG emissions. This enabled SIA to achieve an estimated GHG emissions saving of 39,901 tonnes CO<sub>2</sub>e in FY2022/23.

<sup>26</sup> Please refer to the Appendix for definitions and methodologies. Given SilkAir's integration into SIA in FY2021/22, past year data for SilkAir can be found in Supplementary Sustainability Data section under Appendix chapter.

## CLIMATE ACTION (CONTINUED)

### ENERGY CONSERVATION ON THE GROUND

Buildings account for approximately 39% of energy-related global GHG emissions<sup>27</sup>. SIA aims to transition into a decarbonised environment through retrofitting and renovation efforts to reduce resource usage and improve performance.

#### Energy Reduction Initiatives

SIA reviews the performance of major building equipment, including the plans for refurbishment or upgrading on an annual basis. In FY2022/23, SIA implemented new energy reduction initiatives, including:

- Upgrading and adjusting operating parameters of its chiller plants and air-handling units.
- Reducing unnecessary use of utilities such as air conditioning, lighting, and IT hardware at SIA data centres.
- Progressively replacing lightings with more energy efficient light-emitting diode (LED) light fittings. The use of energy efficient LED high bay lights is expected to save 330,000 kWh annually, equivalent to 135 tonnes of CO<sub>2</sub>e savings annually.
- Replacement of lifts with newer systems that use a more efficient motor. This translated into approximately 35% of energy savings annually.
- Replacement of chiller plants with energy efficient ones at the SIA Training Centre and TechSQ. The new chiller system is expected to save more than 870,000kWh and reduce 352 tonnes of CO<sub>2</sub>e emission annually.

### CASE STUDY

#### SIA Celebrates Earth Day 2022

In support of Earth Day 2022, SIA's Properties team implemented a series of green initiatives. These included raising the air conditioning temperature by 1 degree Celsius at common areas and turning them off an hour earlier, switching off non-essential water features at the SIA Training Centre and TechSQ, and turning off all building signages and facade lighting in the evening. These efforts were estimated to have saved up to 470 kWh of electricity.



<sup>27</sup> Global Alliance for Buildings and Construction & International Energy Agency, "Global Status Report 2018".

## CLIMATE ACTION (CONTINUED)

### Adoption of Renewable Energy

In FY2022/23, SIA and SIAEC signed a new power purchase agreement with Sembcorp Solar. In addition to current solar photovoltaic (PV) panels at SIA's facilities, the Group also plans to install 1,300 solar PV panels with a capacity of 731 kWp on the roof of the SIA Supplies Centre. The new project will be commissioned in June 2023, and is capable of generating 900,000 kWh of electricity annually, offsetting 375 tonnes of SIA's Scope 2 emissions.



As of FY2022/23, solar panels installed at SIA's facilities delivered 5,279MWh of clean energy, equivalent to offsetting 2,142 tCO<sub>2</sub>e. 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.

> 9,000

solar panels installed at SIA's Airline House, SIA Training Centre, and TechSQ

Installed capacity of

4,243.8 MWp

Expected generating capacity

5,382.6 MWh  
of clean energy per annum<sup>28</sup>

Equivalent to offsetting

2,184 tonnes

of CO<sub>2</sub> emissions a year

Equivalent to planting over

27,558

trees

### Improving Building Infrastructure

In December 2022, the SIA Training Centre and TechSQ received the BCA Green Mark Platinum certification, representing the highest level of environmental performance. This achievement aligns with the Singapore Government's Green Plan 2030 of greening 80% of Singapore's buildings (by gross floor area) by 2030, as well as SIA's Sustainability Policy and Climate Action Pledge. The Group aims to achieve BCA Green Mark Certification for all SIA-owned buildings in Singapore by FY2026/27.

### Greener Transportation

To manage GHG emissions from SIA's ground operations, all diesel- and petrol-powered vehicles in its fleet are required to comply with the NEA regulations on motor vehicle emissions. In addition, the Group's vehicles undergo regular inspections, such as the annual Chassis Dynamometer Smoke Test to ensure that smoke opacity limit meets local standards.

In FY2022/23, SIA acquired new hybrid cars to commute to airside for engineering-related services. The use of hybrid vehicles resulted in lower petrol use and higher fuel efficiency.

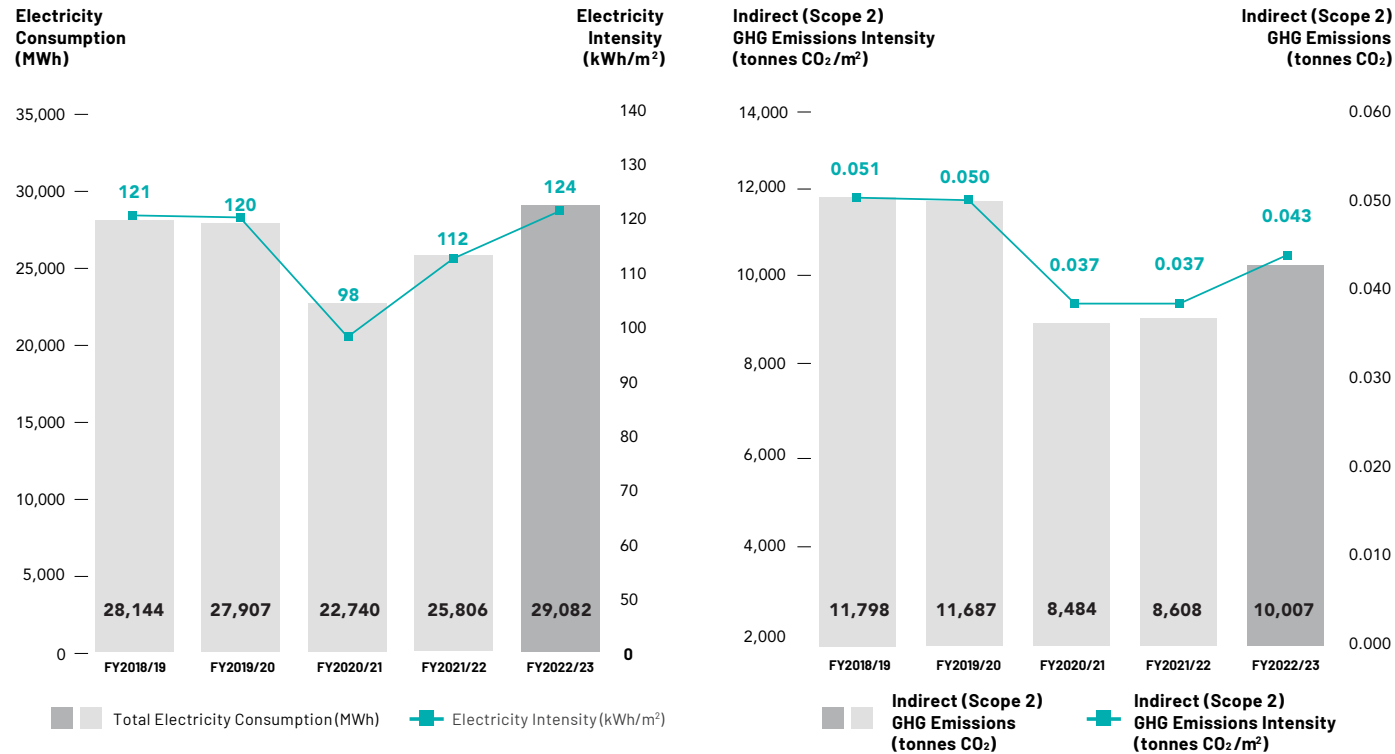
<sup>28</sup> Includes clean energy generated at SIA's Airline House, SIA Training Centre, and TechSQ.



## CLIMATE ACTION (CONTINUED)

### THE SIA GROUP'S SCOPE 2 EMISSIONS FROM BUILDINGS AND OFFICES<sup>29</sup>

302-1 302-3 302-4 305-1 305-4 305-5



The total electricity consumption at the SIA Group's buildings and offices<sup>30</sup> increased by 13% from 25,806 MWh in FY2021/22 to 29,082 MWh in FY2022/23. The increase in electricity consumption is due to higher building occupancy and resumption of business activity across all buildings, after the lifting of Covid-19-related safe management practices in April 2022 in comparison to the low business activity and lower building occupancy in the previous year. Correspondingly, its electricity intensity increased by 11% from 112 kWh/m² in FY2021/22 to 124 kWh/m² in FY2022/23. After the installation of SIA's rooftop solar panels, 4,416 MW of SIA's electricity consumption is derived from renewable energy. This represents 15% of the SIA Group's total electricity consumption for its buildings, as well as leased premises.

SIA's energy indirect (Scope 2) GHG emissions increased by 16% from 8,608 tonnes CO<sub>2</sub>e in FY2021/22 to 10,007 tonnes CO<sub>2</sub>e in FY2022/23, while the indirect emissions intensity (Scope 2) intensity increased by 14% to 0.043 tonnes CO<sub>2</sub>e/m². The disproportionate increase in emissions is attributed to the use of renewable energy.

Apart from committing to attaining BCA Green Mark Certification, SIA aims to achieve a 10% reduction in electricity consumption at its four buildings by FY2029/30, from FY2019/20 levels. The Group also seeks to use solar energy at all SIA-owned buildings in Singapore, which will be achieved through the installation of rooftop solar panels. In particular, it aims for the SIA Supplies Centre to be fully powered by renewable energy sources by FY2025/26, with at least 50% self-generated from the rooftop solar panels.

<sup>29</sup> Please refer to the Appendix for definitions and methodologies.

<sup>30</sup> Locations include SIA's four buildings (Airline House, SIA Supplies Centre, SIA Training Centre and TechSO) and offices.

## CLIMATE ACTION (CONTINUED)

### OTHER VALUE-CHAIN ACTIVITIES 305-3

In FY2022/23, SIA started its journey of creating an inventory for its Scope 3 GHG emissions, in line with Task Force on Climate-related Financial Disclosures (TCFD) recommendations to account for GHG emissions that occur along the value chain. Scope 3 emissions include all other indirect emissions that occur in a company's value chain, and account for both upstream and downstream activities. It is essential for SIA and its stakeholders to understand the full range of SIA's environmental impact, which will aid in refining SIA's emissions reduction targets.

SIA will continue to progressively refine its emissions accounting and data collection process through a multi-year phased approach. By broadening the scope and analysis of its calculations, SIA aims to present a more comprehensive representation of its Scope 3 emissions in future reports. In the meantime, SIA is engaging with its suppliers and stakeholders to identify opportunities for emissions reductions and collaborate on sustainability initiatives.

Details of SIA's Scope 3 emissions can be found in the Appendix chapter on page 136.



# RESOURCE MANAGEMENT

## PACKAGING, MATERIALS, AND WASTE MANAGEMENT 306-1 306-2 306-3 306-4 306-5

As part of SIA's commitment to minimise its environmental footprint, the Group practises the five Rs – Refuse, Reduce, Reuse, Repurpose, and Recycle – across its operations.



### 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 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 its 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

## In-flight Waste Management

Aircraft cabin waste comprises two primary waste streams: cleaning waste and catering 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** is generated by in-flight meals and beverages distributed on board the flight. These include food and packaging which are returned to the galley carts, static bins or compactor boxes.

SIA does not collect, store, or dispose of waste. These activities are performed by contracted cleaners and caterers, and are subjected to the relevant national waste management controls. Nonetheless, the Group works with its caterers worldwide to explore ways of managing cabin waste in a more sustainable manner, and conducts audits to gain a better understanding of the make-up of its waste. This allows SIA to effectively segregate and recycle its waste.

The Cabin Crew Division organises an annual Reduce Wastage Campaign to develop environmental consciousness among SIA employees, and involves the sharing of tips and best practices for waste management.

The Group has embarked on various initiatives to identify other waste reduction opportunities. For instance, SIA has been working with SATS Ltd since July 2020 to monitor the amount of food waste generated on its flights into Singapore. Through this initiative, SIA discovered that the majority of its cabin waste comprised of food and beverage waste. By monitoring and understanding its waste footprint, SIA hopes to develop a more structured and targeted approach to managing cabin waste.

## RESOURCE MANAGEMENT (CONTINUED)

### Managing Materials and Waste

SIA reduces its materials and waste by:



#### Using technology to study food waste

An ongoing collaboration with Lumitics allows SIA to use scanning technology to track unconsumed meals. Together with KrisLab and SATS Ltd, SIA is also working on a proof of concept with inspections.ai to study partially consumed main courses. Using an artificial intelligence model, the aim is to minimise food waste by adjusting quantities to bring on board or tweaking menus and dishes.



#### Pre-ordering meals to reduce food waste

SIA enhanced the pre-ordering of meals by allowing customers to indicate if they wish to skip meals when managing their bookings on its website or mobile app before their flight. This allows for more accurate uplifting of meals, thereby reducing food waste.



#### Digitising work processes

Through the Sustainability Taskforce, SIA implemented several initiatives to digitise its 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 SIA website. Customer feedback can then be tracked and investigated online.
- Accepting electronic signatures across the organisation.
- Ceasing the submission of Onboard Service Lists (OSLs) since May 2020. Cabin crew can access passenger lists and details via the Beyond Excellent Service through Technology (BEST) application, while ground staff can utilise the electronic OSL portal for an overview of customer requests and details for each flight.
- Digitising copies of the Cabin Safety Equipment Checklist, Aircraft Quick Reference Guide Cabin Safety Instructions and security bulletins for easy access by cabin crew.
- Digitising the Cargo Digital Checklist, which is used by operations to record cargo handling discrepancies, resulting in less paper used.

SIA is also in the process of:

- Reviewing onboard work processes to reduce the printing of OSLs used for meal order taking in business and economy class.
- Phasing out physical copies of Safety and Emergency Procedures cards.
- Digitising the Aircraft Certificate File, which is found on board every aircraft, on the eCert app.



#### Improved menu design and food preparation processes

Food wastage is a prevalent issue in the airline industry, with 20% of cabin waste comprising untouched food and drink<sup>31</sup>. SIA works closely with partners such as Lumitics and SATS Ltd to improve its menu design and preparation processes through machine learning, as well as research and development.



#### Reducing waste from in-flight amenities

SIA has been offering its in-flight amenity kits on a request basis to Business Class, Premium Economy Class and Economy Class customers since FY2019/20.



#### Digitising reading literature

Where feasible, hardcopy literature such as newspapers and magazines have been removed from the seatback pockets on SIA flights, and can be found in the SingaporeAir mobile application and Digital Menu, respectively, since FY2020/21.

<sup>31</sup> IATA, "Cabin Waste Handbook"

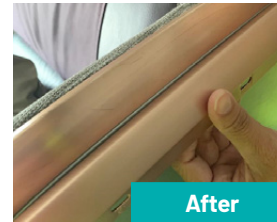
## RESOURCE MANAGEMENT (CONTINUED)

### Minimising Materials and Waste

Instead of replacing worn copper trims on Business Class seats, trims are salvaged and sent for refurbishment. A total of 2019 trims were repaired in FY2022/23, amounting to 355kg of copper material saved.



Before

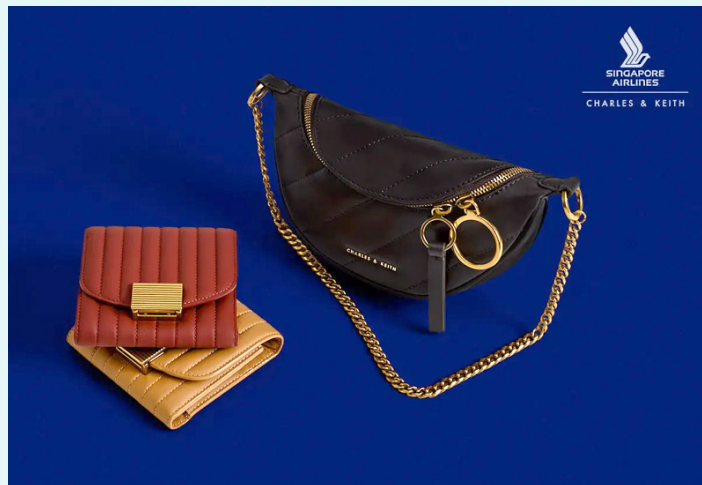


After

### Recycling In-flight Waste

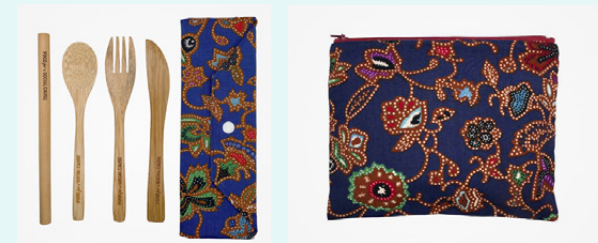
An in-flight initiative was introduced in September 2020 to segregate the polyethylene plastic bottles that are used on board flights for recycling. The bottles will be recycled into blankets, which will be sold on KrisShop. SIA is looking to expand this initiative to other medium- to long-haul flights.

## CASE STUDY



### The Upcycling Project

The Upcycling Project brings together local 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 materials 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 SIA's Business Class seats and cabin windows. Notable brands include Bynd Artisan, CHARLES & KEITH, Supermama, and Tocco Toscano.



In FY2022/23, a collection drive for unused cabin crew uniform was conducted over a span of one week. This collection is in collaboration with KrisShop, where the old uniforms weighing over 200kg were upcycled and repurposed by KrisShop for The Upcycling Project. Using these uniforms, pouches, cutlery kits, and tote bags made from the batik motif cloth of SIA's unused uniforms were created in collaboration with Singapore Fashion Runway and The Art Faculty, in an effort to promote sustainable living. These products are available on KrisShop, as well as the individual brands' online and retail outlets.

## RESOURCE MANAGEMENT (CONTINUED)

### In-flight Packaging

#### Using Alternative Packaging Materials

SIA is committed to using alternative packaging materials in order to reduce its environmental impact. In FY2022/23, SIA replaced its filling materials from kraft paper to plastic air pillows that are made of 50% recycled material. In addition, polypropylene tape used to seal carton boxes has been replaced with water-based resistant paper tape.

Having already replaced the packaging for its children's toys with recyclable paper packaging, SIA is now exploring the use of alternative sustainable material for its teddy bear packaging.

Scoot has replaced plastic water bottles on its flights with more sustainable Tetra Pak alternatives. It has also successfully replaced plastic drink stirrers with wooden stirrers.

SIA has also worked with SATS Ltd to replace single-use plastic packaging with sustainable materials, such as FSC-certified paper for meal boxes and cups, as well as bamboo and paper-based alternatives for dessert boxes and cutlery packs, on short-haul flights in Economy Class. This measure can reduce weight by up to 60% and reduce almost all single-use plastics on the Economy Class meal tray.

#### Performance of SIA's In-flight Waste

SIA started monitoring the total amount of waste generated and recycled in its flight operations from FY2021/22. General waste from catering and cleaning services are collected and disposed of by its ground handling and catering partner, and waste data is gathered from an online database. A biannual waste audit is also conducted to ensure the authenticity of the data. Similarly, recyclable waste is collected and managed by the catering partner, and all data is obtained from a centralised database.

In FY2022/23, the total amount of waste generated in its flight operations increased by 1,064% from 138 tonnes to 1,971 tonnes. The significant increase in overall waste generation and recycling was primarily due to more countries reopening their borders, resulting in an increase in air travel demand.

An increase of recycled waste tonnage was observed, from 31 tonnes in FY2021/22 to 300 tonnes in FY2022/23. A recycling rate of 13% was achieved, with total of 292 tonnes of glass waste and eight tonnes of papers being recycled. Having already resumed its recycling of magazines in FY2022/23, SIA will also resume the recycling of in-flight newspapers, which had been halted during the pandemic, and will explore the recycling of plastic bottles in the coming years.



# RESOURCE MANAGEMENT (CONTINUED)

## Ground Waste Management

SIA strives to align its waste management approach with Singapore’s Zero Waste aspirations, which include reducing waste sent to Singapore’s Semakau Landfill each day by 30% and increasing its overall recycling rate to 70% by 2030<sup>32</sup>. In FY2022/23, SIA continued implementing 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 plastic waste.



### REDUCE

#### Reducing Paper One Name Card at a Time

As part of its digitalisation efforts, SIA introduced digital name cards for all SIA Group staff in the form of a QR code in the 1SQ mobile app. External parties can scan the QR code and save an SIA employee’s information into their phone contact list. This initiative started in July 2019 and has saved approximately 59 reams of paper annually.

#### Reducing Plastic Waste

SIA’s Engineering Division has multiple initiatives to reduce plastic and paper waste generated. These 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.



### REUSE

#### Reusing Aircraft Parts for Safety Training

Safety training for pilots and cabin crew have been conducted using retired aircraft equipment, such as slide rafts and smoke hoods, since FY2021/22. Such retired aircraft parts are still functional, despite not meeting regulatory requirements for flight use. The equipment is restored to operational conditions and approved for training use by SIA’s Flight Operations Division.

#### Reusable Economy Class Earphones

Economy Class earphones were enhanced in 2020 from a double-jack to a single-jack design, where customers could use them on their own personal devices after their flight.



### RECYCLE

#### Recycling Electronic Waste at SIA’s Offices

In 2016, SIA launched a “Let’s Erase e-Waste” campaign that continues today. In FY2022/23, 2.7 tonnes of e-waste were recycled. SIA also participated in Changi Airport Group’s e-waste collection day, with employees contributing items ranging from power banks and chargers to keyboards and mobile phones.

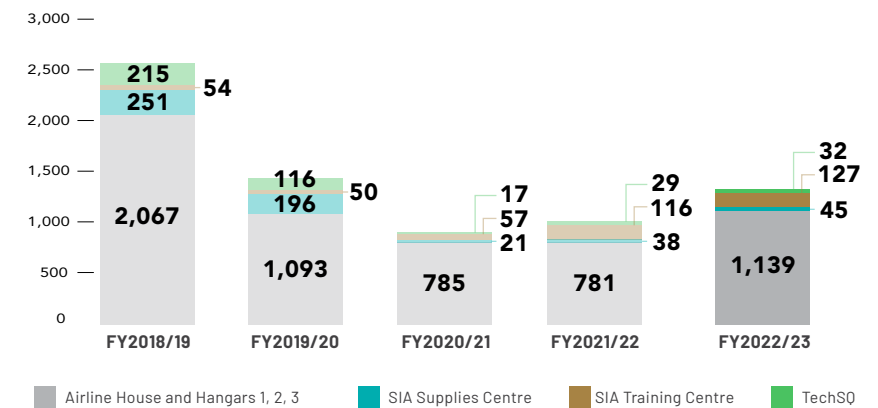
## Ground Packaging

### Complying With Stricter Packaging Legislation

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 NEA. SIA has complied with MPR rules, having collected relevant material information on its packaging products, such as material type, percentage of recycled content, as well as corresponding weights.

### Performance of SIA Ground Waste<sup>33</sup>

#### Total Waste Generated at Buildings (tonnes)



Total waste generated by SIA’s buildings<sup>34</sup> in Singapore increased by 39% from 964 tonnes in FY2021/22 to 1,343 tonnes in FY2022/23. The Group recycled a total of 175 tonnes of waste in FY2022/23, equivalent to 13% of total waste. The breakdown of recycled waste includes paper, plastics, ferrous metals, glass, textiles, and wood. Dedicated recycling bins are made available at SIA’s properties for recyclables.

General waste is collected and managed by general waste collectors licensed by the National Environment Agency. The waste is either sent directly to an incineration plant, or to a material recovery facility for further sorting and destruction. The weight of waste for both general waste and recyclable waste streams are recorded by licensed waste collectors, and shared with SIA.

<sup>32</sup> Ministry of Environment & Water Resources, “Singapore’s Zero Waste Masterplan”.

<sup>33</sup> Please refer to the Appendix for definitions and methodologies.

<sup>34</sup> Locations covered include SIA’s four buildings (Airline House, SIA Supplies Centre, SIA Training Centre, and TechSQ). Waste data will not include Hangars 1, 2 and 3, as they are under SIAEC’s operational control and reported separately by SIAEC.

# RESOURCE MANAGEMENT (CONTINUED)

## WATER CONSERVATION PR-7 PR-8 PR-9



### SIA's Water Conservation Efforts 303-1 303-2

Most of SIA's water management initiatives involve reducing usage through water-saving devices and the harvesting of rainwater and ground water. No industrial effluents that are generated from its commercial activities, and all wastewater 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.

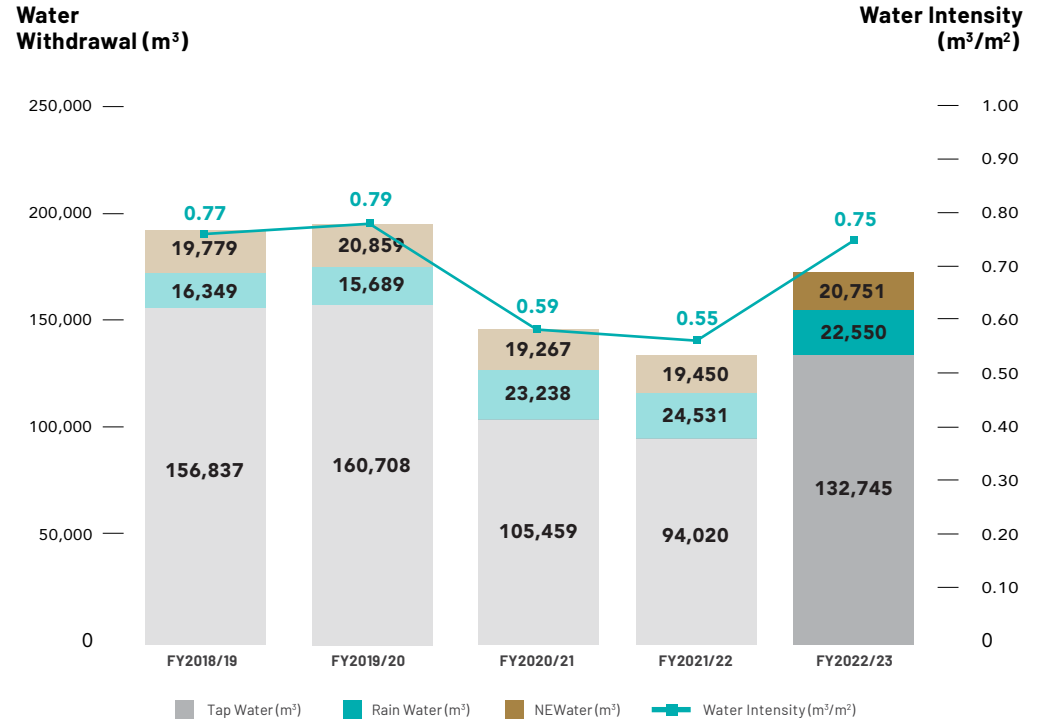
In line with MSE's Clean Water Policy, SIA strives to continually improve the efficiency of its water usage across its various buildings. Existing and ongoing water conservation and improvement initiatives include:

- Harvesting rainwater that is suitable for flushing purposes and watering of the external landscape. In FY2022/23, 7,666m<sup>3</sup> 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 was about 14,884m<sup>3</sup> in FY2022/23. Together with the rainwater harvested, the total water harvested amount to 90.7% of the total Airline House demand for non-potable water.
- Studying the collection and reuse of condensate water from air-conditioning units and treatment of surface water for cooling towers to reduce reliance on potable water.
- Installing water saving taps and foam soap dispensers in washrooms.
- Displaying educational posters provided by the Public Utilities Board (PUB) in shower rooms and public hand wash areas in the canteen to encourage water conservation.
- Conducting regular water audits and submitting water efficiency management plans to PUB annually.
- Replacing manual flush valves and water taps with sensor-operated models with at least three ticks based on PUB's Water Efficiency Labelling Scheme.

SIA will progressively replace the current sanitary wares with sensor-based models during its upcoming washroom renovations to minimise water wastage.

In recognition of SIA's water conservation efforts during the year, the Group attained the PUB Water Efficiency Building Certificates for four SIA-owned buildings, namely Airline House, SIA Training Centre, TechSQ and SIA Supplies Centre.

### Water Performance of SIA's Properties and Offices<sup>35</sup>



Water withdrawn from SIA's buildings and offices increased by 28% from 138,001m<sup>3</sup> in FY2021/22 to 176,046m<sup>3</sup> in FY2022/23. Water intensity figures also saw an increase of 36% from 0.55m<sup>3</sup>/m<sup>2</sup> in FY2021/22 to 0.75m<sup>3</sup>/m<sup>2</sup> in FY2022/23. The changes in water withdrawn and water intensity were due to increase in building occupancy and resumption of business activity across all buildings, after the lifting of Covid-related community and border measures in April 2022.

Apart from the attainment of BCA Green Mark Certification, which includes a water reduction criterion, SIA aims to achieve a 10% reduction in potable water consumption at its four buildings by FY2029/30, from FY2019/20 levels.

<sup>35</sup> Prior year's water withdrawal and water intensity values for FY2016/17, FY2017/18, FY2018/19 and FY2019/20 were corrected to ensure the accuracy of values reported. Please refer to the Appendix for definitions, methodologies and reasons for and effect of restatements.



## POLLUTION CONTROL

### NOISE PR-7 PR-8 PR-9

Aircraft engines are a major source of noise pollution, especially during the landing and take-off cycle. SIA is continually exploring ways to reduce its noise pollution and the impact on local communities situated near airports.

SIA seeks to minimise its noise pollution through compliance with ICAO noise standards, which have been made progressively more stringent over the years. It does this by investing in newer and quieter aircraft, continuous improvements to existing fleets, and adopting appropriate noise abatement procedures in the airport vicinity.

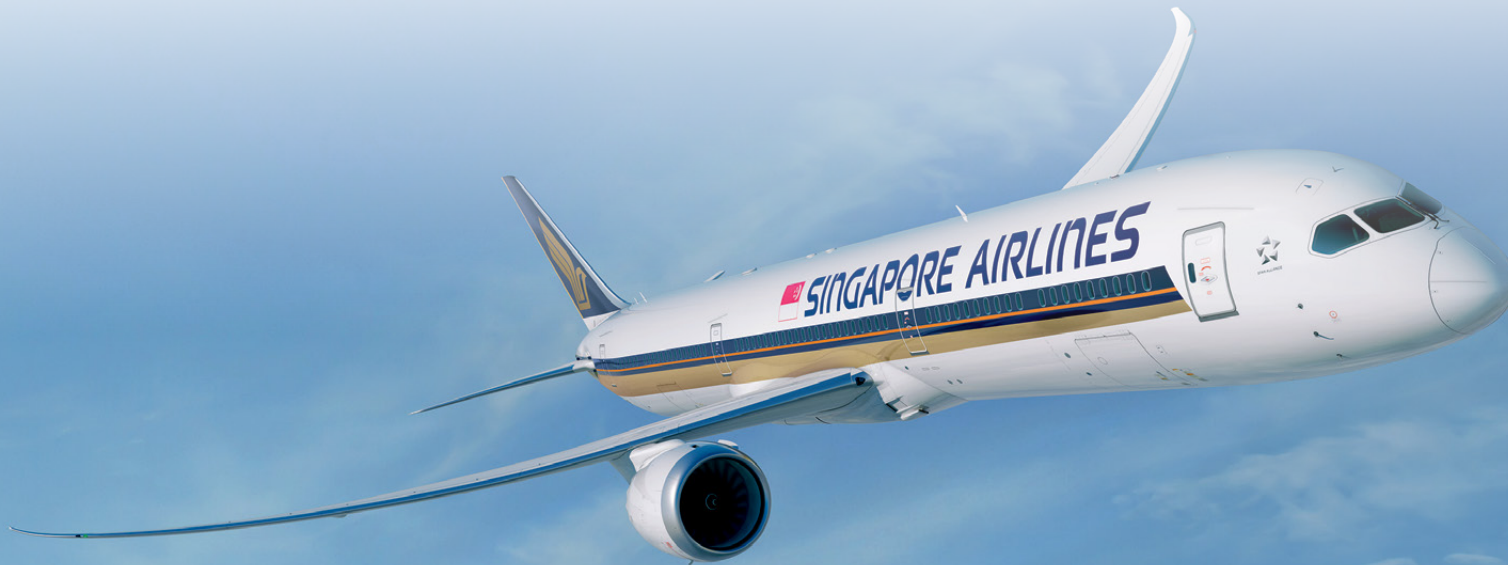
As of FY2022/23, every aircraft in SIA Group meets the latest ICAO Chapter 4 noise standard. SIA has also ordered 31 Boeing 777-9s, which will have up to 15 dB noise levels below Stage 4 Aircraft Noise Standards margin.

### 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 (NO<sub>x</sub>), sulphur oxides (SO<sub>x</sub>), carbon monoxide (CO), particulate matter (PM) and other trace compounds that affect air quality. Over the years, improved engine designs have gradually reduced emissions of NO<sub>x</sub> and CO<sup>36</sup>.

ICAO sets the international standards for NO<sub>x</sub>, CO<sub>2</sub>, hydrocarbons, and exhaust levels from aircraft engine emissions, which is applicable to new aircraft designs as of 2020, as well as new deliveries of current in-production aircraft types from 2023.

SIA seeks to minimise its NO<sub>x</sub> footprint through compliance with ICAO's emissions standards. As of FY2022/23, the SIA Group's fleet meets the 2004 ICAO CAEP/6 Emissions Standards for NO<sub>x</sub>, while its Airbus A350s and Boeing 787s meet the more stringent CAEP/8 standards.



<sup>36</sup> IATA, "Local Air Quality"

# BIODIVERSITY

## BIODIVERSITY 304-3 PR-8

### 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. Since 2010, SIA has 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 Hutan Harapan Rainforest Initiative 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.

With strong support from the Indonesian Government, the Hutan Harapan Rainforest Initiative has been able to continually expand its biodiversity efforts and support indigenous communities.

#### Key Highlights of the Hutan Harapan Rainforest Initiative

The Hutan Harapan Rainforest Initiative has achieved several important objectives, including:

- Reducing the amount of forest lost each year to less than 800 hectares, which is below the Kreditanstalt für Wiederaufbau (KfW) milestone average, and lowering the number of illegal activities in the forest.
- Strengthening forest protection in areas that are considered a priority.
- Improving infrastructure and facilities to effectively manage the forest concession.
- Creating long-term economic sustainability to support the protection, restoration, and preservation of wildlife biodiversity and community development in Hutan Harapan.
- Establishing a Forest Partnership Agreement and improving the livelihoods of nearby Batin Sembilan communities.
- Collaboration with scientific and business partners for Hutan Harapan's operations.



### Strengthening Forest Protection

Forest protection is essential to preserving biodiversity by maintaining its habit and ecosystem. In FY2022/23, around 56 Community Wardens from the Batin Sembilan community were involved in protecting Hutan Harapan's forests by patrolling with PT Restorasi Ekosistem Indonesia's (PT REKI) forest protection team. PT REKI is a company that holds ecosystem restoration licenses, and has played a vital part in the Hutan Harapan initiative by maintaining close collaboration with stakeholders within Hutan Harapan. Community wardens are either integrated into PT REKI's forest patrols, or are engaged part-time for patrolling. The Community Wardens conduct patrols four times per week with the PT REKI Patrol team, particularly in areas and locations prioritised in the "grid map," and record all encounters and illegal activities they come across in the Cyber Tracker application. The information gathered is used to inform patrolling strategies and management plans, and Community Wardens have been trained to use Cyber Tracker-SMART tools, operate GPS devices, map data on GPS, and make patrol reports.

### Forest Fire Prevention in Hutan Harapan

Threats of forest and land fires are prevalent in Indonesia, especially during prolonged periods of dry season. The 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.

Although the risk of forest fires was low in 2022, with only seven hotspots identified and extinguished, the weather agency predicts that Indonesia will face its driest weather since 2019 from May 2023 to April 2024, which will increase the risk of forest fires. To anticipate the fire season, PT REKI has increased the capacity of staff and Community Wardens for forest protection and fire prevention. They have signed a cooperation agreement with local military, police, and forestry associations, and received training support for community-based fire prevention groups. PT REKI has also carried out fire prevention activities such as installing warning signs, maintaining firefighting equipment, and cleaning water reservoirs. 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.

## BIODIVERSITY (CONTINUED)



### Biodiversity Monitoring in Hutan Harapan

A biodiversity monitoring plan has been outlined, defining the foreseeable activities for monitoring Hutan Harapan's rich biodiversity in the coming years. This includes further developing the biodiversity monitoring system, which will help SIA achieve and measure the success of biodiversity conservation efforts.

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 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 multilateral 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.

### 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 ensuance of conflicts with local communities as they have a stake in the forest's protection and conservation.

Hutan Harapan, managed by PT REKI, is implementing several initiatives to improve the livelihoods of local communities and ensure the conservation and protection of forests in the area. One important aspect of their strategy is working with communities to develop sustainable livelihoods. In late 2021, PT REKI conducted a household income survey with the support of BMW-Pirelli to better understand household income patterns and identify opportunities for improving income. To address findings, PT REKI is working with the Batin Sembilan communities to improve the management of their rubber agroforests while diversifying the commodities they plant.

Representatives from BirdLife International, BMW, and Pirelli visited Hutan Harapan in October 2022 and found that the technical practices for rubber tapping were poor. Koltiva, a technology-enabled service company empowering producers and business users to go from seed to table, was invited to Hutan Harapan by Pirelli to demonstrate their targeted good agricultural practices coaching across two farms. Following Koltiva's suggestion, training and coaching will be carried out with each farmer in their respective gardens to increase latex quality and quantity, address pests and fungus, and apply fertilisers and good latex management methods. A Memorandum of Understanding between PT REKI and Koltiva was signed in February 2023.

Additionally, Hutan Harapan is developing its own businesses that are allowed under government regulations and are in keeping with its vision and mission. The project is focusing on the cultivation of vanilla and patchouli with the support of P4F. Currently, hectares of vanilla have been planted, and the vegetative growth of the plantations is normal and in accordance with the growth period. Hutan Harapan is maintaining the plants until pollination in 2024 and harvesting in 2025, and has partnered with a market-access player that will become a long-term commercial partner to achieve financial sustainability for the vanilla crops.

Hutan Harapan is also assessing its potential as a viable location for developing carbon projects.

Apart from biodiversity collaboration efforts, the Hutan Harapan initiative also focuses strongly on addressing local community needs and improving their livelihoods.

## BIODIVERSITY (CONTINUED)

### Providing Basic Health Services

In collaboration with the Batanghari District government, PT REKI provided public health services for Batin Sembilan communities. The services consist of a permanent clinic and monthly mobile health centres. Door-to-door awareness for Batin Sembilan families are regularly conducted by PT REKI's nurses to promote healthy behaviour, malaria prevention and family planning home care.



### Education for the Batin Sembilan Children

The Besamo School teachers have developed a new teaching and learning strategy, which involves visiting children at their homes and inviting them to the Besamo School or forest classroom for learning. The teachers use various methods to keep the children engaged and enthusiastic about learning, such as providing them with learning choices.



# TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES

## Climate Governance

As part of the SIA Group's commitment to transparent and effective climate governance, the Group has started reporting its efforts in addressing climate-related risks and opportunities in this year's sustainability report, and will progressively update its disclosures in accordance with Taskforce on Climate-related Financial Disclosures (TCFD) recommendations through a phased approach.

SIA is also developing an implementation roadmap to improve the management and reporting of climate-related issues over the longer-term, so that stakeholders have a clearer understanding of the SIA Group's climate-related risks and opportunities, as well as the mitigation and adaptation measures SIA is taking to manage them.

## Climate-related Risks And Opportunities 3-3 PR-7 PR-8 PR-9

### Governance

To support SIA Board's oversight of key risks, the respective Board Committees have been delegated to review specific areas of risks and controls and report the outcome of such reviews to the Board regularly. Based on this approach to ensure Board's oversight, the Board Customer Experience, Technology and Sustainability Committee (CETSC) is responsible for overseeing climate-related risks and opportunities with a strategic angle, while the Board Safety and Risk Committee (BSRC) focuses on the impact of climate-related risks to operations.

#### BOARD

##### Board Customer Experience, Technology and Sustainability Committee (CETSC)

The CETSC supports the SIA Board with overall oversight of the Group's sustainability management across the Group's business, operations, and strategies; and provides guidance on the development of a strategic roadmap for ESG topics. CETSC's responsibilities also include the management of sustainability risks, which covers climate-related risks and opportunities.

Key sustainability risks are surfaced to the CETSC annually through the Annual Group-wide Risk Management Review Exercise (ARMRE) process, or as required throughout the year as part of the SIA Group Risk Management Framework that includes ongoing review of risks.

As required, climate-related opportunities are surfaced to CETSC for deliberation. CETSC reports on the Committee's activities and discussions back to the Board twice a year.

##### Board Safety and Risk Committee (BSRC)

The BSRC supports the SIA Board with the oversight of the Group's risk governance system to ensure that risk management processes are sound and in accordance with best practices, and that they comply with applicable regulatory requirements. In addition to key risk topics being surfaced to the BSRC for review on a regular basis, the BSRC also coordinates the distribution of relevant risks to other Board Committees, including the CETSC for oversight, as the Group's risks are interdependent and cut across various functions.

BSRC reports on the Committee's activities and discussions back to the Board on a quarterly basis.

#### SENIOR MANAGEMENT

##### Management Committee (MC) and Sustainability Steering Committee (SSC)

CETSC is supported by Management Committee (MC) and Sustainability Steering Committee (SSC), which are chaired by SIA CEO and Chief Sustainability Officer (CSO) respectively.

The MC supports the SIA Board in periodic review and assessment of the potential and actual impact of SIA's activities on the economy, environment, and people; as well as periodic updates to the Board on significant developments and/or key sustainability matters as required. MC is informed by the SSC, comprising of selected Senior Management representatives from key business units directly involved in sustainability matters in SIA.

##### Group Risk and Compliance Management Committee (GRCMC)

BSRC is supported by the SIA Group Risk and Compliance Management Committee (GRCMC), chaired by SIA CEO and comprising of company heads and key appointment holders overseeing risk management in the respective companies under the Group. GRCMC ensures that risks are effectively surfaced and reviewed, and risk responses are coordinated and integrated across the Group.

Correspondingly, company Risk Management Committees, comprising of Senior Management and key appointment holders representing key areas of the business, ensures that risks are reviewed holistically and surfaced to the GRCMC and BSRC for further review.

Details of the key elements of the SIA Group Risk Management Framework and Risk Governance Structure are published on the [SIA website](#), and available on pages 65 to 67, and pages 82 to 83 of the SIA Annual Report FY2022/23.

## TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES (CONTINUED)

### Strategy

The SIA Group recognises that climate change presents significant risks and opportunities for businesses. SIA has conducted a climate scenario analysis to enable SIA to assess the resilience of its business activities and strategies to potential impacts of climate change over the short term (by 2025), medium term (by 2030), and long term (by 2050). These time horizons were selected in alignment with Singapore's 2030 national targets for sustainable development and the SIA Group's 2050 net zero ambition.

According to TCFD recommendation, companies should assess climate resilience across different climate-related scenarios – a 2°C or lower scenario, in addition to other scenarios most relevant to their circumstances. SIA's analysis considers two climate pathways namely Net Zero Emissions Scenario (2°C or lower) and Middle-of-The-Road Scenario (~2.4°C to 2.8°C), primarily taking reference from IPCC<sup>37</sup> Representative Concentration Pathways (RCPs) for physical risk assessment and Shared Socioeconomic Pathways (SSPs) for transition risk assessment.

These were assessed to be the most practical and relevant scenarios to plan and prepare for, as the first scenario fulfils TCFD requirements, and the second scenario has been described as a "likely" scenario in terms of current pace of development and trends in socio-economic factors, climate policy landscape, technology evolution.

SIA will continue to monitor developments in climate scenarios to make informed climate risk assessment and strengthen its decision-making processes.

Climate Scenarios	Scenario Analysis <sup>38,39</sup>	Description
1. Net Zero Emissions	IPCC RCP2.6 and SSP 1-2.6 2°C or lower	<p>This scenario assumes a future towards a more sustainable path where the management of global issues gradually improves through effective collaboration and cooperation across international, national, and local institutions. There will be an increased environmental awareness and a gradual behavioural shift towards a less resource intensive lifestyle. This favourable outlook will also attract more investments and financial incentives for low carbon technologies to orientate towards lower resource and energy intensity.</p> <p>To achieve this, significant reductions in emissions will be necessary over the next few decades, with the aim of achieving almost zero emissions by 2100.</p>
2. Middle-of-the-Road	IPCC RCP4.5 and SSP2-4.5 ~2.4°C to 2.8°C <sup>40</sup>	<p>An intermediate scenario in which emissions peak around 2040 and then decline. This scenario assumes that the social, economic, and technological trends do not change considerably from historical patterns. There will be moderate collaboration and cooperation across international, national, and local institutions but slow progress in achieving sustainable development goals. Technological development continues to evolve but without fundamental breakthrough. Though dependencies on fossil fuels reduces gradually, reluctance to use non-conventional fossil fuel sources remains.</p> <p>Stabilisation of emissions is expected to occur shortly after 2100.</p>

<sup>37</sup> In recent years, IPCC has developed a new set of climate scenarios called Shared Socioeconomic Pathways (SSPs) for their sixth assessment report on climate change (published 9 August 2021) to better illustrate the complexities of social and economic factors contributing to climate change through a range of plausible future pathways of human development. Although RCP scenarios are still widely adopted among organisations, SIA have considered the SSP scenarios along with additional assumptions from the Network for Greening the Financial System (NGFS) Nationally Determined Contributions (NDCs) and the International Energy Agency (IEA) Stated Policies Scenario (STEPS) to provide a more comprehensive frame for climate impact and policy analysis – in particular for transition risk assessment.

<sup>38</sup> For IPCC RCP2.6 and RCP4.5 scenario analysis applied to physical risks, a projected global mean surface temperature of "Likely" range between 0.3°C - 1.7°C and 1.1°C - 2.6°C in the long-term (2081 - 2100) was used respectively (IPCC Fifth Assessment Report Summary for Policymakers, Table SPM.2)

<sup>39</sup> For IPCC SSP1-2.6 and SSP2-4.5 scenario analysis applied to transition risks, a projected global mean surface temperature of "Very Likely" range between 1.3°C - 2.4°C and 2.1°C - 3.5°C in the long-term (2081 - 2100) was used respectively (IPCC Sixth Assessment Report Summary for Policymakers, Table SPM.1)

<sup>40</sup> The estimated temperature range referenced here is for representation purposes and draws upon four sources – IPCC RCP 4.5, IPCC SSP 2-4.5, International Energy Agency (IEA) Stated Policies Scenario (STEPS) and the Network for Greening the Financial System (NGFS) Nationally Determined Contributions (NDCs).

## TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES (CONTINUED)

### Risk Management

The SIA Group has a formalised Risk Management Framework in place to govern, report and manage risks through the application of established risk management principles, policies and guidelines. This framework is embedded in the Group's business operations, including facilitating risk-based decisions and strategic planning, and emphasises the importance of managing risks on an ongoing basis through coordinated efforts across different business functions.

*For more details on SIA's Risk Management Framework and Processes, please refer to the Governance chapter, pages 112 and 113 of this sustainability report.*

The Group's top risks are broadly classified into 'strategic' and 'non-strategic' risks, where risks are further classified under specific risk sub-categories to ensure they are appropriately and clearly captured in the risk register for continuous monitoring and review. Accordingly, climate-related risks and controls are assessed and considered across various areas of the business operations and duly called out in a dedicated risk register for closer monitoring. To increase awareness and enhance staff competency in assessing climate-related factors and their impact to business operations, engagement with business units has also stepped up in the past year and will continue to be a key area of focus in the Group's commitment to address climate-related risks and pursue associated climate-related opportunities.

Over the past year, SIA conducted a study to identify and assess the potential impact of physical risks, as well as transition risks and opportunities on airport operations, cargo operations and owned assets in Singapore given that it is a critical hub for the Group's operations. The following sections highlight key findings from the study. SIA will continue to closely monitor and review these climate issues to ensure that any potential operational disruption will be minimised. This includes assessing climate risks and opportunities of overseas operations too.

## CASE STUDY

### Raising Awareness of Climate Risks and Opportunities

The Sustainability Office was invited to discuss climate risks and opportunities with staff across the SIA Group, including those from SIAEC and Scoot, as part of the annual Risk Champions Engagement Session and Training Workshop on 23 February 2023. The presentation included topics on potential types of physical and transition risks in aviation, as well as opportunities such as cost savings from resource efficiency, green product innovations, access to new partnerships, and green financing options. During the breakout sessions, participants highlighted climate-related risks and opportunities that affected their respective business units, and measures they are taking to manage them.



## TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES (CONTINUED)

### Physical Risks in Singapore








Physical risks refer to potential negative impacts from physical effects of climate change. Physical risks can be event-driven (acute), such as the severity of extreme weather events; or relate to long-term shifts and increased variability in weather patterns (chronic), such as sea level rise, changes in temperature and precipitation patterns.

Such risks could result in increased frequency of disruptions to SIA operations such as flight diversions, delays and cancellations in the short-term; and also pose longer-term strategic impact to the whole of aviation industry. SIA recognises that it is critical to identify these physical risks, and ensure that mitigation and adaptation measures are put in place timely.

In FY2022/23, SIA conducted a physical risk assessment which identified climate hazards to Singapore's operations as outlined in the table on the right.

### Mitigation and Adaptation Measures for Physical Risks

SIA regularly develops and updates its crisis response and business continuity plans (BCP) to mitigate potential business disruptions. This includes ensuring that a flight disruption BCP is in place to handle major disruptions during extreme weather conditions. SIA also actively participates in external multi-agency airport emergency exercises to validate its crisis management response plans, capabilities, and the management of communications with external stakeholders. SIA is also reviewing specific measures to better manage individual physical risks, and will progressively report on its efforts.

Risk Type	Risk Description	Potential Operational and Financial Impact
Long-term shifts and increased variability in weather patterns (chronic)	Heat stress 	<ul style="list-style-type: none"> <li>Disruptions to ground operations (e.g workforce absenteeism from heat-related health stresses), and flight operations (e.g flight cancellations, delays, diversions).</li> <li>Increased cooling demand for airport terminal buildings.</li> <li>Revenue loss from operational disruptions, and increased maintenance or operational costs from airport infrastructure cooling needs.</li> </ul>
	Precipitation stress 	<ul style="list-style-type: none"> <li>Physical damage or impairment of runway and airport infrastructure due to periods of heavy or persistent rainfall.</li> <li>Disruptions to ground operations (e.g. increased lightning activities during prolonged rainfall) and flight operations (e.g. flight cancellations and delays due to poor visibility during take-off and landing).</li> <li>Revenue loss from operational disruptions, and increased costs of insurance or enhancements for critical assets.</li> </ul>
	Sea level rise 	<ul style="list-style-type: none"> <li>Physical damage to airport infrastructure due to storm surges, or periods of heavy or persistent rain, which overburdens drainage system.</li> <li>Loss of access to offices, facilities, equipment.</li> <li>Revenue loss from operational disruptions, and increased costs of insurance or enhancements for critical assets.</li> </ul>
	Drought stress 	<ul style="list-style-type: none"> <li>Disruptions to ground and flight operations due to water shortages such as simultaneous multiple grounded or delayed flights; reduced potable water uplift; restrictions to full water and toilet servicing of aircraft and in-flight food catering menu.</li> <li>Revenue loss from operational disruptions.</li> </ul>
	Fire weather stress 	<ul style="list-style-type: none"> <li>Disruptions to ground and flight operations due to haze conditions from uncontrolled forest fires in neighboring countries.</li> <li>Revenue loss from operational disruptions.</li> </ul>
Increased severity of weather events (acute)	Tropical cyclones 	<ul style="list-style-type: none"> <li>Airport closure for an extended period – includes disruptions to logistical supply lines, simultaneous grounding of multiple flights, and handling of stranded passengers who are unable to reach or leave the airport.</li> <li>Physical damage to infrastructure and assets like airport buildings, aircraft, ground service equipment etc..</li> <li>Revenue loss from operational disruptions and increased costs of maintenance and repair for critical assets.</li> </ul>
	River floods 	<ul style="list-style-type: none"> <li>Singapore's overall topography is small and flat as a coastal island-state, impact is assessed to be similar to sea level rise (see above).</li> </ul>



## TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES (CONTINUED)

### Transition Risks and Opportunities in Singapore

Transition risks refer to potential negative impacts associated with the transition to a low-carbon global economy. Commonly identified transition risks include policy and legal actions, technological changes, market responses, and reputational concerns. At the same time, there are also potential opportunities related to climate measures such as cost-savings from improved resource efficiency of operations, and climate-friendly product innovation in tandem with shifting consumer preferences.

Based on the transition risk assessment conducted for SIA's operations in Singapore, the following key transition risks were identified:

Risk/Opportunity	Description	Potential Operational and Financial Impact
Policy and Legal	Enhanced emissions reporting obligations	<ul style="list-style-type: none"> <li>Increased costs and resources to implement processes to ensure compliance against mandatory climate and carbon emissions reporting requirements.</li> <li>Failure to adhere to mandatory reporting obligations may result in potential risk of shareholder and employee activism, investor divestment and penalties from the relevant authorities.</li> </ul>
	Introduction of mandates and regulation on existing products and services	<ul style="list-style-type: none"> <li>Potential emergence of uncoordinated climate policies and mandates on product and services at the regional or national level may create market distortion and lead to increased compliance cost.</li> <li>Increased upgrading and retrofitting cost to meet higher environmental standards for industrial and commercial buildings.</li> </ul>
Market	Increased cost of raw materials – increased fuel expenditure in the transition to SAF	<ul style="list-style-type: none"> <li>The cost of SAF including the production, feedstocks, conversion technologies, transportation and fuelling infrastructure will remain significantly high at least till 2030, resulting in high operating costs, which could potentially impact revenue.</li> <li>Consumer demand and overall revenue could be impacted if the associated cost of SAF adoption is passed on to consumers, as part of the transition to a low carbon economy.</li> </ul>
Technology	Investments in new technologies and carbon credits projects	<ul style="list-style-type: none"> <li>Increased operating expenditure to research, develop, and deploy evolutionary and revolutionary aircraft technologies. Opportunities for airlines to explore co-investments, or purchase low-emissions fleet.</li> <li>As decarbonisation levers like the use of SAF and purchase of carbon offsets are increasingly relevant to help airlines meet sustainability targets, strategic investments in SAF, carbon credits production could be increasingly attractive.</li> <li>However, there is also a risk of failed investments or a low return on investment, which will impact profit margins.</li> </ul>

### Mitigation and Adaptation Measures for Transition Risks and Opportunities

SIA recognises the dynamic nature of transition risks and opportunities, and will continue to monitor and review them to ensure minimal disruption to operations. SIA has existing measures to help it transit better into a low-carbon economy, such as working closely with aviation ecosystem partners through the International Advisory Panel (IAP) to develop a Sustainable Air Hub Blueprint for Singapore. This includes advocating policies that encourage large-scale adoption and production of SAF among others, and also exploring opportunities to finance and procure eligible carbon offsets to meet emissions reporting obligations. SIA is also reviewing specific measures to better manage individual transition risks and opportunities, and will progressively report on its efforts to make greener travel viable and accessible to all.

*For more details on SIA's decarbonisation and resource conservation efforts, please refer to Environment chapter, pages 25 to 47 of this sustainability report.*

### Metrics and Targets

The SIA Group has been monitoring its environmental performance through relevant metrics and targets, aligned to the GRI Standards, GHG Protocol Corporate Accounting and Reporting Standard, and TCFD recommendations. The Group has consistently disclosed over the past years, metrics related to energy and water consumption, waste generation, and carbon emissions (Scope 1 and 2). SIA has also done a computation of limited Scope 3 emissions for reporting from FY2022/23.

In May 2021, the Group announced its commitment to achieve net zero carbon emissions by 2050, reinforcing its longstanding strategy to work towards decarbonisation and environmental sustainability across its operations. This demonstrates SIA's commitment to environmental stewardship and its decision to take on an active role in mitigating climate change. Targets surrounding energy and water consumption have also been established and communicated in prior year's sustainability reports.

*For more details on targets set, please refer to Environment chapter, page 25 of this sustainability report.*

# SAFETY

The safety and well-being of customers and employees have always been SIA's top priority. The Group believes that fostering a strong safety culture is the collective responsibility of all employees, and is committed to continuously improving its processes to make them safer for all.

## SIA's MANAGEMENT APPROACH

### Key Engagement Activities

Engagement Mode	Frequency
Audits and Assessments	Regular
Bulletins and Notices	Regular
Employee Portals (1SQ, SQhub, SKIES, etc.)	Regular
External, Statutory, and Regulatory Communications	Regular
Fire Evacuation Drills	Half-yearly
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 its divisions and departments
- Various safety audits, including Airline Operator Certificate (AOC) Renewal Audit, IATA Operational Safety Audit (IOSA), and Line Operations Safety Audit (LOSA)

### SIA's Ambitions

SIA strives to improve its safety practices, as well as inculcate a strong and positive safety culture within the organisation.

Targets	Due	Status
Review the Departmental and Corporate Risk Register (Operations)	Every six months	Achieved
Conduct at least two fire evacuation drills for each office location in Singapore	Every year	Achieved
Conduct an IATA Operational Safety Audit (IOSA) once every two years	By FY2022/23	Achieved
Conduct a Hazard Identification and Risk Assessment for Workplace once every three years	By FY2024/25	On track
Conduct a Line Operations Safety Audit (LOSA) once every five years	By FY2024/25	On track
Conduct a Safety Survey	Every year	Achieved

### Supporting the UN SDGs



### FY2022/23 in Numbers

<p><b>100%</b> of all reported hazards have been investigated and addressed</p>	<p><b>0</b> work-related fatalities and high-consequence work-related injuries for employees and key contractors</p>	<p><b>41</b> Safety Awards and Safety Citations awarded to employees at the Safety and Security Week 2022</p>
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## FLIGHT SAFETY AND SECURITY

3-3 403-1 403-2 403-3 403-4 403-4 403-4 403-5 403-6 403-7 403-8 416-1 416-2

### SAFETY MANAGEMENT

403-1 403-4 403-5 403-6 403-7 403-8 416-1 416-2

All employees are actively engaged in the review and continual development of SIA's safety programmes.

#### Safety Governance

SIA has an open and effective safety culture that is built on trust and accountability, with clearly defined mandates, roles, and responsibilities. The Group's pursuit of safety excellence is evident across all levels of the organisation, with leaders guiding and influencing employee attitudes towards safety.

#### 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

##### Hazard Reporting

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

##### Incident and Accident Reporting

- Every employee is responsible for reporting 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



SIA's Safety Management Systems are regularly reviewed by its Board of Directors and Management to ensure their 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)

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

#### AIR SAFETY COMMITTEE (ASC)

The ASC oversees the flight safety programme and SMS on behalf of the CEO. The committee is responsible for monitoring safety performance and trends, as well as taking pre-emptive actions to avoid or mitigate risks. It also provides directions and guidance to the SAGs.

#### SAFETY ACTION GROUPS (SAGs)

The 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.

## FLIGHT SAFETY AND SECURITY (CONTINUED)

### Safety Management Systems, Processes, and Procedures 403-1 403-8 416-1 416-2

SIA's pursuit of operational and technical excellence is underpinned by its commitment to safety and reliability. The Group adopts a systematic approach to managing safety. This features robust organisational structures, accountabilities, policies, processes, and procedures that are designed to ensure a safe environment for all stakeholders.

SIA's aviation support activities comply with the requirements of CAAS, and the recommendations of the International Civil Aviation Organization (ICAO). The Group prioritises a safe working environment for its employees and contractors, while aiming to achieve high standards in aircraft maintenance.

Safety is an essential element of flight operations, and it is crucial to keep aviators abreast of the developing operational risks, hazard, trends, safety performance indicators (SPIs), and global aviation happenings. Through continuous engagement sessions and feedback with pilots, SIA is able to strengthen its commitment to a safe ecosystem. The inclusion of interactive communications platforms for teleconferencing have proven to be crucial in engaging the SIA pilot population. These digital tools have a wide reach, particularly to pilots who are on layovers abroad.

The Safety department continuously explores new capabilities to evaluate, analyse, and mitigate operational risks proactively. These include collaborating with pilots, aviation experts, as well as SIA's Flight Operations Division. Safety Performance Monitoring is an integral aspect of the aviation industry's pursuit for continuous improvement as it not only provides an idea of how the entire aviation system is behaving, but also offers a mechanism for pilots to make decisions regarding safety.

Safety Intelligence provides safety information and presents data smartly, tailored to the decision-makers' needs. Safety intelligence has the users in mind, and sets the foundation for the Flight Operations Safety Performance Dashboard.

## MANAGEMENT SYSTEMS

### Flight Safety Management System (SMS)

#### Based on:

- CAAS Air Navigation Regulation (ANR)
- ICAO International Standards and Recommended 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

## FLIGHT SAFETY AND SECURITY (CONTINUED)

### PROCESSES AND PROCEDURES

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

Airport Operations Department	Cabin Crew Division	Cargo Division	Crisis Management Department	Engineering Division	Flight Operations Division	Safety, Security, and Quality Department
<ul style="list-style-type: none"> <li>• Ground Services Manual (GSM)</li> <li>• Ground Services Quality Manual (GSQM)</li> </ul>	<ul style="list-style-type: none"> <li>• Cabin Crew Division Manual (CCM)</li> <li>• Cabin Crew Safety Management System Manual (CCSMSM)</li> <li>• Cabin Crew Safety Manual (CCSM)</li> <li>• Cabin Crew Safety, Security, Quality and Health Department Procedures Manual (CCSQH DPM)</li> </ul>	<ul style="list-style-type: none"> <li>• Cargo Quality Manual (CQM)</li> <li>• Cargo Safety Manual (CSM)</li> </ul>	<ul style="list-style-type: none"> <li>• Crisis Management Manual (CMM)</li> </ul>	<ul style="list-style-type: none"> <li>• Maintenance Control Manual (MCM)</li> </ul>	<ul style="list-style-type: none"> <li>• Crew Administration Manual (CAM)</li> <li>• Flight Operations Quality Manual (FOQM)</li> </ul>	<ul style="list-style-type: none"> <li>• Air Carrier Security Programme (ACSP)</li> <li>• Corporate Flight Safety Management and Procedures Manual (CFSM)</li> <li>• Corporate Operational Quality (Safety) Manual (COQM)</li> <li>• Flight Security Procedures Manual (FSPM)</li> <li>• Ground Safety Manual (SSQ GSM)</li> <li>• Premises Security Manual (PSM)</li> <li>• Quality Manual (SSQ QM)</li> <li>• Safety and Emergency Procedures Manual (SEPM)</li> <li>• Security Management System Manual (SESM)</li> </ul>

The health and safety of SIA's customers are of utmost importance. SIA continually assesses all potential health and safety issues and seeks to improve processes to mitigate them. This is done via the implementation of safety management systems and processes, which are subject to regular internal reviews and audits, as well as external audits by local authorities. In FY2022/23, there were zero incidents of non-compliance to health and safety from the provision of flight services that resulted in fines, penalties, or warnings.

**100%** of flight services related to health and safety impacts were assessed in FY2022/23

## CASE STUDY

### SIA's 11<sup>th</sup> IATA Operational Safety Audit (IOSA) Programme

SIA maintains high safety standards by participating in the IOSA programme. The programme is an internationally recognised evaluation system designed to assess the operational management and control systems of an airline, with the aim of improving airline safety globally. SIA has been an IOSA Operator since 2004, and completed its 11<sup>th</sup> IOSA Renewal Audit in November 2022, conducted by accredited audit organisation ARGUS PROS. The audit evaluated SIA's conformity with the IOSA standards, which are based on eight disciplines that contribute to airline operational safety. SIA's IOSA registration confirms its commitment to safe operations and providing a high level of service to its customers.

## FLIGHT SAFETY AND SECURITY (CONTINUED)

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

SIA's employees play an integral part in building and maintaining a positive safety culture. Staff are informed of their individual safety obligations and other safety-critical information through various training initiatives, and a wide range of communications channels and safety activities.

#### Safety Surveys

SIA's Safety, Security and Quality (SSQ) department conducts a Safety Survey annually, with the latest one conducted in 2022. These surveys are conducted to identify safety issues that employees encounter in the course of their daily operations. It also serves to gather insights on safety resilience from the operational divisions. Employees are encouraged to provide feedback and clarify any issues that they may have regarding unsafe working procedures or conditions.



#### Safety Training and Communication

All employees are equipped with safety skills and knowledge required for them to perform their duties and respond appropriately when required. All newly recruited employees undergo a comprehensive safety training programme, including specialised and vocational training. Continual education is also provided to keep its employees abreast of the latest developments.

Flight Operations management and staff who conduct safety investigations 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 its flight crews' operational proficiencies are current and maintained at the highest level through a series of flight simulators and check-rides.

Pilots are provided with iPads where they can access emails and safety and operational information on-the-go. They are also kept abreast of operational events, safety incidents, and other important issues through the Safety Communications Portal and fortnightly Flight Operations Notices.

All pilots are also updated on movements within the respective fleets via SQhub, SIA's employee portal. Similarly, a Safety SharePoint was created by the Flight Operations Safety, Security, and Quality department to serve as a one-stop platform for pilots to access information on safety and security, incident reports, and hazard reports. The Flight Operations Division also launched a campaign to reinforce the importance of safety, encouraging all to engage in safety-related practices and make safety-conscious decisions. In addition, pilots were encouraged to maintain high standards of knowledge, skills, and proficiency to ensure safer flight operations. The campaign also focused on the significance of human factors for safe operations.

SIA also conducted a comprehensive review of the interference risk to aircraft avionics with the 5G deployment within the airport vicinity in February 2022. Following the review, guidance and training materials were provided to pilots to address issues or concerns they had.

## FLIGHT SAFETY AND SECURITY (CONTINUED)

### Safety Forums and Events

SIA inculcates a culture of safety among its flight crew through safety initiatives and campaigns.

#### Safety Focus Forums

Pilots are regularly updated on safety incidents, fatigue risk management, and safety performance at forums, which are held quarterly.

In June 2022, the Flight Operations Safety department conducted an in-person Safety Focus Forum, after two years of virtual forums being conducted due to the pandemic. The forum was a collaboration between CAAS Air Traffic Systems (ATS) and SIA, where they engaged with fellow aviators onsite, strengthening the safety of Singapore's aviation ecosystem.

The sharing of relevant operational information, lessons learnt from significant events, crew resource management, and human factors, proved timely as SIA ramped up its operations.

The Flight Operations Safety Performance Dashboard was also launched during the forum. More details of this tool can be found in the case study below.

#### Safety and Security Week

The launch of Safety and Security Week 2022 saw colleagues and guests coming together to learn more about the importance of safety and security excellence, as well as to celebrate those who exhibit these qualities. The theme of "Forging Ahead Together – Safely and Securely" focused on building upon the strengths and capabilities gained during challenging times, and being mindful of potential pitfalls as SIA recovers from the pandemic.

Presentations were given on SIA's efforts to overcome challenges, how it maintained safety standards in the face of adversity, as well as the best practices that SIA can employ to prepare themselves for the future. The event concluded with a ceremony to recognise recipients of the Safety and Security Awards and Citations, who embody the spirit of safety and excellence.



In SSW 2022, 10 safety awards and 31 safety citations were given out. The safety awards were given to nine SIA recipients and one contractor, while the 31 citation recipients included 14 representatives from SIA, three from Scoot, 11 from SIAEC, and three contractors.

#### Flight Operations Safety Day

The annual Flight Operations Safety Day was held on 23 September 2022, and was attended by around 200 pilots, flying instructors, cadet pilots, safety specialists, and industry partners.

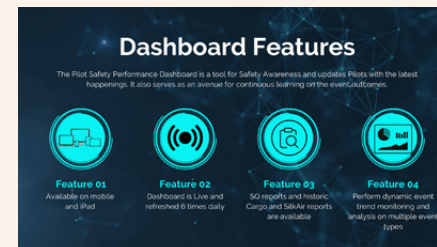
The event aims to promote safety and serves as a platform for airports, airlines, service providers, and the regulators to collaborate. Speakers from Airbus, Boeing, CAAS, and IATA were invited to the event, and covered topics such as the pandemic's impact on the industry, route to recovery, key challenges and areas of focus, as well as safety events case studies.

## CASE STUDY

### Launch of the Flight Operations Safety Programme Dashboard

The Flight Operations Safety Performance Dashboard was introduced at the Safety Focus Forum held in June 2022, and provides pilots with flexible access to several key metrics, including the safety performance of flight operations, hazard performance indicators, trend analysis of different types of flight events, monitoring of safety performance, historical reports, and the latest happenings at each of the SIA Group's overseas stations.

The dashboard is refreshed six times daily to ensure the latest data is available, and can be accessed by SIA Management and line pilots via their iPads and their mobile devices.



## FLIGHT SAFETY AND SECURITY (CONTINUED)

### CASE STUDY

#### Airport Operations Inaugural Safety Conference

The Airport Operations department organised its first safety conference in Singapore in January 2023. This was attended by 79 Safety Champions from across the SIA network. The three-day event aimed to foster a closely-knit Safety Champion community and provide them with the right safety mindset, knowledge, and tools to become effective safety leaders. The conference covered a wide range of safety topics, including airfield environment inspection, cargo loading and unloading hazards, emergency response, dangerous goods, and safety leadership.



The Safety Champions tour the apron at Singapore Changi Airport Terminal 3.



## CUSTOMER HEALTH AND SAFETY

403-5 403-7 416-1 416-2

### Crew Competency

SIA's 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 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 its Safety and Emergency Procedures Manual include:



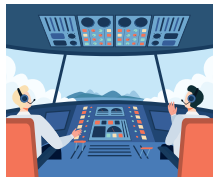
Emergency Procedures



In-flight Medical Emergency



Safety Equipment and Systems



Standard Operating Procedures



Survival

### Pre-flight Safety Briefing

As part of its Standard Operating Procedures, pilots undergo a pre-flight safety briefing covering general safety, as well as specific aircraft, route, and weather information for the flight they are operating. A mandatory briefing for cabin crew 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. SIA will continue issuing an aide-memoire to its flight crew as it ramps up its operations.

### 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 its customers' awareness of the appropriate actions in the unlikely event of an emergency.

### Medical Emergencies and Infectious Disease Handling

SIA emphasises the proper handling of in-flight medical emergencies. In the event of an in-flight injury or illness, cabin crew are equipped with first aid skills to administer care to an unwell passenger, who will be attended to by the relevant medical authorities upon landing.

SIA will continue adopting strict measures both on the ground and in the air to minimise the spread of infectious diseases. Its 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.

## CUSTOMER HEALTH AND SAFETY (CONTINUED)

### Product Safety

SIA offers a plethora of products via KrisShop, an online retail platform, which provides a duty-free shopping service. These include cosmetics, fragrances, gourmet food items, travel essentials, and more. All of these products are assessed for health and safety impacts, as governed by relevant guidelines stipulated by local authorities. In FY2022/23, there were zero incidents of non-compliance to regulations specified for cosmetic products or food products, that resulted in any fines, penalties, or warnings.

### Food Safety

In-flight food and beverage offerings, as well as those served at SIA's SilverKris lounges are subject to assessment. All potential health and safety impacts brought about by food catering are assessed for improvement, via regular on-site checks, assessments, and audits to ensure compliance with food safety and hygiene regulations.

**100%** of product and food-related health and safety impacts are assessed in FY2022/23

The SIA Group is committed to serving in-flight meals that meet the highest level of food safety and hygiene standards. The Group has a policy of not using Monosodium Glutamate (MSG) in meals served. SIA's caterers also 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 SIA's local caterer, SATS Ltd, also conducts factory audits on external suppliers, regular laboratory tests, and random quality checks on incoming raw ingredients. SIA also engages Medina Quality Assurance to conduct regular audits on SATS Ltd and selected caterers from overseas stations.

Globally, all SIA 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 licenced 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 FY2022/23, there were zero incidents of non-compliance to food safety and hygiene that resulted in any fines, penalties, or warnings.



# HAZARD IDENTIFICATION AND RISK MANAGEMENT

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

Hazard identification is part of SIA's risk management process, which is based on the principle of managing justifiable risks at the right time and at the right level. SIA evaluates the probability and potential consequences from the exposure of identified hazards, and determines the appropriate measures to prevent the occurrence of such situations.

## STEP 1



### Hazard Identification

SIA identifies 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.

## STEP 2



### Risk Assessment

SIA performs risk assessments based on the probability of the hazard causing harm or adverse consequences, and considers the severity of its outcomes.

## STEP 3



### Risk Mitigation

SIA adopts 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, are considered first.

## STEP 4



### Implementation

SIA communicates the adopted measures to its internal stakeholders prior to its implementation. These may come in the form of bulletins, notices, or workshops.

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

## STEP 5



### Review

SIA conducts reviews to assess the adequacy of risk management and ensures that the implemented controls are effective.

## HAZARD IDENTIFICATION AND RISK MANAGEMENT (CONTINUED)

### Hazard Reporting

SIA's employees are encouraged to identify and address hazards across its operations and workplaces without fear of reprisal. Hazard reports can be submitted electronically via the employee portal, employee mobile app ISQ, or through a physical form. All hazard reports are routed to the respective division or department to investigate, and to implement measures to remove these hazards. An initial risk assessment and investigation findings of the hazard are required to be submitted within two weeks of the incident.

All reported hazards have been investigated and addressed during the year. To raise awareness of hazards among employees and to encourage them to step forward to report hazards, all hazard reports and notable case studies are circulated internally through the quarterly Hazards Newsletter. In FY2022/23, SIA investigated and addressed all of the 509 hazard reports received.

### Fatigue Risk Management

SIA's 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 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 SIA's operations.

Safety Focus Forums are also held to update pilots on recent incidents. 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, to keep abreast of the latest regulatory and industry developments in this area.

### Crew Psychological Well-being 403-6

SIA prioritises the mental well-being of its pilots and cabin crew. The Group employs 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 its pilots. In addition, SIA abides by medical reporting guidelines to create a safe environment for reporting, and for pilots to seek assistance when required.

SIA's cabin crew are supported within an established reporting structure, in which crew leaders and relevant management representatives are trained to manage the mental well-being of their team. Apart from attending assigned training courses related to improving well-being and self-care, cabin crew can also reach out to SIA's appointed psychologists and approved counsellors. Resources and contacts to national agencies are also shared with cabin crew through various communications platforms.

### Systematic Alcohol Screening

SIA views cases related to alcohol consumption seriously, and has clear and regularly enforced policies regarding the consumption of alcohol for its operating crew. In accordance with CAAS guidelines, SIA implemented the Airline Alcohol Management Programme, 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 its operating flight crew reporting for duty. This programme is over and above the stipulated Airport Alcohol Testing Programme, which CAAS mandates.

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

## EMERGENCY PREPAREDNESS AND RESPONSE

403-4 403-5 403-7

SIA has an emergency response plan that details the various measures that should be undertaken in the event of a fire or hazmat emergency that may occur on SIA premises. The aim of this response plan is to prevent and minimise injuries to occupants, as well as damage to properties.

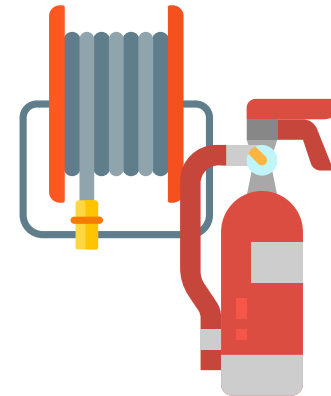
In the event of a fire or hazmat emergency, SIA's Company Emergency Response Team (CERT) will be the first to respond and prevent the situation from escalating. CERT's primary objective is to mitigate and control the emergency during its initial stages, prior to the arrival of the Singapore Civil Defence Force arriving.

The Emergency Response Plan (ERP) enables SIA's stakeholders to respond swiftly to a fire or hazmat emergency at any of its office premises. SIA aims to conduct at least two fire evacuation drills for each office location in Singapore annually, to familiarise its employees with evacuation procedures. Appointed fire wardens across SIA divisions are deployed to assist SIA's Fire Safety Managers and building managers to effect the response plan when such emergencies arise. All fire evacuation drills planned in FY2022/23 were conducted successfully.



### Fire Emergency Plan

- 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

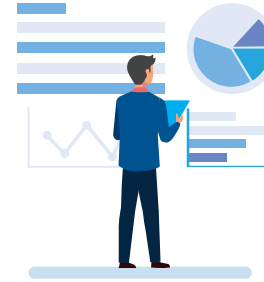
- Includes procedures to safeguard the building's fire safety system against security threats arising from arson attacks

# AIRCRAFT INCIDENTS

403-2 403-5 403-7 PR-1

## Aircraft Incident Procedures

SIA emphasises incident reporting and investigation to avoid similar incidents from occurring in the future. These are measures that extend beyond legal and regulatory requirements.



### Reporting

SIA requires incidents to be reported promptly. A robust set of reporting procedures are in place for different incident types, which 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 within SIA are engaged upon notification of the incident or receipt of the incident report. They include:

- Flight Operations Division
- Safety, Security, and Quality department
- SIA Engineering Company
- SIA Operations Control team
- 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 the SSQ department into a bi-monthly summary, which will be reviewed by the Air Safety Committee.

### Communication

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

## WORKPLACE SAFETY

403-9 403-10 PR-1

The SIA Group has 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 recurring.

The SIA Group also has a Confidential Incident Reporting programme in place 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 also be kept confidential, and their personal details are only disclosed should the SSQ department require further information for investigation.

### Work-related Injuries

403-9

In FY2022/23, the SIA Group reported zero work-related fatalities and zero high-consequence work-related injuries. It recorded five work-related injuries for its ground employees, and 158 work-related injuries for its cabin crew, with an overall work-related injury rate of 8.1 injuries per million man-hours worked. Each work-related injury is documented and the cause for the injuries are identified. Additional precautionary measures are implemented to reduce similar incidents, such as the promotion of safe work practices, reminders to workers to be mindful of their work environment, and initiatives to raise awareness of workplace injuries prevention.

In FY2022/23, SIA recorded zero work-related injuries for its key contractors.

Employees	FY2021/22		FY2022/23	
Estimated number of man-hours worked	18,835,417		<b>20,225,876</b>	
Number (and rate <sup>41</sup> ) of fatalities as a result of work-related injuries	0	(0)	<b>0</b>	<b>(0)</b>
Number (and rate <sup>41</sup> ) of high-consequence work-related injuries	0	(0)	<b>0</b>	<b>(0)</b>
Number (and rate <sup>41</sup> ) of recordable work-related injuries	60	(3.2)	<b>163</b>	<b>(8.1)</b>
Main types of work-related injuries	<ul style="list-style-type: none"> <li>Slip, trips, falls and knocks</li> <li>Injury sustained from assisting in stowage of cabin baggage</li> <li>Scalding and cuts</li> <li>Over-exertion and strenuous movements</li> </ul>		<ul style="list-style-type: none"> <li>Slip, trips, falls and knocks</li> <li>Sprains</li> <li>Scalding and cuts</li> </ul>	

Workers Who are Non-Employees	FY2021/22		FY2022/23	
Estimated number of man-hours worked	1,281,554		<b>2,771,559</b>	
Number (and rate <sup>41</sup> ) of fatalities as a result of work-related injuries	0	(0.0)	<b>0</b>	<b>(0.0)</b>
Number (and rate <sup>41</sup> ) of high-consequence work-related injuries (excluding fatalities)	0	(0.0)	<b>0</b>	<b>(0.0)</b>
Number (and rate <sup>41</sup> ) of recordable work-related injuries	1	(0.8)	<b>0</b>	<b>(0.0)</b>
Main types of work-related injuries	Slips, trips, and falls		Nil	
Scope of workers who are non-employees	Key contractors only (cleaners, maintenance workers, landscapers, warehouse operators, check-in agents)		Key contractors only (cleaners, maintenance workers, landscapers, warehouse operators, check-in agents, sales agents, ground handling agents)	

<sup>41</sup> Rates are calculated per million man-hours worked.

## WORKPLACE SAFETY (CONTINUED)

### Work-related ill-health 403-10

Due to the nature of SIA's operations, employees may be exposed to loud noise and various chemicals. In FY2022/23, SIA reported six cases of work-related ill-health for its employees and key contractors, all of which were related to noise-induced deafness. To better address such cases, SIA has in place a Hearing Conservation Programme that comprises nine components, such as ensuring the correct fitting of hearing protection equipment on its staff, training on the proper use and maintenance of the hearing protection equipment, and an annual audiometric examination.

Employees	FY2021/22	FY2022/23
Number of fatalities as a result of work-related ill-health	0	<b>0</b>
Number of recordable work-related ill-health	6	<b>6</b>
Main types of work-related ill-health	Noise-induced deafness	Noise-induced deafness

Workers Who are Non-Employees	FY2021/22	FY2022/23
Number of fatalities as a result of work-related ill-health	0	<b>0</b>
Number of recordable work-related ill-health	0	<b>0</b>
Main types of work-related ill-health	Nil	Nil
Scope of workers who are non-employees	Key contractors only (cleaners, maintenance workers, landscapers, warehouse operators, check-in agents)	Key contractors only (cleaners, maintenance workers, landscapers, warehouse operators, check-in agents, sales agents, ground handling agents)



# CUSTOMERS

SIA works tirelessly to deliver an exceptional customer experience, a commitment which is deeply ingrained in its brand promise. This dedication extends across the entire customer journey, encompassing pre-flight, in-flight, and post-flight interactions. SIA aims to provide experiences that are not only safe and seamless, but also personal, supported by world-class products and services.

## SIA's MANAGEMENT APPROACH

### Key Engagement Activities

Engagement Mode	Frequency
Annual Report, 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)	Regular
Press Releases	As required
Publications (KrisWorld Magazine, Priority Magazine, <a href="http://SilverKris.com">SilverKris.com</a> )	Regular

### Key Policies, Processes, and Procedures

- Performance Improvement Framework
- Quality Management System
- Quality Framework
- Service Audits
- SOAR as ONE Service Philosophy
- Customer Experience Fundamentals and Design Tools (Singapore Airlines Experience Principles, Customer Personas, 3Ds Methodology - Discover, Design, Deliver)

### SIA's Ambitions

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

### Supporting the SDGs



### FY2022/23 in Numbers

Achieved **76.6%** average Customer Satisfaction (CSAT) Score for touchpoints on the ground and in the air in FY2022/23<sup>42</sup>.

### World's Most Awarded Airline

Some examples of the awards SIA won in FY2022/23 for its commitment to service excellence:

#### Best Airline

*Business Traveller Awards 2022 (UK)*

#### Airline of the Year

*49<sup>th</sup> Annual Air Transport World (ATW) Airline Industry Awards 2023*

#### World's Best International Airline

*(27<sup>th</sup> consecutive year) Travel + Leisure Magazine (USA) 2022*

#### Best Airline (Overall) Gold

*DestinAsian (Asia) Readers' Choice Awards 2022*

<sup>42</sup> Based on >50,000 responses per month from Voice of Customer (VoC) surveys.

## BRAND MANAGEMENT AND REPUTATION 3-3

### World Class in Every Way - Placing Customers at the Heart of Everything We Do

SIA's business decisions are guided by two fundamental principles: understanding customers' needs and enhancing their experience. The Airline strives to elevate the level of service at every touchpoint, anticipating customer requirements while delighting them throughout their journey, whether on the ground or in the air.

Recognising that innovation is a key driver of exceptional customer service, SIA has been a trailblazer in the airline industry, continuously pushing boundaries with new and exciting products and services.

### 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 bring together 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 the option of pre-ordering meals from different cuisine categories under its Child Meal Programme 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



One of the first to offer free unlimited Wi-Fi access to customers in all cabin classes in 2023

## BRAND MANAGEMENT AND REPUTATION (CONTINUED)

### Awards Won in FY2022/23

A selection of awards won by SIA in FY2022/23 can be found on pages 48 and 49 of the SIA Annual Report FY2022/23 and [website](#). Some of these awards include:



SIA won awards for Best Airline, Best Asian Airline, Best Cabin Staff, and Best First Class at the Business Traveller Awards 2022 in the United Kingdom. SIA has been recognised for its renowned hospitality and cutting-edge premium cabin products.



Air Transport World recognised SIA's swift and decisive response to the Covid-19 pandemic, which enabled it to capitalise on pent-up travel demand and re-enter the market strongly when borders reopened. The recipients of this award were chosen by a group of editors and analysts from several aviation publications, for distinguishing themselves through outstanding performance, innovation, and superior service within the airline industry.



This award recognised the superior all-round performance of SIA's cabin crew, in the areas of technique, efficiency, attention, enthusiasm, attitude, friendliness, and hospitality.



For the 27<sup>th</sup> year running, SIA was recognised in Travel + Leisure's annual ranking for its world-class products and services. Voters highlighted outstanding food, service, and comfort across every aspect of the onboard experience, and cited SIA as the benchmarking standard for other airlines.



SIA continued to top the 17<sup>th</sup> edition of DestinAsian Reader's Choice Awards. SIA also won Gold awards in four other categories, including Best Airline (First Class and Business Class), Best Airline (Economy Class), Best In-flight Entertainment, and Best Frequent Flier Programme for KrisFlyer. These awards recognised SIA's commitment to delivering exceptional products and services to their customers across cabin classes.



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

## BRAND MANAGEMENT AND REPUTATION (CONTINUED)

### Reigniting the Love for Travel and Shaping SIA's Brand Narrative Through Campaigns

#### Time To Fly



Launched in late March 2022, SIA's *Time To Fly* campaign sought to reinvigorate the travel industry, solidify the brand in the minds of customers, and capture advance sales before other airlines increased their capacity.

The campaign involved a virtual travel fair held over two weeks in Singapore with SIA as the official airline. The event was held less than a week before the Singapore Government announced the further relaxation of border measures, making it a timely initiative.

The fair featured 10 participating travel agents promoting travel to destinations such as Canada, Italy, the Maldives, and South Korea, while partners like Allianz Travel, COMO, DBS, Golden Door, Mastercard, UOB, Kris+, and KrisShop offered exciting prizes and special deals.

With the strong support of its partners and Mediacorp's publicity on the television, radio, as well as digital and social media channels, the campaign successfully reinvigorated the interest for travel and cemented SIA's brand recall and mindshare in Singapore.

In November 2022, SIA organised the *Time To Fly* travel fair, the first physical one organised by the company after more than 20 years. The travel fair had extensive publicity and marketing efforts supported by SIA and its partners, and was well-received by the public.



#### Travel Like Never Before

Emerging from the height of the pandemic, SIA's narrative evolved from one of reassuring customers to encouraging them to rediscover the world.

In August 2022, SIA launched *Cocktail Conversations*, a video series on its social media channels that featured well-known local and international personalities while showcasing the luxurious facilities available at the all-new flagship SilverKris Lounge at Singapore Changi Airport Terminal 3. The series received over 24 million impressions and almost eight million completed video views.

Following the successful introduction of the *Cocktail Conversations* series, SIA launched the *Travel Like Never Before* campaign on its social media channels and SilverKris website to inspire customers to go big with their travel plans, by leveraging the pent-up demand for air travel arising from the pandemic. The series received over 192 million impressions and 62 million completed video views.

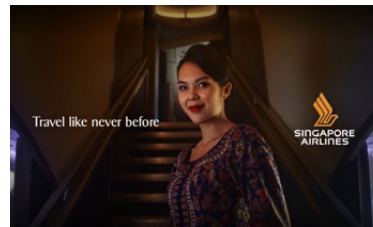


#### Cocktail Conversations

[Ep 1. Hossan Leong](#)

[Ep 2. Matt Moran](#)

[Ep 3. HONNE](#)



#### Travel Like Never Before

[Campaign video](#)

#### Welcome to World Class

As SIA shifted its narrative towards product leadership and service excellence as it emerged from the pandemic, a new campaign titled *Welcome to World Class* was launched in January 2023. The campaign reflects SIA's commitment to deliver an exceptional customer experience across the end-to-end travel journey. The campaign was launched on social media platforms and digital publications, as well as print, broadcast, and out-of-home platforms.

As part of the campaign, SIA released a 90-second video on its social media channels that showcases how its cabin crew's global and diverse experiences enrich their service delivery on board. The video was published on Facebook, Instagram, YouTube, and LinkedIn, and has received over 733 million impressions and more than 218 million views.

More information on the campaign can be found on SIA's [website](#).



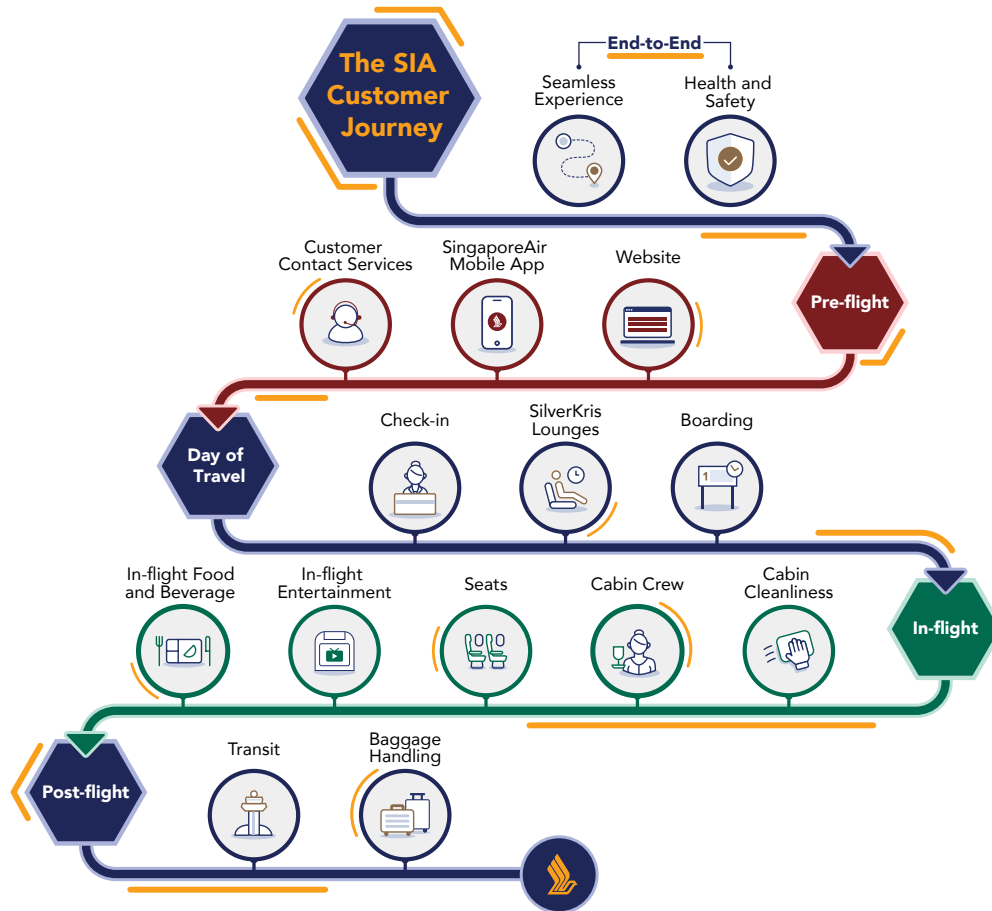
#### Welcome to World Class

[Campaign video](#)

# CUSTOMER EXPERIENCE AND SATISFACTION 3-3

## CUSTOMER ENGAGEMENT

Understanding SIA's customers and going the extra mile for them.



### Leveraging Insights to Deliver a Positive and Personalised SIA Experience

SIA proactively engages with its customers to better understand their needs and identify opportunities to exceed their expectations by enhancing its products and services. This involves embracing a customer-centric approach that leverages digitalisation to delight customers at every stage of their journey, and cultivate loyalty towards SIA's brand.

SIA's Customer Experience department plays a key role in this area, as it envisions the complete customer journey and develops strategies to enhance SIA's overall customer experience with five key strategies in mind: Health and Safety, Contactless, Seamless, Personalisation, and Sustainability to restore travel confidence as international borders reopened.

The Group also utilises the Customer Insights Portal (CIP) to obtain a 360-degree view of customer insights gathered across all touchpoints. CIP employs machine learning to provide timely and actionable insights to continuously improve the customer experience.

SIA's Customer Experience Management system builds on CIP insights to deliver highly personalised experiences based on customers' needs and wants. The personalisation roadmap, endorsed by the Board's Customer Experience Technology and Sustainability Committee, is continually refined and executed accordingly to evolving customer behaviours and value drivers.

SIA's Customer Affairs department is dedicated to handling customer feedback and inquiries promptly, and conducts investigations when necessary to effectively address customer concerns. This enables the department to adopt the appropriate service recovery methods and restore customers' confidence in SIA. The Customer Affairs department also prepares key performance indicator reports to monitor the achieved response rates at the station, department, and individual levels.

## CUSTOMER EXPERIENCE AND SATISFACTION (CONTINUED)

### CASE STUDY

#### Enhancements to the CIP to Improve Customer Insights

SIA has been using the CIP since it was launched in 2020 to gather a single, consolidated view of insights compiled from various customer feedback sources. It also helps to generate actionable insights to improve the customer experience. This tool has enabled various departments across the Company to monitor, almost in real time, problems that arise and quickly disseminate the information required to address them.

In FY2022/23, SIA implemented a new "Topic Performance" feature that ranks topics across customer touchpoints, and utilises an AI model to tag each one using two dimensions – Sentiments (Mixed/Negative/Positive) and Topic (Quality/Variety/etc.). An average sentiment score is then derived for each topic, which is weighted by the number of respondents who provided feedback on the topic. This approach not only helps to identify areas that need improvement, but also provides valuable insights for more targeted measures at improving customer experience.

#### Enhancing the In-flight Experience by Minimising Onboard Friction Points

SIA strives to communicate the right message, at the right time, to the right customer. This helps to inform them of all they need to know for a better journey, allowing them to travel with confidence.

As on-board friction points can hamper the in-flight experience, SIA proactively engages with customers ahead of their trip to improve their overall experience. This is done by analysing the entire customer journey to identify opportunities to provide more information at identified touchpoints, which helps customers prepare before they board their flight. For instance, SIA encourages customers to download its mobile app before their flight so that they can access and download reading materials via the e-Library feature before boarding.



## CUSTOMER EXPERIENCE AND SATISFACTION (CONTINUED)

### ENSURING CUSTOMER SATISFACTION THROUGH SERVICE EXCELLENCE

SIA delivers on its brand promise to maintain the highest standards of service.

#### Tracking and Refining SIA's Service Quality Performance

The SIA Customer Contact Services department focuses on delivering high customer satisfaction by assisting travellers with their requests and inquiries. The team constantly looks for opportunities to simplify and redesign processes, and employs data analytics to improve decisions and implement effective changes at SIA contact centres. The department also utilises a Process Improvement Framework to achieve its service vision by facilitating collaboration and continuous learning. Furthermore, SIA continuously improves its Quality Framework to deliver high-quality service.

The Service Culture and Quality team tracks customer feedback and compiles monthly service quality performance reports, which help BUs to monitor their service performance. By adopting customised tableau dashboards, the team can identify and monitor emerging concerns in real time. The team shares its insights with relevant departments to enhance customer experience and develop new products and services.

#### A Data-centric Approach to Drive Positive Customer Experience as Travel Restarts

The surge in the volume of travel as global border restrictions eased, coupled with operating constraints in ramping up resources within the aviation ecosystem, put pressure on SIA to deliver a positive and seamless travel experience for its customers. There was also a need for SIA to address the changing needs of travellers as they took to the skies again when borders around the world reopened.

To navigate such challenges, SIA's Customer Experience department works with business units across the organisation to elevate the travel experience using a customer-centric and data-driven approach to improve the end-to-end customer journey. With the application of digital tools like data science and analytics, data collected from the Voice of Customers (VoC) surveys conducted after each flight are synthesised quickly with operational data to discover impactful and actionable insights. The department also conducts extensive qualitative research to understand global and customer trends.

The insights gathered are shared with SIA's business units via CIP, a one-stop go-to platform with self-service data visualisation tools for business units to obtain a holistic view of customers' end-to-end journey and their perspectives at different touchpoints. Utilising the rich set of data and insights collected, workshops are conducted across the Company to reimagine the customer journey and review internal processes at key touchpoints. These are done by focusing on the 3Ds (Discover, Design, and Deliver) methodology and guided by SIA Experience Principles, with the goal of delivering a safe, seamless, personalised end-to-end customer journey.

To better prepare customers for their journey so that they can travel with confidence, SIA also developed a communications cadence and governance to improve its communications to customers by engaging them via the right channel at the right time. This helps customers understand the products and services offerings available to them throughout their journey.

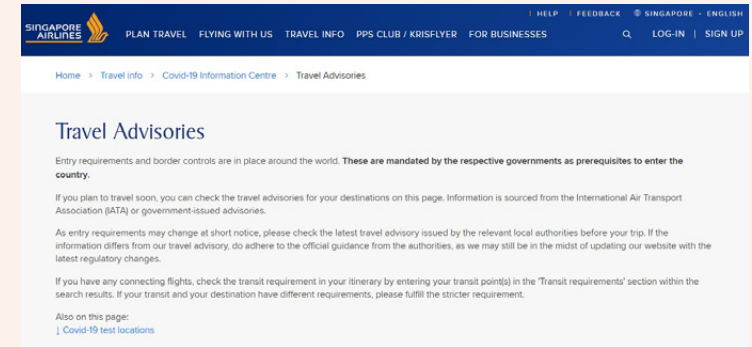


## CUSTOMER EXPERIENCE AND SATISFACTION (CONTINUED)

### CASE STUDY

#### Smartvel Travel Advisory

As countries gradually eased their border restrictions in FY2022/23, customers were concerned about the evolving travel restrictions. To address this issue, SIA partnered with Smartvel to leverage its travel advisory content source. This provided customers with easy access to the latest travel requirements across multiple touchpoints, providing them with a peace of mind as they plan their trips.



#### Performance Tracking

Ensuring a positive customer experience across the customer journey is a key priority for SIA. This is measured through the Voice of Customers (VoC) surveys<sup>43</sup>.

Customer Satisfaction Score (CSAT) scores for touchpoints on the ground and in the air are tracked to gain deeper insights into SIA's delivery of a safe and seamless journey for customers.

In FY2022/23, SIA received more than 50,000 customer responses per month from VoC surveys. CSAT is tracked closely across the various touchpoints in our customer journey to understand how they feel about their end-to-end travel experience and the touchpoint performance. These indicators lead to actions taken to improve the customer experience and better satisfy their needs as the results assess the effectiveness of initiatives implemented.

The CSAT scores remain relatively high at an average of 76.6% despite challenges in a post-pandemic landscape such as infrastructure constraints, supply chain disruption, manpower resources related matters, as well as changing customer behaviour and expectations.

SIA regularly reviews CSAT scores, as well as customer feedback and concerns raised through VoC surveys, at forums such as Management Committee, and the Board's CETSC meetings. In addition, SIA's business units tap on these data to review existing customer-related policies, products, and services.



<sup>43</sup> Surveys are conducted after each flight, covering customer touchpoints both on the ground and in the air.



## CUSTOMER EXPERIENCE AND SATISFACTION (CONTINUED)

### Leveraging Digital Platforms and Data Analytics

SIA invests in digital solutions to transform its business using amid a rapidly changing global environment. The Group regularly sources for new digital tools that can leverage data analytics to better engage its customers, streamline feedback, and respond more effectively to their concerns. Digital tools and platforms such as social media and mobile applications help SIA stay connected with customers and improve the overall customer experience.

#### Enhancing Digital Platforms

SIA enhanced customer convenience by implementing additional self-service features on its website and the SingaporeAir mobile app. Through these platforms, customers can easily access a range of important information, including regulatory requirements for entry into countries, flight itineraries and updates, weather at destination, as well as their baggage tracking status. SIA agents are also equipped with the knowledge and skills to help customers who require special assistance.

#### Better Service Through Process Automation



##### Schedule Change Bot

Automates manual processes for following up with customers on schedule changes, saving about 1,400 man-hours annually.



##### De-dupe Bot

Automates the removal of duplicate passenger cases and reduces manual processing, saving about 1,179 man-hours annually.



##### Passenger Name Record (PNR) Sorting Bot

Automates the queuing of prioritised passenger name records to the correct queue, reducing manual processing and saving about 48 man-hours annually.



# CUSTOMER EXPERIENCE AND SATISFACTION (CONTINUED)

## CASE STUDY

### Strengthening SIA's Capabilities in Managing Irregular Operations

SIA introduced two digital initiatives in FY2022/23 to improve the experience for customers and staff during flight disruptions such as schedule changes and flight delays.

#### Enabling Self-service for Schedule Changes

Previously, customers who were affected by schedule changes could incur additional costs in the form of change fees or fare top ups, depending on their original fare conditions. Some customers would also not have been able to self-manage these schedule changes due to the ticket type they were holding, such as a ticket with a partially flown itinerary. This would require them to contact SIA's customer care or service staff for assistance.

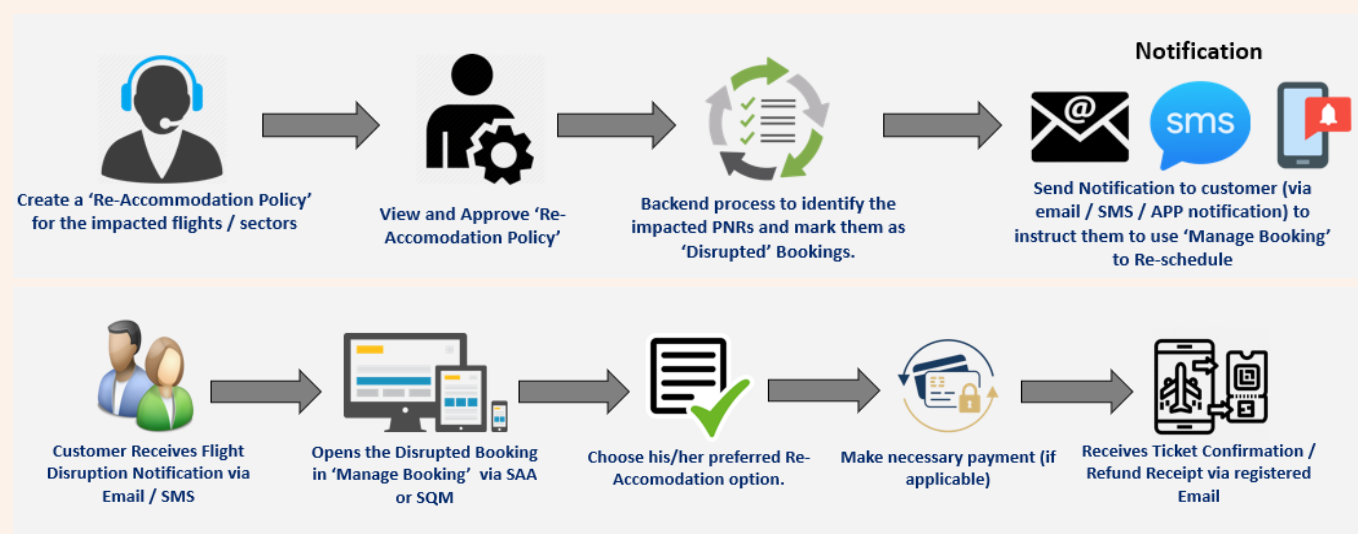
SIA's new Self-service Re-Accommodation (SSRA) and Refund as a Service (RaaS) features allow customers to self-manage their bookings when they encounter a schedule change. Customers who receive a notification informing them of the change are guided to the SIA website to decide on their next course-of-action at no additional charge.

Customers who choose to rebook their flights are allocated their chosen flights immediately (subject to seat availability), and will receive a confirmation email with their new itinerary. Customers who wish to cancel their travel plans can opt for a refund, with the amount refunded to their original form of payment instantly.

#### Without SSRA / RaaS



#### With SSRA / RaaS



# CUSTOMER EXPERIENCE AND SATISFACTION (CONTINUED)

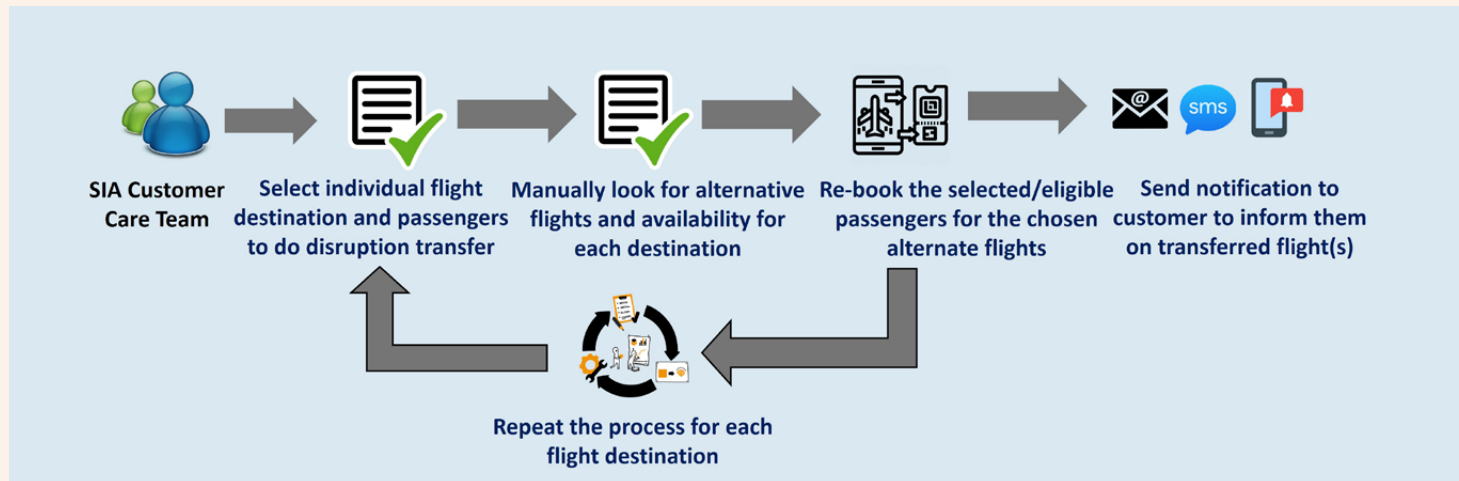
## CASE STUDY

### Streamlining Passenger Transfer During Flight Delays

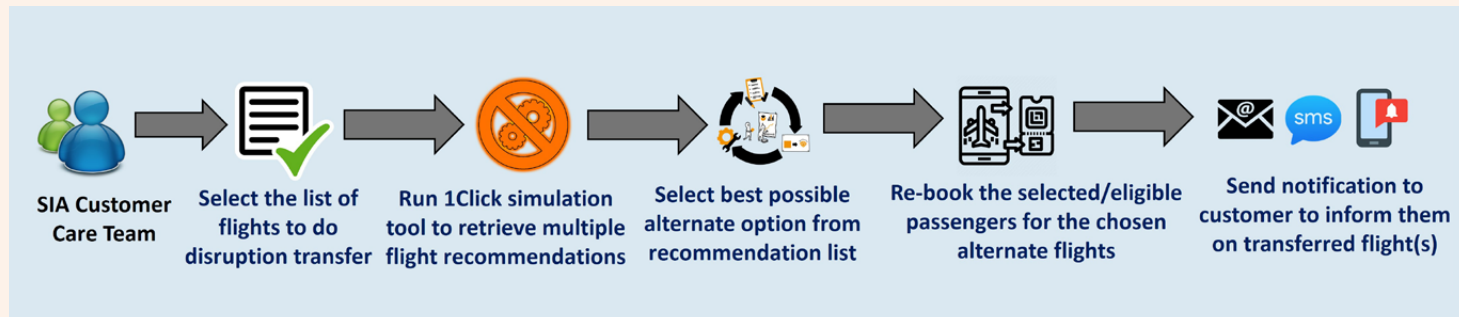
SIA's new 1Click initiative provides faster and better disruption handling for both customers and staff during a flight delay. 1Click recommends the flights to which customers can be transferred to based on user-configurable parameters. The tool then facilitates the transfer of customers to the preferred flight.

1Click allows users to run multiple recommendations and select the most appropriate one for the situation. This results in a more efficient end-to-end process, with processing time per flight reduced from an hour to less than two minutes. This enables customers to be transferred and alerted on their flight changes as soon as possible.

#### Without 1Click



#### With 1Click



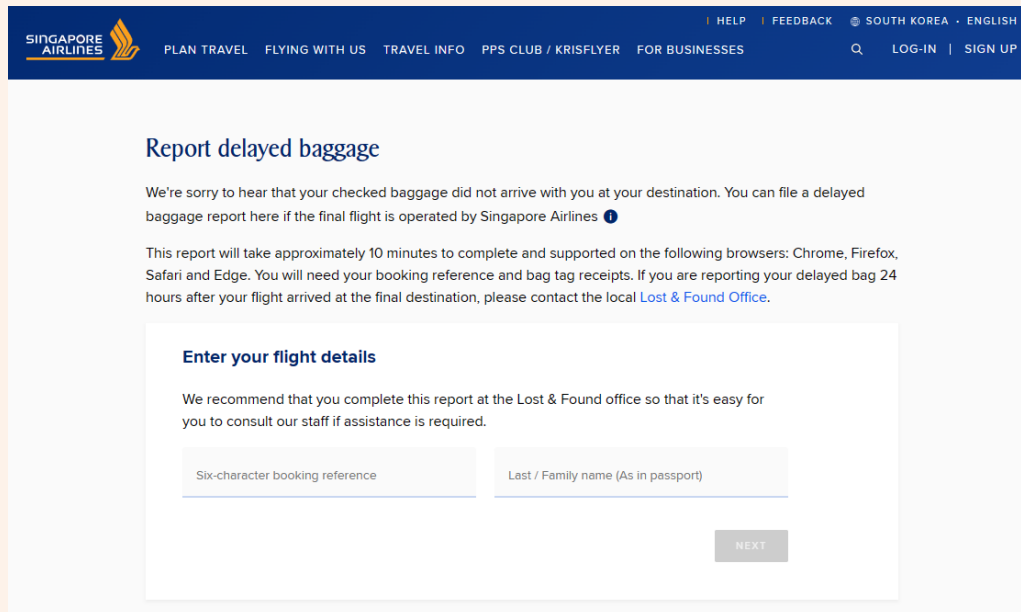
## CUSTOMER EXPERIENCE AND SATISFACTION (CONTINUED)

### CASE STUDY

#### Improving Baggage Service Recovery Experience Through Baggage E2E Self-service Suite

SIA's Baggage E2E Self-service Suite (BESS) is a digital initiative that aims to improve the baggage service recovery experience for customers in the event that their baggage is mishandled. The extensive automation of the baggage service recovery flow taps on API integration, and does away with physical forms, resulting in a more seamless experience for the customers.

Since FY2021/22, BESS has processed over 800,000 transactions, saving approximately 90,000 customer hours, 75,000 man-hours, and around 200kg of paper, with most of the savings achieved in FY2022/23. These savings are expected to increase as SIA continues to recover. SIA is working to improve BESS by taking into consideration both the customer experience as well as operational processes.



The screenshot shows the Singapore Airlines website interface for reporting a delayed baggage. The header includes the Singapore Airlines logo and navigation links: PLAN TRAVEL, FLYING WITH US, TRAVEL INFO, PPS CLUB / KRISFLYER, FOR BUSINESSES, HELP, FEEDBACK, SOUTH KOREA, ENGLISH, Q, LOG-IN, and SIGN UP. The main heading is 'Report delayed baggage'. Below it, a message states: 'We're sorry to hear that your checked baggage did not arrive with you at your destination. You can file a delayed baggage report here if the final flight is operated by Singapore Airlines'. A sub-heading reads 'Enter your flight details'. A recommendation states: 'We recommend that you complete this report at the Lost & Found office so that it's easy for you to consult our staff if assistance is required.' There are two input fields: 'Six-character booking reference' and 'Last / Family name (As in passport)'. A 'NEXT' button is located at the bottom right of the form area.



## CUSTOMER EXPERIENCE AND SATISFACTION (CONTINUED)

### Enhancing Customers' Feedback Management and Engagement

The Customer Affairs department employs digital solutions to automate and better manage SIA's feedback handling process, with the objective of improving the response time. For example, the natural language processing features of SIA's Customer Feedback Analytics (CFA) tool allows for automated extraction of customer information, better feedback classification, facilitates case routing, and prioritisation of time-sensitive cases.

By the end of FY2022/23, the department had saved approximately 9,591 man-hours since the launch of CFA in March 2018. In particular, using CFA to prioritise customer requests for refunds, re-bookings, and ticket cancellations related to the pandemic helped the department manage the surge in feedback volumes during the initial period of the Covid-19 pandemic.

### Engaging Customers Through Social Media Platforms

Social media is an important platform for SIA to reach out to new audiences, engage with customers by sharing important travel information, and build a community that is passionate about travel and aviation. SIA maintains a social media presence on Facebook, Twitter, Instagram, LinkedIn, YouTube, TikTok, Weibo, and WeChat, and has a dedicated Social Media Engagement Unit to provide assistance to customers.



## CASE STUDY

### Optimising Feedback Case Management Through Digital Solutions

In March 2022, SIA deployed 1Point, a digital solution that offers a contextual and holistic view of customer interactions, enabling information to be shared more efficiently between departments, allowing customer issues to be resolved faster, thereby reducing customer wait times.

The implementation of 1Point represents a significant improvement to SIA's customer service capabilities. The solution was subsequently extended to all customer feedback handling units worldwide in January 2023.

### Transforming Customer Contact Services to Build Resilient Operations

SIA's Customer Contact Services department faced an unprecedented surge in customer contact volumes as global travel demand recovered in FY2022/23. To cope with this volume, the department pursued a three-pronged strategy:

#### Building Resource Resilience

The department completed the implementation of SIA's new global consolidated operating model in February 2022, enabling them to ramp up resources across 10 contact centre sites worldwide. This new model provides a more resilient and future-ready customer contact operations to meet rising global demand.

#### Leveraging Technology

SIA increasingly utilises technology such as 1Point to address customer demand and supply challenges. The new case management tool gives customer service agents a 360-degree view of customer data and handling history, enabling them to understand and resolve issues for customers more efficiently. SIA also expanded the use of live chat, which focuses on assisting customers using the website or mobile applications. AI-driven automation is progressively being embedded in the live chat handling process to resolve consumer issues quickly.

#### Analysing and Sharing Customer Insights

The department continuously analyses customer interaction data and shares insights with key partner stakeholders in areas such as digital channel development, self-service platforms, simplification of product policies and processes, and customer communications. They collaborate with other departments to deliver improvements across these areas to enhance customer experience.

SIA's customer contact services are well-positioned to become more resilient and sustainable as the Group emerges from the pandemic.

## CUSTOMER EXPERIENCE AND SATISFACTION (CONTINUED)

### New Product and Service Offerings for Customers

#### Launch of SilverKris and KrisFlyer Gold Lounges at Singapore Changi Airport Terminal 3

SIA has expanded its lounge offerings with the addition of The Private Room, First Class SilverKris Lounge, Business Class SilverKris Lounge, and the KrisFlyer Gold Lounge at Changi Airport Terminal 3. Collectively, these spaces provide seating for around 1,150 customers across 6,100 square-metres.

SIA designed these spaces to cater to diverse groups of travellers, with a focus on enhancing their comfort and convenience. Customers can indulge in world-class products and services, as well as a wide range of enticing food and beverage options, available round-the-clock before their flight.

The new SilverKris and KrisFlyer Gold lounges have been thoughtfully designed based on extensive customer engagement and research. The lounges provide thoughtfully curated product offerings, and SIA's signature hospitality in a comfortable and restful environment, ensuring travellers are refreshed and ready for their journey.

The opening of these lounges in May 2022 reinforces SIA's commitment to its premium brand and growth strategy, and cements its position as Changi Airport's anchor airline.



## CUSTOMER EXPERIENCE AND SATISFACTION (CONTINUED)

### SIA Elevates the In-flight Dining Experience

SIA refreshed its popular Kyo-Kaiseki menu and serviceware offered exclusively to First Class customers travelling between Singapore and Japan, as well as from Tokyo to Los Angeles, in January 2023. The new range of serviceware was created in collaboration with Narumi, a well-known Japanese serviceware brand, to complement the culinary experience.

SIA has also introduced exclusive German and Swiss menus designed by Michelin-starred chefs for Suites, First Class and Business Class meals on board flights departing from Germany and Switzerland. The menus featured dishes such as Frankfurt green sauce with roast beef and Styrian pork ribs with caraway created by chef Johann Lafer, as well as fusion dishes such as lobster and foie gras with mango, seaweed, and vadouvan Indian spices created by chef Heiko Nieder.

For the second year running, SIA continued with the Singapore Showcase, featuring iconic dishes from Singapore's UNESCO-listed Hawker Culture. First Class and Business Class customers on selected flights departing from Singapore were treated to favourites such as Beach Road Prawn Noodle, Soon Heng Pork Noodles and Nasi Padang from Rumah Makan Minang.

As part of its Farm to Plane initiative, SIA serves sustainably sourced trout from Hudson Valley Fisheries on flights departing from New York. Hudson Valley Fisheries shares SIA's commitment to sustainability, as it uses all-natural feed for their fish, and reuses 95% of the water required for its farming process. This is part of SIA's efforts to source for ingredients closer to catering facilities, reducing the transportation time, making it more environmentally friendly.



Refreshed Kyo-Kaiseki menu and serviceware



Beach Road Prawn Noodles



Rumah Makan Minang

### SIA Expands Free In-flight Wi-Fi Offerings

In February 2023, SIA expanded its free in-flight Wi-Fi offerings to a wider range of customers. First Class and Business Class customers, as well as PPS Club members and PPS supplementary card holders, enjoy unlimited free Wi-Fi for the entire duration of their flight. KrisFlyer members, including staff, benefitted from free Wi-Fi, with three-hour plans for Premium Economy Class and two-hour plans for Economy Class.

From 1 July 2023, all KrisFlyer members will enjoy unlimited free Wi-Fi for their whole flight across all cabin classes. This enhanced Wi-Fi offering will be available virtually across the entire aircraft fleet<sup>44</sup> and almost the entire global SIA route network.



<sup>44</sup> Free unlimited Wi-Fi services are available on all aircraft except for the seven Boeing 737-800 NGs that are not Wi-Fi enabled.

## CUSTOMER EXPERIENCE AND SATISFACTION (CONTINUED)

### SIA Ramps Up on The Upcycling Project

Launched in 2021, The Upcycling Project features retail products made from retired aircraft parts and in-flight service items created in collaboration with local brands. A physical pop-up store was set up at Design Orchard in Singapore from July to August 2022, when aviation enthusiasts had the opportunity to view the upcycled pieces. During the event, SIA also launched limited edition SIA-designed aviation tags made from the metal fuselage harvested from retired SIA aircraft. The Carrier Collection, a range of bags designed by SIA, is made from retired life vests. These items are available for sale via [KrisShop](#).



More details on SIA's product innovations are available on pages 27 to 29 of the SIA Annual Report FY2022/23.



# EMPLOYEES

SIA's success as a leading global airline stems from the passion and dedication of its people. The Group is focused on hiring and retaining talent to ensure that it has the human capital necessary to build a resilient and sustainable organisation. It also invests heavily in its employees, and provides them with multiple pathways for professional development. With the right people in place, SIA will be able to realise its ambitions in all aspects of its business.

## SIA's MANAGEMENT APPROACH

### Key Engagement Activities

Engagement Mode	Frequency
Chill Out with CEO Sessions	Quarterly
Senior Management Webinars, Divisional Townhalls, Engagement Sessions	Regular
Engagement with Union Leadership	Monthly
Safety and Security Week, CEO Service Excellence Awards, Innovation Awards	Yearly
Community Service Activities	Regular
Leisure Activities (Arts, Health and Wellness, Sports and Recreation, Social Functions)	Regular
Publications (Bulletins, CEO Message, Circulars, Magazines, Newsletters, Notices, Internal News Stories, Weekly Email News Digest, etc.)	Regular
Organisational Climate and Transformation Pulse Surveys	Regular

### Key Policies, Processes, and Systems

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

### SIA's Ambitions

SIA strives to be an employer of choice that:

- Develops its employees to their fullest potential to foster a high-performing, productive and future ready workforce.
- Facilitates a work environment that is safe, flexible and nurturing, and caters to individual needs and aspirations, including opportunities to contribute to local communities through volunteer programmes.
- Provides employees with an enriching experience in their journey with SIA.

Targets	Due	Status
At least 25% female employees in senior positions (VPs and above)	By FY2025/26	On Track
At least 25% increase in the number of female pilots, from FY2020/21 levels	By FY2025/26	On Track
100% completion of the UPLIFT suite for SIA ground staff	By FY2022/23	Achieved

### Supporting the UN SDGs



### FY2022/23 in Numbers

<p><b>50.4%:49.6%</b> gender ratio (male:female) of employees</p>	<p><b>100%</b> of SIA ground staff completed the UPLIFT suite by end FY2022/23</p>	<p><b>\$29.6 mil</b> investment in learning and development of employees in SIA</p>
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## EMPLOYEES<sup>45</sup> (CONTINUED)

### Strength in Workforce Diversity 2-7 405-1

SIA promotes diversity, equity, and inclusion in the workplace, underpinned by progressive policies, processes, and practices that support these values. This has resulted in employees who hail from a broad range of cultures and backgrounds, offering varying perspectives that help to strengthen the organisation.

Regardless of their race, ethnicity, gender, age, or beliefs, SIA strives to make all its employees feel included and valued at work. Equal opportunities are given to all staff in the areas of work assignments, personal development, and progress within the organisation.

As of 31 March 2023, the SIA Group had 24,181<sup>46</sup> employees, reflecting a 10% increase in headcount from the previous financial year. Of these, SIA and Scoot employed 18,090 employees, with 64% of employees holding Singapore Citizenship. Female employees accounted for 49.6% of the workforce, while male employees made up 50.4%.

Full-time employees account for 99.7% of employees. 27.5% of employees are under 30 years of age, 54.7% are between the ages of 30 and 50, and 17.8% above the age of 50. Managers and above make up around 3.5% of total employees, followed by 11.9% and 84.6% for executives, and other employees, respectively.

### Employees in the SIA Group<sup>47</sup>

	FY2022/23
<b>Employees in the SIA Group</b>	<b>24,181</b>
Employees by Subsidiary	
SIA	<b>15,539</b>
Scoot	<b>2,551</b>
SIA Engineering Company (SIAEC)	<b>4,127</b>
SIAEC's Subsidiaries	<b>1,609</b>
Cargo Community Network	<b>81</b>
Singapore Flying College	<b>67</b>
SAGI	<b>3</b>
KrisShop	<b>127</b>
Encounters	<b>77</b>

### SIA and Scoot Employees, by Employment Type (Permanent and Contract) and by Gender and by Region

	FY2022/23			
	Permanent		Contract	
<b>By Gender</b>	<b>9,396</b>	<b>51.9%</b>	<b>8,694</b>	<b>48.1%</b>
Male	<b>6,284</b>	<b>34.7%</b>	<b>2,833</b>	<b>15.7%</b>
Female	<b>3,112</b>	<b>17.2%</b>	<b>5,861</b>	<b>32.4%</b>
<b>By Region</b>	<b>9,396</b>	<b>51.9%</b>	<b>8,694</b>	<b>48.1%</b>
Singapore	<b>7,239</b>	<b>40.0%</b>	<b>8,620</b>	<b>47.7%</b>
The Americas	<b>137</b>	<b>0.8%</b>	<b>3</b>	<b>0.02%</b>
Europe	<b>401</b>	<b>2.2%</b>	<b>21</b>	<b>0.1%</b>
North Asia	<b>549</b>	<b>3.0%</b>	<b>44</b>	<b>0.2%</b>
South East Asia	<b>464</b>	<b>2.6%</b>	<b>2</b>	<b>0.01%</b>
South West Pacific	<b>302</b>	<b>1.7%</b>	<b>1</b>	<b>0.01%</b>
West Asia and Africa	<b>304</b>	<b>1.7%</b>	<b>3</b>	<b>0.02%</b>

<sup>45</sup> Please refer to the Appendix for definitions and methodologies. Due to rounding, percentages presented may not add up precisely to the absolute totals indicated.

<sup>46</sup> Includes employees from all of SIA's subsidiaries. Please refer to the Appendix for details on reporting boundaries.

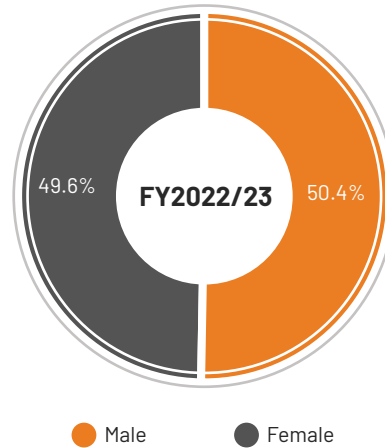
<sup>47</sup> Excludes SIA staff seconded to other companies but includes staff seconded to SIA. Due to rounding, percentages presented may not add up precisely to the absolute totals indicated.

# EMPLOYEES (CONTINUED)

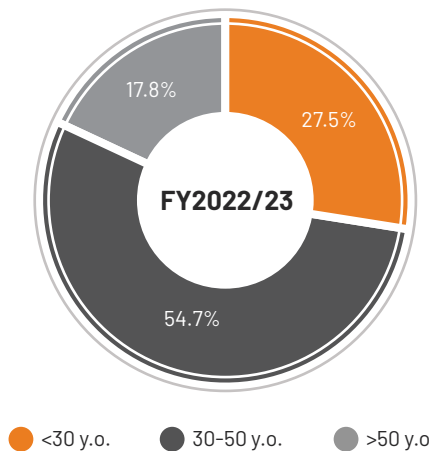
## SIA and Scoot Employee Demographics

FY2022/23		
<b>SIA and Scoot Employees</b>	<b>18,090</b>	<b>100%</b>
<b>Employees, by Gender</b>		
Male	<b>9,117</b>	<b>50.4%</b>
Female	<b>8,973</b>	<b>49.6%</b>
<b>Employees, by Age Group</b>		
<30 y.o.	<b>4,977</b>	<b>27.5%</b>
30-50 y.o.	<b>9,897</b>	<b>54.7%</b>
>50 y.o.	<b>3,216</b>	<b>17.8%</b>
<b>Employees, by Employee level by Gender</b>		
<b>Managers and Above</b>	<b>638</b>	<b>3.5%</b>
Male	<b>429</b>	<b>2.4%</b>
Female	<b>209</b>	<b>1.2%</b>
<b>Executive</b>	<b>2,146</b>	<b>11.9%</b>
Male	<b>1,147</b>	<b>6.3%</b>
Female	<b>999</b>	<b>5.5%</b>
<b>Other Employees</b>	<b>15,306</b>	<b>84.6%</b>
Male	<b>7,541</b>	<b>41.7%</b>
Female	<b>7,765</b>	<b>42.9%</b>

## SIA and Scoot Employees, by Gender



## SIA and Scoot Employees, by Age Group



FY2022/23		
<b>Employees, by Employee level by Age Group</b>		
<b>Managers and Above</b>	<b>638</b>	<b>3.5%</b>
<30 y.o.	<b>1</b>	<b>0.01%</b>
30-50 y.o.	<b>458</b>	<b>2.5%</b>
>50 y.o.	<b>179</b>	<b>1.0%</b>
<b>Executive</b>	<b>2,146</b>	<b>11.9%</b>
<30 y.o.	<b>579</b>	<b>3.2%</b>
30-50 y.o.	<b>1,307</b>	<b>7.2%</b>
>50 y.o.	<b>260</b>	<b>1.4%</b>
<b>Other Employees</b>	<b>15,306</b>	<b>84.6%</b>
<30 y.o.	<b>4,397</b>	<b>24.3%</b>
30-50 y.o.	<b>8,132</b>	<b>45.0%</b>
>50 y.o.	<b>2,777</b>	<b>15.4%</b>

## EMPLOYEES (CONTINUED)

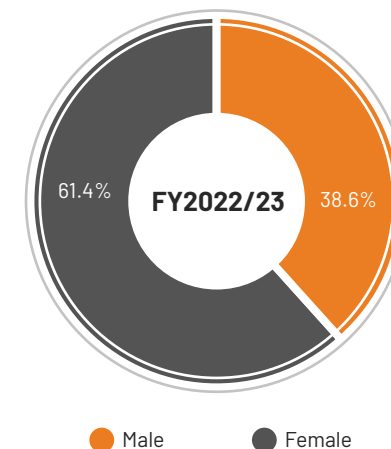
### New Hires and Turnover 401-1

#### SIA and Scoot New Hires

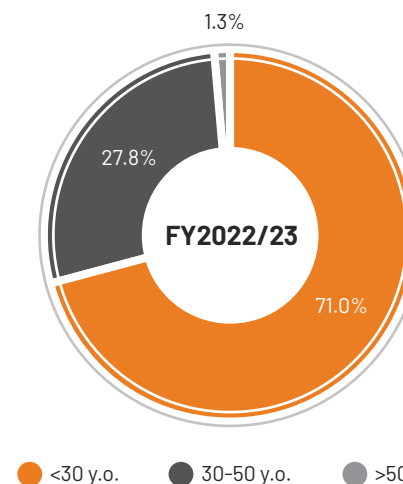
In FY2022/23, SIA and Scoot's overall new hire rate<sup>48</sup> increased to 21.7%, with the new hire rate for male employees at 8.4%, and female employees at 13.3%. In terms of age group, the Group's new hire rate was 15.4% for employees under 30 years of age, 6.0% between the ages of 30 and 50, and 0.3% above the age of 50.

FY2022/23		
<b>SIA and Scoot New Hires</b>	<b>3,929</b>	<b>100%</b>
<b>New Hires, by Gender</b>		
Male	<b>1,517</b>	<b>38.6%</b>
Female	<b>2,412</b>	<b>61.4%</b>
<b>New Hires, by Age Group</b>		
<30 y.o.	<b>2,789</b>	<b>71.0%</b>
30-50 y.o.	<b>1,091</b>	<b>27.8%</b>
>50 y.o.	<b>49</b>	<b>1.3%</b>
<b>New Hires, by Employee Level</b>		
Managers and above	<b>43</b>	<b>1.1%</b>
Executive	<b>543</b>	<b>13.8%</b>
Other Employees	<b>3,343</b>	<b>85.1%</b>
<b>New Hires, by Region</b>		
Singapore	<b>3,626</b>	<b>92.3%</b>
The Americas	<b>34</b>	<b>0.9%</b>
Europe	<b>41</b>	<b>1.0%</b>
North Asia	<b>53</b>	<b>1.4%</b>
South East Asia	<b>95</b>	<b>2.4%</b>
South West Pacific	<b>54</b>	<b>1.4%</b>
West Asia and Africa	<b>26</b>	<b>0.7%</b>

#### SIA and Scoot New Hires, by Gender



#### SIA and Scoot New Hires, by Age Group



<sup>48</sup> 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.

## EMPLOYEES (CONTINUED)

### SIA and Scoot Turnover

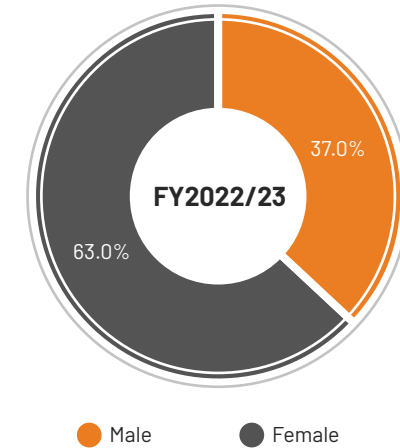
SIA and Scoot's overall turnover rate<sup>49</sup> stood at 7.5% with turnover rate for male employees at 2.8%, and female employees at 4.8%. In terms of age group, the Group's turnover rate was 3.1% for employees under 30 years of age, 4.2% between the ages of 30 and 50, and 0.2% above the age of 50.

FY2022/23		
<b>SIA and Scoot Turnover<sup>50</sup></b>	<b>1,363</b>	<b>100%</b>
<b>Turnover, by Gender</b>		
Male	<b>504</b>	<b>37.0%</b>
Female	<b>859</b>	<b>63.0%</b>
<b>Turnover, by Age Group</b>		
<30 y.o.	<b>566</b>	<b>41.5%</b>
30-50 y.o.	<b>758</b>	<b>55.6%</b>
>50 y.o.	<b>39</b>	<b>2.9%</b>
<b>Turnover, by Employee Level</b>		
Managers and above	<b>38</b>	<b>2.8%</b>
Executive	<b>255</b>	<b>18.7%</b>
Other Employees	<b>1,070</b>	<b>78.5%</b>
<b>Turnover, by Region</b>		
Singapore	<b>1,178</b>	<b>86.4%</b>
The Americas	<b>16</b>	<b>1.2%</b>
Europe	<b>23</b>	<b>1.7%</b>
North Asia	<b>35</b>	<b>2.6%</b>
South East Asia	<b>44</b>	<b>3.2%</b>
South West Pacific	<b>44</b>	<b>3.2%</b>
West Asia and Africa	<b>23</b>	<b>1.7%</b>

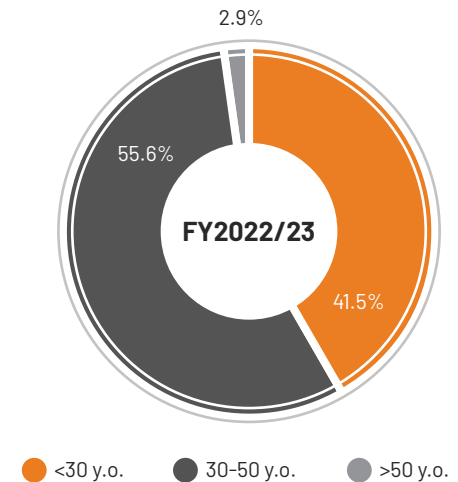
<sup>49</sup> Turnover rate is computed by number of turnover over the number of employees, expressed as a percentage. This can be computed by the respective demographic cuts. Due to confidentiality constraints, turnover relates purely to voluntary attrition, and does not include involuntary turnover such as dismissal, completion of contract, etc.

<sup>50</sup> Due to confidentiality constraints, turnover relates purely to voluntary attrition, and does not include involuntary turnover such as dismissal, completion of contract, etc.

### SIA and Scoot Turnover, by Gender



### SIA and Scoot Turnover, by Age Group



# EMPLOYEE ENGAGEMENT

SIA constantly engages with its employees to better understand their needs, and support their growth in the organisation. Such engagement also allows SIA to quickly and effectively identify and address staff issues, feedback, and concerns through various support programmes.

## Engaging SIA Employees

SIA maintains multiple engagement modes and communication channels with all its employees, both local and overseas.



### Activities and Events

**Community Service Activities**  
(Regular)

**Demo Day by KrisLab**  
(Regular)

**Divisional Communications Sessions**  
(Quarterly)

**Innovation Awards**  
(Regular)

**Leisure Activities (Arts, Health and Wellness, Sports and Recreation, Social Functions)**  
(Regular)

**Safety and Security Week**  
(Annual)



### Forums and Meetings

**Business Meetings**  
(Biannual)

**Chill Out with CEO Sessions**  
(Quarterly)

**Dialogues, Forums, Townhalls**  
(Regular)



### Online Platforms

**e-Learning Platforms**  
(Regular)

**Employee Platforms (1SQ, SQhub)**  
(Regular)

**Internal Collaboration using Microsoft Teams**  
(Regular)

**Yammer Groups**  
(Regular)



### Publications

**Bulletins, Circulars, Notices**  
(Regular)

**Cabin Crew Times**  
(Monthly)

**CEO Message**  
(Monthly)

**Fleet e-Newsletters**  
(Quarterly)

**Flight Safety Magazine**  
(Biannual)

**Hazard Newsletters**  
(Every four months)

**Internal News Stories**  
(Regular)

**Weekly Email News Digest**  
(Weekly)



### Surveys

**Organisational Climate Survey**  
(Biennial)

**Transformation Pulse Survey**  
(Biennial)

SIA obtains employee feedback through its Organisational Climate Survey (OCS) and Transformation Pulse Surveys. OCS and pulse surveys enable SIA to better understand its employees' needs, as well as identify opportunities to deliver a more positive working experience. The surveys are conducted biennially, with each one conducted on alternating years. There was strong participation in the OCS and Pulse Survey conducted in February 2022 and February 2023 respectively. Through the feedback gathered, SIA was able to effectively gauge general satisfaction levels among employees, and their sentiment towards certain changes within the Company. Follow up actions were devised based on employees' feedback and communicated to employees through various staff engagement sessions post survey.

In FY2022/23, 81% of SIA employees participated in the Pulse Survey, which remained relatively constant as compared to the last OCS. The Company attained an engagement rate of 84%, outperforming the Singapore National Norm and 94% of employees who participated expressed their pride in working for SIA.

## EMPLOYEE ENGAGEMENT (CONTINUED)

### Leveraging Technology

SIA leverages technology to better connect with its employees, and also enable staff to access self-service and other functions that enhance their overall experience with the Company anytime, anywhere.

#### 1SQ and SQhub: One-stop Employee Mobile App and Employee Portal

SIA's employee mobile app, 1SQ, is designed to provide employees with on-the-go access to the latest company news, as well as the ability to perform self-service functions, such as leave submissions and travel requests. As of 31 March 2023, over 95% of staff in Singapore were actively using the mobile app. SIA continues to enhance 1SQ based on user feedback. Meanwhile, SQhub acts as a centralised platform for management and company messages, as well as news about employees.

#### myHR: Human Resources' Global Portal

SIA started its multi-year journey towards the implementation of a new global Human Resources (HR) system called myHR to elevate employee experience, enable seamless access and facilitate talent development. Four modules of myHR – Employee Central, Expense Management, Shift Management, and Manpower Planning were launched in May 2022 for employees in Singapore and the South West Pacific region. To deliver value to employees and the organisation globally, myHR will be progressively extended to all employees from end 2023.

#### SKIES e-Learning Platform: Learn Anytime, Anywhere

SIA employees are able to access over 55,000 bite-sized learning modules on the SKIES e-learning platform on their mobile devices. This platform empowers staff to take charge of their learning and development, even on the go.

#### Joey and Ozy: Chatbots for Employee Support

SIA leverages technology to reduce cycle time and throughput time in its employee service delivery. SIA's HR chatbot, Joey, was launched on 15 April 2021. Joey is SIA's first chatbot developed entirely in-house using Smart Search technology that can assist staff with HR-related queries. For the year in review, Joey was enhanced through integration with Google Dialogflow, making it more interactive.

The introduction of Joey enabled a single point of contact for all HR-related matters. A case management tool is also developed so all employee queries can be managed, tracked, and fed back to Joey more efficiently.

Ozy is a chatbot on Scoot's employee messaging app that allows employees to conveniently submit Workday and Employee Service Centre requests on the go. Popular employee requests include time off matters such as submission of sick leave and viewing time off balance. Ozy also helps managers easily approve time off request with a click of a button and remind them on work anniversaries. In the first half of 2023, nearly 9,000 transactions were initiated on Ozy and 75% of those were completed transactions.

## EMPLOYEE ENGAGEMENT (CONTINUED)

### CASE STUDY

#### Fostering Innovation and Ideation Through Innovation Awards

The long-running Staff-Ideas-in-Action (S-I-A) scheme aims to foster a culture of innovation and continuous learning by providing a platform for employees to submit their suggestions to improve work processes. Such improvements aim to enhance revenue, reduce costs, or promote efficiency. In FY2021/22, the S-I-A scheme received a record of more than 6,500 submissions from staff across the Group, resulting in significant saving of \$8.6 million.

The annual Innovation Awards Ceremony returned in person on 23 November 2022, with 19 awards accorded to staff who have embodied the spirit of innovation.



### CASE STUDY

#### The SIA Group 25 Years Long Service and Retirement Award Ceremonies

To recognise staff loyalty, SIA organises award ceremonies for employees who have attained key service milestones, such as 25 years of service, or retirement. These group-wide events are hosted by the Chairman, CEO, and senior management, and attended by local and overseas staff, along with their partners.

For the first time, four Long Service Award ceremonies were organised within a span of seven months to celebrate the loyalty and dedication of staff members who had attained 25 years of service in 2019, 2020 and 2021. The ceremonies were held following a pause in large-scale events due to the pandemic. Close to 500 staff, including those from overseas, came together to celebrate this significant milestone.

Some 134 retirees globally, with a collective total of 4,821 years of service, were honoured in style at the SIA Group Retirement Award Ceremony on 16 November 2022. Hosted by SIA Chairman and SIA senior management, the retirees celebrated this key career milestone with their family, colleagues-turned-lifelong friends, and senior management.





## EMPLOYMENT PRACTICES 2-30 402-1

**SIA invests in its employees' well-being and professional development, keeping them meaningfully engaged to ensure that they have fulfilling careers during their time with the Group.**

### Employee Remuneration

SIA strives to ensure that employees are rewarded through a fair and merit-based remuneration package, regardless of gender. In assessing the performance of staff, the following are considered:

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

Further information on SIA's remuneration policies is available in the FY2022/23 SIA Annual Report.

### Collaborative Partnerships with Unions 2-30

SIA adopts a collaborative approach when engaging with unions. The management team and the unions meet monthly to address matters pertaining to the workforce, and to share updates on initiatives aimed at developing employees' careers and competencies. Terms and conditions of service, which are encapsulated in the respective Collective Agreements, are also 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 the unions annually.

SIA's Company Training Committee, comprising management and union representatives from AESU and SIASU, reviews the training needs of employees in light of the industry's transformation. The union leadership has supported SIA over the years in launching initiatives to better prepare employees for the future.

SIA's 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.

### Notice Periods 402-1

SIA's collective agreements and employment contracts set out the minimum notice period for the termination or resignation of 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 with local regulations and union agreements.

# 94%

Approximate number of SIA employees covered by collective bargaining agreements<sup>51</sup>



**Air Transport Executive Staff Union (AESU) represents around 36% of SIA executives**



**Air Line Pilots Association Singapore (ALPA-S) represents around 93% of SIA pilots**



**Singapore Airlines Staff Union (SIASU) represents around 70% of cabin crew and associates**

<sup>51</sup> Number of SIA employees covered by collective bargaining agreements refer to Head Office staff only.

# A FUTURE-READY WORKFORCE 404-2

SIA focuses on building a sustainable talent pipeline to meet the current and future needs of the organisation.

## Attracting Talent and Developing Our People

SIA seeks new talent and invests in developing its employees to ensure that they are equipped with the skills to remain relevant for the future. SIA participated in career fairs and talks with Singapore-based university and polytechnics, and restarted its internship programme to provide opportunities for tertiary students. SIA also resumed cabin crew and pilot recruitment in FY2022/23 following a two-year hiatus due to the pandemic.

To support the learning and development of its employees, the SIA Group provides numerous opportunities for them to be equipped with relevant soft and hard skills. This includes upskilling and re-skilling them to support the Group's transformation initiatives. SIA invests significant resources to develop employees globally. In FY2022/23, S\$29.6 million was invested in learning and development initiatives.

Average Number of Training Hours by SIA and Scoot Employees, by Employee Category

FY2022/23	
Average Training Hours by Employee Function	
Ground Staff	36
Cabin Crew	81
Pilots	39

## UPLIFT: Upskilling for Future-Readiness

UPLIFT is an ambitious two-year holistic upskilling plan that focuses on five key capabilities critical for employees to remain competitive in the new normal. The capabilities include Digital and Innovation, Solutioning Mindset, Resilience and Change Management, Leadership and Collaborations, and Value-outcome Application. Through a suite of programmes, employees worldwide were upskilled to navigate a dynamic external environment. Programmes such as ASCEND, Leading Hybrid Teams, Managing End-to-End Change, and Coaching, equipped employees with the knowledge and skills needed for a resilience, agility and future-readiness. As of 31 March 2023, 100% of SIA ground staff completed the UPLIFT programme.

Status

Achieved with a **100%** completion rate by all ground staff by FY2022/23



Digital and Innovation



Solutioning Mindset



Resilience and Change Management



Leadership and Collaboration



Value-outcome Application

## ASCEND Programme

One of the programmes under UPLIFT, ASCEND, is a company-wide learning experience designed to arm employees with digital toolsets, skillsets and mindset to work more innovatively and create value in their day-to-day roles. The programme leverages Human-Centered Design Thinking, Lean Startup, Agile and Data-Digital approaches to enable employees to readily identify opportunities, iterate on potential solutions, and lead meaningful and impactful change in a rapidly evolving world.

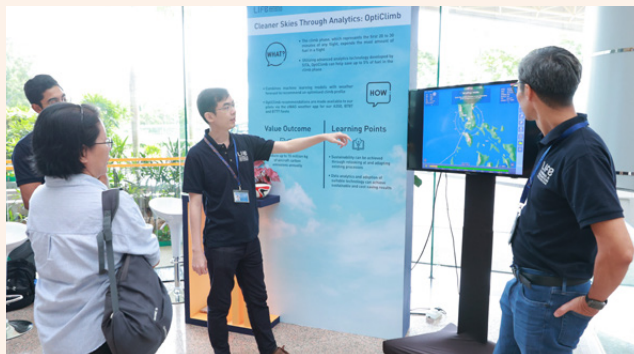
## A FUTURE-READY WORKFORCE (CONTINUED)

### CASE STUDY

#### Learning & Innovation For Everyone (LIFE) 2023

Employees across the SIA Group participated in the biennial LIFE event, a three-day long sustainability-themed global learning festival held from 21 to 23 March 2023. The event sought to reinforce the importance of the Group's long-term sustainability goals, as well as its commitment towards a lifelong learning culture for its people. LIFE 2023 was also the first time the event was held in a hybrid format globally for the SIA Group. Collectively, over 2,700 attendees participated over the three days. On average, each attendee participated in two to three activities in total.

Throughout the event, 50 activities were held around the world and across the SIA Group featuring industry experts, thought leaders, heads of business, sustainability champions, and subject matter experts within the SIA Group. Topics ranged from how the Group aims to achieve the SIA Group's 2050 net zero carbon emissions target, building workforce sustainability, steward leadership, the future of flight, biodiversity protection, to how technology can mitigate sustainability issues. Showcases and workshops by SIA Group employees were held for their colleagues to gain insights into the Group's various sustainability initiatives. Employees also visited Singapore-based farms, recycling plants, and museums to gain a better understanding of sustainability trends and practises in other industries.



# >2,700

Attendees

# 53

Activities

# 24

Workshops and Talks

# 15

Share & Learn Showcases

# 14

Field Trips

## A FUTURE-READY WORKFORCE (CONTINUED)

### CASE STUDY

#### SIA Won the Gold Award at the SkillsFuture Fellowships and Employer Awards

SIA was honoured with the Gold Award at the SkillsFuture Fellowships and Employer Awards on 22 November 2022, and recognised as the highest skills award for employers in Singapore. SIA's CEO Goh Choon Phong received the accolade from the President of Singapore, Mdm Halimah Yacob, who is also the Patron of the Awards and its Guest of Honour. SkillsFuture also accorded SIA a special mention for being a Resilient Employer, recognising the Company's continued investments in the upskilling and reskilling of employees despite the business challenges faced during the pandemic. Programmes such as UPLIFT, ASCEND and LIFE are a testament to SIA's goal of building a future-ready workforce.



#### Leadership and Professional Development

All SIA employees enjoy access to a suite of leadership and professional development programmes as part of the Group's efforts to strengthen its workforce capabilities. SIA focuses on equipping 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.

SIA works closely with institutions such as the Institute for Adult Learning and the Singapore University of Social Sciences (SUSS) to enhance its leadership and management capabilities. 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 (ACLPL) programme. Furthermore, efforts will be made to identify possibilities for the joint offering of courses or programmes to SIA and SUSS learners. The two organisations will also explore co-developing practices that enhance organisational and workplace learning through initiatives such as coaching and mentoring.

#### Singapore Airlines Academy

The Academy offers 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 SIA's wide range of globally recognised skills and competencies, and taps on its experienced staff to deliver these programmes.

The Academy has trained more than 2,000 learners from nine countries since it was launched in 2020. The learners come from a diverse range of organisations in the public and private sectors, including Healthcare, Banking and Finance, Retail, Infrastructure and Transportation. The Academy has received high ratings from clients for both its standard and bespoke programmes, and continues to see strong interest from local and global companies. With over 50 trainers who are also seasoned practitioners in their own field, the Academy has been able to offer engaging and insightful learning in various formats. With over a decade of service at SIA, these trainers are drawn from various divisions, including Cabin Crew and Flight Operations, as well as the corporate departments.

Notably, the Academy offers a range of Service Excellence and Operational Excellence courses, including Service Mindfulness and Awareness, Handling Challenging Customers, Customer Experience and Journey, and 'Digital x Service'. Meanwhile, Operational Excellence courses cover topics on Team Resource Management, Threat, Error and Risk Management, as well as Team Resilience.

#### Service Excellence Programmes

The SOAR as ONE initiative empowers SIA staff and service partners to deliver the highest service standards across every touchpoint. Structured service training programmes have been progressively offered to employees and service partners, and has become key to SIA's mission to be one of the best airlines in customer service globally.

The subsequent launch of Leading Service as ONE (LSAO) in 2022 aimed to equip leaders with the mindset, skills and tools needed to align team goals, develop a growth outlook, and discover new ways to foster a culture of service excellence. As of January 2023, close to 800 frontline staff participated in LSAO over 45 training sessions conducted by SIA's Corporate Learning Centre.

Meanwhile, quarterly training evaluations are organised with Corporate Learning Centre to determine the effectiveness of Service Excellence programmes in achieving their objectives. Necessary adjustments are made when needed to ensure relevance and to improve delivery.

To further strengthen service excellence, recognition schemes like the annual CEO Service Excellence Awards are held to pay tribute to exemplary individuals and teams for outstanding service, resilience, and service innovation. In 2022, the Group celebrated its best and brightest staff and service partners in an in-person awards ceremony on 18 October 2022. A total of 30 individuals and teams were recognised for delivering extraordinary service.

## A FUTURE-READY WORKFORCE (CONTINUED)

### Mentorship Programme for Newly Promoted Managers

One of SIA's key initiatives to develop talent is a mentorship programme for newly promoted managers, who will be attached to a senior management leader for a year. The programme provides mentees with exposure and learning opportunities to develop their leadership competencies, as they step into more senior roles. It also enables the mentors to develop coaching and mentoring skills to help nurture the next generation of leaders.

### Pilot and Cabin Crew Training

New cabin crew members must complete a 14-week classroom and on-the-job training programme before they can assume their flight duties. Crew also undergo training in security, safety and first aid procedures, which include learning cardiopulmonary resuscitation. They are also equipped with strong communications and customer handling skills to cater to the needs of customers.

Cabin crew also have opportunities for self-development through the Self-Directed Learning programme, which empowers crew members to upgrade their core skillsets with certified professional competencies.

All SIA pilots undergo mandatory training as well as developmental programmes to enhance their operational and flight skills. The Group also has a mentoring framework in place to instil SIA's core values and improve a pilot's competencies by learning from experienced peers.

### Scout

In FY2022/23, Scout continued to foster a culture of learning and continual growth among employees through platforms such as:

**Workday Learning**, a learning management system which is an extension to the existing human capital system, makes learning accessible on desktops and mobile devices, facilitating learning on the go

**Enhancing Communication and Collaboration in the Workplace workshop** to raise individual contributors' communication effectiveness

**Change Leadership, Coaching and Leading Hybrid Teams courses** to raise people managers' leadership effectiveness and capability

**LinkedIn Learning**, an online learning platform which grants employees access to over 16,000 online courses for self-learning. Monthly learning posts to expose employees on a variety of learning available on LinkedIn Learning

**Annual learning festival** held in October 2022 where all employees including flying crew had access to over 20 virtual talks and workshops. These focused on the theme of "Skills and Knowledge as the Currencies of the Future" covering areas in Digital, Cognitive, Social and Emotion, Adaptability and Resilience, as well as Driving Results.

## EMPLOYEE HEALTH, SAFETY AND WELL-BEING 3-3 403-1

**SIA believes that a healthy and safe workplace is essential to providing high-quality service to its customers and maintaining a positive work environment.**

SIA maintains a healthy and safe workforce in order to provide exceptional service to its customers. In line with this commitment, SIA has in place robust organisational structures, management approaches, including policies and procedures, as well as activities and programmes, focused on promoting employee health, safety and well-being.

*For more details on the management of employee safety and workplace incidents, please refer to the Safety chapter of this report.*

### Employee Benefits 401-2

To promote employee well-being and work-life balance, full-time Singapore-based employees enjoy benefits such as:

#### Employee Health Benefits

- 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
- Complimentary eye and spine tests as part of the basic onsite health screenings held annually

#### Support for Working Mothers

SIA has a dedicated nursing room in its offices and will continue to support new mothers as they return to work, to foster a more inclusive environment for working mothers.

#### Flexible Work Arrangements

Where operationally feasible, SIA offers flexible work arrangements such as staggered working hours and work-from-home scheme for ground employees based in Singapore.

### Travel Benefits

- One set of complimentary return tickets to any destination in SIA's network for employees, their spouses, and children annually
- Scoot employees are also offered up to five complimentary tickets to any destination, which can be used for up to five nominees, including family and friends
- Holiday accommodation subsidies

### Parental Leave 403-1

In FY2022/23, SIA and Scoot's overall retention rate and return to work rate of employees who took parental leave increased slightly from the previous year to 96.7% and 99.5% respectively.

### Parental Leave Statistics

	FY2022/23		
	Male	Female	Total
Employees who were entitled to parental leave	2,375	1,028	<b>3,403</b>
Employees who took parental leave	1,740	907	<b>2,647</b>
Employees who returned to work after parental leave ended	1,738	896	<b>2,634</b>
Employees who returned to work after parental leave ended and who were still employed 12 months after returning to work	1,698	861	<b>2,559</b>
Retention rate <sup>52</sup> of employees who took parental leave	97.6%	94.9%	<b>96.7%</b>
Return to work rate <sup>53</sup> of employees who took parental leave	99.9%	98.8%	<b>99.5%</b>

<sup>52</sup> 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.

<sup>53</sup> 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.

## EMPLOYEE HEALTH, SAFETY AND WELL-BEING (CONTINUED)

### Physical and Mental Wellness Activities to Promote Employee Health, Safety, and Well-being 403-6

SIA organised several programmes and initiatives to encourage employees to live a more balanced lifestyle and care for their overall health and well-being.



#### PHYSICAL AND MENTAL WELLNESS ACTIVITIES

##### Self-help and Self-care Portal

- SIA has an internal site on mental wellness where staff can read articles on the subject and get access to virtual lunch sessions on topics ranging from mental health to sleep management.

##### Professional Help

- SIA has an appointed counsellor from whom staff can seek professional help. The visits to the counsellor are part of their staff benefits.

##### Wellness Talks and Trainings

- SIA offers mental wellness programmes and talks for employees, given the importance of this issue. To date, the company has held eight talks, as well as training sessions on how to identify and manage colleagues under stress at the workplace.

##### Health and Wellness Events and Bazaars

- [SIA and Fullerton Health Group \(FHG\) Wellness Bazaar from 8 to 15 March 2023](#)

SIA organised its first wellness bazaar in FY2022/23 with its appointed third party medical benefits administrator, FHG, as part of efforts to drive employee wellness, and to encourage employees to prioritise their overall well-being. The event was open to all Singapore-based employees at Airline House and SIA Training Centre.

In addition to basic onsite health screenings, employees were also offered optional eyes and spine screening, wellness talks, and healthy food and beverage booths. The talks also focused on eye and spine health, since these are more commonly observed workplace ergonomic issues.



##### Regular Sports, Social and Other Recreational Activities

- Run at Bedok Reservoir Park with SIA's CEO Goh Choon Phong on 10 September 2022



#### STAFF-LED ACTIVITIES

##### Special Interest Groups and Social Recreation Clubs

- [Supremes In Arena \(S.I.A\) – SIA's eSports special interest group](#)

The eSports group has more than 300 active members who connect with each other almost daily by playing video games together. The group hosted its first online tournament on 27 May 2022 with support from SIASU and NTUC club, to create more awareness for eSports and its benefits.

##### Appreciation Celebrations

- [August 2022 – Cabin Crew Month](#)

This year's Cabin Crew Month built upon the division's recognition theme 'You Make a Difference', which aimed to remind crew of the impact of their profession and service pre-Covid, and invigorate all especially during this period of recovery. Programmes and treats were specially curated, with a fair amount of fanfare, to boost the morale of the crew as well as the ground staff who work tirelessly behind the scenes.



# SOCIETY

SIA is committed to giving back to the society, and strengthening its relationships with the communities that it serves in Singapore and around the world. By using its business as a force for good, the Group aims to make a difference in people's lives through impactful initiatives with a lasting effect. These efforts include contributing to communities in need, fostering sporting talent, supporting the arts, and encouraging environmental stewardship.

## SIA's MANAGEMENT APPROACH

### Key Engagement Activities

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

### SIA's Ambition

SIA practises good corporate citizenship, contributing to and investing in the communities where it operates.

### Key Policies, Processes, and Systems

Allocating one CSR Day per calendar year for all Singapore-based SIA employees, and up to eight hours of volunteering time-off per month for Singapore-based Scoot employees to participate in volunteering activities.

### Supporting the UN SDGs



### FY2022/23 in Numbers

**>2,000** SIA and Scoot employees

SIA and Scoot employees participated in various community service projects in Singapore in FY2022/23

**>8,600** hours

of staff volunteerism in Singapore in FY2022/23

**>15** beneficiary organisations

in Singapore supported in FY2022/23

**\$200,000** raised

for Covid-19 frontline workers in FY2022/23

Approximately **108** million doses

of Covid-19 vaccines transported in FY2022/23



## SOCIETY (CONTINUED)

### COMMUNITY PROJECTS IN SINGAPORE 413-1

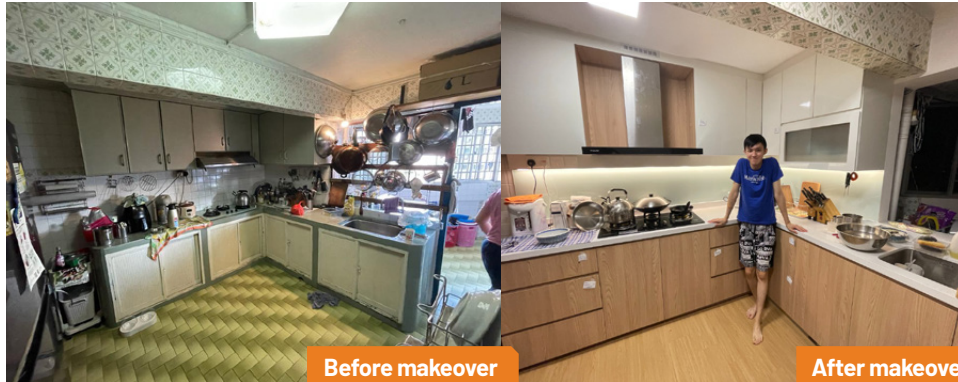
#### Contributing to Communities in Need and Promoting the Arts and Sports Excellence

SIA is dedicated to fostering enduring bonds with the communities in which it operates in. In Singapore, the Group supports a diverse range of local causes and community groups through initiatives such as corporate donations, ticket sponsorships, and the volunteering efforts of its staff.

#### DONATIONS AND SPONSORSHIPS

##### KrisFlyer and Make-A-Wish Singapore Partnership

Around **5.5 million miles** were redeemed in FY2022/23 to fulfil the wishes of children with life-threatening illnesses under a partnership between KrisFlyer and Make-A-Wish Singapore. Since this programme started in 2017, KrisFlyer members have generously donated to it and **over 36.5 million miles** have been redeemed for SIA flights, as well as products and activities on KrisShop and Pelago, for the benefit of beneficiaries to date. Some of the wishes fulfilled in FY2022/23 include a new fridge as part of a kitchen makeover for a budding chef, and a marine ecology tour for a marine life enthusiast.



In FY2022/23, SIA sponsored **over 100 tickets** for Make-A-Wish beneficiaries and their families to participate in KrisFlyer Experiences events organised by SIA. These comprised 27 tickets to attend the KrisFlyer Day-out at KidZania in June 2022, and 80 tickets to attend Disney's Frozen The Hit Musical.

##### National Council of Social Service's Community Chest

SIA donated **over \$200,000** to Community Chest in FY2022/23, the philanthropy and engagement arm of the National Council of Social Service. These donations were used to support **over 100 Singapore social service agencies** in delivering critical services to adults with disabilities, children with special needs, youth-at-risk, needy families, vulnerable seniors, and persons with mental health issues. For these contributions, SIA was presented with the Charity Gold award at the annual Community Chest Awards on 1 November 2022.

SIA has been a strong supporter of Community Chest since 1987. Today, the bulk of contributions come from SIA employees' monthly donations to SHARE, Community Chest's monthly giving programme, as well as direct donations, such as sponsoring a pair of return Business Class ticket for charity events.

##### Cerebral Palsy Alliance Singapore (CPAS)

SIA's Engineering Division continued to support CPAS in FY2022/23 through community events and a donation of **\$3,000** to purchase necessities for its beneficiaries.

## SOCIETY (CONTINUED)

### STAFF VOLUNTEERISM

#### SIA

SIA launched its CSR Day on 1 January 2022 for all Singapore-based staff, allowing them to allocate one day per calendar year to support various charitable causes. This enables staff to volunteer their time and skills to make a positive impact on the lives of others. Monthly CSR activities are curated at the corporate level and published on the internal portal for staff to sign up. These supported different beneficiaries such as the youth, low-income individuals, and persons with disabilities.

In FY2022/23, **more than 2,000 SIA staff** participated in community service projects in Singapore. **Over 370 corporate activities** were organised for staff to participate in, and a total of **8,320 hours of volunteerism** was achieved. As part of the company's onboarding programme, all new joiners took part in one of these volunteering activities to exemplify the Company's core value in caring for our community.

**Ten beneficiary organisations** were supported in this FY2022/23, such as AMKFSC Community Services, Community Chest, Free Food For All, North East Community Development Council, South East Community Development Council, Thye Hua Kuan Moral Charities, and Willing Hearts.



#### Scoot

Scoot's volunteering time-off encourages employees to support meaningful causes close to their hearts and make a difference beyond work. All Singapore-based office staff are eligible to apply up to eight hours of volunteering time-off per month, and participate in company-organised or self-sourced volunteering opportunities. In FY2022/23, **more than 85 Scoot staff** volunteered **over 280 hours** of time to give back to local causes and communities in need through various projects:



**Sathya Sai Social Service (4S) Food Aid Programme:** Scoot's volunteers helped to pack and distribute food parcels to beneficiary households around Eunos, run a digital clinic with the seniors, and engage them in bonding activities.



**Food from the Heart (FFTH):** Scoot's volunteers helped to sort and pack community food packs and school supplies for FFTH beneficiaries.



**Gardening with Seniors:** In partnership with St. John's Home for Elderly Persons and Edible Garden City, Scoot's volunteers helped to harvest and groom the edible roof garden, while mingling with seniors from the home.



**Save That Pen x U Heart:** In collaboration with Save That Pen, Scoot's volunteers helped to refill and pack used pens to be distributed to beneficiaries under NTUC's Share-a-Textbook initiative.



**Sustainability @ Tampines Park:** Scoot volunteers helped with the breeding and feeding of Black Soldier Fly larvae to support food sustainability operations at Tampines Park in partnership with Otolith Enrichment.



**Christmas Party with Children's Wishing Well (CWW):** Scoot hosted a Christmas party for 30 kids from CWW for the second year running. Activities include sharing of stories from Scoot's volunteers to learn more about aviation, games, and gifting of prizes and presents.



**Pedal & Pick Family Day:** Scoot brought back the Pedal & Pick Family Day beach clean-up event. Volunteers combed the beach and park on foot and on bikes to remove about 10kg of trash from the area.



**Christmas Impact Marketplace:** Scoot invited five non-profit organisations to set up booths at Scoot's two-day impact marketplace in the office, to give staff a chance to purchase items that support meaningful causes.

## SOCIETY (CONTINUED)

### SUPPORTING COVID-19 EFFORTS

#### Donation to Vulnerable Communities

From December 2022 to January 2023, Scoot donated **2,700 bottles of hand sanitisers** and **27,500 N95 masks** to The Food Bank, Dementia Singapore, and Serving People with Disabilities.

#### Carriage of Vaccines, Therapeutics, and Relief Supplies to Support the Fight Against Covid-19

SIA continued to play its part in the fight against the pandemic by transporting time- and temperature-sensitive vaccines with utmost care. In April 2022, SIA transported 325,000 doses of Covid-19 vaccines from India to Cambodia under the QUAD Vaccine Initiative. In total, SIA transported an **estimated 108 million doses of Covid-19 vaccines** (approximately 94 tonnes in weight) to various destinations in the Asia-Pacific region in FY2022/23.

#### Star Alliance Charity Run Fundraising for Covid-19 Frontline Workers

Star Alliance, the largest network of global airlines, organised a charity run for over 1,000 participants along the Kallang River on 9 October 2022 to celebrate the Alliance's 25<sup>th</sup> anniversary, and the first year since the opening of its Singapore office. SIA supported the event through the sponsorship of a pair of flight tickets, and also promoted the event to all other Star Alliance member carriers in Singapore.



### ARTS

#### Growing Singapore's Arts Scene

SIA sponsored the following organisations in FY2022/23, as part of its longstanding commitment to help grow the Singapore arts scene:

- Arts House Limited (since 2022)
- LASALLE College of the Arts (since 1999)
- Singapore Chinese Orchestra (since 2002)
- Singapore Ballet Limited (since 1988)
- Singapore Lyric Opera (since 1991)
- Singapore Symphony Orchestra (since 1979)

SIA's ticket sponsorships enable these organisations to send Singapore-based artistes overseas to perform, or invite international artistes to perform in Singapore.

### SPORTS

#### Supporting Sporting Excellence in Singapore

SIA recognises the value of a strong sports ecosystem to forge bonds within the community. The Group sponsored the following organisations in FY2022/23:

- 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

SIA also sponsored the following major sporting events in FY2022/23:

- **FORMULA 1 SINGAPORE AIRLINES SINGAPORE GRAND PRIX:** SIA renewed its title sponsorship for three years, demonstrating its strong support for tourism, sports, and the development of Singapore as an international air hub. In particular, 2022 marked the return of this important international sporting event after a two-year pandemic disruption. Despite heavy rain, the event drew a record-breaking 302,000 fans. About 50 SIA cabin crew participated in the event, with their involvement ranging from being flagbearers at the starting grid, performing Singapore's National Anthem and supporting photo opportunities with fans in Paddock Club™ Suites and fan village.
- **Tour de France Prudential Singapore Criterium 2022:** SIA was the official airline partner of the Tour de France Prudential Singapore Criterium 2022. The event marked the first time that a criterium race has been held in Singapore as part of the iconic Tour de France global bicycle competition.

## SOCIETY (CONTINUED)

### COMMUNITY PROJECTS AROUND THE WORLD 413-1

Reaching out to those in need, wherever they may be.

SIA's overseas stations continued to be passionate about reaching out to their local communities in FY2022/23. As a global airline, SIA works with charities in support of various initiatives and causes.

#### SOUTH AFRICA

##### Donating onesies to Johannesburg's babies

Door of Hope provides care for abandoned or relinquished babies, offering them a new chance at life. The mission currently houses 42 children ranging from newborns to five-year-olds in Johannesburg. As part of SIA's Miles of Good programme, baby onesies were redeemed and donated by KrisShop to Door of Hope.

**42 onesies**  
donated in FY2022/23

#### THE PHILIPPINES

##### KrisFlyer brings smiles to Filipino children via Miles of Good

The SIA team in the Philippines has maintained a longstanding partnership with ABS-CBN Foundation, Inc – Bantay Bata 163, a child welfare programme based in Manila, for over 17 years. Some 1,690 children have been positively impacted through financial support for school-related projects, field trips, and other activities.

As part of the SIA's KrisFlyer Miles of Good programme, 100 journals were donated to aid children's studies.

**100 journals**  
donated to children in FY2022/23

#### JAPAN

##### Bringing cheer to children at the Ronald McDonald House in Japan

Under SIA's KrisFlyer Miles of Good initiative, 175 limited-edition batik-print plush toys were donated to hospitalised children in Japan. The toys were distributed via Ronald McDonald House Japan, an organisation that provides accommodation for families whose children are hospitalised far from home. This is the first collaboration between the SIA team in Japan and Ronald McDonald House, which operates in 11 Japanese cities to support families and children.

**175 batik-print plush toys**  
donated in FY2022/23

#### INDIA

##### Scoring goals in the fields and in our hearts

In the middle of the FIFA World Cup in Qatar, the SIA team in India sponsored an inter-NGO football tournament for underprivileged children in Mumbai, organised by the Concern India Foundation. The event brought together over 120 children from various municipal schools and NGOs.

Some 15 staff from both the town and airport offices volunteered at the event. The money contributed by the SIA team in India was used to design winning trophies, print T-shirts, caps, and certificates for the children, as well as to cover logistics and transport costs. Each child also received an exclusive SIA batik-print water bottle from KrisShop.

**More than 120 children** benefited from the football tournament organised in FY2022/23

## SOCIETY (CONTINUED)

### VIETNAM

#### Spreading the joy of reading

SOS Children's Villages is an international non-profit organisation that has been offering refuge and care to children without parental care in Vietnam for more than 30 years in Go Vap, Ho Chi Minh City.

The SIA team in Vietnam donated 50 copies of the book 'Lost in Singapore' to the village in an effort to promote reading among underprivileged children. The team also donated 2,000 goodie bags with notebooks, pens and stickers to the *Time to Fly* travel fair, which was held in Ho Chi Minh City and Hanoi in November 2022.

**2,000 goodie bags and 50 books donated in FY2022/23**

### TURKEY

#### Humanitarian relief efforts for Turkey earthquake

The SIA team in Turkey facilitated the Singapore Civil Defence Force (SCDF) search and rescue team's journey to the earthquake site, and also provided them with portable Wi-Fi modems and local SIM cards so that they could maintain constant communication while in the country.

Back at the SIA headquarters in Singapore, six bags of winter apparel and 2,500 blankets from KrisShop were collected and donated to the victims of the earthquake through the Turkish Embassy.

**Six bags of winter apparel and 2,500 blankets donated to victims of earthquakes in FY2022/23**

### GERMANY and SWITZERLAND

#### Bringing joy to children in Germany and Switzerland

SIA's Loyalty Marketing department and the teams in Germany, Austria, and Switzerland collaborated to support various children foundations in Germany and Switzerland.

Donated miles from SIA's KrisFlyer Miles of Good programme were used to redeem stuffed bunnies and aircraft models, which were gifted to around 50 children in Die Arche (The Ark). Five aircraft models were also donated to Stiftung Waisenhaus (Orphanage Foundation) Christmas tombola. In addition, the SIA teams in Germany, Austria, and Switzerland supported a charity gala event for children's non-profit foundation Kiwanis Club by offering discounted tickets from Zurich to Singapore as the top prize for the fundraiser.

**About 50 children received donations of stuffed bunnies and aircraft models in FY2022/23**

### TAIWAN, China

#### Raising funds to children with developmental delays

The SIA team in Taipei continues to partner local Non-Governmental Organisation, Eden Social Welfare Foundation for the fifth consecutive year, supporting children with developmental delay and their families with early-intervention services. In 2022, SIA donated umbrellas with SIA's batik motif to the Foundation and the public can make a regular monthly donation of TWD400 over a year or a one-time donation of TWD4,800 to bring home these umbrellas. In total, TWD945,000 (S\$41,500) was raised, taking the cumulative total funds raised over five years to TWD4.25 million (S\$185,820).

**Approximately \$41,500 raised from donations in FY2022/23**

### THE UNITED STATES OF AMERICA

#### Feeding seniors and bringing joy to kindergarten students across the USA

The SIA team in the United States of America launched its first #SIACares initiative to support food security for seniors. The team collaborated with five Meals on Wheels USA chapters in New York, Dallas, Houston, San Francisco, and Los Angeles to prepare and deliver over 1,500 meals to home-bound seniors. Through the initiative, dozens of staff volunteers spread across over 3,000 miles in USA came together to participate in meal plating, packing, labelling, and grocery assembly in each of the cities.

Supported by SIA KrisFlyer Miles of Good programme, miles donated by KrisFlyer members were used to gift 100 stuffed toys to kindergarten students at the Isaacs Center in New York.

**Over 1,500 meals delivered to seniors, and 100 stuffed toys donated to students in FY2022/23**

# GOVERNANCE

The SIA Group seeks to enhance long-term value for its stakeholders by upholding high standards of corporate governance across the entire organisation. This effort is driven by the Company’s strong leadership and its rigorous approach to managing risk. This commitment enables it to allocate resources wisely, while strengthening business resilience and fostering sustainable growth.

## SIA’s MANAGEMENT APPROACH



### Key Engagement Activities

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



### Key Policies, Processes, and Systems<sup>54</sup>

- Anti-corruption and Anti-bribery Policy and Procedures
- Anti-modern Slavery and Human Trafficking Statement
- Code of Conduct
- Conflict-of-interest Policy
- Grievance Mechanism
- Risk Management Framework
- SIA Privacy Policy
- Staff Regulations
- Whistleblowing Policy



### SIA’s Ambitions

The SIA Group seeks to maintain high standards of corporate governance, professionalism, and integrity at all levels, underpinned by strong internal controls and risk management systems.

Target	Due	Status
At least 95% of the Group’s employees <sup>55</sup> to complete the anti-corruption web-based training by the due date, annually	Yearly	Achieved

## FY2022/23 in Numbers

**96%**

of employees completed the anti-corruption training

**0**

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

## Supporting the SDGs



<sup>54</sup> Please refer to pages 65 to 86 of the SIA Annual Report FY2022/23

<sup>55</sup> This target excludes SIA’s 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.

# GOVERNANCE (CONTINUED)

## CORPORATE GOVERNANCE AND ETHICS 3-3

The SIA Board of Directors and Management Committee play a critical role in advancing the SIA Group's sustainability agenda.

*For more details on sustainability governance, please refer to the sustainability approach section of this report.*

### Board of Directors 2-11 405-1

The Board oversees the Company's business performance and affairs, while offering general guidance to Management. The Board's principal functions include charting the Group's strategic direction and monitoring its performance, guiding Management on digitalisation, technology, and innovation; reviewing and approving annual budgets and financial plans; approving major acquisitions and fundraising exercises, as well as ensuring the Group's compliance with relevant laws and regulations.

Recognising the importance of sustainability, the Board guides the Management Committee to ensure that the SIA Group's long-term value creation is aligned with ESG factors.

The Board places great importance on maintaining a strong independent element among its members. As of 31 March 2023, the Board comprises 11 Directors, of which eight are independent and three are designated as non-independent. The remaining eight Directors are independent from the Management and the Company's substantial shareholders. The three non-independent Directors are Mr Goh Choon Phong, the Company's CEO, Mr Hsieh Tsun-yan, and Mr Gautam Banerjee. To ensure that The Board continues to provide the necessary range of perspectives, expertise and experience for the Company, diversity is a consideration for director selection and nomination. SIA has set out a target to achieve a 30% ratio of female directors by 2030, consistent with national ambitions set forth by the Council for Board Diversity (CBD). As of 31 March 2023, SIA has two female Directors, Ms Goh Swee Chen and Ms Jeanette Wong Kai Yuan, putting the female representation on SIA's Board at 18%. The Board will strive to maintain a minimum of two female Directors. It will also continue to build on the element of diversity, recognising the importance of having an effective and diverse Board.

*Please refer to the SIA Annual Report FY2022/23 for more details.*

### Evaluation of Board Performance 2-18

For FY2022/23, the Nominating Committee (NC) commissioned a formal evaluation of the Board and its Board committees. The process involved sending questionnaires to gather feedback from the Directors. The evaluation confirmed that the Board and its board committees were generally functioning effectively and performing well, amid a highly competitive and challenging environment. The performance of individual Directors was reviewed by the Chairman and NC, while the Chairman's performance was reviewed by the rest of the Board. Moving forward, with the increasing expectation to align ESG objectives with overall strategic drivers of the business, SIA will be reviewing its board evaluation process to better assess the Board's effectiveness in achieving long-term sustainability in line with ESG objectives.

*Please refer to the SIA Annual Report FY2022/23 for more details.*

### Ethics, Values and Principles

The SIA Group's values and principles guide the Company on the way it works with stakeholders, and how it conducts itself in all its activities.

SIA conducts its business ethically, and expects the same from the suppliers and partners they work with too. Some of the policies it adheres to includes the Conflict of Interest policy, Whistleblowing policy, Grievance Mechanism policy, and Anti-corruption and Anti-bribery policy. The Company expects the highest standards of integrity from its employees, business partners, suppliers, contractors, and agents. SIA lists its commitment and whistleblowing channels on its corporate [website](#).

### Supporting the Ten Principles of the United Nations Global Compact

SIA has aligned its corporate strategies, policies, and procedures with the Ten Principles of the United Nations (UN) Global Compact since becoming a signatory in 2018. This is part of the Company's effort to build a responsible business that meet fundamental responsibilities in the areas of human rights, labour, environment, and anti-corruption.

### Conflict of Interest 2-15

SIA 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 Conflict-of-interest policy also requires all employees to make a declaration of all actual and potential conflicts of interest to the Human Resources Division annually.

*Please refer to the SIA Annual Report FY2022/23 for more details.*

## GOVERNANCE (CONTINUED)



### Anti-modern Slavery and Human Trafficking Statement 2-23 2-24 PR-1 PR-2 PR-4 PR-5

The SIA Group does not condone any form of slavery and human trafficking and remains committed to combating these risks across its value chain. Suppliers are required to comply with standards set out in the Suppliers' Code of Conduct. Those found to be in breach risk having their supplier contracts terminated.

As a key player in the international transport market, the Company also recognises that it has a responsibility to address human trafficking risks. The SIA Group works closely with governments, national law enforcement agencies, and airports in the countries and territories where it operates to ensure that all suspected trafficking on its flights are reported and dealt with appropriately. The Company is also committed to sharing best practices with its peers through the International Air Transport Association (IATA). The full Anti-modern Slavery and Human Trafficking Statement was updated in FY2021/22 to take into account the Australian and UK Modern Slavery Act, and is available on the corporate [website](#).

### Whistleblowing Policy 2-16 2-23 2-24 2-25 2-26

The SIA Group has confidential channels for all internal and external stakeholders to raise concerns about possible improprieties. Internal and external stakeholders can submit their reports anonymously without fearing reprisal. The Whistleblowing policy is communicated to all employees through the corporate intranet, staff regulations and a mandatory web-based training module. Under this 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 the corporate [website](#). The whistleblowing platform is managed by a third-party service provider, where reports received are within an agreed scope (staff fraud, external fraud, staff conduct, business conduct) and subsequently referred to the internal audit team, which is responsible for the independent review and investigation on any fraud cases. The Audit Committee reviews all whistle blower reports at its quarterly meetings to ensure independent investigation and adequate resolution. The committee also regularly reviews the whistleblowing programme to ensure that it continues to be adequate.

### Grievance Mechanisms 2-16 2-25 2-26

Since 2018, SIA has adopted the Tripartite Standards for Grievance Handling to encourage employees to discuss work-related matters, including grievances, with their managers. The grievance handling process for employees is covered in the collective agreements, and feedback from stakeholders such as Unions and Line departments are incorporated into the review process, where applicable. If employees are covered under a Union, they may also inform their Union representative to assist in the resolution process. SIA keeps all information related to the grievance confidential, and has developed internal processes to ensure that there is an independent investigation into any reported incidents and appropriate follow-up actions. The collective agreements with respective unions are reviewed and renewed every three years. The company will continue to keep abreast of updates to the national framework, in close consultation with the relevant agencies and unions.

### Political Contributions 415-1

As Singapore's national carrier, SIA works closely with the government, policymakers, and regulators to help shape effective and comprehensive policies and regulations. The Company also advocates to stakeholders indirectly through its participation in industry and trade associations, or coalitions such as the Association of Asia Pacific Airlines, 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 FY2022/23, SIA did not make any political contributions other than memberships fees to trade associations.



# GOVERNANCE (CONTINUED)

## Anti-corruption 2-23 2-24 205-2 205-3 PR-10

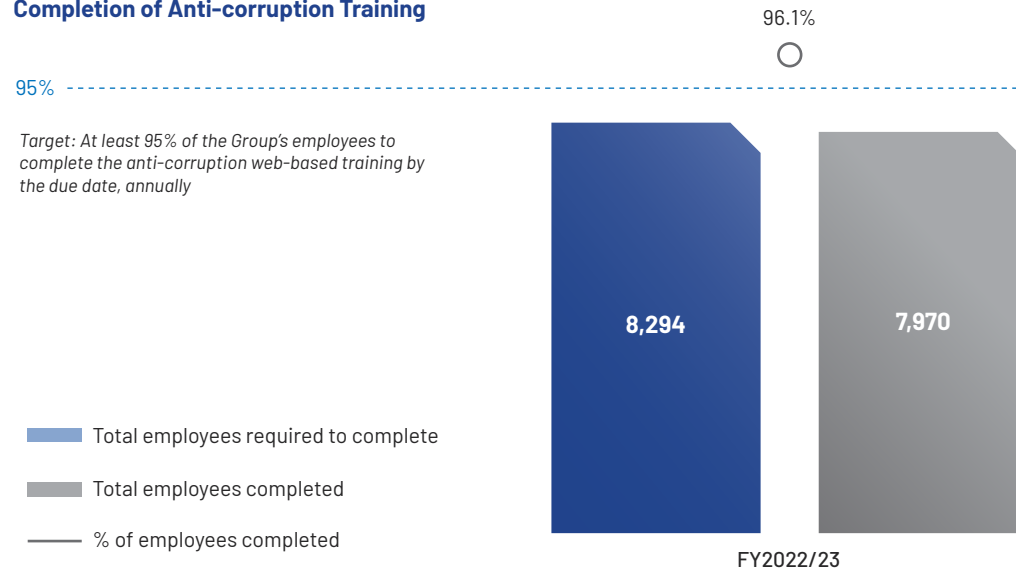
The SIA Group has a zero-tolerance stance on corruption and works closely with its stakeholders across the value chain to drive anti-corruption efforts.

All employees, officers, and directors of the SIA Group and all its subsidiaries are expected to comply with the Group's Anti-bribery and Anti-corruption policy and procedures. All employees undergo a mandatory anti-corruption web-based training annually and are assessed on their knowledge and understanding at the end of the course. Some 7,970 (96%) of the 8,294 SIA and Scoot employees required to complete anti-corruption training in FY2022/23 successfully did so.

In 2022, an SIA staff was investigated by the authorities for allegedly receiving gratification from an external party. Whilst under investigation, the employee resigned from SIA. Following the investigations, the former SIA employee was charged with corruption and money laundering. No charges were brought against SIA in connection with the case. Outside of this, there were no confirmed incidents of corruption involving SIA's employees or business partners in FY2022/23.

Furthermore, to minimise the chance of developing vested interest in sensitive roles, all employee roles up to the Vice President level are assessed for sensitivity risks on a biennial basis. This is part of SIA's Rotation of Sensitive Positions framework, and a policy review is conducted every four years.

### Completion of Anti-corruption Training



## CASE STUDY



### SIA Honoured at the SIAS Investors' Choice Awards

SIA received the Singapore Corporate Governance Diversity runner-up award at the Securities Investors Association Singapore (SIAS) Investors' Choice Awards on 7 October 2022. The award recognises companies and individuals with good corporate governance and sustainability practices.

# GOVERNANCE (CONTINUED)

## Compliance with Laws and Regulations

2-25 2-26

2-27 3-3

The SIA Group does its utmost to conduct its business in a manner that is just and responsible to society and the environment.

To help foster trust and better relationships with its stakeholders, the SIA Group complies with the applicable social and environmental regulations in the countries where it operates. For more details on the Company’s specific environmental management systems and Suppliers’ Code of Conduct, please refer to the relevant chapters in this report. In FY2022/23, there were no significant fines<sup>56</sup> or non-monetary sanctions for non-compliance with environmental, health and safety laws, and regulations.

## Employee Code of Conduct

2-23 2-24 2-26

All employees are expected to adhere to staff regulations, which cover aspects such as anti-corruption, anti-competition laws, personal conduct, discipline, non-discrimination and personal data protection. In particular, SIA has zero tolerance for any incidents of discrimination and harassment. Staff regulations are published on the Company’s corporate intranet and appended to all letters of offer to new hires. New hires are expected to read and acknowledge the contents during their onboarding process.

The Company has an established disciplinary inquiry process to handle cases in the event an employee violates the staff regulations. Such proceedings are documented and a summary report is provided to Senior Management. Staff regulations are also reviewed periodically by the Human Resources and Legal departments to ensure continued relevance. Any changes are updated and shared with all employees on the corporate intranet for compliance.

Employees can raise concerns about the Organisation’s business conduct or report grievances through the appropriate channels as detailed in the earlier section on whistleblowing and grievance mechanisms. The code of conduct also takes into consideration labour policies relating to child labour, forced or compulsory labour and employment rights, which comply with the Ministry of Manpower’s Employment Act in Singapore.

## Risk Management

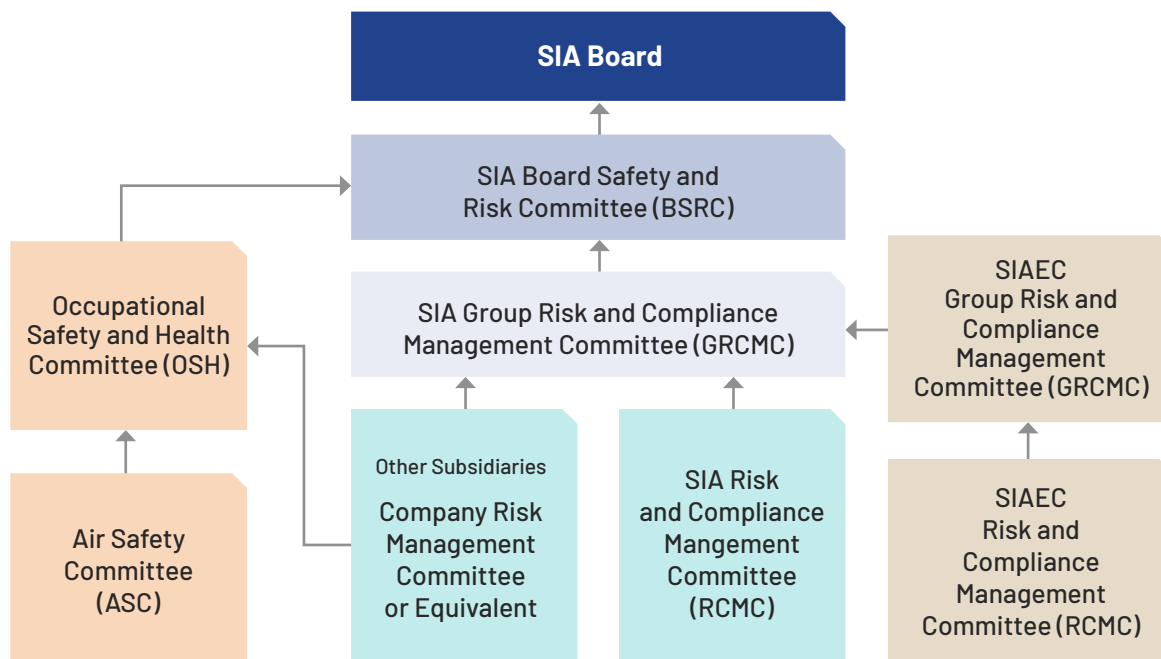
2-23 2-24

Identifying, managing, and responding to risks while capitalising on potential opportunities allows the SIA Group to remain agile and make informed decisions to achieve its strategic objectives.

The dynamic nature of the commercial aviation business requires risks to be effectively managed to ensure the resilience and growth of the business. The SIA Group has a formalised Risk Management Framework that comprises 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 that adequate risk controls are in place and regularly reviewed and tested to validate their effectiveness and relevance.

## Group Risk Governance and Reporting Structure



\* Significant fines refer to those above SGD 10,000.

## GOVERNANCE (CONTINUED)

### Risk Management Department

SIA's Risk Management (RM) department engages with all employees to foster a healthy culture of risk-awareness for the effective and efficient management of risks across the organisation. Conducting regular training to equip employees with the relevant knowledge and the right mindset to manage risks. The RM department has developed an interactive web-based training module that all ground employees are required 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 facilitates opportunities for collaboration across different functions and within the SIA Group, including joint reviews of risks and integrated tests of BCPs for risk events that have an extensive and multi-disciplinary impact.

More information on SIA's Risk Management Framework, Board of Directors, Board Committees, Risk Management Committee, and Risk Management Functions can be found on the corporate [website](#).

### Risk Appetite

To effectively manage risk across the organisation, the SIA Group makes informed decisions guided by Risk Appetite Statements presented in the Company's Annual Report to protect the interests of customers, investors, employees, and other stakeholders.

*Please refer to the SIA Annual Report FY2022/23 for the risk appetite statements approved by The Board.*



### Risk Management Process

The SIA Group has developed a process to identify new risks, as well as evaluate existing risks and associated controls, to determine their relevance in the current context. Once a year, all BUs participate in the Group-wide Risk Management Review Exercise that includes a review and reporting process by Senior Management and the SIA Board. To ensure that risk assessments conducted by BUs are consistent, the Company has developed a comprehensive guide and a Risk Assessment Matrix. Any identified risks are then graded and prioritised so that resources can be more effectively allocated to manage them.

The SIA GRMC works closely with the BSRC to ensure that risks are surfaced and reviewed, and that risk responses across the Group are coordinated and integrated. Correspondingly, Risk Management Committees ensure that risks are surfaced by their various business divisions for review by the GRMC and BSRC. Beyond this annual exercise, the Risk Management Framework is continually reviewed to ensure that the Group's risk governance and risk management practices remain relevant and effective, while meeting applicable corporate governance requirements. The SIA Group also inculcates a risk-aware culture, where risks are reviewed proactively and on an ongoing basis. To achieve this, a comprehensive plan was implemented to reach out to all employees through targeted communications and engagements activities.

At the end of each financial year, SIA's CEO and the Executive Vice President Finance and Strategy provide assurances to confirm that the Group's risk management system and internal controls are adequate and effective in addressing risks, which the Group considers relevant and material to its operations. These are based on written assurances given by the respective department heads.

### Crisis Management 3-3

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

Crisis management exercises are conducted at least once a year. These are scenario-driven exercises for participants to derive solutions to likely emergency scenarios. Solutions to issues that surface during these exercises will be developed to ensure that SIA is ready to address such emergencies.

SIA remains vigilant in this evolving global landscape and measures were implemented across the Company's operations to keep abreast with the regulatory changes and industry best practices ensuring operational and economic resilience.

## GOVERNANCE (CONTINUED)

### Data Privacy and Cybersecurity

2-26

3-3

418-1

SIA recognises the importance of safeguarding the privacy of data collected from stakeholders.

SIA is committed to safeguarding the personal data of its customers and complies with the requirements under the applicable data protection laws, including the Personal Data Protection Act of Singapore. The Company recognises the importance of customer privacy and has implemented robust measures to protect the personal data entrusted to SIA, and ensure that customer data is handled in accordance with the applicable data protection principles.

The Company has a Cyber Incident Response Team (CIRT), which comprises members from various business units including Customer Contact Services, Information Security, Legal, and Public Affairs to provide a holistic and coordinated response to any cyber threats and data incidents. The CIRT Team spearheads the Company's response to such incidents and works closely with external vendors and internal stakeholders to resolve the incidents expeditiously, and significant incidents are escalated to senior management for guidance.

The Company regularly reviews and updates its policies, guidelines, and processes for compliance with the applicable global privacy laws. This includes conducting privacy impact assessments or transfer impact assessments where required, having in place appropriate data protection terms in agreements with external parties, and implementing stringent technical and organisational measures for the protection and security of personal data. More information on how the Company handles personal data can be found in the SIA Privacy Policy on the corporate [website](#).

SIA employees are required to complete the Customer Data Protection Programme annually through SIA's e-learning platform, SKIES. Annual completion rates are tracked and reported to the GRCCM. The Company conducts regular cybersecurity tabletop exercises with senior management and relevant business units such as Information Security, Legal, and Public Affairs. An external training partner is typically engaged to plan hypothetical case scenarios involving cyber or data incidents to test the team's preparedness and responses to incidents.

SIA maintains a high level of cyber security to defend critical assets from, and minimise the impact of, cyber attacks. The Company continually invests in cyber security to refresh protection, detection, and response across processes, systems, and people.



The Board oversees cyber security and reviews cyber risks and mitigations. The CEO and the Management Committee are updated regularly on cyber security, and provides guidance on cyber security strategy, posture, and initiatives. In FY2022/23, there were a total of five substantiated complaints concerning breaches of customer privacy and losses of customer data for the group.

For SIA, there were three isolated incidents caused by human error and one incident caused by a technical glitch on the part of SIA's vendor. For Scoot, there was one isolated incident caused by a technical glitch on the part of Scoot's vendor.

For the three incidents involving human error, action was taken with respect to the staff involved, including counselling, where appropriate. Furthermore, internal processes were tightened and both refresher and enhanced staff training were provided. For the two incidents involving a technical glitch, SIA and Scoot have since worked with their respective vendors to identify and rectify the glitches. In both cases, the technical glitches have since been resolved with no new incidents detected.

## CASE STUDY

### Improving Data Governance Using a Data Inventory Management System

SIA has embarked on an initiative to create a single holistic view of the data in its systems and where this data resides. This is done by mapping out data lineage to display the data flow between systems. With this, users will have a precise view of what each system stores and which databases are most relevant. At the same time, this will allow the company to identify and classify Personally Identifiable Information (PII) data fields efficiently so that appropriate data protection can be prescribed for different groups of data based on their sensitivity. This is in line with SIA's commitment to maintain accountability and transparency across data collection and storage processes.

# SUPPLIERS

Fostering robust supplier relationships is vital to the SIA Group’s continuing success, given that a significant portion of the Group’s societal and environmental impact stems from its supply chain. Every supplier plays a pivotal role in shaping the aviation sector’s journey towards socio-economic and environmental sustainability. As such, SIA collaborates with suppliers to advance their collective sustainable development efforts.

## SIA’s 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

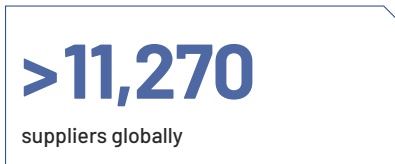
### Key Policies, Processes, and Systems

- Procurement policies and processes
- Suppliers’ Code of Conduct

### SIA’s Ambitions

SIA treats its suppliers with respect, emphasises fairness in its relationships, and works together with them to achieve sustainable business practices.

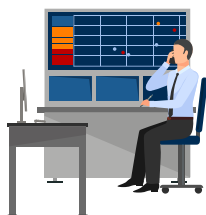
### FY2022/23 in Numbers



### Supporting the UN SDGs



In-flight Catering



Technology Systems



Aviation Maintenance and Materials



Ground Handling



Aviation Fuel



Aircraft Fleet and Engines

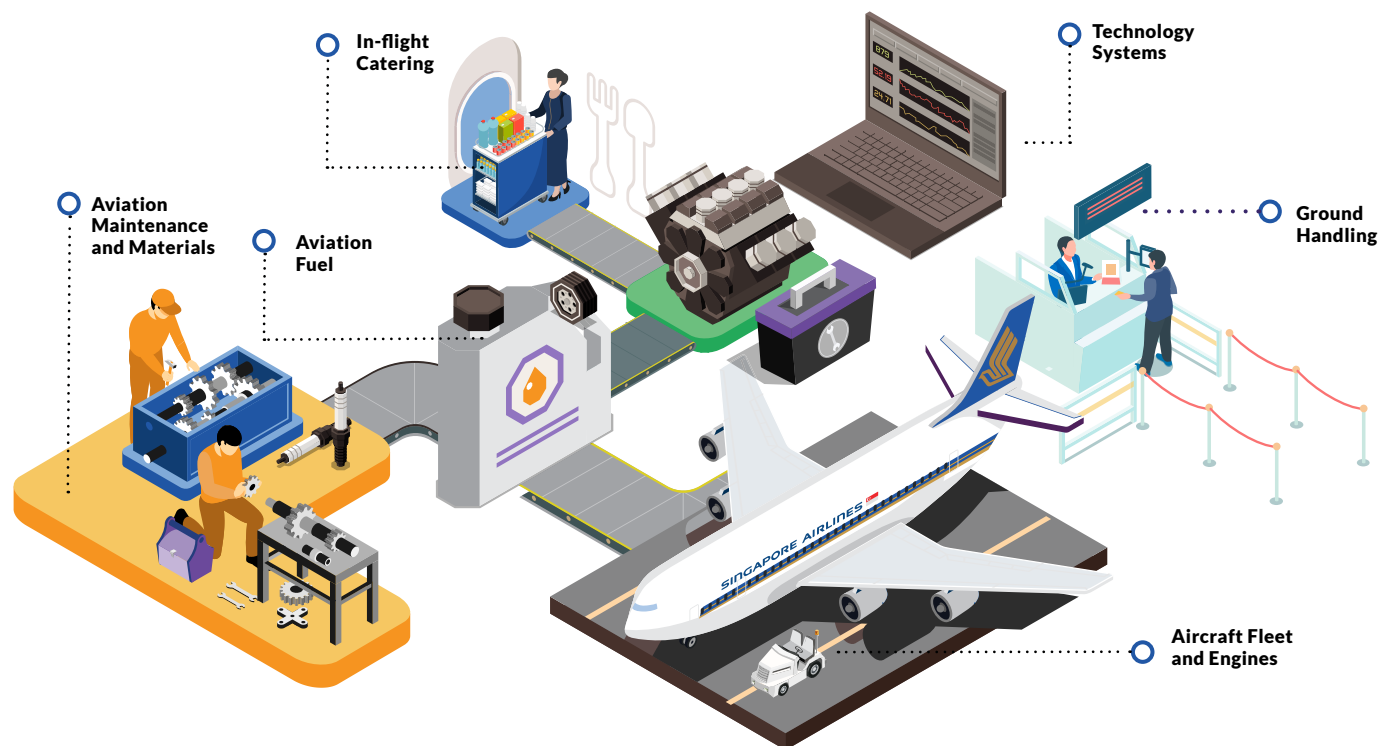
## SIA'S SUPPLY CHAIN

2-6 3-3

SIA adopts a risk-based approach to ensure that its supply chain is sustainable and resilient.

### SIA's Key Suppliers

The SIA Group has more than 11,270 suppliers worldwide. They supply goods, materials, or services directly to the Group. SIA's supply chain can be broadly classified into six main categories:



In FY2022/23, the total expenditure for suppliers' services engaged by the SIA Group was over \$14 billion, with most of this going towards aircraft fleet and engines, aviation fuel, aviation maintenance and materials, ground handling, and in-flight catering.

SIA's top 10 suppliers based on expenditure\*, listed in alphabetical order, are as follows:

1. Air BP Limited
2. Airbus SAS
3. Atlantis Aviation Corporation
4. Changi Airport Group (Singapore)
5. Chevron Singapore Pte Ltd
6. ExxonMobil Petroleum & Chemical BVBA
7. Rolls-Royce Holdings PLC
8. SATS Ltd
9. Shell Eastern Petroleum (Pte) Ltd
10. Singapore Petroleum Company

\* The list does not include any of the SIA Group's subsidiaries.

# INTEGRATING SUSTAINABILITY

SIA works to secure a sustainable future by strengthening its supply chain.

## Embedding Sustainability Within SIA's Procurement Process

SIA integrates ESG considerations into its procurement process. SIA also manages supply chain risks and maintains a high level of sustainability performance standards through its Suppliers' Code of Conduct (SCOC).

All contracted suppliers are required to comply with the SCOC, and failure to do so may result in penalties such as contract termination. New and existing suppliers may submit relevant environmental and safety certifications or standards during the bidding and submission stage to 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 record, including any SCOC breaches.

4



### Award of Contract

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

# MANAGING SUPPLY CHAIN RISKS

SIA seeks to manage sustainability risks across its supply chain.

## Suppliers' Code of Conduct 2-23 2-24

SIA aims to mitigate any social, economic and environmental risks by setting minimum standards of behaviour for its suppliers through the SCOC. The SCOC defines SIA's expectations and requirements of its suppliers, and the responsibility of suppliers towards their stakeholders, society, and the environment. The code was developed in accordance with SIA's business values to promote sustainable development and is also based on the Ten Principles of the UN Global Compact.

SIA is developing due diligence processes for SCOC enforcement in its contracts and compliance by its suppliers. In the event where changes or waiver to the SCOC clauses are recommended by the Procurement Authorities, approval from Vice President Sustainability or his or her alternate is required. SIA's SCOC is publicly available via SIA's [website](#).



### 1. Compliance With Laws and Regulations

- Accounting practices
- Intellectual property
- Competition compliance
- Disclosure



### 2. Ethics and Conflict of Interest PR-10

- Anti-corruption
- Confidentiality
- Financial integrity
- 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
- Working hours
- Non-discrimination
- Wage standards
- Minimum age child labour or forced labour



### 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

## Promoting Best Practices With its Suppliers

SIA maintains responsible supply chains that minimise adverse environmental and societal impacts, as well as risks in the communities they operate in. During the product assessment and selection stage of the procurement exercise, SIA favourably considers suppliers with sustainable business practices and environmentally friendly proposal submissions.

## Building Resilient Supply Chain Strategies

Building resilient supply chain strategies is crucial for SIA to adapt to changing market conditions, disruptions, and uncertainties. Learning from its experience during the pandemic, SIA is developing strategies to mitigate risks, including dual sourcing and diversifying its supplier networks.

For items critical to SIA's operations, the Airline builds redundancy into its supply chain by having multiple suppliers based in different locations, where possible, for purchases such as its flight crew uniforms, boarding passes, and baggage tags. This allows SIA to have greater flexibility and the ability to adapt quickly to disruptions or sudden changes in demand.



## WORKING WITH SUPPLIERS ON SUSTAINABLE DEVELOPMENT

SIA collaborates with its suppliers to integrate sustainability into its business.

### Partnerships With its 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 SIA's goals. SIA strives to support such initiatives by sourcing from suppliers with strong sustainable value propositions .

In FY2020/21, SIA and SATS Ltd collaborated to develop a new eco-friendly meal concept for Economy Class customers on selected SIA flights under 3.5 hours<sup>57</sup>. The meal concept includes a wider range of main courses with more environmentally-friendly packaging and utensils.

Other ongoing initiatives include the Farm to Plane programme with Aerofarms, SIA's KrisShop Cares concept store, SIA's collaboration with COMO Shambhala to provide wholesome and nutritious in-flight meals, and its partnership with Lumitics and SATS Ltd to reduce in-flight catering food waste through the use of artificial intelligence and digital technologies.



<sup>57</sup> Except flights between Singapore and Kuala Lumpur, Penang, Medan.

## LIST OF KEY ABBREVIATIONS AND ACRONYMS

<b>AAPA</b>	Association of Asia Pacific Airlines	<b>CCSM</b>	Cabin Crew Safety Manual	<b>CPAS</b>	Cerebral Palsy Alliance	<b>HACCP</b>	Hazard Analysis and Critical Control Points
<b>AC</b>	Audit Committee	<b>CCSMSM</b>	Cabin Crew Safety Management System Manual	<b>CPR</b>	Cardiopulmonary Resuscitation	<b>IAP</b>	International Advisory Panel
<b>ACSP</b>	Air Carrier Security Program	<b>CDO</b>	Continuous Descent Operations	<b>CQM</b>	Cargo Quality Manual	<b>IATA</b>	International Air Transport Association
<b>AESU</b>	Air-Transport Executive Staff Union	<b>CEO</b>	Chief Executive Officer	<b>CSAT</b>	Customer Satisfaction Score	<b>ICAO</b>	International Civil Aviation Organisation
<b>AG</b>	American Gallon	<b>CERT</b>	Company Emergency Response Team	<b>CSM</b>	Cargo Safety Manual	<b>ICW</b>	International Catering Waste
<b>AGM</b>	Annual General Meeting	<b>CETSC</b>	Customer Experience, Technology and Sustainability Committee	<b>CSO</b>	Chief Sustainability Officer	<b>ILO</b>	International Labour Organisation
<b>AI</b>	Artificial Intelligence	<b>CFA</b>	Customer Feedback Analytics	<b>CSR</b>	Corporate Social Responsibility	<b>IOSA</b>	IATA Operational Safety Audit
<b>ALH</b>	Airline House	<b>CFSM</b>	Corporate Flight Safety Management and Procedures Manual	<b>DBS</b>	Development Bank of Singapore	<b>IPCC</b>	Intergovernmental Panel on Climate Change
<b>ALPA-S</b>	Air Line Pilots' Association Singapore	<b>CI</b>	Cost Index	<b>EDB</b>	Economic Development Board	<b>ISO</b>	International Organisation for Standardisation
<b>ANR</b>	Air Navigation Regulations	<b>CIP</b>	Customer Insights Portal	<b>EMS</b>	Environmental Management System	<b>kg</b>	Kilograms
<b>AOC</b>	Air Operator Certificate	<b>CIRT</b>	Cyber Incident Response Team	<b>ERP</b>	Emergency Response Plan	<b>kWh</b>	Kilowatt-hour
<b>APU</b>	Auxiliary Power Units	<b>CLC</b>	Corporate Learning Centre	<b>ESG</b>	Environmental, Social, Governance	<b>L</b>	Litre
<b>ARMRE</b>	Annual Group-wide Risk Management Review Exercise	<b>CMG</b>	Crisis Management Group	<b>FHG</b>	Fullerton Health Group	<b>LIFE</b>	Learning & Innovation For Everyone
<b>ATM</b>	Air Traffic Management	<b>CMM</b>	Crisis Management Manual	<b>FOQM</b>	Flight Operations Quality Manual	<b>LOSA</b>	Line Operations Safety Audit
<b>BCA</b>	Building and Construction Authority	<b>CO</b>	Carbon monoxide	<b>FRM</b>	Fatigue Risk Management	<b>LTK</b>	Load tonne-kilometre
<b>BCP</b>	Business Continuity Plans	<b>CO<sub>2</sub></b>	Carbon dioxide	<b>FSC</b>	Forest Stewardship Council	<b>m<sup>2</sup></b>	Square metre
<b>BESS</b>	Baggage E2E Self-service Suit	<b>CO<sub>2</sub>e</b>	Carbon dioxide equivalent	<b>FSPM</b>	Flight Security Procedures Manual	<b>m<sup>3</sup></b>	Cubic metre
<b>BEST</b>	Beyond Excellent Service through Technology	<b>COP</b>	Communication on Progress	<b>GDP</b>	Gross Domestic Product	<b>MBM</b>	Market-Based Measure
<b>BSRC</b>	Board Safety & Risk Committee	<b>COQM</b>	Corporate Operational Quality (Safety) Manual	<b>GDPR</b>	General Data Protection Regulation	<b>MC</b>	Management Committee
<b>BU</b> s	Business Units	<b>CORSIA</b>	Carbon Offset and Reduction Scheme for International Aviation	<b>GHG</b>	Greenhouse gas	<b>MEWR</b>	Ministry of the Environment and Water Resources (Singapore)
<b>CAAS</b>	Civil Aviation Authority of Singapore			<b>GRI</b>	Global Reporting Initiative	<b>MOM</b>	Ministry of Manpower (Singapore)
<b>CAG</b>	Changi Airport Group			<b>GRCMC</b>	Group Risk and Compliance Management Committee	<b>MPR</b>	Mandatory Packaging Report
<b>CAM</b>	Crew Administration Manual			<b>GSM</b>	Ground Services Manual		
<b>CBD</b>	Council for Board Diversity			<b>GSQM</b>	Ground Services Quality Manual		
<b>CCM</b>	Cabin Crew Division Manual			<b>ha</b>	Hectare		

## LIST OF KEY ABBREVIATIONS AND ACRONYMS (CONTINUED)

<b>MRV</b>	Monitoring, Reporting & Verification	<b>Pte Ltd.</b>	Private Limited	<b>SEPM</b>	Safety and Emergency Procedures Manual	<b>SSW</b>	Safety and Security Week
<b>MSG</b>	Monosodium Glutamate	<b>PUB</b>	Public Utilities Board	<b>SESM</b>	Security Management System Manual	<b>SSWC</b>	Sustainability Strategic Working Committee
<b>MWh</b>	Megawatt-hour	<b>PV</b>	Photovoltaic	<b>SFA</b>	Singapore Food Agency	<b>STC</b>	SIA Training Centre
<b>NC</b>	Nominating Committee	<b>QMS</b>	Quality Management System	<b>SGX</b>	Singapore Exchange	<b>TCFD</b>	Task Force on Climate-Related Financial Disclosures
<b>NEA</b>	National Environment Agency (Singapore)	<b>RAAS</b>	Refund as a Service	<b>SGXNet</b>	Singapore Exchange Net	<b>TJ</b>	Terajoules
<b>NOx</b>	Nitrogen oxides	<b>RCMC</b>	Risk & Compliance Management Committee	<b>S-I-A</b>	Staff-Ideas-in-Action	<b>TMM</b>	Total Mission Management
<b>NTUC</b>	National Trades Union Congress	<b>RCP</b>	Representative Concentration Pathways	<b>SIAEC</b>	Singapore Airlines Engineering Company	<b>TSQ</b>	TechSQ
<b>NUS</b>	National University of Singapore	<b>RFP</b>	Request for Proposal	<b>SIASU</b>	Singapore Airlines Staff Union	<b>UN</b>	United Nations
<b>OCS</b>	Organisational Climate Survey	<b>RM</b>	Risk Management	<b>SID</b>	Singapore Institute of Directors	<b>UNEP</b>	United Nations Environment Programme
<b>OEMs</b>	Original Equipment Manufacturers	<b>SAF</b>	Sustainable Aviation Fuels	<b>SMS</b>	Safety Management System	<b>VoC</b>	Voice of Customer
<b>OHSMS</b>	Occupational Health and Safety Management System	<b>SAFUG</b>	Sustainable Aviation Fuel Users Group	<b>SO</b>	Sustainability Office	<b>WBCSD</b>	World Business Council for Sustainable Development
<b>OSH</b>	Occupational Safety & Health	<b>SAG</b>	Safety Action Groups	<b>SOx</b>	Sulphur oxides	<b>WHO</b>	World Health Organisation
<b>OSHE</b>	Occupational Safety, Health & Environment	<b>SATS</b>	Singapore Airport Terminal Services	<b>SSC</b>	SIA Supplies Centre	<b>WRI</b>	World Resource Institute
<b>PDPA</b>	Personal Data Protection Act	<b>SCDF</b>	Singapore Civil Defence Force	<b>SSC</b>	Sustainability Steering Committee	<b>ZFW</b>	Zero-fuel Weight
<b>PM</b>	Particulate matter	<b>SCOC</b>	Suppliers' Code of Conduct	<b>SSQ GSM</b>	SSQ Ground Safety Manual		
<b>PPE</b>	Personal Protective Equipment	<b>SDG</b>	Sustainable Development Goals	<b>SSQ QM</b>	SSQ Quality Manual		
<b>PRs</b>	Permanent Residents	<b>SEMS</b>	Security Management System	<b>SSQ</b>	Safety, Security & Quality		
<b>PSM</b>	Premises Security Manual			<b>SSRA</b>	Self-Service Re-Accommodation		

## DEFINITIONS AND METHODOLOGIES

### GENERAL

**Mode of Narration** Throughout this Sustainability Report, “Singapore Airlines”, “SIA”, “the company”, “its” 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” and “the group” are 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 FY2022/23 SIA Annual Report.

**Reporting Scope** All sustainability data and information presented in SIA’s report primarily relates to two of its reportable businesses – Singapore Airlines and Scoot – 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 its subsidiary.

More information on SIA’s reportable businesses can be found in the FY2022/23 SIA Annual Report.

More information on the boundaries for key social and environmental data can be found on pages 122 to 132.

**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 SIA operates in a continually changing environment, readers are cautioned not to place undue reliance on forward-looking statements.

### ENVIRONMENT

#### Energy

#### Energy consumption definitions and boundaries:

#### Consumption

- **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 the SIA Group’s operations in Singapore; jet fuel consumption of the SIA Group’s passenger and freighter fleet.
  - » Since the integration of SilkAir into SIA, energy consumption reported for FY2021/22 onwards covers SIA’s passenger fleet, SIA’s freighter fleet, and Scoot’s operations. Past year data for FY2020/21, FY2019/20, FY2018/19, includes SIA’s passenger and freighter fleet, SilkAir and Scoot’s global operations unless otherwise stated.
  - » From FY2022/23, this includes Scoot’s diesel and petrol consumption from ground support vehicles and equipment as well.<sup>58</sup>
- **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 Supplies Centre (SSC), SIA Training Centre (STC), TechSQ (TSQ) and offices. In FY2022/23, the reporting scope includes purchased electricity at Scoot’s head offices.
- **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
<b>Electricity</b>	Conversion to energy units	kWh to TJ	0.0000036
<b>Diesel</b>	Fuel density for gas/diesel oil	kg/litre	0.84
	Net calorific value for gas/diesel oil	GJ/tonne	43.0
<b>Petrol</b>	Fuel density for motor gasoline	kg/litre	0.74
	Net calorific value for motor gasoline	GJ/tonne	44.3
<b>Jet Kerosene</b>	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.

<sup>58</sup> Scoot’s diesel consumption from ground operations in FY2022/23 only covers September 2022 to March 2023.

## 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 Group, expressed in kilograms of carbon dioxide (kgCO<sub>2</sub>) or multiples. These include emissions from combustion in owned or controlled vehicles aforementioned for SIA Group's operations in Singapore. Emission factors used are as follows:

Emission Source	Conversion Factors	Unit	Conversion Numbers
<b>Diesel</b>	CO <sub>2</sub> Emission Factor	kg CO <sub>2</sub> /GJ	74.1
	CH <sub>4</sub> Emission Factor	kg CH <sub>4</sub> /GJ	0.0039
	Global Warming Potential for CH <sub>4</sub>	-	28
	N <sub>2</sub> O Emission Factor	kg N <sub>2</sub> O/GJ	0.0039
	Global Warming Potential for N <sub>2</sub> O	-	265
<b>Petrol</b>	CO <sub>2</sub> Emission Factor	kg CO <sub>2</sub> /GJ	69.3
	CH <sub>4</sub> Emission Factor	kg CH <sub>4</sub> /GJ	0.0038
	Global Warming Potential for CH <sub>4</sub>	-	28
	N <sub>2</sub> O Emission Factor	kg N <sub>2</sub> O/GJ	0.0057
	Global Warming Potential for N <sub>2</sub> O	-	265
<b>Jet Kerosene</b>	CO <sub>2</sub> Emission Factor	tonnes CO <sub>2</sub> /tonnes of jet fuel	3.15

For diesel and petrol, CO<sub>2</sub>, methane (CH<sub>4</sub>) and nitrous oxide (N<sub>2</sub>O) 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<sub>2</sub> 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<sub>2</sub>/tonne of jet fuel is also the internationally recognised constant representing the amount of CO<sub>2</sub> 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<sub>2</sub>) 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 (EMA) Grid Emission Factor (GEF) annual publication on energy statistics in Singapore. 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
<b>Electricity Generation (Singapore Grid)</b>	FY2022/23	0.4057	kgCO <sub>2</sub> / kWh	EMA, Singapore GEF 2021
	FY2021/22	0.408	kgCO <sub>2</sub> / kWh	EMA, Singapore GEF 2020
	FY2020/21	0.4085	kgCO <sub>2</sub> / kWh	EMA, Singapore GEF 2019
	FY2019/20	0.4188	kgCO <sub>2</sub> / kWh	EMA, Singapore GEF 2018
	FY2018/19	0.4192	kgCO <sub>2</sub> / kWh	EMA, Singapore GEF 2017
	FY2017/18	0.4237	kgCO <sub>2</sub> / 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.

SIA's Scope 3 emissions are calculated according to the recommendations of Greenhouse Gas (GHG) Protocol's "Corporate Value Chain (Scope 3) Accounting and Reporting Standard" as well as "GHG Protocol Corporate Accounting and Reporting Standard" by World Resources Institute (WRI) and World Business Council for Sustainable Development (WBCSD).

## DEFINITIONS AND METHODOLOGIES (CONTINUED)

### ENVIRONMENT (CONTINUED)

#### Greenhouse Gas (GHG) Emissions (continued)

- » **Source of emission factors:**
  - › [Greenhouse gas reporting: conversion factors 2022](#) (UK Government Department for Energy Security and Net Zero and Department for Business, Energy & Industrial Strategy)
  - › [Singapore's Fifth National Communication and Fifth Biennial Update Report 2022](#) (National Climate Change Secretariat Singapore)
  - › [Supply Chain GHG Emissions Factors for US Commodities and Industries v1.1.1](#) (US Environmental Protection Agency)
  - › [Comfort Delgro Sustainability Report 2017](#)
- » **Reference to the GWP source:**
  - › 100-year GWP values from IPCC Assessment Report (AR5)
  - › 100-year GWP values from IPCC Assessment Report (AR4) – applied by UK Government Department for Energy Security and Net Zero and Department for Business, Energy & Industrial Strategy for Greenhouse gas reporting: conversion factors 2022
- In FY2022/23, SIA will be disclosing a limited scope of Scope 3 categories, based on current data availability. The scope of reporting will be gradually increased over the next few reporting years. The definitions for the reported categories are:
  - » **Category 1 Purchased Goods and services:** All upstream (i.e. cradle-to-gate) emissions from the production of products purchased or acquired by the reporting company in the reporting year. Products include both goods (tangible products) and services (intangible products).
    - › *Reporting boundary:* Limited to products and services procured from SATS Ltd in Singapore.
    - › *Methodologies used and assumptions made:* Economic-allocated emissions from SATS Ltd.
  - » **Category 4 Upstream transportation and distribution:** Emissions from the transportation and distribution of products (excluding fuel and energy products) purchased or acquired by the reporting company in the reporting year in vehicles and facilities not owned or operated by the reporting company, as well as other transportation and distribution services purchased by the reporting company in the reporting year (including both inbound and outbound logistics).
    - › *Reporting boundary:* Limited to upstream transportation and distribution services procured from SATS Ltd in Singapore.
    - › *Methodologies used and assumptions made:* Economic-allocated emissions from SATS Ltd.
  - » **Category 5 Waste generated in operations:** Emissions from third-party disposal and treatment of waste that is generated in the reporting company's owned or controlled operations in the reporting year.
    - › *Reporting boundary:* Refer to reporting boundary under "Waste"
    - › *Methodologies used and assumptions made:* Waste-type-specific method and average-data method. The latter method is used where data from waste vendor is unavailable, and the type of waste disposed and waste treatment method were reasonably assumed based on operational context.

#### Greenhouse Gas (GHG) Emissions (continued)

- » **Category 6 Business travel:** Emissions from the transportation of employees for business-related activities in vehicles owned or operated by third parties, such as aircraft, trains, buses, and passenger cars.
  - › *Reporting boundary:* Includes road travel in Singapore only. Given that SIA operates mainly as an airline, air travel for the purposes of business-related travel have already been encompassed within the SIA's Scope 1 emissions.
  - › *Methodologies used and assumptions made:* Spend-based method for road travel.
- » **Category 7 Employee commute:** Emissions from the transportation of employees between their homes and their worksites
  - › *Reporting boundary:* All SIA employees within the geographical boundary of Singapore.
  - › *Methodologies used and assumptions made:* Distance-based method. Distance travelled is assumed to be the distance between employees' homes and their worksites. Mode of transportation taken by employees is estimated from Singapore Census of Population 2020, Statistical Release 2, Transport.

#### 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, SIA has 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<sub>2</sub>/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<sup>2</sup>) or multiples. Electricity indirect (Scope 2) GHG emissions intensity is expressed in kilograms of carbon dioxide per square metre (kgCO<sub>2</sub>/m<sup>2</sup>) or multiples. Water intensity is expressed in cubic metres per square metres (m<sup>3</sup>/m<sup>2</sup>). The organisation-specific metric (the denominator) used was the total floor area by which SIA has operational control over, which is a summation of total common area and total lettable area.
  - » **Definition of total common area:** Common area of SIA-owned buildings in Singapore, which are ALH, SSC, STC, and TSQ.
  - » **Definition of total lettable area:** Lettable area of SIA-owned buildings in Singapore, which are ALH (excludes Hangar 1), SSC, STC, and TSQ, and SIA leased spaces in Changi Airport Group (CAG) Passenger Terminal Building (PTB), and ION Orchard, as well as Scoot's head offices.
  - » **Definition of gross floor area:** GFA of SIA-owned buildings in Singapore, which are ALH, SSC, STC, and TSQ.

## 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 its 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 United Nations Environment Programme (UNEP), Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, 1989.*

The reporting boundary of waste includes both operational ground waste, as well as in-flight waste. For cabin waste, only data from inbound flights are captured, due to business challenges in collecting overseas data across different handlers and restrictions from International Catering Waste (ICW) regulations.

Category	Source	Details	Boundary
<b>Waste directed to disposal</b>	<b>Waste-to-energy (WTE) incineration</b>	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.	<p>SIA's four properties (ALH, SSC, STC, TSQ)</p> <ul style="list-style-type: none"> <li>• Up till FY2019/20, ALH's waste data includes SIAEC's waste disposal from Hangar 1, 2 and 3, as data could not be segregated. For FY2020/21, waste data includes SIAEC's waste disposal from Hangar 1, as data could not be segregated. From FY2021/22 onwards, waste data excludes SIAEC's waste disposal<sup>59</sup>.</li> <li>• From FY2021/22 onwards, includes cabin waste from SIA's passenger fleets, inbound flight operations</li> <li>• From FY2022/23, includes scrap aircraft waste</li> <li>• Excludes ground waste data from warehouse due to incomplete data</li> <li>• Excludes waste disposal at Scoot's offices due to data unavailability</li> </ul>
<b>Waste diverted from disposal</b>	<b>Recycling</b>	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.	<p>SIA's four properties (ALH, STC, TSQ, SSC)</p> <ul style="list-style-type: none"> <li>• Up till FY2021/22, ALH's waste data includes SIAEC's waste disposal from Hangar 1, 2 and 3, as data could not be segregated. From FY2021/22, this excludes SIAEC's waste disposal.<sup>57</sup></li> <li>• From FY2021/22 onwards, includes cabin waste from SIA's passenger fleets, inbound flight operations</li> <li>• From FY2022/23, includes scrap aircraft waste</li> <li>• Excludes ground waste data from warehouse due to incomplete data</li> <li>• Excludes waste disposal at Scoot's offices due to data unavailability</li> </ul>

<sup>59</sup> Restatements have been made to past year's reporting boundary due to incorrect understanding by data owners.

## DEFINITIONS AND METHODOLOGIES (CONTINUED)

### ENVIRONMENT (CONTINUED)

#### Water and Effluents

**Definition of water withdrawn:** Total water drawn for the organisation's use, expressed in cubic metre (m<sup>3</sup>) or multiples. All water withdrawn by SIA is water drawn from the Public Utilities Board (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).

- **Surface water definition:** Water that occurs naturally on the Earth's surface. This includes harvested rainwater.
- **Groundwater<sup>60</sup> definition:** Water that is being held in, and that can be recovered from, an underground formation.
  - » Reporting boundary: Ground water has been collected since FY2020/21
- **Third-party water definition:** Water drawn from a third-party. In Singapore, water is sourced from the Public Utilities Board (PUB). Data is broken down by Tap water and NEWater.

Category	Source	Details	Boundary
Groundwater	(1) Groundwater harvested	Storing and recovery of groundwater from an underground formation.	SIA's property (ALH)
Surface water	(2) Rainwater harvested	Collection and storing of rainwater from surfaces on which rain falls.	SIA's property (ALH)
Third-party water	(3) 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 <ul style="list-style-type: none"> <li>• Includes SIAEC's water withdrawal at Hangar 1, as data could not be segregated</li> <li>• Up till FY2021/22, excludes water withdrawal at Scoot's offices due to data unavailability. From FY2022/23, includes water withdrawal at Scoot's head offices.</li> </ul>
	(4) 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)

*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)*

<sup>60</sup> Restatements have been made to include groundwater consumption within reporting boundary from FY2020/21 onwards. The restatement was made due to an incorrect understanding of water categories by data owners.



## DEFINITIONS AND METHODOLOGIES (CONTINUED)

### 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.

#### Customer health and safety

**Health and Safety impacts of products and services definition:** Incidents of non-compliance with regulations and/or voluntary codes concerns the direct health and safety impacts of products and services on customers.

#### 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 Ministry of Manpower's (MOM) [list of Dangerous Occurrences](#) in the Workplace Safety and Health Act (Chapter 354A), Section 4(1).

*This definition is based on the International Labour Organisation ("ILO") Guidelines on Occupational Safety and Health Management Systems.*

#### 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.*

#### 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 FY2022/23 and 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. Due to data unavailability, Scoot's FY2018/19 data was excluded from the reporting scope.

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.*

## DEFINITIONS AND METHODOLOGIES (CONTINUED)

### SAFETY (CONTINUED)

#### 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, SIA records a work-related injury should SIA's 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.

**Restatements:** A restatement was made, please refer to the respective section in the appendix for more details.

#### 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)

### 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 2023

**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. Managers and above, Executives, Other Employees), in line with its human resources system.

The employee levels are defined below for Singapore Airlines and Scoot respectively.

Employee Levels	Singapore Airlines	Scoot
<b>Mangers and above</b>	Manager, Senior Manager, Vice President, Divisional Vice President, Senior Vice President, Executive Vice President and Chief Executive Officer	Section Manager, Manager, Senior Manager, Director, Vice President, Senior Vice President and above, this includes the Chief Commercial Officer, Chief Operating Officer and Chief Executive Officer
<b>Executives</b>	Executive, Senior Executive and Assistant Manager	Specialists, Analysts, and Assistant Manager
<b>Other Employees</b>	Associates, Senior Associates, Pilots and Cabin Crew	Officer, Senior Officer, Cabin Crew and Flight Crew

**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 from 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. A five-year dataset from FY2018/19 to FY2022/23 for SIA, Scoot and SilkAir (till FY2020/21) is provided in this year's report.

**Note:** For new disclosures included in FY2021/22, the five-year dataset will only include SIA and Scoot's global operations since SilkAir has been integrated into SIA. This includes the breakdown of employees by Employee Function and by Gender, by Employee Level and by Gender, by Employee Level and by Age Group, by Nationality and by Employee Level.

**Restatement:** Past year data from FY2018/19 to FY2021/22 were restated due to improvements in Scoot's data compilation methodologies which resulted in a slight decrease to the previously reported employee values in SIA Group. In FY2022/23, the definitions of employee levels were further refined as detailed above. As such, all employee breakdown by employee levels were reorganised into the new categories.

#### 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 in FY2021/22, the employee profile breakdown reported from 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. A five-year dataset from FY2018/19 to FY2022/23 for SIA, Scoot and SilkAir (till FY2020/21) is provided in this year's report.

**Restatement:** Past year data from FY2018/19 to FY2021/22 were restated due to improvements in Scoot's data compilation methodologies which resulted in a slight decrease to the previously reported employee values in SIA Group.

##### **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:** Past year data from FY2018/19 to FY2021/22 were restated due to improvements in Scoot's data compilation methodologies which resulted in a slight decrease to the previously reported employee values in SIA Group.

## DEFINITIONS AND METHODOLOGIES (CONTINUED)

### EMPLOYEES (CONTINUED)

#### New Hires and Turnover

##### **New Hires:**

**New hires definition:** Employees who joined the organisation during the year.

**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 the 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:**

**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.

**Note:** Starting FY2021/22, the breakdown of new hires by Employee Level, by Employment Type (Full-time and Part-time) and by Recruitment Type (Internal and External Hires) is tracked and reported according to the updated calculation methodology and boundary refined in FY2022/23. Additionally, the five-year dataset for the breakdown of turnover, by Employee Level, will only include SIA and Scoot's global operations since SilkAir has been integrated into SIA.

**Restatement:** Past year data from FY2018/19 to FY2021/22 were restated due to improvements in Scoot's data compilation methodologies which resulted in a slight decrease to the previously reported values. In FY2022/23, the definitions of employee levels were further refined as detailed in Employees. As such, all new hire and turnover breakdown by employee levels were reorganised into the new categories.

#### 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.

**Restatement:** Past year data from FY2018/19 to FY2021/22 were restated due to improvements in Scoot's data compilation methodologies for employees which resulted in a slight increase to the previously reported training hours values.

#### 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.

#### Worker who is a non-employee

**Worker who is a non-employee definition:** An individual whose work, or workplace, is controlled by the organisation. This report has been scoped to include key contractors only (cleaners, maintenance workers, landscapers, sales agent, ground handling agents, check-in agents, and warehouse operators), unless otherwise stated.

**Boundary:** The worker profile breakdown reported only covers SIA and Scoot's global operations.

**Note:** This is a new disclosure in FY2022/23 and data is only available in the current reporting year due to variations in data collection processes. SIA is working towards including past year data progressively.

## DEFINITIONS AND METHODOLOGIES (CONTINUED)

### GOVERNANCE

#### 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.

#### 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.

**Restatement:** A restatement was made, please refer to the respective section in the appendix for more details.

**Note:** In FY2022/23, completion rates are broken down by a new format of employee levels hence, only a three-year dataset from FY2020/21 to FY2022/23 is provided in this year's report. Past year data for FY2020/21 does not include SilkAir's global operations since the breakdown cannot be retrieved after the integration with SIA in FY2021/22.

#### 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 SGD 10,000.

**Boundary:** Incidents of non-compliance and significant fines incurred covers SIA and Scoot's global operations.

#### 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:** All cases of substantiated complaints concerning breaches of customer privacy and/or identified leaks, thefts, or losses of customer data across SIA and Scoot's global operations, but excluding cases that are still pending investigation in the reporting period.

**Restatement:** Total number of substantiated complaints concerning breaches of customer privacy and losses of customer data in FY2021/22 was restated due to a refinement of reporting boundaries to include all substantiated cases. As such, there were a total of three substantiated complaints in FY2021/22. The two additional incidents were isolated events caused by human error where the employee inadvertently released details of customers. Remedial actions were taken for the incidents, including notifying affected individuals and conducting refresher trainings for relevant staff.

## DEFINITIONS AND METHODOLOGIES (CONTINUED)

### 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** **Suppliers' 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.

# SUPPLEMENTARY SUSTAINABILITY DATA

## ENVIRONMENT

### Energy and Emissions (continued)

Flight Operations					
	FY2018/19	FY2019/20	FY2020/21	FY2021/22	FY2022/23
<b>SIA Group</b>					
Fuel Consumption (million AG)	1,748	1,729	420	827	<b>1,353</b>
Fuel Consumption (TJ)	230,836	228,215	55,410	109,157	<b>178,685</b>
Fuel Productivity (LTK/AG)	11.37	11.13	10.44	9.60	<b>11.80</b>
Overall Fuel Productivity for Passenger Fleet (Litres / 100 passenger - km)	4.43	4.39	40.74	13.11	<b>3.96</b>
Overall Fuel Productivity for Cargo Fleet (Litres / tonne - km) <sup>61</sup>	0.22	0.23	0.23	0.22	<b>0.27</b>
Direct (Scope 1) GHG Emissions ('000 tonnes CO <sub>2</sub> )	16,488	16,301	3,958	7,797	<b>12,763</b>
Direct (Scope 1) GHG Emissions Intensity (kgCO <sub>2</sub> /LTK)	0.83	0.85	0.90	0.98	<b>0.80</b>
<b>Singapore Airlines (Passenger Fleet)</b>					
Fuel Consumption (million AG)	1,333	1,334	291	657	<b>1,026</b>
Fuel Productivity (LTK/AG)	10.74	10.57	8.30	8.63	<b>11.16</b>
Fuel Productivity (Litres/100 passenger-km)	4.92	4.85	42.60	12.97	<b>4.27</b>
Direct (Scope 1) GHG Emissions ('000 tonnes CO <sub>2</sub> )	12,567.5	12,582.5	2,739.6	6,194.4	<b>9,677</b>
Direct (Scope 1) GHG Emissions Intensity (kgCO <sub>2</sub> /LTK)	0.88	0.89	1.14	1.09	<b>0.84</b>
<b>Singapore Airlines (Freighter Fleet)</b>					
Fuel Consumption (million AG)	99	93	109	111	<b>165</b>
Fuel Productivity (LTK/AG) <sup>62</sup>	17.25	16.15	16.70	17.05	<b>13.80</b>
Fuel Productivity (Litres/tonne-km) <sup>63</sup>	0.22	0.23	0.23	0.22	<b>0.27</b>
Direct (Scope 1) GHG Emissions ('000 tonnes CO <sub>2</sub> )	934	875	1024	1,046	<b>1,558</b>
Direct (Scope 1) GHG Emissions Intensity (kgCO <sub>2</sub> /LTK)	0.55	0.58	0.56	0.55	<b>0.68</b>

<sup>61</sup> Restatements to the Overall Fuel Productivity for Cargo Fleet are made for all previously reported years, due to an error in the calculation methodology.

<sup>62</sup> During the initial launch of DHL-SIA freighter, the fuel productivity was computed using Gross LTK due to unavailability of Nett LTK data for the period of August 2022 to October 2022. Subsequent computation of the fuel productivity was performed based on Nett LTK

<sup>63</sup> Restatements to Singapore Airlines (Freighter Fleet) Fuel Productivity are made for all previously reported years, due to an error in the calculation methodology.

## SUPPLEMENTARY SUSTAINABILITY DATA (CONTINUED)

### ENVIRONMENT (CONTINUED)

#### Energy and Emissions (continued)

	FY2018/19	FY2019/20	FY2020/21	FY2021/22	FY2022/23
<b>SilkAir</b>					
Fuel Consumption (million AG)	95.6	87.4	2.0	-	-
Fuel Productivity (LTK/AG)	8.99	8.86	5.09	-	-
Fuel Productivity (Litres/100 passenger-km)	4.05	4.04	8.61	-	-
Direct (Scope 1) GHG Emissions ('000 tonnes CO <sub>2</sub> )	901.7	824.2	18.8	-	-
Direct (Scope 1) GHG Emissions Intensity (kgCO <sub>2</sub> /LTK)	1.05	1.06	1.85	-	-
<b>Scoot</b>					
Fuel Consumption (million AG)	221	214	19	59	<b>162</b>
Fuel Productivity (LTK/AG)	13.62	13.18	7.86	6.42	<b>13.84</b>
Fuel Productivity (Litres/100 passenger-km)	2.85	2.83	31.83	15.02	<b>2.71</b>
Direct (Scope 1) GHG Emissions ('000 tonnes CO <sub>2</sub> )	2,085	2,020	176	556	<b>1,528</b>
Direct (Scope 1) GHG Emissions Intensity (kgCO <sub>2</sub> /LTK)	0.69	0.72	1.20	1.47	<b>0.68</b>



## SUPPLEMENTARY SUSTAINABILITY DATA (CONTINUED)

### ENVIRONMENT (CONTINUED)

#### Energy and Emissions (continued)

Buildings, Offices and Ground Operations					
	FY2018/19	FY2019/20	FY2020/21	FY2021/22	FY2022/23
<b>Ground Operations (Diesel)</b>					
Diesel Consumption (litres)	5,216	10,014	10,152	10,745	<b>12,667</b>
Diesel Consumption (TJ)	0.2	0.4	0.4	0.4	<b>0.5</b>
Direct (Scope 1) GHG Emissions From Diesel (tonnes CO <sub>2</sub> e)	14	27	28	29	<b>34</b>
<b>Ground Operations (Petrol)</b>					
Petrol Consumption (litres)	22,142.2	20,869.6	12,740.0	18,860.9	<b>24,274</b>
Petrol Consumption (TJ)	0.7	0.7	0.4	0.6	<b>0.8</b>
Direct (Scope 1) GHG Emissions From Petrol (tonnes CO <sub>2</sub> e)	52	49	30	44	<b>56</b>
<b>Buildings and Offices (Electricity)</b>					
Electricity Consumption (GWh)	28.1	27.9	20.8	21.1	<b>24.7</b>
Electrical Energy Consumption (TJ)	101.3	100.5	74.8	76.0	<b>88.8</b>
Renewable Energy Consumption (GWh)	-	-	2.0	4.7	<b>4.4</b>
Renewable Energy Consumption (TJ)	-	-	7.1	17.0	<b>15.9</b>
Electricity Intensity (kWh/m <sup>2</sup> )	121.36	120.34	98.06	111.98	<b>124.27</b>
Energy Indirect (Scope 2) GHG Emissions (tonnes CO <sub>2</sub> e)	11,798	11,687	8,484	8,608	<b>10,007</b>
Energy Indirect (Scope 2) GHG Emissions Intensity (tonnes CO <sub>2</sub> e/m <sup>2</sup> )	0.05	0.05	0.04	0.04	<b>0.04</b>

## SUPPLEMENTARY SUSTAINABILITY DATA (CONTINUED)

### ENVIRONMENT (CONTINUED)

#### Energy and Emissions (continued)

Other Value-Chain Activities					
	FY2018/19	FY2019/20	FY2020/21	FY2021/22	FY2022/23
<b>Scope 3 Emissions (tonnes CO<sub>2</sub>e)</b>					
Category 1: Purchased goods and services	-	-	-	-	96,718
Category 4: Upstream transportation and distribution	-	-	-	-	13,245
Category 5: Waste generated in operations	-	-	-	-	1,150
Category 6: Business travel	-	-	-	-	92
Category 7: Employee commuting	-	-	-	-	8,885
<b>Total Other Indirect (Scope 3) GHG Emissions (tonnes CO<sub>2</sub>e)</b>	-	-	-	-	120,089

## SUPPLEMENTARY SUSTAINABILITY DATA (CONTINUED)

### ENVIRONMENT (CONTINUED)

#### Energy and Emissions (continued)

Summary of Energy Consumptions and Emissions Profile within SIA Group					
	FY2018/19	FY2019/20	FY2020/21	FY2021/22	FY2022/23
<b>Total Energy Consumption within SIA Group</b>					
Energy Consumption from SIA's Operations (TJ)	201,752	200,042	53,033	101,461	<b>157,404</b>
Energy Consumption from Scoot's Operations (TJ)	29,187	28,274	2,460	7,790	<b>21,386</b>
<b>Total Energy Consumption within SIA Group (TJ)</b>	<b>230,938</b>	<b>228,317</b>	<b>55,493</b>	<b>109,250</b>	<b>178,790</b>
<b>Total Emissions Profile within SIA Group</b>					
<b>Total Scope 1, 2, and 3 GHG Emissions within SIA<sup>64</sup></b>					
Direct (Scope 1) GHG Emissions From SIA (tonnes CO <sub>2</sub> e)	14,403,592	14,281,573	3,782,242	7,240,574	<b>11,235,744</b>
Energy Indirect (Scope 2) GHG Emissions From SIA (tonnes CO <sub>2</sub> e)	11,798	11,687	8,484	8,608	<b>9,901</b>
Other Indirect (Scope 3) GHG Emissions (tonnes CO <sub>2</sub> e) From SIA (tonnes CO <sub>2</sub> e)	-	-	-	-	<b>120,089</b>
<b>Total Scope 1, 2, and 3 GHG Emissions within Scoot</b>					
Direct (Scope 1) GHG Emissions From Scoot (tonnes CO <sub>2</sub> e)	2,084,766	2,019,602	175,705	556,398	<b>1,527,547</b>
Energy Indirect (Scope 2) GHG Emissions From Scoot (tonnes CO <sub>2</sub> e)	-	-	-	-	<b>106</b>
Other Indirect (Scope 3) GHG Emissions (tonnes CO <sub>2</sub> e) From Scoot (tonnes CO <sub>2</sub> e)	-	-	-	-	<b>-</b>
<b>Total Energy Consumption within SIA Group</b>					
<b>Total Direct (Scope 1) GHG Emissions (tonnes CO<sub>2</sub>e)</b>	<b>16,488,357</b>	<b>16,301,175</b>	<b>3,957,947</b>	<b>7,796,972</b>	<b>12,763,291</b>
<b>Total Energy Indirect (Scope 2) GHG Emissions (tonnes CO<sub>2</sub>e)</b>	<b>11,798</b>	<b>11,687</b>	<b>8,484</b>	<b>8,608</b>	<b>10,007</b>
<b>Total Other Indirect (Scope 3) GHG Emissions (tonnes CO<sub>2</sub>e)</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>120,089</b>
<b>Total Scope 1 and 2 GHG Emissions (tonnes CO<sub>2</sub>e)</b>	<b>16,500,155</b>	<b>16,312,863</b>	<b>3,966,431</b>	<b>7,805,579</b>	<b>12,773,298</b>
<b>Total Scope 1, 2, and 3 GHG Emissions (tonnes CO<sub>2</sub>e)</b>	<b>16,500,155</b>	<b>16,312,863</b>	<b>3,966,431</b>	<b>7,805,579</b>	<b>12,893,387</b>

<sup>64</sup> Given SilkAir's integration into SIA in FY2021/22, past year data for SilkAir's energy and emissions performance have been integrated with SIA.

## SUPPLEMENTARY SUSTAINABILITY DATA (CONTINUED)

### ENVIRONMENT (CONTINUED)

#### Waste

Summary of Waste Generated, Diverted and Disposed of at SIA's Buildings					
	FY2018/19	FY2019/20	FY2020/21	FY2021/22	FY2022/23
<b>Total Waste Generated (tonnes), Non-hazardous Waste</b>					
Airline House <sup>65</sup>	2,067	1,093	785	781	<b>1,139</b>
SIA Supplies Centre	251	196	21	38	<b>45</b>
SIA Training Centre	54	50	57	116	<b>127</b>
TechSQ	215	116	17	29	<b>32</b>
<b>Total Waste Generated (tonnes)</b>	<b>2,587</b>	<b>1,455</b>	<b>880</b>	<b>964</b>	<b>1,343</b>
<b>Total Waste Directed to Disposal (tonnes), Non-hazardous Waste – Waste-to-Energy (WTE) Incineration</b>					
Airline House <sup>65</sup>	-	1,023	719	681	<b>861</b>
SIA Supplies Centre	-	191	21	9	<b>7</b>
SIA Training Centre	-	49	55	113	<b>123</b>
TechSQ	-	115	16	28	<b>31</b>
<b>Total Waste Diverted From Disposal (tonnes)</b>	<b>-</b>	<b>1,378</b>	<b>811</b>	<b>832</b>	<b>1,021</b>
<b>Total Waste Diverted from Disposal (tonnes), Non-hazardous Waste – Recycling<sup>66</sup></b>					
Airline House <sup>65</sup>	-	70.4	66.1	99.4	<b>131.4</b>
SIA Supplies Centre	-	5.4	0.5	28.7	<b>38.6</b>
SIA Training Centre	-	0.6	1.4	3.2	<b>4.3</b>
TechSQ	-	0.5	0.4	0.8	<b>1.1</b>
<b>Total Waste Diverted From Disposal (tonnes)</b>	<b>-</b>	<b>76.9</b>	<b>68.4</b>	<b>132.2</b>	<b>175.3</b>

<sup>65</sup> Restatements to past year's waste reporting boundary have been made, please refer to the "Definitions and Methodologies" section for more details. In FY2022/23's Sustainability Report, the category "Airline house and Hangars 1, 2, 3" has also been renamed to "Airline house" instead, to reflect the waste boundary that has been defined since FY2021/22.

<sup>66</sup> The values under "Total Waste Diverted from Disposal, Non-hazardous Waste – Recycling" contain electronic waste. The "Breakdown of Waste Diverted from Disposal, Non-hazardous Waste – Recycling", however, excludes electronic waste, as SIA has chosen to breakdown the composition of the waste by materials, rather than waste streams.

## SUPPLEMENTARY SUSTAINABILITY DATA (CONTINUED)

### ENVIRONMENT (CONTINUED)

#### Waste (continued)

##### Breakdown of Waste Diverted from Disposal (tonnes), Non-hazardous Waste – Recycling for FY2021/22<sup>67</sup>

	Paper	Plastic	Ferrous Metal	Glass	Textile	Wood	Total
Airline House <sup>65</sup>	71.8	10.3	14.4	-	-	2.9	99.4
SIA Supplies Centre	1.8	0.0	0.0	0.3	1.7	24.9	28.7
SIA Training Centre	3.2	0.0	0.0	0.0	-	-	3.2
TechSQ	0.8	0.0	0.0	0.0	-	-	0.8
<b>Total Waste Diverted From Disposal (tonnes)</b>	<b>77.6</b>	<b>10.4</b>	<b>14.5</b>	<b>0.3</b>	<b>1.7</b>	<b>27.8</b>	<b>132.2</b>

##### Breakdown of Waste Diverted from Disposal (tonnes), Non-hazardous Waste – Recycling for FY2022/23<sup>66</sup>

	Paper	Plastic	Ferrous Metal	Glass	Textile	Wood	Total
Airline House	<b>88.6</b>	<b>13.6</b>	<b>20.5</b>	-	-	<b>6.8</b>	<b>129.6</b>
SIA Supplies Centre	<b>0.2</b>	<b>0.0</b>	<b>0.0</b>	<b>0.3</b>	-	<b>38.1</b>	<b>38.6</b>
SIA Training Centre	<b>3.5</b>	<b>0.0</b>	<b>0.0</b>	-	-	-	<b>3.5</b>
TechSQ	<b>0.9</b>	-	<b>0.0</b>	-	-	-	<b>0.9</b>
<b>Total Waste Diverted From Disposal (tonnes)</b>	<b>93.2</b>	<b>13.7</b>	<b>20.5</b>	<b>0.3</b>	-	<b>44.9</b>	<b>172.6</b>

##### Summary of Waste Generated, Diverted and Disposed of at Flight Operations

	FY2018/19	FY2019/20	FY2020/21	FY2021/22 <sup>68</sup>	FY2022/23
<b>Total Waste Generated at Flight Operations</b>					
Total Waste Generated (tonnes)	791	670	38	169	<b>1,971</b>
<b>Total Waste Diverted from Disposal (tonnes), Non-hazardous Waste – Recycling</b>					
Glass bottles	283	282	-	31	<b>292</b>
Newspapers	240	121	-	-	-
Magazines	268	267	38	-	<b>8</b>
<b>Total Waste Diverted From Disposal (tonnes)</b>	<b>791</b>	<b>670</b>	<b>38</b>	<b>31</b>	<b>300</b>
<b>Total Waste Directed to Disposal (tonnes), Non-hazardous Waste – Waste-to-Energy (WTE) Incineration</b>					
<b>General Waste (tonnes)</b>	-	-	-	138	<b>1,671</b>

<sup>65</sup> Restatements to past year's waste reporting boundary have been made, please refer to the "Definitions and Methodologies" section for more details. In FY2022/23's Sustainability Report, the category "Airline house and Hangars 1, 2, 3" has also been renamed to "Airline house" instead, to reflect the waste boundary that has been defined since FY2021/22.

<sup>66</sup> The values under "Total Waste Diverted from Disposal, Non-hazardous Waste – Recycling" contain electronic waste. The "Breakdown of Waste Diverted from Disposal, Non-hazardous Waste – Recycling", however, excludes electronic waste, as SIA has chosen to breakdown the composition of the waste by materials, rather than waste streams.

<sup>67</sup> Restatements to Waste Diverted from Disposal, Recycling are made for FY2021/22 due to transcription errors.

<sup>68</sup> Restatements to Summary of Waste Generated, Diverted and Disposed of at Flight Operations are made for FY2021/22 due to transcription errors and an incomplete dataset.

## SUPPLEMENTARY SUSTAINABILITY DATA (CONTINUED)

### ENVIRONMENT (CONTINUED)

#### Water

Summary of Water Performance at SIA's Buildings and Offices					
	FY2018/19	FY2019/20	FY2020/21	FY2021/22	FY2022/23
<b>Water Withdrawal, by Source</b>					
Tap water (m <sup>3</sup> )	156,837	160,708	105,459	94,020	<b>132,745</b>
Surface water (m <sup>3</sup> ) <sup>69</sup>	16,349	15,689	5,716.54	985	<b>7,666</b>
Groundwater (m <sup>3</sup> ) <sup>70</sup>	-	-	17,521.43	23,545.63	<b>14,884</b>
NEWater (m <sup>3</sup> )	19,779	20,859	19,267	19,450	<b>20,751</b>
<b>Total Water Withdrawal (m<sup>3</sup>)</b>	<b>192,965</b>	<b>197,256</b>	<b>147,964</b>	<b>138,001</b>	<b>176,046</b>
<b>Water Intensity</b>					
<b>Water Intensity (m<sup>3</sup>/m<sup>2</sup>)</b>	<b>0.77</b>	<b>0.79</b>	<b>0.59</b>	<b>0.55</b>	<b>0.75</b>

<sup>69</sup> Restatements have been made to include groundwater consumption within reporting boundary from FY2020/21 onwards, please refer to the "Definitions and Methodologies" section for more details. In order to better align with GRI standards, the category "rainwater" has also been renamed to "surface water" instead.

<sup>70</sup> Restatements have been made to include groundwater consumption within reporting boundary from FY2020/21 onwards, please refer to the "Definitions and Methodologies" section for more details.

## SUPPLEMENTARY SUSTAINABILITY DATA (CONTINUED)

### SAFETY

#### Work-related Injuries

Work-related Injuries, Employees										
	FY2018/19		FY2019/20		FY2020/21		FY2021/22		FY2022/23	
Estimated number of man-hours worked (hours)	18,843,922		22,856,786		11,768,518		18,835,417		<b>20,225,876</b>	
Number (and rate) of fatalities as a result of work-related injuries	0	(0)	0	(0)	0	(0)	0	(0)	<b>0</b>	<b>(0)</b>
Number (and rate) of high-consequence work-related injuries	0	(0)	0	(0)	0	(0)	0	(0)	<b>0</b>	<b>(0)</b>
Number (and rate) of recordable work-related injuries	212	(11.3)	606	(26.5)	51	(4.3)	60	(3.2)	<b>163</b>	<b>(8.1)</b>
Main types of work-related injuries	<ul style="list-style-type: none"> <li>Slip, trips and falls</li> <li>Struck by falling objects such as cabin baggage</li> </ul>					<ul style="list-style-type: none"> <li>Over-exertion and strenuous movements</li> <li>Exposure to extreme temperatures such as scalds</li> </ul>				
Work-related Injuries, Workers Who are Non-employees										
	FY2018/19		FY2019/20		FY2020/21		FY2021/22		FY2022/23	
Scope of workers who are non-employees	Key contractors only (cleaners, maintenance workers, landscapers, warehouse operators)				Key contractors only (cleaners, maintenance workers, landscapers, warehouse operators, check-in agents)			Key contractors only (cleaners, maintenance workers, landscapers, warehouse operators, check-in agents, sales agent, ground handling agent)		
Estimated number of man-hours worked (hours)	1,213,404		1,294,689		1,421,863		1,281,554		<b>2,771,559</b>	
Number (and rate) of fatalities as a result of work-related injuries	0	(0)	0	(0)	0	(0)	0	(0)	<b>0</b>	<b>(0)</b>
Number (and rate) of high-consequence work-related injuries	0	(0)	0	(0)	0	(0)	0	(0)	<b>0</b>	<b>(0)</b>
Number (and rate) of recordable work-related injuries	0	(0)	2	(1.5)	0	(0)	1	(0.8)	<b>0</b>	<b>(0)</b>
Main types of work-related injuries	Nil		Slips, trips and falls			Nil		Slips, trips and falls		<b>Nil</b>

## SUPPLEMENTARY SUSTAINABILITY DATA (CONTINUED)

### SAFETY (CONTINUED)

#### Work-related Ill-health

Work-related Ill-health, Employees					
	FY2018/19	FY2019/20	FY2020/21	FY2021/22	FY2022/23
Number of fatalities as a result of work-related ill-health	0	0	0	0	0
Number of recordable work-related ill-health	13	0	21	6	6
Main types of work-related ill-health	Noise-induced deafness	Nil	Noise-induced deafness	Noise-induced deafness	Noise-induced deafness
Work-related Injuries, Workers Who are Non-employees					
	FY2018/19	FY2019/20	FY2020/21	FY2021/22	FY2022/23
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 and rate of recordable work-related ill-health <sup>71</sup>	0	0	0	0	0
Main types of work-related ill-health	Nil	Nil	Nil	Nil	Nil

<sup>71</sup> Restatements to the number and rate of recordable work-related ill-health for FY2019/20, FY2020/21, and FY2021/22 were made within the appendix, due to a typo in FY2021/22's sustainability report.



## SUPPLEMENTARY SUSTAINABILITY DATA (CONTINUED)

### EMPLOYEES

#### Employee Profile<sup>72</sup>

Total Employees										
	FY2018/19		FY2019/20		FY2020/21		FY2021/22		FY2022/23	
<b>Employees in the SIA Group</b>										
Employees in the SIA Group	27,145		28,353		23,578		21,517		24,181	
Singapore Airlines	16,316		17,204		14,956		14,125		15,539	
SilkAir	1,484		1,389		608		-		-	
Scoot	2,339		2,412		1,976		1,747		2,551	
SIA Engineering Company (SIAEC)	4,540		4,559		4,332		3,964		4,127	
SIAEC's Subsidiaries	2,195		2,476		1,356		1,330		1,609	
Tradewinds Tours & Travel	44		51		46		42		-	
Cargo Community Network	76		77		77		70		81	
Singapore Flying College	66		82		76		62		67	
SAGI	3		3		3		3		3	
KrisShop	82		100		100		119		127	
Encounters	0		0		48		55		77	
<b>Employees by Gender and by Age Group</b>										
	FY2018/19		FY2019/20		FY2020/21		FY2021/22		FY2022/23	
<b>Singapore Airlines, SilkAir (for FY2018/19, FY2019/20, FY2020/21) and Scoot Employees</b>										
Singapore Airlines, SilkAir (for FY2018/19, FY2019/20, FY2020/21) and Scoot Employees	20,139	100%	21,005	100%	17,540	100%	15,872	100%	18,090	100%
<b>Employees, by Gender</b>										
Male	9,537	47.4%	9,955	47.4%	8,731	49.8%	8,245	51.9%	9,117	50.4%
Female	10,602	52.6%	11,050	52.6%	8,809	50.2%	7,627	48.1%	8,973	49.6%

<sup>72</sup> Past year data from FY2018/19 to FY2021/22 were restated due to improvements in Scoot's data compilation methodologies which resulted in a slight decrease to the previously reported employee values in SIA Group. In FY2022/23, the definitions of employee levels were further refined as detailed in the definition and methodologies section. As such, all employee breakdown by employee levels were reorganised into the new categories.

## SUPPLEMENTARY SUSTAINABILITY DATA (CONTINUED)

### EMPLOYEES (CONTINUED)

#### Employee Profile (continued)

	FY2018/19		FY2019/20		FY2020/21		FY2021/22		FY2022/23	
<b>Employees, by Age Group</b>										
<30 y.o.	7,560	37.5%	7,951	37.9%	4,893	27.9%	3,528	22.2%	<b>4,977</b>	<b>27.5%</b>
30-50 y.o.	9,677	48.1%	10,017	47.7%	9,763	55.7%	9,375	59.1%	<b>9,897</b>	<b>54.7%</b>
>50 y.o.	2,902	14.4%	3,037	14.5%	2,884	16.4%	2,969	18.7%	<b>3,216</b>	<b>17.8%</b>
<b>Employees, by Employee Function and by Gender</b>										
	FY2018/19		FY2019/20		FY2020/21		FY2021/22		FY2022/23	
<b>Ground Staff</b>										
<b>Total</b>	5,807	28.8%	6,117	29.1%	5,533	31.5%	5,591	35.2%	<b>5,963</b>	<b>33.0%</b>
Male	2,429	12.1%	2,584	12.3%	2,359	13.4%	2,445	15.4%	<b>2,638</b>	<b>14.6%</b>
Female	3,378	16.8%	3,533	16.8%	3,174	18.1%	3,146	19.8%	<b>3,325</b>	<b>18.4%</b>
<b>Cabin Crew</b>										
<b>Total</b>	10,030	49.8%	10,568	50.3%	8,537	48.7%	7,470	47.1%	<b>9,124</b>	<b>50.4%</b>
Male	3,662	18.2%	3,852	18.3%	3,320	18.9%	3,028	19.1%	<b>3,524</b>	<b>19.5%</b>
Female	6,368	31.6%	6,716	32.0%	5,217	29.7%	4,442	28.0%	<b>5,600</b>	<b>31.0%</b>
<b>Pilots</b>										
<b>Total</b>	2,818	14.0%	2,931	14.0%	2,862	16.3%	2,811	17.7%	<b>3,003</b>	<b>16.6%</b>
Male	2,779	13.8%	2,889	13.8%	2,824	16.1%	2,772	17.5%	<b>2,955</b>	<b>16.3%</b>
Female	39	0.2%	42	0.2%	38	0.2%	39	0.2%	<b>48</b>	<b>0.3%</b>

## SUPPLEMENTARY SUSTAINABILITY DATA (CONTINUED)

### EMPLOYEES (CONTINUED)

#### Employee Profile (continued)

Employees, by Employee Function and by Age Group										
	FY2018/19		FY2019/20		FY2020/21		FY2021/22		FY2022/23	
<b>Ground Staff</b>										
<b>Total</b>	6,316	31.4%	6,501	30.9%	5,749	32.8%	5,591	35.2%	<b>5,963</b>	<b>33.0%</b>
<30 y.o.	1,443	7.2%	1,440	6.9%	988	5.6%	940	5.9%	<b>1,090</b>	<b>6.0%</b>
30-50 y.o.	3,244	16.1%	3,441	16.4%	3,325	19.0%	3,215	20.3%	<b>3,377</b>	<b>18.7%</b>
>50 y.o.	1,629	8.1%	1,620	7.7%	1,436	8.2%	1,436	9.0%	<b>1,496</b>	<b>8.3%</b>
<b>Cabin Crew</b>										
<b>Total</b>	10,692	53.1%	11,250	53.6%	8,859	50.5%	7,470	47.1%	<b>9,124</b>	<b>50.4%</b>
<30 y.o.	5,831	29.0%	6,137	29.2%	3,693	21.1%	2,474	15.6%	<b>3,741</b>	<b>20.7%</b>
30-50 y.o.	4,229	21.0%	4,358	20.7%	4,367	24.9%	4,143	26.1%	<b>4,426</b>	<b>24.5%</b>
>50 y.o.	632	3.1%	755	3.6%	799	4.6%	853	5.4%	<b>957</b>	<b>5.3%</b>
<b>Pilots</b>										
<b>Total</b>	3,131	15.5%	3,254	15.5%	2,932	16.7%	2,811	17.7%	<b>3,003</b>	<b>16.6%</b>
<30 y.o.	286	1.4%	374	1.8%	212	1.2%	114	0.7%	<b>146</b>	<b>0.8%</b>
30-50 y.o.	2,204	10.9%	2,218	10.6%	2,071	11.8%	2,017	12.7%	<b>2,094</b>	<b>11.6%</b>
>50 y.o.	641	3.2%	662	3.2%	649	3.7%	680	4.3%	<b>763</b>	<b>4.2%</b>

## SUPPLEMENTARY SUSTAINABILITY DATA (CONTINUED)

### EMPLOYEES (CONTINUED)

#### Employee Profile (continued)

Employees, by Employee Level and by Gender										
	FY2018/19		FY2019/20		FY2020/21		FY2021/22		FY2022/23	
<b>Managers and above</b>										
<b>Total</b>	526	2.6%	577	2.7%	557	3.2%	563	3.5%	<b>638</b>	<b>3.5%</b>
Male	361	1.8%	398	1.9%	381	2.2%	377	2.4%	<b>429</b>	<b>2.4%</b>
Female	165	0.8%	179	0.9%	176	1.0%	186	1.2%	<b>209</b>	<b>1.2%</b>
<b>Executive</b>										
<b>Total</b>	1,823	9.1%	2,044	9.7%	1,845	10.5%	1,928	12.1%	<b>2,146</b>	<b>11.9%</b>
Male	957	4.8%	1,067	5.1%	985	5.6%	1,049	6.6%	<b>1,147</b>	<b>6.3%</b>
Female	866	4.3%	977	4.7%	860	4.9%	879	5.5%	<b>999</b>	<b>5.5%</b>
<b>Other Employees</b>										
<b>Total</b>	16,306	81.0%	16,995	80.9%	14,531	82.8%	13,381	84.3%	<b>15,306</b>	<b>84.6%</b>
Male	7,552	37.5%	7,860	37.4%	7,138	40.7%	6,819	43.0%	<b>7,541</b>	<b>41.7%</b>
Female	8,754	43.5%	9,135	43.5%	7,393	42.1%	6,562	41.3%	<b>7,765</b>	<b>42.9%</b>

## SUPPLEMENTARY SUSTAINABILITY DATA (CONTINUED)

### EMPLOYEES (CONTINUED)

#### Employee Profile (continued)

Employees, by Employee Level and by Age Group										
	FY2018/19		FY2019/20		FY2020/21		FY2021/22		FY2022/23	
<b>Managers and above</b>										
<b>Total</b>	526	2.6%	577	2.7%	556	3.2%	563	3.5%	<b>638</b>	<b>3.5%</b>
<30 y.o.	4	0.02%	6	0.03%	2	0.01%	-	-	<b>1</b>	<b>0.01%</b>
30-50 y.o.	363	1.8%	398	1.9%	418	2.4%	406	2.6%	<b>458</b>	<b>2.5%</b>
>50 y.o.	159	0.8%	173	0.8%	136	0.8%	157	1.0%	<b>179</b>	<b>1.0%</b>
<b>Executive</b>										
<b>Total</b>	1,823	9.1%	2,044	9.7%	1,845	10.5%	1,928	12.1%	<b>2,146</b>	<b>11.9%</b>
<30 y.o.	615	3.1%	664	3.2%	438	2.5%	486	3.1%	<b>579</b>	<b>3.2%</b>
30-50 y.o.	977	4.9%	1,153	5.5%	1,174	6.7%	1,207	7.6%	<b>1,307</b>	<b>7.2%</b>
>50 y.o.	231	1.1%	227	1.1%	233	1.3%	235	1.5%	<b>260</b>	<b>1.4%</b>
<b>Other Employees</b>										
<b>Total</b>	16,306	81.0%	16,995	80.9%	14,531	82.8%	13,381	84.3%	<b>15,306</b>	<b>84.6%</b>
<30 y.o.	6,246	31.0%	6,672	31.8%	4,214	24.0%	3,042	19.2%	<b>4,397</b>	<b>24.3%</b>
30-50 y.o.	7,622	37.8%	7,798	37.1%	7,853	44.8%	7,762	48.9%	<b>8,132</b>	<b>45.0%</b>
>50 y.o.	2,438	12.1%	2,525	12.0%	2,464	14.0%	2,577	16.2%	<b>2,777</b>	<b>15.4%</b>

## SUPPLEMENTARY SUSTAINABILITY DATA (CONTINUED)

### EMPLOYEES (CONTINUED)

#### Employee Profile (continued)

Employees, by Nationality and by Employee Categories										
	FY2018/19		FY2019/20		FY2020/21		FY2021/22		FY2022/23	
<b>Managers and above</b>										
<b>Total</b>	526	2.6%	577	2.7%	556	3.2%	563	3.5%	<b>638</b>	<b>3.5%</b>
Singaporean	412	2.0%	444	2.1%	430	2.5%	436	2.7%	<b>502</b>	<b>2.8%</b>
Malaysian	32	0.2%	39	0.2%	36	0.2%	35	0.2%	<b>36</b>	<b>0.2%</b>
Indian	12	0.1%	20	0.1%	20	0.1%	22	0.1%	<b>25</b>	<b>0.1%</b>
Others	70	0.3%	74	0.4%	70	0.4%	70	0.4%	<b>75</b>	<b>0.4%</b>
<b>Executive</b>										
<b>Total</b>	1,823	9.1%	2,044	9.7%	1,845	10.5%	1,928	12.1%	<b>2,146</b>	<b>11.9%</b>
Singaporean	1,373	6.8%	1,503	7.2%	1,350	7.7%	1,412	8.9%	<b>1,569</b>	<b>8.7%</b>
Malaysian	76	0.4%	88	0.4%	85	0.5%	95	0.6%	<b>97</b>	<b>0.5%</b>
Indian	70	0.3%	118	0.6%	97	0.6%	114	0.7%	<b>133</b>	<b>0.7%</b>
Others	304	1.5%	335	1.6%	313	1.8%	307	1.9%	<b>347</b>	<b>1.9%</b>
<b>Other Employees</b>										
<b>Total</b>	16,306	81.0%	16,995	80.9%	14,531	82.8%	13,381	84.3%	<b>15,306</b>	<b>84.6%</b>
Singaporean	9,731	48.3%	9,935	47.3%	9,291	53.0%	8,737	55.0%	<b>9,514</b>	<b>52.6%</b>
Malaysian	2,539	12.6%	2,822	13.4%	2,041	11.6%	1,758	11.1%	<b>2,512</b>	<b>13.9%</b>
Indian	455	2.3%	454	2.2%	393	2.2%	380	2.4%	<b>357</b>	<b>2.0%</b>
Others	3,581	17.8%	3,784	18.0%	2,806	16.0%	2,506	15.8%	<b>2,923</b>	<b>16.2%</b>

## SUPPLEMENTARY SUSTAINABILITY DATA (CONTINUED)

### EMPLOYEES (CONTINUED)

#### Employee Profile (continued)

Employees, by Employment Type (Full-time and Part-time) and by Gender										
	FY2018/19		FY2019/20		FY2020/21		FY2021/22		FY2022/23	
<b>Full-Time</b>										
<b>Total</b>	20,085	99.7%	20,949	99.7%	17,492	99.7%	15,827	99.7%	<b>18,038</b>	<b>99.7%</b>
Male	9,535	47.3%	9,951	47.4%	8,729	49.8%	8,240	51.9%	<b>9,110</b>	<b>50.4%</b>
Female	10,550	52.4%	10,998	52.4%	8,763	50.0%	7,587	47.8%	<b>8,928</b>	<b>49.4%</b>
<b>Part-Time</b>										
<b>Total</b>	54	0.3%	56	0.3%	48	0.3%	45	0.3%	<b>52</b>	<b>0.3%</b>
Male	2	0.01%	4	0.02%	2	0.01%	5	0.03%	<b>7</b>	<b>0.04%</b>
Female	52	0.3%	52	0.2%	46	0.3%	40	0.3%	<b>45</b>	<b>0.2%</b>
Employees, by Employment Type (Permanent and Contract) and by Gender										
	FY2018/19		FY2019/20		FY2020/21		FY2021/22		FY2022/23	
<b>Permanent</b>										
<b>Total</b>	10,162	50.5%	10,331	49.2%	9,235	52.7%	8,909	56.1%	<b>9,396</b>	<b>51.9%</b>
Male	6,647	33.0%	6,792	32.3%	6,148	35.1%	5,984	37.7%	<b>6,284</b>	<b>34.7%</b>
Female	3,515	17.5%	3,539	16.8%	3,087	17.6%	2,925	18.4%	<b>3,112</b>	<b>17.2%</b>
<b>Contract</b>										
<b>Total</b>	9,977	49.5%	10,674	50.8%	8,305	47.3%	6,963	43.9%	<b>8,694</b>	<b>48.1%</b>
Male	2,890	14.4%	3,163	15.1%	2,583	14.7%	2,261	14.2%	<b>2,833</b>	<b>15.7%</b>
Female	7,087	35.2%	7,511	35.8%	5,722	32.6%	4,702	29.6%	<b>5,861</b>	<b>32.4%</b>

## SUPPLEMENTARY SUSTAINABILITY DATA (CONTINUED)

### EMPLOYEES (CONTINUED)

#### Employee Profile (continued)

Employees, by Employment Type (Permanent and Contract) and by Region										
	FY2018/19		FY2019/20		FY2020/21		FY2021/22		FY2022/23	
<b>Permanent</b>										
<b>Total</b>	10,162	50.5%	10,331	49.2%	9,235	52.7%	8,909	56.1%	<b>9,396</b>	<b>51.9%</b>
Singapore	7,431	36.9%	7,618	36.3%	6,942	39.6%	6,791	42.8%	<b>7,239</b>	<b>40.0%</b>
Americas	156	0.8%	163	0.8%	138	0.8%	127	0.8%	<b>137</b>	<b>0.8%</b>
Europe	495	2.5%	509	2.4%	430	2.5%	407	2.6%	<b>401</b>	<b>2.2%</b>
North Asia	664	3.3%	669	3.2%	573	3.3%	535	3.4%	<b>549</b>	<b>3.0%</b>
South East Asia	635	3.2%	599	2.9%	495	2.8%	436	2.7%	<b>464</b>	<b>2.6%</b>
South West Pacific	405	2.0%	403	1.9%	325	1.9%	310	2.0%	<b>302</b>	<b>1.7%</b>
West Asia and Africa	376	1.9%	370	1.8%	332	1.9%	303	1.9%	<b>304</b>	<b>1.7%</b>
<b>Contract</b>										
<b>Total</b>	9,977	49.5%	10,674	50.8%	8,305	47.3%	6,963	43.9%	<b>8,694</b>	<b>48.1%</b>
Singapore	9,894	49.1%	10,578	50.4%	8,234	46.9%	6,892	43.4%	<b>8,620</b>	<b>47.7%</b>
Americas	3	0.01%	3	0.01%	2	0.01%	2	0.01%	<b>3</b>	<b>0.02%</b>
Europe	19	0.1%	25	0.1%	17	0.1%	18	0.1%	<b>21</b>	<b>0.1%</b>
North Asia	43	0.2%	49	0.2%	45	0.3%	44	0.3%	<b>44</b>	<b>0.2%</b>
South East Asia	6	0.03%	11	0.1%	1	0.01%	2	0.01%	<b>2</b>	<b>0.01%</b>
South West Pacific	1	0.00%	1	0.00%	1	0.01%	1	0.01%	<b>1</b>	<b>0.01%</b>
West Asia and Africa	11	0.1%	7	0.03%	5	0.03%	4	0.03%	<b>3</b>	<b>0.02%</b>



## SUPPLEMENTARY SUSTAINABILITY DATA (CONTINUED)

### EMPLOYEES (CONTINUED)

#### New Hires

New Hires										
	FY2018/19		FY2019/20		FY2020/21		FY2021/22		FY2022/23	
<b>New Hires (Total)</b>										
Total	3,161	100%	2,727	100%	101	100%	787	100%	<b>3,929</b>	<b>100%</b>
<b>New Hires, by Gender</b>										
Male	1,170	37.0%	1,100	40.3%	58	57.4%	421	53.5%	<b>1,517</b>	<b>38.6%</b>
Female	1,991	63.0%	1,627	59.7%	43	42.6%	366	46.5%	<b>2,412</b>	<b>61.4%</b>
<b>New Hires, by Age Group</b>										
<30 y.o.	2,630	83.2%	2,130	78.1%	44	43.6%	440	55.9%	<b>2,789</b>	<b>71.0%</b>
30-50 y.o.	500	15.8%	561	20.6%	51	50.5%	309	39.3%	<b>1,091</b>	<b>27.8%</b>
>50 y.o.	31	1.0%	36	1.3%	6	5.9%	38	4.8%	<b>49</b>	<b>1.2%</b>
<b>New Hires, by Region</b>										
Singapore	2,871	90.8%	2,393	87.8%	91	90.1%	683	86.8%	<b>3,626</b>	<b>92.3%</b>
Americas	45	1.4%	31	1.1%	4	4.0%	20	2.5%	<b>34</b>	<b>0.9%</b>
Europe	45	1.4%	45	1.7%	3	3.0%	12	1.5%	<b>41</b>	<b>1.0%</b>
North Asia	72	2.3%	93	3.4%	-	-	23	2.9%	<b>53</b>	<b>1.3%</b>
South East Asia	60	1.9%	55	2.0%	1	1.0%	19	2.4%	<b>95</b>	<b>2.4%</b>
South West Pacific	42	1.3%	76	2.8%	-	-	24	3.0%	<b>54</b>	<b>1.4%</b>
West Asia and Africa	26	0.8%	34	1.2%	2	2.0%	6	0.8%	<b>26</b>	<b>0.7%</b>

## SUPPLEMENTARY SUSTAINABILITY DATA (CONTINUED)

### EMPLOYEES (CONTINUED)

#### New Hires (continued)

	FY2018/19		FY2019/20		FY2020/21		FY2021/22		FY2022/23	
<b>New Hires, by Employee Level<sup>73</sup></b>										
Managers and above	-	-	-	-	-	-	29	3.7%	<b>43</b>	<b>1.1%</b>
Executive	-	-	-	-	-	-	468	59.5%	<b>543</b>	<b>13.8%</b>
Other Employees	-	-	-	-	-	-	290	36.8%	<b>3,343</b>	<b>85.1%</b>
<b>New Hires, by Employment Type (Full-time and Part-Time)<sup>73</sup></b>										
Full-time	-	-	-	-	-	-	784	99.6%	<b>3,918</b>	<b>99.7%</b>
Part-Time	-	-	-	-	-	-	3	0.4%	<b>11</b>	<b>0.3%</b>
<b>Recruitment Type (Internal and External Hires)<sup>73</sup></b>										
<b>Total</b>	-	-	-	-	-	-	1,198	100%	<b>4,433</b>	<b>100%</b>
Internal Hires	-	-	-	-	-	-	411	34.3%	<b>504</b>	<b>11.4%</b>
External Hires	-	-	-	-	-	-	787	65.7%	<b>3,929</b>	<b>88.6%</b>

<sup>73</sup> Note: Starting FY2021/22, the breakdown of new hires by employee level, employment type and recruitment type is tracked and reported according to the updated calculation methodology and boundary refined in FY2022/23.

## SUPPLEMENTARY SUSTAINABILITY DATA (CONTINUED)

### EMPLOYEES (CONTINUED)

#### Turnover

Turnover	FY2018/19		FY2019/20		FY2020/21		FY2021/22		FY2022/23	
<b>Turnover (Total)</b>										
Total	2,191	100%	1,453	100%	1,286	100%	1,777	100%	<b>1,363</b>	<b>100%</b>
<b>Turnover, by Gender</b>										
Male	748	34.1%	450	31.0%	504	39.2%	601	33.8%	<b>504</b>	<b>37.0%</b>
Female	1,443	65.9%	1,003	69.0%	782	60.8%	1,176	66.2%	<b>859</b>	<b>63.0%</b>
<b>Turnover, by Age Group</b>										
<30 y.o.	1,128	51.5%	919	63.2%	662	51.5%	858	48.3%	<b>566</b>	<b>41.5%</b>
30-50 y.o.	775	35.4%	474	32.6%	539	41.9%	876	49.3%	<b>758</b>	<b>55.6%</b>
>50 y.o.	288	13.1%	60	4.1%	85	6.6%	43	2.4%	<b>39</b>	<b>2.9%</b>
<b>Turnover, by Region</b>										
Singapore	1,869	85.3%	1,243	85.5%	1,168	90.8%	1,592	89.6%	<b>1,178</b>	<b>86.4%</b>
Americas	37	1.7%	16	1.1%	10	0.8%	28	1.6%	<b>16</b>	<b>1.2%</b>
Europe	62	2.8%	32	2.2%	23	1.8%	23	1.3%	<b>23</b>	<b>1.7%</b>
North Asia	79	3.6%	53	3.6%	33	2.6%	40	2.3%	<b>35</b>	<b>2.6%</b>
South East Asia	59	2.7%	50	3.4%	24	1.9%	46	2.6%	<b>44</b>	<b>3.2%</b>
South West Pacific	56	2.6%	37	2.5%	22	1.7%	33	1.9%	<b>44</b>	<b>3.2%</b>
West Asia and Africa	29	1.3%	22	1.5%	6	0.5%	15	0.8%	<b>23</b>	<b>1.7%</b>
<b>Turnover, by Employee Level</b>										
Managers and above	36	1.6%	34	2.3%	38	3.0%	42	2.4%	<b>38</b>	<b>2.8%</b>
Executive	201	9.2%	165	11.4%	262	20.4%	414	23.3%	<b>255</b>	<b>18.7%</b>
Other Employees	1,819	83.0%	1,169	80.5%	945	73.5%	1,321	74.3%	<b>1,070</b>	<b>78.5%</b>

## SUPPLEMENTARY SUSTAINABILITY DATA (CONTINUED)

### EMPLOYEES (CONTINUED)

#### Parental Leave Statistics

Parental Leave Statistics															
	FY2018/19			FY2019/20			FY2020/21			FY2021/22			FY2022/23		
	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total	Male	Female	Total
Employees who were entitled to parental leave	2,623	1,499	4,122	2,677	1,279	3,956	2,765	1,343	4,108	2,463	995	3,458	2,375	1,028	3,403
Employees who took parental leave	1,748	1,234	2,982	1,903	1,236	3,139	1,295	1,075	2,370	1,386	810	2,196	1,740	907	2,647
Employees who returned to work after parental leave ended	1,548	1,206	2,754	1,895	1,018	2,913	1,285	856	2,141	1,381	802	2,183	1,738	896	2,634
Employees who returned to work after parental leave ended and who were still employed 12 months after returning to work	1,486	1,168	2,654	1,839	975	2,814	1,232	799	2,031	1,308	729	2,037	1,698	861	2,559
Retention rate of employees who took parental leave	85.0%	94.7%	89.0%	96.6%	78.9%	89.6%	95.1%	74.3%	85.7%	94.4%	90.0%	92.8%	97.6%	94.9%	96.7%
Return to work rate of employees who took parental leave	88.6%	97.7%	92.4%	99.6%	82.4%	92.8%	99.2%	79.6%	90.3%	99.6%	99.0%	99.4%	99.9%	98.8%	99.5%

#### Average Training Hours<sup>74</sup>

Average Training Hours										
	FY2018/19		FY2019/20		FY2020/21		FY2021/22		FY2022/23	
<b>Average Training Hours by Employee Function</b>										
Ground Staff	33		32		51		38		36	
Cabin Crew	115		104		81		59		81	
Pilots	44		45		37		35		39	

#### Worker Profile

Workers who are non-employees	
	FY2022/23
<b>Total number of workers who are not employees by region</b>	
Singapore	443
Other overseas operations	111
Total	554

<sup>74</sup> Past year data from FY2018/19 to FY2021/22 were restated due to improvements in Scoot's data compilation methodologies for employees which resulted in a slight increase to the previously reported training values.

## SUPPLEMENTARY SUSTAINABILITY DATA (CONTINUED)

### GOVERNANCE

#### Completion of Anti-Corruption Training, by Employee Type and Region

FY2020/21 <sup>75</sup>	Managers and above	Executive	Other Employees	Total
<b>Total employees required to complete, by employee type</b>	<b>466</b>	<b>1,328</b>	<b>3,401</b>	<b>5,195</b>
<b>Total employees completed, by employee type and region</b>	<b>454 (97.4%)</b>	<b>1,297 (97.7%)</b>	<b>3,320 (97.6%)</b>	<b>5,071 (97.6%)</b>
Singapore (Head Office)	355	1,030	1,141	2,526
Americas	11	17	102	130
Europe	28	43	396	467
North Asia	15	58	477	550
South East Asia	23	63	620	706
South West Pacific	14	45	265	324
West Asia and Africa	8	41	319	368
FY2021/22 <sup>76</sup>	Managers and above	Executive	Other Employees	Total
<b>Total employees required to complete, by employee type</b>	<b>647</b>	<b>1,941</b>	<b>4,348</b>	<b>6,936</b>
<b>Total employees completed, by employee type and region</b>	<b>609 (94.1%)</b>	<b>1,846 (95.1%)</b>	<b>4,223 (97.1%)</b>	<b>6,678 (96.3%)</b>
Singapore (Head Office)	510	1,540	2,276	4,326
Americas	8	14	113	135
Europe	22	47	343	412
North Asia	24	92	446	562
South East Asia	21	65	526	612
South West Pacific	16	45	248	309
West Asia and Africa	8	43	271	322

<sup>75</sup> A restatement of the number of employee who are required to complete and has completed the anti-corruption training in FY2020/21 was made due to the refinement of employee categories and the removal of SilkAir's data as past data cannot be retrieved following its integration into SIA in FY2021/22.

<sup>76</sup> A restatement of the number of employee who are required to complete and has completed the anti-corruption training in FY2021/22 was made after the improvement of Scoot's data compilation methodologies.

## SUPPLEMENTARY SUSTAINABILITY DATA (CONTINUED)

### GOVERNANCE (CONTINUED)

#### Completion of Anti-Corruption Training, by Employee Type and Region (continued)

FY2022/23	Managers and above	Executive	Other Employees	Total
<b>Total employees required to complete, by employee type</b>	<b>627</b>	<b>1,952</b>	<b>5,715</b>	<b>8,294</b>
<b>Total employees completed, by employee type and region</b>	<b>588 (93.8%)</b>	<b>1,917 (98.2%)</b>	<b>5,465 (95.6%)</b>	<b>7,970 (96.1%)</b>
Singapore (Head Office)	482	1,592	3,451	5,525
Americas	9	15	128	152
Europe	26	46	343	415
North Asia	24	90	451	565
South East Asia	23	80	558	661
South West Pacific	14	55	242	311
West Asia and Africa	10	39	292	341

#### Data Privacy and Cybersecurity

	FY2021/22 <sup>77</sup>	FY2022/23
Number of substantiated complaints concerning breaches of customer privacy and losses of customer data	3	5

<sup>77</sup> Total number of substantiated complaints concerning breaches of customer privacy and losses of customer data in FY2021/22 was restated due to a refinement of reporting boundaries to include all substantiated cases regardless of whether incidents qualify as reportable under the relevant data protection legislation. As such, there were a total of three substantiated complaints in FY2021/22. The two additional incidents were isolated events caused by human error where the employee inadvertently released details of customers. Remedial actions were taken for the incidents, including notifying affected individuals and conducting refresher trainings for relevant staff.

# GRI CONTENT INDEX

The GRI Content Index has been prepared in accordance with the GRI 2021 Standards. It summarises the GRI Standards Disclosures SIA has 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 FY2022/23    **SR:** SIA Sustainability Report FY2022/23    **Web:** SIA Website

## GENERAL DISCLOSURES

GRI Standards Disclosures	Page Reference(s) and Remarks	Page Number	GRI Standards Disclosures	Page Reference(s) and Remarks	Page Number
<b>GRI 2: General Disclosures 2021</b>					
<b>The organisation and its reporting practices</b>					
<b>2-1</b>	Organisation details	Fleet Management and Network Back Cover	<b>SR: 6</b>		
<b>2-2</b>	Entities included in the organization's sustainability reporting	Reporting Scope	<b>SR: 4</b>		
<b>2-3</b>	Reporting period, frequency and contact point	Reporting Period Back Cover	<b>SR: 4</b>		
<b>2-4</b>	Restatements of information	Definitions and Methodologies	<b>SR: 122-132</b>		
<b>2-5</b>	Ownership and legal form	Reporting Quality	<b>SR: 4</b>		
<b>Activities and workers</b>					
<b>2-6</b>	Activities, value chain and other business relationships	Principal Activities Fleet Management and Network	<b>SR: 5</b> <b>SR: 6-7</b>		
<b>2-7</b>	Employees	Strength in our Workforce Diversity Supplementary Sustainability Data – Employee Profile	<b>SR: 88-89</b> <b>SR: 143-150</b>		
<b>2-8</b>	Workers who are not employees	Supplementary Sustainability Data – Worker Profile	<b>SR: 154</b>		
<b>Governance</b>					
<b>2-9</b>	Governance structure and composition	SIA's Sustainability Governance Structure and Composition SIA Annual Report FY2022/23	<b>SR: 9</b> <b>AR: 69, 72, 88-93</b>		
<b>2-10</b>	Nomination and selection of the highest governance body	SIA Annual Report FY2022/23	<b>AR: 73</b>		
<b>2-11</b>	Chair of the highest governance body	Board of Directors SIA Annual Report FY2022/23	<b>SR: 9</b> <b>AR: 69, 71</b>		
<b>2-12</b>	Role of the highest governance body in overseeing the management of impacts	SIA's Sustainability Governance Structure and Composition	<b>SR: 9</b>		
<b>2-13</b>	Delegation of responsibility for managing impacts	SIA's Sustainability Governance Structure and Composition	<b>SR: 9</b>		
<b>2-14</b>	Role of the highest governance body in sustainability reporting	SIA's Sustainability Governance Structure and Composition	<b>SR: 9</b>		
<b>2-15</b>	Conflicts of interest	Conflicts of Interest SIA Annual Report FY2022/23	<b>SR: 109</b> <b>AR: 68</b>		
<b>2-16</b>	Communication of critical concerns	Whistleblowing Policy and Grievance Mechanisms	<b>SR: 110</b>		
				<b>Confidentiality constraints:</b> Omitted sub-disclosure (b) – Information regarding the number and nature of critical concerns communicated to the board is not publicly disclosed by SIA as it includes sensitive information and is confidential.	
<b>2-17</b>	Collective knowledge of the highest governance body	SIA's Sustainability Governance Structure and Composition SIA Annual Report FY2022/23	<b>SR: 9</b> <b>AR: 73-74</b>		
<b>2-18</b>	Evaluation of performance of the highest governance body	Evaluation of Board Performance SIA Annual Report FY2022/23	<b>SR: 109</b> <b>AR: 73</b>		
<b>2-19</b>	Remuneration policies	SIA Annual Report FY2022/23	<b>AR: 74-82</b>		
				<b>Confidentiality constraints:</b> Omitted sub-disclosure (b) – Information regarding specific details on remuneration policies is not publicly disclosed by SIA as it includes sensitive information and is confidential.	
<b>2-20</b>	Process to determine remuneration	SIA Annual Report FY2022/23	<b>AR: 74-82</b> <b>Web: <a href="#">SIA AGM Minutes 2022</a></b>		

## GRI CONTENT INDEX (CONTINUED)

### GENERAL DISCLOSURES (CONTINUED)

GRI Standards Disclosures	Page Reference(s) and Remarks	Page Number
<b>2-21</b> Annual total compensation ratio	<b>Confidentiality constraints:</b> Information regarding total compensation is not publicly disclosed by SIA as it includes sensitive information and is confidential.	-
<b>Strategy, policies, and practices</b>		
<b>2-22</b> Statement on sustainable development strategy	Message from the CEO Board Statement	<a href="#">SR: 1-2</a> <a href="#">SR: 9</a>
<b>2-23</b> Policy commitments	Core Values Sustainability Policy, Commitment and Strategy Corporate Governance and Ethics	<a href="#">SR: 5</a> <a href="#">SR: 10</a> <a href="#">SR: 109-113</a>
<b>2-24</b> Embedding policy commitments	Sustainability Policy, Commitment and Strategy Corporate Governance and Ethics	<a href="#">SR: 10</a> <a href="#">SR: 109-113</a>
<b>2-25</b> Processes to remediate negative impacts	Whistleblowing Policy and Grievance Mechanisms Compliance with Laws and Regulations	<a href="#">SR: 110</a> <a href="#">SR: 112</a>

GRI Standards Disclosures	Page Reference(s) and Remarks	Page Number
<b>2-26</b> Mechanisms for seeking advice and raising concerns	Whistleblowing Policy and Grievance Mechanisms Compliance with Laws and Regulations Employee Code of Conduct Data Privacy and Cybersecurity	<a href="#">SR: 110</a> <a href="#">SR: 112</a> <a href="#">SR: 112</a> <a href="#">SR: 114</a>
<b>2-27</b> Compliance with laws and regulations	Compliance with Laws and Regulations	<a href="#">SR: 112</a>
<b>2-28</b> Membership associations	Memberships	<a href="#">SR: 5</a>
<b>Stakeholder engagement</b>		
<b>2-29</b> Approach to stakeholder	Stakeholder Engagement	<a href="#">SR: 11-12</a>
<b>2-30</b> Mechanisms for advice and concerns about ethics	Collaborative Partnerships with Unions	<a href="#">SR: 95</a>
<b>GRI 3: Material Topics 2021</b>		
<b>3-1</b> Process to determine material topics	Materiality	<a href="#">SR: 13-16</a>
<b>3-2</b> List of material topics	Materiality	<a href="#">SR: 13-16</a>
<b>3-3</b> Management of material topics	Materiality	<a href="#">SR: 13-16</a>



## GRI CONTENT INDEX (CONTINUED)

### TOPIC-SPECIFIC DISCLOSURES

GRI Standards Disclosures	Page Reference(s) and Remarks	Page Number
<b>Chapter: Introduction</b>		
<b>GRI 3 : Material Topics 2021</b>		
<b>3-3</b> Management of material topics	Fleet Management and Network Economic Performance and Value Creation	<b>SR: 6-8</b> <b>SR: 17-24</b>
<b>Material topic: Economic Value Creation</b>		
<b>GRI 201: Economic Performance 2016</b>		
<b>201-1</b> Direct economic value generated and distributed	Economic Performance and Value Creation	<b>SR: 18-24</b>
<b>Chapter: Environment</b>		
<b>GRI 3 : Material Topics 2021</b>		
<b>3-3</b> Management of material topics	Energy and GHG Management Resilience to climate change Packaging, materials, and waste management	<b>SR: 14, 26-40</b> <b>SR: 14, 26-40, 51-55</b> <b>SR: 14, 41-45</b>
<b>Material topic: Energy and GHG Management</b>		
<b>GRI 302 : Energy 2016</b>		
<b>302-1</b> Energy consumption within the organisation	Performance of SIA's Flight Operations Performance of SIA Buildings and Offices	<b>SR: 36, 39, 133-137</b>
<b>302-3</b> Energy intensity	Performance of SIA's Flight Operations Performance of SIA Buildings and Offices	<b>SR: 36, 39, 133-137</b>
<b>302-4</b> Reduction of energy consumption	Performance of SIA's Flight Operations Performance of SIA Buildings and Offices	<b>SR: 28-40</b>
<b>GRI 305 : Emissions 2016</b>		
<b>305-1</b> Direct (Scope 1) GHG emissions	Performance of SIA's Flight Operations	<b>SR: 36, 133-137</b>
<b>305-2</b> Energy indirect (Scope 2) GHG emissions	Performance of SIA Buildings and Offices	<b>SR: 39, 135-137</b>
<b>305-3</b> Other indirect (Scope 3) GHG emissions	Other Value-Chain Activities	<b>SR: 40, 136-137</b>
<b>305-4</b> GHG emissions intensity	Performance of SIA's Flight Operations Performance of SIA Buildings and Offices	<b>SR: 36, 133-134</b> <b>SR: 39, 135</b>
<b>305-5</b> Reduction of GHG emissions	Performance of SIA's Flight Operations Performance of SIA Buildings and Offices	<b>SR: 28-40</b>

GRI Standards Disclosures	Page Reference(s) and Remarks	Page Number
<b>Material Topic: Packaging, materials, and waste management</b>		
<b>GRI 306: Waste 2020</b>		
<b>306-1</b> Waste generation and significant waste-related impacts	Packaging, Materials and Waste Management	<b>SR: 41-45</b>
<b>306-2</b> Management of significant waste-related impacts	Packaging, Materials and Waste Management	<b>SR: 41-45</b>
<b>306-3</b> Waste generated	Packaging, Materials and Waste Management	<b>SR: 45, 139</b>
<b>306-4</b> Waste diverted from disposal	Packaging, Materials and Waste Management	<b>SR: 45, 139</b>
<b>306-5</b> Waste directed to disposal	Packaging, Materials and Waste Management	<b>SR: 45, 139</b>
<b>Other Disclosures</b>		
<b>GRI 303 : Water and Effluents 2018</b>		
<b>303-1</b> Interactions with water as a shared resource	SIA's Water Conservation	<b>SR: 46</b>
<b>303-2</b> Management of water discharge-related impacts	SIA's Water Conservation	<b>SR: 46</b>
<b>GRI 304 : Biodiversity 2016</b>		
<b>304-3</b> Habitats protected or restored	Biodiversity	<b>SR: 48-50</b>
<b>Chapter: Safety</b>		
<b>GRI 3 : Material Topics 2021</b>		
<b>3-3</b> Management of material topics	Flight safety and security	<b>SR: 15, 57-70</b>
<b>Material topic: Flight safety and security/Customer health and safety</b>		
<b>GRI 403 : Occupational health and safety 2018</b>		
<b>403-1</b> Occupational health and safety management systems	Safety Management	<b>SR: 57-59</b>
<b>403-2</b> Hazard identification, risk assessment, and incident investigation	Hazard Identification and Risk Management Aircraft Incidents	<b>SR: 65-66</b> <b>SR: 68</b>
<b>403-3</b> Occupational health services	Hazard Identification and Risk Management	<b>SR: 65-66</b>

## GRI CONTENT INDEX (CONTINUED)

### TOPIC-SPECIFIC DISCLOSURES (CONTINUED)

GRI Standards Disclosures	Page Reference(s) and Remarks	Page Number
<b>403-4</b> Worker participation, consultation, and communication on occupational health and safety	Safety Training and Communication Hazard Identification and Risk Management Emergency Preparedness and Response	<a href="#">SR: 60-62</a> <a href="#">SR: 65-66</a> <a href="#">SR: 67</a>
<b>403-5</b> Worker training on occupational health and safety	Safety Training and Communication Hazard Identification and Risk Management Emergency Preparedness and Response Aircraft Incidents	<a href="#">SR: 60-62</a> <a href="#">SR: 65-66</a> <a href="#">SR: 67</a> <a href="#">SR: 68</a>
<b>403-6</b> Promotion of worker health	Safety Training and Communication Hazard Identification and Risk Management Employee health, safety and well-being	<a href="#">SR: 60-62</a> <a href="#">SR: 66</a> <a href="#">SR: 101</a>
<b>403-7</b> Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	Safety Management Customer Health and Safety Hazard Identification and Risk Management Emergency Preparedness and Response Aircraft Incidents	<a href="#">SR: 57-59</a> <a href="#">SR: 63-64</a> <a href="#">SR: 65-66</a> <a href="#">SR: 67</a> <a href="#">SR: 68</a>
<b>403-8</b> Workers covered by an occupational health and safety management system	Safety Management	<a href="#">SR: 57-59</a>
<b>403-9</b> Work-related injuries	Work-Related Injuries	<a href="#">SR: 69, 141</a>
<b>403-10</b> Work-related ill-health	Work-Related Ill-Health	<a href="#">SR: 70, 142</a>
<b>GRI 416 : Customer health and safety 2016</b>		
<b>416-1</b> Assessment of the health and safety impacts of product and service categories	Safety Management Customer Health and Safety	<a href="#">SR: 59</a> <a href="#">SR: 63-64</a>
<b>416-2</b> Incidents of non-compliance concerning the health and safety impacts of products and services	Safety Management Customer Health and Safety	<a href="#">SR: 59</a> <a href="#">SR: 63-64</a>
<b>Chapter: Customer</b>		
<b>GRI 3 : Material Topics 2021</b>		
<b>3-3</b> Management of material topics	Brand Management and Reputation	<a href="#">SR: 15, 72-74</a>
	<b>Information unavailable/incomplete:</b> This is a new material topic for SIA and the review of suitable performance metrics is in progress for upcoming sustainability reports.	
	Customer Satisfaction and Experience	<a href="#">SR: 15, 75-86</a>

GRI Standards Disclosures	Page Reference(s) and Remarks	Page Number
<b>Chapter: Employees</b>		
<b>GRI 3 : Material Topics 2021</b>		
<b>3-3</b> Management of material topics	Employee Health, Safety, and Well-being	<a href="#">SR: 15, 100-101</a>
<b>Other Disclosures</b>		
<b>GRI 401 : Employment 2016</b>		
<b>401-1</b> New employee hires and employee turnover	New Hires and Turnover	<a href="#">SR: 90-91</a>
<b>GRI 402 : Labor/Management Relations 2016</b>		
<b>402-1</b> Minimum notice periods regarding operational changes	Notice Periods	<a href="#">SR: 95</a>
<b>GRI 404 : Training and education 2016</b>		
<b>404-2</b> Programmes for upgrading employee skills and transition assistance programmes	A Future-Ready Workforce	<a href="#">SR: 96-99</a>
<b>GRI 405 : Diversity and equal opportunity 2016</b>		
<b>405-1</b> Diversity of governance bodies and employees	Board of Directors Strength in our Workforce Diversity	<a href="#">SR: 109</a> <a href="#">SR: 88-89</a>
<b>Material Topic: Employee Health, Safety and Wellbeing</b>		
<b>GRI 401 : Employment 2016</b>		
<b>401-2</b> Benefits provided to full-time employees that are not provided to temporary or part-time employees	Employee Benefits	<a href="#">SR: 100</a>
<b>401-3</b> Parental leave	Parental Leave	<a href="#">SR: 100</a>
<b>GRI 403 : Occupational Health and Safety 2018</b>		
<b>403-1</b> Occupational health and safety management system	Employee Health, Safety and Well-being	<a href="#">SR: 100-101</a>
<b>403-6</b> Promotion of worker health	Physical and mental health activities to promote employee health, safety, and well-being	<a href="#">SR: 101</a>

## GRI CONTENT INDEX (CONTINUED)

TOPIC-SPECIFIC DISCLOSURES (CONTINUED)					
GRI Standards Disclosures		Page Reference(s) and Remarks	Page Number	GRI Standards Disclosures	
<b>Chapter: Society</b>					
<b>Other Disclosures</b>					
<b>GRI 413 (2016): Local communities</b>					
<b>413-1</b>	Operations with local community engagement, impact assessments, and development programmes	Community Projects in Singapore	<b>SR: 103-105</b>		
<b>Chapter: Governance</b>					
<b>GRI 3 : Material Topics 2021</b>					
<b>3-3</b>	Management of material topics	Corporate Governance and Ethics Compliance with Laws and Regulations Data Privacy and Cybersecurity Crisis Management	<b>SR: 16, 109-113</b> <b>SR: 16, 112</b> <b>SR: 16, 114</b> <b>SR: 16, 113</b>		
<b>Material Topic: Corporate Governance and Ethics</b>					
<b>GRI 205: Anti-corruption 2016</b>					
<b>205-2</b>	Communication and training about anti-corruption policies and procedures	Anti-Corruption	<b>SR: 111</b>		
<b>205-3</b>	Confirmed incidents of corruption and actions taken	Anti-Corruption	<b>SR: 111</b>		
<b>Material topic: Crisis Management</b>					
<b>GRI 403 : Occupational health and safety 2018</b>					
<b>403-4</b>	Worker participation, consultation, and communication on occupational health and safety	Emergency Preparedness and Response Crisis Management	<b>SR: 67</b> <b>SR: 113</b>		
<b>403-5</b>	Worker training on occupational health and safety	Emergency Preparedness and Response Crisis Management	<b>SR: 67</b> <b>SR: 113</b>		
<b>403-7</b>	Prevention and mitigation of Occupational health and safety impacts directly linked by business relationships	Emergency Preparedness and Response Crisis Management	<b>SR: 67</b> <b>SR: 113</b>		
<b>GRI 415: Public Policy 2016</b>					
<b>415-1</b>	Political Contributions	Political contributions	<b>SR: 110</b>		
GRI Standards Disclosures		Page Reference(s) and Remarks	Page Number	GRI Standards Disclosures	
<b>Material Topic: Data Privacy and Cybersecurity</b>					
<b>GRI 418: Customer Privacy 2016</b>					
<b>418-1</b>	Substantiated complaints concerning breaches of customer privacy and losses of customer data	Data Privacy and Cybersecurity	<b>SR: 114</b>		
<b>Chapter: Suppliers</b>					
<b>GRI 3 : Material Topics 2021</b>					
<b>3-3</b>	Management of material topics	SIA's Supply Chain Integrating Sustainability Managing Supply Chain Risks	<b>SR: 16, 116</b> <b>SR: 16, 117</b> <b>SR: 16, 118</b>		
<b>Material Topic: Sustainable Supply Chain Management</b>					
<b>GRI 308 : Supplier environmental assessment 2016</b>					
<b>308-1</b>	New suppliers that were screened using environmental criteria	<b>Information unavailable/incomplete:</b> SIA is currently working on enhancing its procurement system and processes to gather relevant data to report the % of new suppliers screened for environmental considerations progressively in the upcoming sustainability reports.	-		
<b>GRI 414 : Supplier social assessment 2016</b>					
<b>414-1</b>	New suppliers that were screened using social criteria	<b>Information unavailable/incomplete:</b> SIA is currently working on enhancing its procurement system and processes to gather relevant data to report the % of new suppliers screened for social considerations progressively in the upcoming sustainability reports.	-		

# TCFD CONTENT INDEX

The TCFD Content Index summarises SIA's disclosures reported based on TCFD recommendations, and directs readers to the appropriate references in this sustainability report and other publicly available resources published by SIA. The full recommendations of TCFD are available on the TCFD [website](#).

## References:

**AR:** SIA Annual Report FY2022/23    **SR:** SIA Sustainability Report FY2022/23

TCFD Recommendations	Page Reference(s) and Remarks	Page Number
<b>Governance:</b>		
Disclose organisation's governance around climate-related risks and opportunities	SIA's Sustainability Governance Structure and Composition Taskforce on Climate-related Financial Disclosures SIA Annual Report FY2022/23	<b>SR: 9</b> <b>SR: 51</b> <b>AR: 65-67, 82-83</b>
Describe the Board's oversight of climate-related risks and opportunities	SIA's Sustainability Governance Structure and Composition Taskforce on Climate-related Financial Disclosures SIA Annual Report FY2022/23	<b>SR: 9</b> <b>SR: 51</b> <b>AR: 65-67, 82-83</b>
Describe management's role in assessing and managing climate-related risks and opportunities	SIA's Sustainability Governance Structure and Composition Taskforce on Climate-related Financial Disclosures	<b>SR: 9</b> <b>SR: 51</b>
<b>Strategy:</b>		
Disclose the actual and potential impacts of climate-related risks and opportunities on the organisation's businesses, strategy and financial planning where such information is material	Taskforce on Climate-related Financial Disclosures	<b>SR: 53-54</b>
Describe the climate-related risks and opportunities the organisation has identified over the short, medium and long term	Taskforce on Climate-related Financial Disclosures	<b>SR: 52-54</b>
Describe the impact of climate related risks and opportunities on the organisation's businesses, strategy, and financial planning	Climate Change Resilience and Mitigation Taskforce on Climate-related Financial Disclosures	<b>SR: 26-27</b> <b>SR: 53-54</b>
Describe the resilience of the organisation's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario	Taskforce on Climate-related Financial Disclosures	<b>SR: 52</b>
<b>Risk Management:</b>		
Describe how the organisation identified, assesses, and manages climate-related risks	Taskforce on Climate-related Financial Disclosures Risk Management SIA Annual Report FY2022/23	<b>SR: 52-54</b> <b>SR: 112-113</b> <b>AR: 65-67, 82-83</b>
Describe the organisation's processes for identifying and assessing climate-related risks.	Taskforce on Climate-related Financial Disclosures Risk Management SIA Annual Report FY2022/23	<b>SR: 52-54</b> <b>SR: 113</b> <b>AR: 65-67, 82-83</b>

TCFD Recommendations	Page Reference(s) and Remarks	Page Number
Describe the organisation's processes for managing climate-related risks	Taskforce on Climate-related Financial Disclosures Risk Management SIA Annual Report FY2022/23	<b>SR: 52-54</b> <b>SR: 112-113</b> <b>AR: 65-67, 82-83</b>
Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organisation's overall risk management	Taskforce on Climate-related Financial Disclosures Risk Management SIA Annual Report FY2022/23	<b>SR: 52-54</b> <b>SR: 112-113</b> <b>AR: 65-67, 82-83</b>
<b>Metrics and Targets:</b>		
Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material	Taskforce on Climate-related Financial Disclosures	<b>SR: 55</b>
Disclose the metrics used by the organisation to assess climate-related risks and opportunities in line with its strategy and risk management process	Taskforce on Climate-related Financial Disclosures	<b>SR: 55</b>
Disclose Scope 1, Scope 2, and, if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks	Taskforce on Climate-related Financial Disclosures Performance of SIA's Flight Operations Performance of SIA Buildings and Offices Other Value-Chain Activities	<b>SR: 55</b> <b>SR: 36, 133-137</b> <b>SR: 39, 135-137</b> <b>SR: 40, 136-137</b>
Describe the targets used by the organisation to manage climate related risks and opportunities and performance against targets	Environment Taskforce on Climate-related Financial Disclosures	<b>SR: 25</b> <b>SR: 55</b>



A STAR ALLIANCE MEMBER 

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Our stakeholders' feedback is important to us.  
We welcome feedback on this report and any aspect of our sustainability performance.  
Please address all feedback to the Sustainability Office at [sustainability@singaporeair.com.sg](mailto:sustainability@singaporeair.com.sg)