SINGAPORE
AIRLINES

A STAR ALLIANCE MEMBER

# Sustainability
# Report FY2019/20

# CONTENTS

# MESSAGE BY SINGAPORE AIRLINES CEO `102-14`

The impact of the Covid-19 pandemic has been deep and wide, affecting many countries and industries globally.

At the closing of this report, this crisis continues to have a significant impact on the aviation industry amid the unprecedented global travel restrictions and border closures. As a result, airlines around the world have been pre-occupied with survival and recovery.

However, even during this period of uncertainty, the SIA Group's commitment to sustainability remains strong. We continue to be invested in conducting our businesses responsibly, and integrating sustainability into our operations.

## Commitment in Sustainability

Recognising the importance of sustainability well ahead of our peers, we published our first Environment Report to communicate our environmental initiatives and performance in 2001. In 2013, we released our first Sustainability Report, three years ahead of the mandatory reporting requirements by Singapore Exchange. A year later, we published our report in line with the GRI-G4 reporting guidelines.

SIA has been a signatory to the Ten Principles of the United Nations Global Compact since 2018. This report serves to communicate our efforts to support and uphold these principles, and supplements our Active Level Communication on Progress (COP).

## Mapping Our Sustainability Journey

We have one of the youngest fleets in the world, comprising technologically advanced and fuel-efficient models such as the Airbus A350 and Boeing 787. Investing in new aircraft is the most immediate and effective way for airlines to reduce their carbon emissions, and the SIA Group is a clear leader in this area in the industry.

At the same time, we have also contributed to a greener planet in many other ways, as well as engaged our stakeholders and participated in meaningful community efforts.

A dedicated Sustainability Office was set up in December 2019, looking into all aspects of our operations and coordinating long-term sustainability initiatives across our business units. This office reports to me directly, underscoring our commitment to do more as a Group collectively.

The SIA Board also recognises the importance of sustainability, with the Customer Experience, Technology and Sustainability Committee overseeing the topic. The Board steers the management in ensuring that SIA's long-term value creation is achieved with environmental, social and governance factors as guiding principles at all times. This will ensure that sustainability is an integral part of SIA's operations and will be anchored at every level of the organisation.

## Connecting Lives, Communities and the Future

In this year's report, the theme of Timeless Connections has been chosen to detail our sustainability journey.

Beyond connecting cities and destinations as an airline, we connect lives, communities, as well as the future. These form the three sections in this year's sustainability report, which will cover our seven material topics:

**Connecting Lives**
- Governance
- Employees
- Safety
- Customer-focus

**Connecting Communities**
- Suppliers
- Shareholders

**Connecting the Future**
- Environment

We identified our key contributions to the United Nations Sustainable Development Goals (SDGs) based on our material topics. This is detailed on page 15 of the report. We continue to prioritise three of the 17 goals, which are relevant to our Company's sustainability strategy and long-term targets. These are:

- **Goal 8**: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all
- **Goal 12**: Ensure sustainable consumption and production patterns
- **Goal 13**: Take urgent action to combat climate change and its impact

## Elevating Sustainability Reporting Standards

During the year, we continued to look at how we could improve our sustainability reporting in the areas of transparency and accessibility.

For instance, we have clearly tagged the corresponding GRI Standards relevant to each section, as well as the SDGs that the sections support.

This increases clarity and transparency within the report, elevating our standard of reporting, as well as our efforts to continuously improve in this area.

## The Road Ahead

The Covid-19 crisis has created several headwinds for the aviation industry. Yet, in many ways, it has also generated a strong momentum for change and illuminated the importance of critical environmental, social, and governance factors in the new normal.

Our next Transformation chapter will see the Group taking a fundamental relook at our business. Together with the stakeholders in our sustainability journey – our employees, customers, governments, suppliers, shareholders and communities – we will come out from the crisis stronger.

Please stay safe and well.

With regards,

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

# ABOUT THE REPORT

**This is the eighth Sustainability Report of Singapore Airlines. In 2013, we voluntarily published our first Sustainability Report and, since then, have been committed to disclosing our sustainability information in a transparent and open manner.**

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

## Reporting Framework and Initiatives  `102-12`  `102-54`

### Global Reporting Initiative (GRI)

Our report has been prepared in accordance with the GRI Standards: Core option. The GRI Standards are selected as it represents the global best practice for reporting on an organisation's sustainability impacts.

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

| Tag Example |
| --- |
| *Standard number* |
| **ABB-CC** |
| *Disclosure number* |
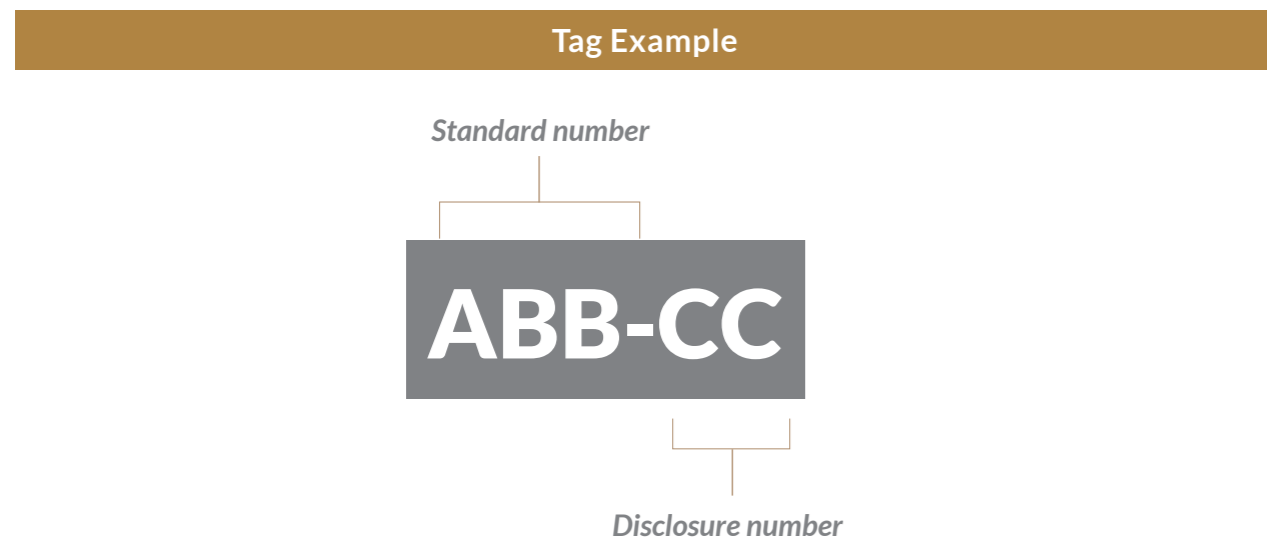
Our GRI Content Index, located on page 134, summarises the GRI Standards selected for reporting. It also directs readers to the appropriate references in this Sustainability Report and other publicly available resources published by SIA.

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

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

### United Nations (UN) Global Compact

SIA is a signatory to the Ten Principles of the UN Global Compact. Our report serves as our Active Level Communication on Progress (COP) which details our actions to embed the Ten Principles into our business strategies and operations. The following indicates the tags that we have used throughout our report whenever a section aligns with a principle:

This is our **Communication on Progress** in implementing the Ten Principles of the **United Nations Global Compact** and supporting broader UN goals.

We welcome feedback on its contents.

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

### UN Sustainable Development Goals (SDGs)

SIA supports the 2030 Agenda for Sustainable Development and the 17 SDGs, with a priority on SDGs `8` `12` `13`. In our report, we mapped our key contributions to the SDGs through the management of our material sustainability topics. The following indicates the icons that we have used throughout our report whenever a section aligns with an SDG:

| Icon | Goal | 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 THE REPORT (CONTINUED)

## Reporting Period  `102-50`  `102-51`  `102-52`

The reporting period covers SIA's financial year 2019/20 (FY2019/20) from 1 April 2019 to 31 March 2020. Data and information from past reporting cycles have been included, where available. Our report is published on an annual basis, with our last report published in June 2019.

## Reporting Scope  `102-2`  `102-45`

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

| Organisation | Description of Services | Coverage in this SR |
|---|---|---|
| Singapore Airlines | Singapore Airlines provides passenger and cargo air transportation, with a focus on the full-service passenger segment serving short to long-haul markets. | 🟢 |
| SilkAir | SilkAir provides passenger air transportation, with a focus on the full-service passenger segment serving regional markets. | 🟢 |
| scoot | Scoot provides passenger air transportation, with a focus on the low-cost passenger segment. | 🟢 |
| SIA Engineering Company | SIAEC is in the business of providing airframe maintenance and overhaul services, line maintenance, technical ground handling servics and fleet management. It also manufactures aircraft cabin equipment, refurbishes aircraft galleys, provides technical and non-technical handling services, as well as repair and overhaul of hydro-mechanical aircraft equipment. | ⚪ |
| Others | Other services provided by the SIA Group, such as the training of pilots, air charters and tour wholesaling, have been aggregated under 'Others'. | 🟢 |

🟢 In Scope   ⚪ Not In Scope

## Reporting Quality  `102-56`

While we have not sought external assurance for our report, we have systems of internal controls in place that are important to assess the quality of data and information reported. Since publishing our first Sustainability Report in 2013, we have been working closely with external consultants to perform an annual gap analysis to continually improve on the quality of the report.

Our report should be read in tandem with the SIA Annual Report FY2019/20 and the SIAEC Sustainability Report FY2019/20 for a more comprehensive overview of the SIA Group's sustainability performance.
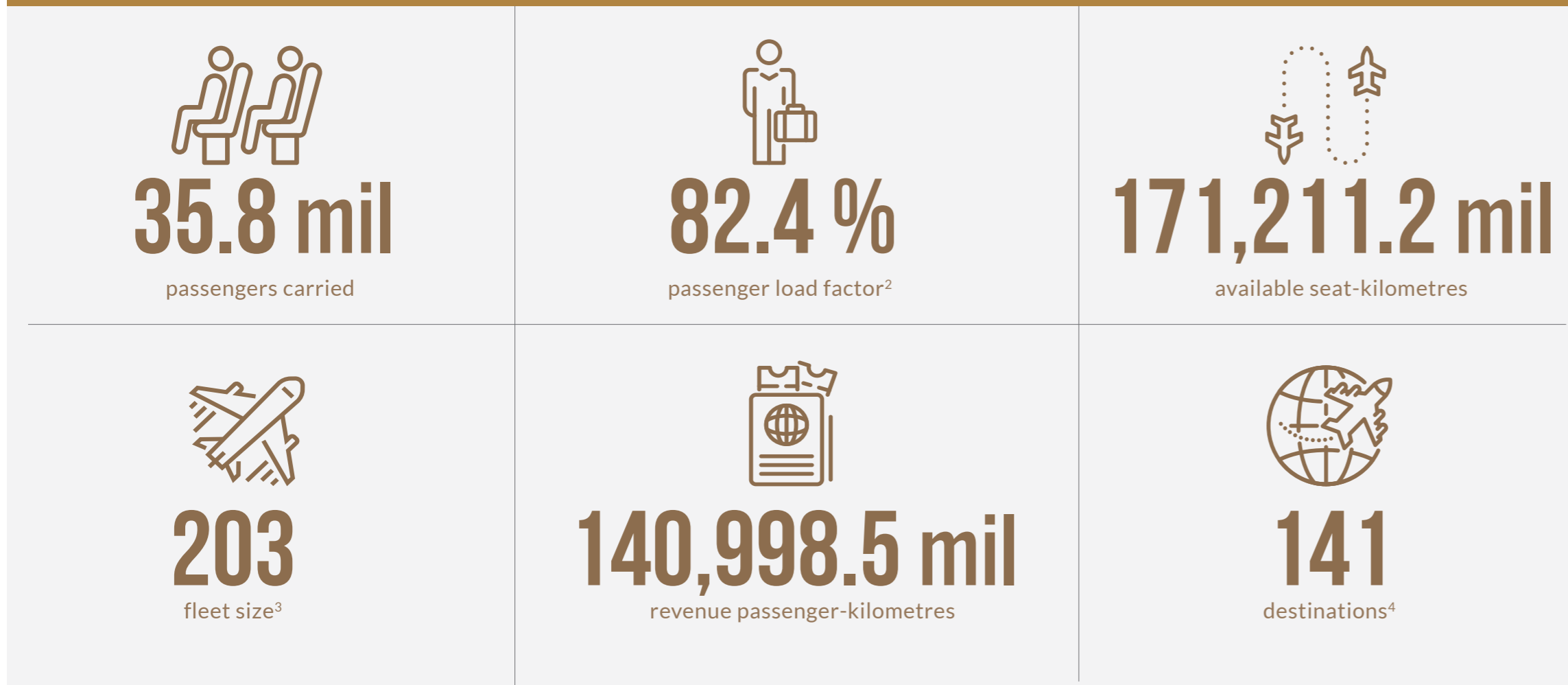
SIAEC Sustainability Report FY2019/20

SIA Annual Report FY2019/20

# ABOUT SINGAPORE AIRLINES

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

Today, we continue to expand our horizons to offer more than just a Great Way to Fly. With our world-famous Singapore Girl as the iconic symbol of quality customer care and service, we strive to push the boundaries of what we can achieve, both on the ground and in the air.

## FY2019/20 Numbers for the SIA Group[1]

| | | |
|---|---|---|
| **35.8 mil** passengers carried | **82.4 %** passenger load factor[2] | **171,211.2 mil** available seat-kilometres |
| **203** fleet size[3] | **140,998.5 mil** revenue passenger-kilometres | **141** destinations[4] |

[1] As at 31 March 2020, including destinations originally scheduled up to end-April 2020. For more information, please refer to the FY2019/20 SIA Annual Report.
[2] Maximum passenger load factor achieved in FY2019/20, not taking into account the impact of the Covid-19 outbreak.
[3] Excludes six Boeing 737 MAX 8 aircraft that are currently not in service, and includes freighter aircraft.
[4] Includes destinations served by both passenger and freighter aircraft, as well as destinations that we used to serve before the Covid-19 outbreak.

## Our Mission Statement

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

## Our Principal Activities `102-2`

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

## Our Core Values `102-16`

**Excellence**          **Care**          **Safety**

**Integrity**          **Customer-focus**          **Teamwork**

## Our Memberships `102-13`

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

# ROUTE NETWORK

`102-2` `102-4` `102-6` `102-7`　As of 31 March 2020, the Singapore Airlines Group's passenger and freighter network covers 141 destinations[5].

## The Americas

| Destination | Airline |
|---|---|
| Anchorage | |
| Dallas / Fort Worth | |
| Houston | |
| Los Angeles | |
| New York (John F. Kennedy) | |
| New York (Newark Liberty) | |
| San Francisco | |
| Seattle | |

## Europe

| Destination | Airline |
|---|---|
| Amsterdam | |
| Athens | |
| Barcelona | |
| Berlin | |
| Brussels | |
| Copenhagen | |
| Dusseldorf | |
| Frankfurt | |
| Istanbul | |
| London | |
| Manchester | |
| Milan | |
| Moscow | |
| Munich | |
| Paris | |
| Rome | |
| Stockholm | |
| Zurich | |

## North Asia

| Destination | Airline |
|---|---|
| Beijing | |
| Busan | |
| Changsha | |
| Chengdu | |
| Chongqing | |
| Fukuoka | |
| Fuzhou | |
| Guangzhou | |
| Haikou | |
| Hangzhou | |
| Harbin | |
| Hong Kong SAR | |
| Jinan | |
| Kaohsiung | |
| Kunming | |
| Macau SAR | |
| Nagoya | |
| Nanchang | |
| Nanjing | |
| Nanning | |
| Ningbo | |
| Osaka | |
| Qingdao | |
| Sapporo | |
| Seoul | |
| Shanghai | |
| Shenyang | |

## North Asia (Continued)

| Destination | Airline |
|---|---|
| Shenzhen | |
| Taipei | |
| Tianjin | |
| Tokyo (Haneda) | |
| Tokyo (Narita) | |
| Wuhan | |
| Wuxi | |
| Xiamen | |
| Xi'an | |
| Zhengzhou | |

## South East Asia

| Destination | Airline |
|---|---|
| Balikpapan | |
| Bandar Seri Begawan | |
| Bandung | |
| Bangkok (Don Mueang) | |
| Bangkok (Suvarnabhumi) | |
| Cebu | |
| Chiang Mai | |
| Clark | |
| Da Nang | |
| Davao | |
| Denpasar | |
| Hanoi | |
| Hat Yai | |
| Ho Chi Minh City | |
| Ipoh | |
| Jakarta | |

## South East Asia (Continued)

| Destination | Airline |
|---|---|
| Koh Samui | |
| Kota Bharu | |
| Kota Kinabalu | |
| Krabi | |
| Kuala Lumpur | |
| Kuantan | |
| Kuching | |
| Langkawi | |
| Lombok | |
| Luang Prabang | |
| Makassar | |
| Manado | |
| Mandalay | |
| Manila | |
| Medan | |
| Palembang | |
| Pekanbaru | |
| Penang | |
| Phnom Penh | |
| Phuket | |
| Semarang | |
| Siem Reap | |
| Singapore | |
| Surabaya | |
| Vientiane | |
| Yangon | |
| Yogyakarta | |

## South West Pacific

| Destination | Airline |
|---|---|
| Adelaide | |
| Auckland | |
| Brisbane | |
| Cairns | |
| Canberra | |
| Christchurch | |
| Darwin | |
| Gold Coast | |
| Melbourne | |
| Perth | |
| Sydney | |
| Wellington | |

## West Asia and Africa

| Destination | Airline |
|---|---|
| Ahmedabad | |
| Amritsar | |
| Bengaluru | |
| Cape Town | |
| Chennai | |
| Coimbatore | |
| Colombo | |
| Dhaka | |
| Dubai | |
| Hyderabad | |
| Jeddah | |
| Johannesburg | |
| Kathmandu | |
| Kochi | |

## West Asia and Africa (Continued)

| Destination | Airline |
|---|---|
| Kolkata | |
| Male | |
| Mumbai | |
| Nairobi | |
| New Delhi | |
| Sharjah | |
| Thiruvananthapuram | |
| Tiruchirappalli | |
| Visakhapatnam | |

[5] Includes destinations served by both passenger and freighter aircraft, as well as destinations that we have temporarily stopped flying to due to the Covid-19 outbreak.

**Singapore Airlines**
**66 destinations**

**SilkAir**
**36 destinations**

**Scoot**
**68 destinations**

**Legend**
Singapore Airlines (Passenger Aircraft)　SilkAir　Scoot　Singapore Airlines (Freighter Aircraft)

# ROUTE NETWORK (CONTINUED)

## Network Changes in FY2019/20  `102-10`

### SINGAPORE AIRLINES

- Launch of non-stop services to Seattle, the fifth US city in SIA's network, in September 2019
- Milan frequency increased from six weekly flights to daily from July 2019
- Copenhagen frequency stepped up from five times weekly to daily from January 2020
- Services to Wellington via Melbourne increased to five times weekly from four times weekly, from January 2020
- Addition of a third daily service to Osaka's Kansai International Airport to meet growing travel demand between Singapore and Japan from April 2019, bringing the total weekly frequency to 21
- Johannesburg frequency increased from daily to 10 times weekly from March 2019
- Stepped up existing Bengaluru daily services to 10 times, due to a partial transfer from Scoot from May 2019
- Took over SilkAir's services to Busan from October 2019
- Announced route joint ventures with Malaysia Airlines in October 2019 and All Nippon Airways in January 2020
- Continued to expand network reach with existing codeshare partners such as Alaska Airlines

### SILKAIR

- Launch of flights between Singapore and Busan in May 2019
- Cairns frequency stepped up from five times weekly to daily from June 2019
- Darwin frequency increased to daily from six times weekly, from July 2019
- Stepped up existing daily Singapore-Danang services to 10 times per week, with further increased frequency to 11 times per week from December 2019
- Increased the frequency of services to Bengaluru, Cebu, Davao, Nepal and Surabaya
- Shenzhen frequency increased from daily to 12 times weekly, as Scoot transferred its services to SilkAir from Scoot from June 2019
- Penang and Phuket each had their frequency stepped up with a sixth daily service
- Increased services to Kochi to twice daily, due to a transfer of services from Scoot in November 2019
- Discontinued the Yangon-Mandalay circular flight. Mandalay services were operated on a seasonal basis between November 2019 and January 2020
- Ceased services to Hiroshima and Kolkata in March 2020
- Ceased services to Luang Prabang and Vientiane in March 2019 and transferred these routes to Scoot to begin operations in April 2019

### scoot

- Commenced flights to four cities in China – Changsha, Fuzhou, Kunming and Wuhan
- Launched flights to three cities in India – Coimbatore, Trivandrum and Visakhapatnam
- Launched flights to Kota Bharu, Kota Kinabalu, Luang Prabang and Vientiane, and took on additional frequencies to Chiang Mai from SilkAir

In early 2020, the global spread of Covid-19 resulted in dampened travel sentiment and border restrictions implemented across the world. Due to the outbreak, the SIA Group reduced its capacity for Mainland China routes from January 2020. The growing scale of the virus led SIA and SilkAir to further cut capacity to other regions, reducing network capacity by 50 per cent in mid-March 2020[6] and eventually announcing that the scheduled passenger capacity from April to June 2020 would be cut by 96 per cent.

[6] For flights originally scheduled up to end-April 2020.

# FLEET INFORMATION[7]   `102-2`  `102-7`

## Singapore Airlines Group Fleet

Our 203-aircraft[8] strong fleet is one of the most modern and fuel-efficient fleets in the world.

### Singapore Airlines (Freighter Aircraft)

**AVERAGE FLEET AGE**

**16** years **4** months | **7** in fleet **0** on order

**BOEING 747-400 FREIGHTER**

**7** in fleet

### Singapore Airlines (Passenger Aircraft)

**AVERAGE FLEET AGE**

**5** years **5** months | **122** in fleet **68** on order

**AIRBUS A330-300**

**8** in fleet

**AIRBUS A350-900**

**48** in fleet **19** on order

**AIRBUS A380-800**

**19** in fleet

**BOEING 777-300/300ER**

**32** in fleet

**BOEING 777-9**

**20** on order

**BOEING 787-10**

**15** in fleet **29** on order

### SilkAir

**AVERAGE FLEET AGE**

**6** years **2** months | **25**[9] in fleet **31** on order

**AIRBUS A319**

**2** in fleet

**AIRBUS A320**

**6** in fleet

**BOEING 737 MAX 8**

**6** in fleet **31** on order
(not in service)

**BOEING 737-800**

**17** in fleet

### Scoot

**AVERAGE FLEET AGE**

**5** years **8** months | **49** in fleet **51** on order

**AIRBUS A320**

**26** in fleet

**AIRBUS A320NEO**

**3** in fleet **30** on order

**AIRBUS A321NEO**

**16** on order

**BOEING 787-8**

**10** in fleet **3** on order
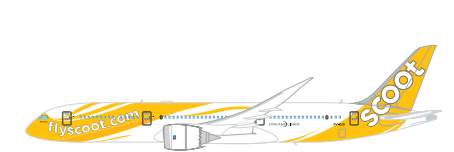
**BOEING 787-9**

**10** in fleet **2** on order
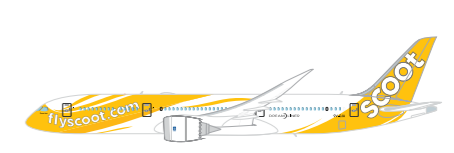
[7] Information is correct as at 31 March 2020.
[8] Our operating fleet includes aircraft that were withdrawn from service for temporary storage due to significant capacity cuts arising from the Covid-19 outbreak.
[9] Excludes six Boeing 737 MAX 8 aircraft that are currently not in service.

*Singapore Airlines aircraft images courtesy of YuccaStudio*

# SUSTAINABILITY JOURNEY

**1992**
SIA sets up the Environment Unit under the Safety and Security department, and issues its first Environmental Statement.

**1993**
SIA pledges support to the Singapore Business Charter for Sustainable Development, demonstrating our commitment to protecting the environment.

**1996**
SIA conducts environmental awareness training for 4,000 employees, over a 10-month period.

**2000**
SIA initiates the Corporate Occupational Safety, Health and Environment (OSHE) Management System to track environment performance data for management dashboard and sustainability reporting.

**2001**
SIA publishes its first Environment Report FY2000/01 to communicate environmental initiatives and performance.

**2002**
SIA is one of the five airlines selected, and the only company from Singapore, to be included in the Dow Jones Sustainability World Indexes (DJSI World).

SIA's Environment Report FY2001/02 wins the inaugural Singapore Environmental Reporting Award in 2002.

**2005**
The SIA Environment Report FY2004/05 wins the Runner Up Best Environmental Report in the Association of Chartered Certified Accountants (ACCA) Singapore Environmental & Social Reporting Awards 2005.

**2008**
SIA Cargo is voted as the 'Best Green Service Provider Airline' by readers of Cargo News Asia – a leading shipping, supply chain and cargo transport newspaper.

**2009**
SIA supports IATA's three climate goals and Four-Pillar Strategy. The goals and strategy aim to reduce carbon emissions and decarbonise the aviation sector collectively.

The SIA Training Centre wins the 10th ASEAN Energy Efficient Building Award in the Retrofitted Building Category. The building retrofit initiatives achieved a total energy savings of 2.47 Gwh or 18.8 per cent in FY2008/09 compared to the previous year.

**2010**
SIA commits to rainforest preservation by supporting the Harapan Rainforest Initiative as the exclusive airline partner. This large-scale green project aims to restore ecosystems threatened by deforestation and the conservation of a rainforest.

**2015**
SIA organises a series of community events to commemorate Singapore's Golden Jubilee, including an Airbus A380 Charity Flight for more than 300 beneficiaries from the Community Chest of Singapore.
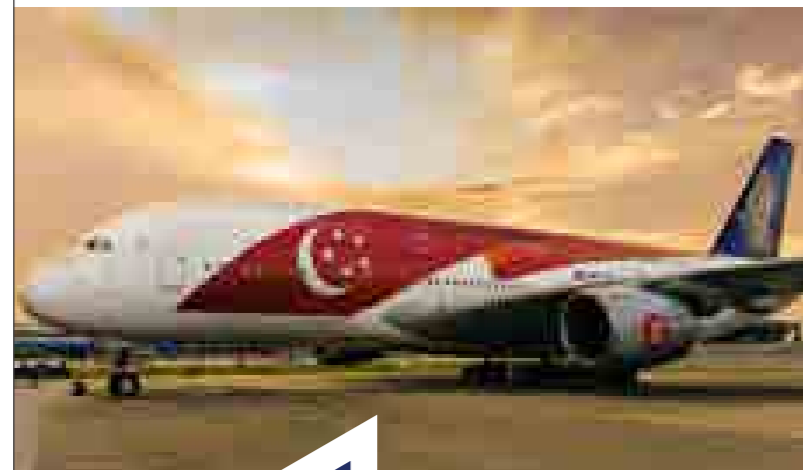
**2013**
SIA publishes its first Sustainability Report in FY2012/13, ahead of SGX introducing sustainability reporting on a "comply or explain" basis in June 2016. A year later, SIA published its report in line with the GRI-G4 reporting guidelines.

**2012**
SIA implements the Suppliers' Code of Conduct to promote sustainable development. It is prepared in line with the Ten Principles of the UN Global Compact around human rights, labour, environment and anti-corruption.

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

**2011**
SIA takes another step towards greener skies by joining the Sustainable Aviation Fuel Users Group (SAFUG), which focuses on accelerating the development and commercialisation of sustainable aviation fuel.

**2010**
SIA successfully completes the world's first multi-sector demonstration green flight under the Asia and Pacific Initiative to Reduce Emissions (ASPIRE) programme, which aims to promote environmental stewardship in the region. SQ11, which operates from Los Angeles to Singapore via Tokyo, achieves fuel savings of more than 10 tonnes and a reduction in carbon emissions of more than 33 tonnes.

**2016**
SGX recognises SIA as a frontrunner in environmental, social and governance standards by including SIA in the new SGX Sustainability Leaders Index.

SIA takes delivery of its first Airbus A350-900, which is one of the most fuel-efficient aircraft in its fleet.

**2017**
In partnership with the Civil Aviation Authority of Singapore, SIA operates a series of 12 green package flights over a three-month period from May on its non-stop San Francisco-Singapore route. It highlights SIA's commitment to sustainable growth and to the reduction of international aviation emissions.

SIA introduces a '*From Farm to Plane*' concept to promote environmental sustainability and support local farmers' communities. Singapore Airlines intends to use more sustainable and meatless ingredients, as well as local produce, in its in-flight meals.

SIA signs the United for Wildlife Transport Taskforce Buckingham Palace Declaration in support of efforts to prevent illegal trafficking and transportation of wildlife and their products.

**2018**
SIA aims to be entirely plastic straw-free on board our flights by September 2019, replacing them with environmentally-friendly paper straws.

SIA takes a Climate Action Pledge to declare our readiness to fight climate change alongside like-minded organisations and members of the public. SIA launches an inaugural Environment Roadshow, in line with the Singapore government's designation of 2018 as the Year of Climate Action.

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

**2019**
SIA unveils its new digital innovation lab, KrisLab, as part of the SIA Group's significant investment programme to become the world's leading digital airline. KrisLab seeks to support Singapore's open innovation ecosystem to develop digital ideas and solutions through collaboration with start-ups, small- and medium-sized enterprises, as well as industry partners.

SIA transforms its staff canteen to be an eco-friendly canteen by eliminating styrofoam and installing an eco-digester to convert food waste and canteen waste into refuse derived fuel.

SIA sets up the Sustainability Office to enhance its sustainability strategy and framework, and drive sustainability initiatives across the SIA Group.

# SUSTAINABILITY HIGHLIGHTS

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

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

**0**
cases of recordable work-related ill health for employees and key contractors

**228,317 TJ**
of energy consumed for all SIA operations

**16.3 mil tonnes $CO_2e$**
total Scope 1 and 2 GHG emissions

**120 kWh/m²**
electricity intensity for SIA buildings and offices in Singapore

**1,455 tonnes**
of waste generated at SIA buildings in Singapore

**0.7 tonnes**
estimated staff canteen waste recycled onsite by eco-digester daily

**77 tonnes**
of waste recycled at SIA buildings in Singapore

**171,042 m³**
total water withdrawal for SIA buildings and offices in Singapore

**Most Attractive Employer in Singapore**
awarded to Singapore Airlines in 2019 by Randstad

**28,160**
total employees in the SIA Group

**S$43.5 mil**
investment in learning and development of employees

**12%**
overall new hire rate of SIA employees

**11.13 LTK/AG**
overall fuel productivity for fleet

**63,803 tonnes $CO_2e$**
total estimated GHG emissions saved as a result of our fuel reduction and efficiency measures across our fleet

**388 tonnes**
of waste recycled from our flights

**100%**
of our fleet meets the 2004 ICAO CAEP/6 or the stricter CAEP/8 emissions standards for NOx

**↓ 19%**
decrease in our average delayed or lost baggage rate

**>150**
publications available for download through the e-Library of our SingaporeAir mobile app

**>500**
brands available on revamped KrisShop, with over 20 dedicated online shopfronts

**0**
substantiated complaints concerning breaches of customer privacy

**98,555 hectares**
of lowland tropical forest covered by the ecosystem restoration concession under the Harapan Rainforest Initiative

**2,787 trees**
replanted under the Harapan Rainforest Initiative, with 260 hectares of forest restored

9

# OUR RESPONSE TO COVID-19  `102-10`

*Information accurate as of 30 June 2020.*

We will weather these turbulent times with you. When the storm clears, we will be ready to welcome you back on board and deliver the exceptional SIA experience that you expect and are familiar with.

Responding to the impact of the Covid-19 outbreak has been our focus since the start of 2020. Despite the uncertainty, we are staying grounded to our roots, our values and vision for all our stakeholders. We see this as an opportunity to take a step back and look at the bigger picture of what sustainable development means to us. In April 2020, we set up an internal task force to spearhead plans on how we can do more for our stakeholders and forge stronger, resilient relationships post-Covid-19. More than ever, we recognise that our stakeholders are a part of our shared journey.

## Employees

The health and safety of our employees and our relationships with them matter deeply to us. We desire to work with them to establish mutually-reinforcing support systems that can ensure our long-term sustainability.

We are using this time to equip our employees with new skills and knowledge that will be required in the future economy. They are also provided with opportunities to give back to the community or try out new experiences such as being a Care or Transport Ambassador.

**Dedicated Employee Support Portal**
One-stop platform for communication with employees on Covid-19-related matters

**Enhanced Health and Safety Measures**
Personal protective equipment (PPE), temperature screening and declaration, enhanced cleaning and disinfection, facility closures, social distancing, work from home

**Prudent Cost-cutting Initiatives to Protect Jobs**
Cuts in Board of Director fees and Management salaries, voluntary and compulsory no-pay leave schemes, hiring freeze

**Job Support Programme**
Alternative employment opportunities, additional earning and new experiences. These include our Care Ambassador and Transport Ambassador Programmes

**Financial Support**
Financial assistance schemes through banks and government agencies
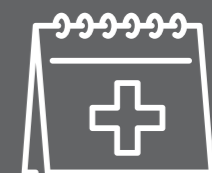
**Upskill and Enrich Employees**
Shorter work months with learning and volunteering opportunities

*For more details on our Covid-19 response for our employees, please refer to page 46 of this report.*
*For more details on our Covid-19 response on our health and safety measures, please refer to pages 59 to 60 of this report.*

# OUR RESPONSE TO COVID-19 (CONTINUED)



## Customers

Our top priority is the health and safety of our customers. We introduced a slew of health and safety measures and continue to make adjustments to our operations based on the evolving situation.

We understand the level of stress and anxiety that our customers are going through and do not take their support for granted. We remain connected with them and keep them updated on how best we can flexibly support them on their travel plans.

**Dedicated Covid-19 Information Centre**
One-stop platform for communications with customers

**Covid-19 Assistance Request Form**
Service automation for greater efficiency

**Bolstered Customer Service and Handling Capacity**
More than 460 employees volunteered to handle the surge in customer enquiries at our call centres, service centre and social media

**Enhanced Health and Safety Measures**
Complimentary Care Kit, temperature screening and declaration, enhanced cleaning and disinfection

**Adjustments to In-flight Service**
Limited onboard interactions, changes in service and meal offerings to minimise contact

**Global Travel Waiver Policy**
Full refunds, bonus flight credits, flexibility to rebook

**PPS and KrisFlyer Members' Recognition**
Membership extension, proactive tier upgrades, extension of various rewards and benefits

*For more details on our Covid-19 response for our customers, please refer to page 72 of this report.*

## Governments

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

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

**Flights with Special Approval**
Flying Singaporeans and permanent residents home, and foreign nationals back to theirs

**Partnering with CAAS, CAG and MINDEF**
Parking of aircraft while ensuring they are appropriately maintained during this period of depressed demand and activity

**Maintaining Airfreight Supply Lines for Essential Goods**
Medical supplies, PPE, phamaceuticals and fresh food

**Government Support**
Wage support through Jobs Support Scheme, cost reliefs for rents, rebates on landing and parking charges

# OUR RESPONSE TO COVID-19 (CONTINUED)

## Suppliers and Partners

The Covid-19 outbreak has had an unprecedented impact on the global supply chain and is the greatest challenge in aviation history. We strive to maintain collaborative relationships with our suppliers and business partners to respond swiftly to our shared challenges.

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

### Cargo-only Passenger flights
Regulatory approval for in-house loading and strapping procedures to carry cargo in the cabins of passenger aircraft

### Working With Our Aircraft Manufacturers
Ongoing discussions to negotiate adjustment to delivery streams for existing aircraft orders

### Anticipating Potential Supply Chain Disruptions
Working closely with SATS Ltd and other suppliers and partners to monitor the evolving situation

*For more details on our Covid-19 response for our suppliers and partners, please refer to page 85 of this report.*

## Shareholders

Our shareholders are important to us. We continue to engage them, address their concerns and provide timely disclosures. Decisive steps are being taken to keep our strategic priorities intact.

We have also commenced on an agile plan to restart our operations, which will enable us to capitalise on opportunities in the current situation. The way we collectively respond to this crisis will greatly shape our long-term sustainability and boost our capability for sustainable value creation.

### Ongoing Engagement and Transparent Disclosures
Address key queries in a timely and accountable manner

### Managing Liquidity and Cash Requirements
Tapping on lines of credit maintained for contingency situations, exploring other sources of funding

### Raising Capital Through the Issuance of Rights Shares and Rights Mandatory Convertible Bonds
To address near-term liquidity requirements and build financial resilience

### Getting Ready to Restart Our Operations
Task force to plan and coordinate our new Transformation chapter

*For more details on our Covid-19 response for our shareholders, please refer to page 90 of this report.*

## Communities

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

We are proud that many of our employees have epitomised the SIA spirit by volunteering as frontline ambassadors in the fight against Covid-19 in Singapore, by taking up important roles in the healthcare, transport and social service sectors.

### Volunteering and Redeployment of Cabin Crew for Community Support
Care Ambassadors, Transport Ambassadors, and other social services

### Medical, Food and Humanitarian Support
Specially mounted flights for uplift of essential goods to and from key destinations

### Supporting Singapore's Community Care Facilities for Covid-19 patients
Donations of amenity items such as blankets, eye shades and ear plugs

*For more details on our Covid-19 response for our communities, please refer to page 45 of this report.*
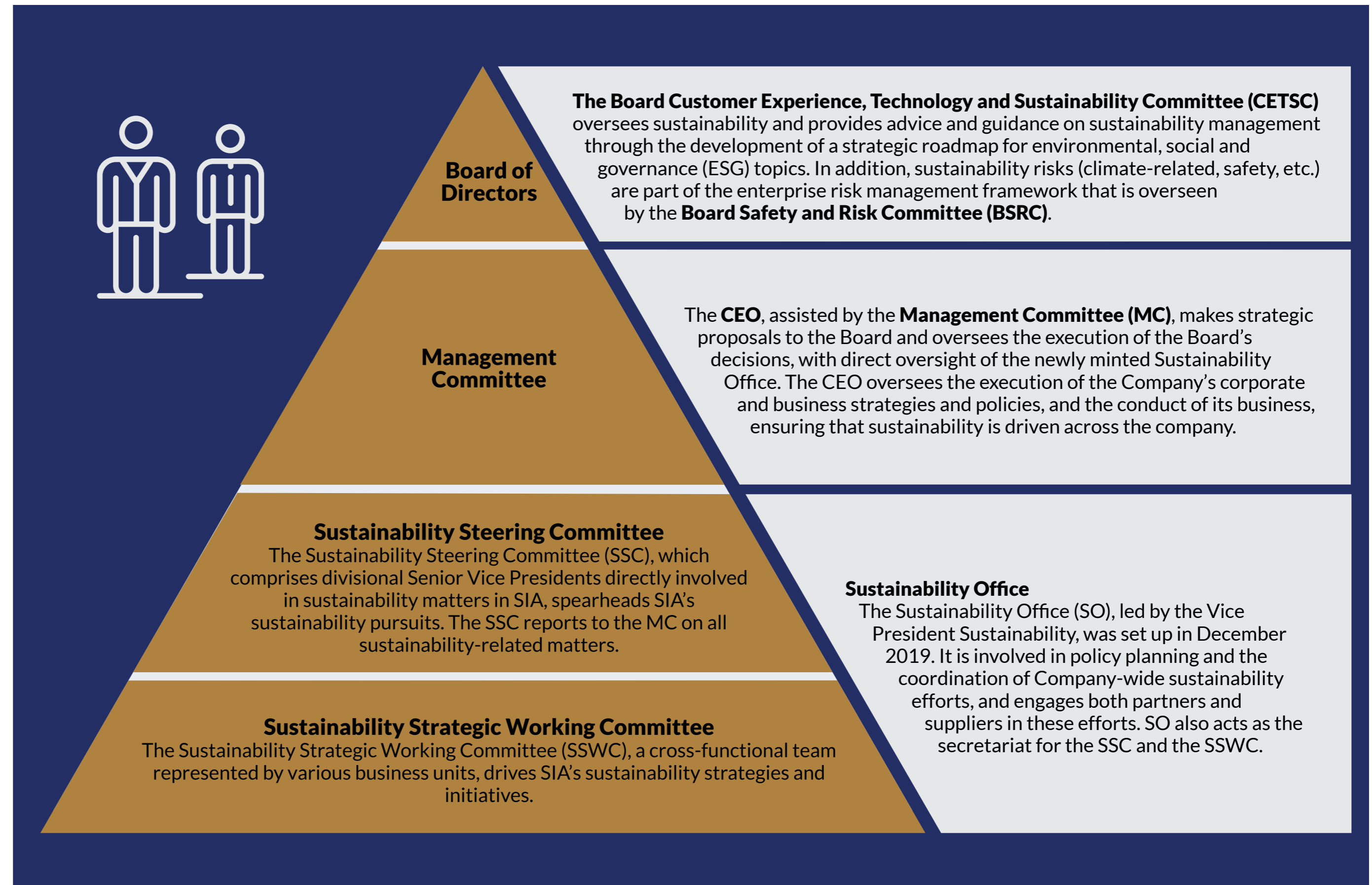
# SUSTAINABILITY GOVERNANCE

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

We have a long-standing commitment in the continual integration of sustainability into every aspect of our business.

To achieve our sustainability goals, clear lines of accountability are of paramount importance and enable us to strengthen our decision-making.

**Board Statement**

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

**Board of Directors**

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

**Management Committee**

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

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

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

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

# MATERIALITY   `102-42`   `102-46`

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

Our activities and relationships with other entities across our value chain will impact our stakeholders and the environment. In 2013, we conducted our inaugural Materiality Assessment to assess our significant sustainability impacts, and considered the concerns and expectations of our key stakeholders. In scoping the coverage of our Materiality Assessment, we focused on our operations in Singapore. We strive to progressively expand the boundaries to include the operations of our subsidiaries, so as to reflect a more holistic picture of the Group's sustainability risks and opportunities.

Our material sustainability topics were last reviewed in 2017 for its continued relevance and were endorsed by SIA's Management Committee and the Board. The seven material sustainability topics are summarised in the following section.

# SUSTAINABILITY STRATEGY   `102-15`

## Our sustainability strategy empowers us to contribute as a responsible corporate citizen.

Since 2013, our sustainability strategy has provided us with a guiding framework to continually strive to fulfil our mission and vision of sustainability stewardship through four key thrusts — Managing Environmental Impact; Safety; Stakeholder Engagement; and Supporting Our Communities. We recognise that our sustainability risks and opportunities are continuously evolving. In FY2019/20, we embarked on a journey to renew our sustainability strategy, the details of which will be unveiled at a later stage.

*Image courtesy of BirdLife International*

# SUSTAINABILITY AMBITIONS  102-12  102-44  102-47

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

| Material Topic | Ambition | Supporting the SDGs Through the Management of our Material Topics |
|---|---|---|
| Governance | We seek to maintain high standards of corporate governance, professionalism, integrity and commitment at all levels, underpinned by strong internal controls and risk management systems. | |
| Employees | We value our employees and care for their well-being and development. | |
| Safety | We strive to improve our safety practices, as well as inculcate a strong and positive safety culture within the organisation. | |
| Customer-focus | We endeavour to offer customers the best travel experience through service excellence and proactive customer engagement. | |
| Suppliers | We treat suppliers with respect, emphasise fairness in our relationships, and work towards sustainable business practices. | |
| Shareholders | We seek to maximise returns for long-term profitability, with the aim of creating sustainable shareholder value. | |
| Environment | We remain committed to environmental sustainability and for our operations to be carried out responsibly in support of industry goals. | |

# TIMELESS CONNECTIONS

We have come a long way from our humble beginnings
And built a brand recognised the world over for its timeless quality
As we grow, we asked ourselves what it will take to remain timeless
We realise it must begin with sustaining our precious connections
With people, with the world, with nature
These connections chart a course towards sustainable development
Empowering us to navigate headwinds
And remain true to the reasons for our existence

## CONNECTING LIVES

The lives of our employees, our customers and their loved ones
Making our workplace and every flight a home away from home
Where they can rest knowing we are doing all we can to make it safe
We build and sustain our connections with people
Because we believe our journey with them never ends

## CONNECTING COMMUNITIES

Forging meaningful, stronger relationships with our stakeholders
From the investing community to our partners, aviation communities and those we serve
Where we weave Singapore's social fabric with a global shared heritage
We sustain our connections with the world
Because we believe in flying the extra mile, with a higher purpose

## CONNECTING THE FUTURE

Implementing solutions to reduce our environmental footprint
Doing all we can to future-proof the wonders of travel
For the adventurers of tomorrow and generations to come
We sustain our connections with nature
Because we believe in conserving our planet and the destinations we serve

# CONNECTING LIVES

*The lives of our employees, our customers and their loved ones*
*Making our workplace and every flight a home away from home*
*Where they can rest knowing we are doing all we can to make it safe*
*We build and sustain our connections with people*
*Because we believe our journey with them never ends*

# GOVERNANCE 103-1 103-2 103-3

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

**LEADERSHIP**  **RISK MANAGEMENT**  **VALUES AND PRINCIPLES**  **COMPLIANCE**

## OUR MANAGEMENT APPROACH

### Key Engagement Activities

| Engagement Mode | Frequency |
|---|---|
| Audits and Assessments | Regular |
| Board Meetings | Quarterly/Ad hoc |
| Crisis Management Exercises | Yearly |
| Employee Portals | Regular |
| External, Statutory and Regulatory Communications | Regular |
| Meetings (Briefings, Dialogues, Forums, Townhalls, etc.) | Regular |
| Orientation Programmes | Regular |
| Publications (Bulletins, Circulars, Magazines, Newsletters, Notices, etc.) | Regular |
| Strategy Sessions | Regular |
| Training Programmes (Anti-corruption, etc.) | Regular |
| Whistleblowing Channel | Available for reporting |

### Key Policies, Processes and Procedures[10]

- Anti-Corruption/Anti-Bribery Policy and Procedures
- Anti-Modern Slavery and Human Trafficking Statement
- Conflict of Interest Policy
- Risk Management Framework
- Staff Regulations
- Suppliers' Code of Conduct
- Whistleblowing Policy

### SIA's Ambition

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

| Target | Due | Status |
|---|---|---|
| At least 95% of our employees[11] to complete the anti-corruption web-based training by the due date | Every year | Achieved |

### Supporting the SDGs
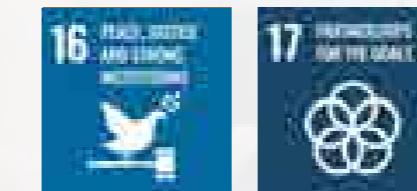
### FY2019/20 in Numbers

**95.8%**
of employees completed the anti-corruption training

**0**
incidents of corruption involving employees or business partners

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

[10] Please refer to pages 66 to 86 of the FY2019/20 SIA Annual Report.
[11] Our target excludes line pilots and cabin crew, as they do not need to enter into transactions on behalf of the Company in the ordinary course of their work.

# LEADERSHIP

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

## Board of Directors `102–22` `102–23` `102–25` `102–26`

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

Our Directors come from diverse backgrounds bringing strong and varied expertise across the fields of business, finance, legal, management and marketing.

| Name of Director | Position Held | Nature of Appointment | Date of Appointment | Date of Last Re-election as Director |
|---|---|---|---|---|
| Mr Peter Seah Lim Huat | Chairman | Non-executive / Independent | 1 September 2015 | 29 July 2019 |
| Mr Goh Choon Phong | Director | Executive / Non-independent | 1 October 2010 | 27 July 2018 |
| Mr Gautam Banerjee | Director | Non-executive / Independent | 1 January 2013 | 27 July 2018 |
| Mr Simon Cheong Sae Peng | Director | Non-executive / Independent | 1 June 2017 | 28 July 2017 |
| Mr Dominic Ho Chiu Fai | Director | Non-executive / Independent | 1 May 2017 | 29 July 2019 |
| Mr Hsieh Tsun-yan | Director | Non-executive / Independent | 1 September 2012 | 27 July 2018 |
| Mr Lee Kim Shin | Director | Non-executive / Independent | 1 September 2016 | 29 July 2019 |
| Mr David John Gledhill | Director | Non-executive / Independent | 1 September 2018 | 29 July 2019 |
| Ms Goh Swee Chen | Director | Non-executive / Independent | 1 January 2019 | 29 July 2019 |

Further information on our Board of Directors, including their qualifications, current directorships in other listed companies and other principal commitments are available on pages 87 to 91 of the FY2019/20 SIA Annual Report.

There is a strong independent element in the Board. Eight out of nine Directors are independent from management and our substantial shareholder, Temasek Holdings (Private) Limited (Temasek). Our sole non-independent Director is Mr Goh Choon Phong, who is the CEO of the Company. There is an appropriate division of responsibilities between the Chairman and the CEO, which ensures a balance of power and authority within the Company.

## Board Committees `102–18`

Six board committees assist the Board in the execution of its responsibilities. Each committee has written terms of reference and operating procedures as set out in their respective charters, which are reviewed periodically. A brief summary of their key functions are as follows:

### Board Executive Committee (ExCo)

- Oversees execution by Management on the overall strategic direction, policies and guidelines set by the Board
- Reviews and recommends annual operating and capital budgets

### Board Audit Committee (AC)

- Oversees financial matters such as reporting, audits, risk management, interested persons transactions and whistleblowing

### Board Compensation and Industrial Relations Committee (BCIRC)

- Reviews and recommends the general framework of remuneration for the Board and relevant key Management personnel

### Board Safety and Risk Committee (BSRC)

- Oversees the regulatory compliance of systems and programmes
- Reviews safety performance and matters
- Oversees Risk Governance Framework and Risk Management System

### Board Nominating Committee (NC)

- Reviews and recommends appointment and re-election of Directors
- Determines independence of Directors

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

- Provides advice and guidance on sustainability matters through the development of a strategic roadmap for environmental, social and governance factors
- Provides guidance on matters related to customer experience and digital innovation

Further information on the Board Committees' work, membership and meeting attendance are available on pages 66 to 86 of the FY2019/20 SIA Annual Report.

# LEADERSHIP (CONTINUED)



## Appointment and Re-election of Directors  `102-24`

The size and composition of the Board are reviewed from time to time, taking into account the scope and nature of our operations to ensure that the Board continues to have diverse views for effective decision making. Under its charter, the Board Nominating Committee's (NC) responsibilities include making recommendations to the Board concerning the appointment and re-election of Directors, and determining the independence of the Directors. The NC's recommendations are based on a review of the range of expertise, skills and attributes of current Board members and the needs of the Board. The committee takes into account our future business direction, the tenure of service, contribution and commitment of each Board member. Board rejuvenation is a guiding principle in determining the need for new appointees to the Board.

With regard to the selection of new Directors, the NC evaluates the balance of skills, knowledge and experience on the Board. It also determines the role and desirable competencies for a particular appointment to enhance the existing Board composition. At least one member of the NC meets with the short-listed Board candidates to assess their suitability and availability. The NC then makes recommendations to the Board for approval.

Newly appointed Directors serve an initial term of three years, after which they may be considered for nomination for re-election for additional terms. Their nominations are subject to the recommendations of the NC.

Our Constitution provides that at each Annual General Meeting (AGM), one-third of the Directors for the time being[12] are required to retire from office and are eligible for re-election. Retiring Directors are selected on the basis of those who have been longest in office since their last re-election, failing which they shall be selected by agreement. The CEO is also subject to retirement and re-election in accordance with the Constitution of the Company. New Directors appointed in the year are subject to retirement and re-election by shareholders at the next AGM after their appointment. All new appointments and re-elections require the approval of the Special Member, the Minister for Finance.

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[12] Or, if their number is not three or a multiple of three, then the number nearest to but not less than one-third.

# COMMUNICATING WITH OUR STAKEHOLDERS

We value our relationship with our stakeholders and remain committed to strengthening trust with the investing community. SIA ensures that pertinent and price-sensitive information such as financial results are shared in a timely manner to create a transparent process for disclosures. We publish such information on various communications platforms. These include press releases posted on our website, as well as disclosures on Singapore Exchange Ltd (SGXNet).

Quarterly results announcements, news releases, presentation slides, monthly operating statistics, annual reports, sustainability reports and other key facts and figures about the Company are also shared with the investing community.

We hold analyst and media briefings to announce the half-yearly and full-year results. A physical media and analyst briefing was organised after the release of our half year (1H FY2019/20) results. A full transcript of the proceedings was made available on SGXNet and the SIA **website** on the next working day. Following the announcement of our full-year results, we organised an analyst and media conference call due to physical meeting restrictions imposed during the Covid-19 outbreak. The audio recording of the conference call was uploaded on the SIA website the next day, followed by the transcript of the question and answer segment, which was subsequently posted on SGXNet and the SIA **website**.

The Investor Relations department also meets analysts and investors on a regular basis through investor conferences, roadshows, post-results luncheons, as well as ad hoc meetings and teleconferences. A dedicated investor relations email address **(investor_relations@singaporeair.com.sg)** and hotline (+65 6541 4885) are maintained for the investing community  to reach out to the Company for queries.
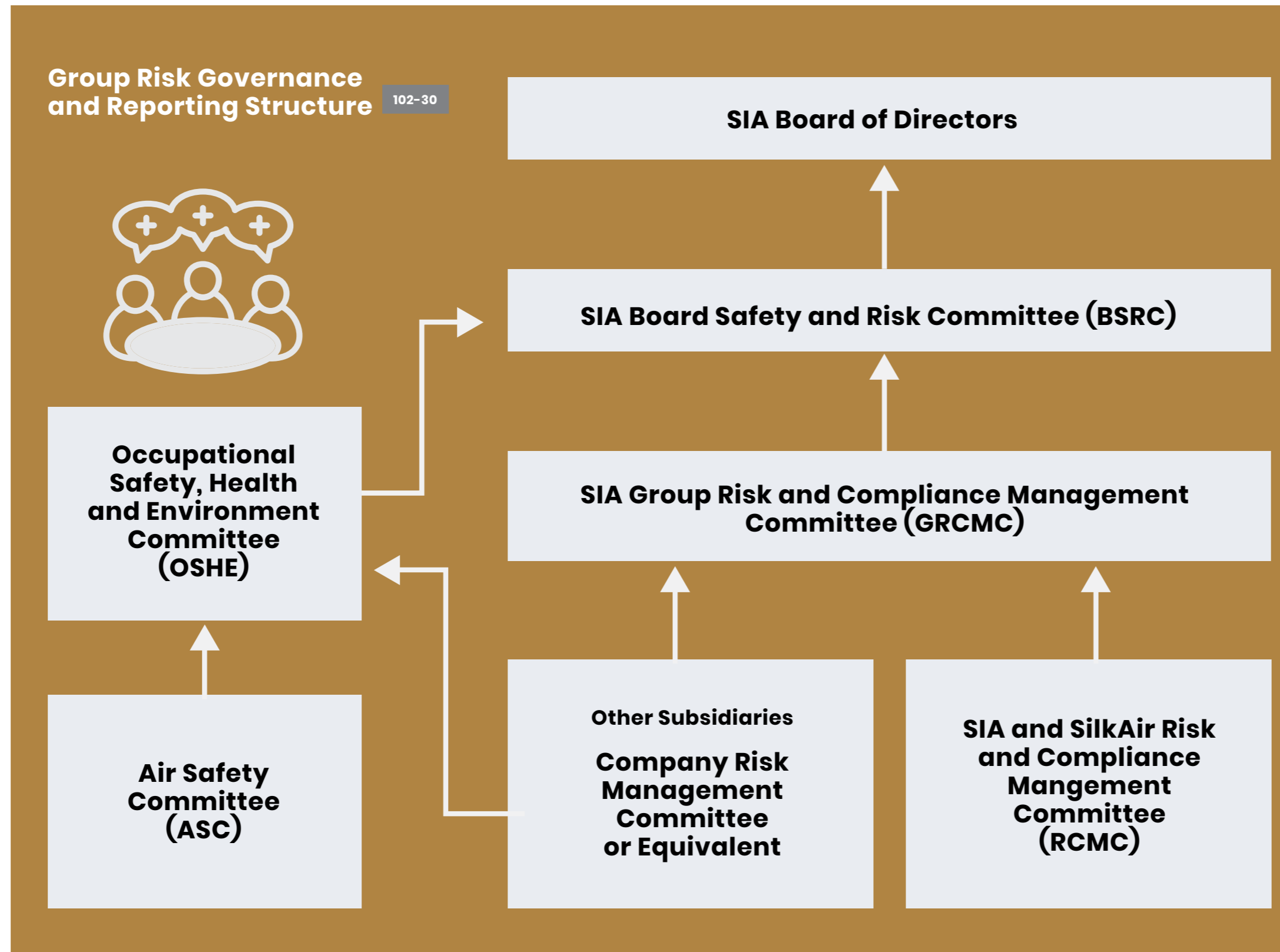
# RISK MANAGEMENT

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

Every business opportunity includes risks that could jeopardise a company's finances. As a publicly listed company, we need to manage our finances and assets responsibly, while protecting the interests of our shareholders.

With this in mind, SIA formalised the Risk Management Framework, which encompasses a governance and reporting structure, risk assessment process, as well as a set of risk management principles, policies and guidelines. These help to ensure that we have a sound system in place to manage risks, where controls are implemented and reviewed regularly so that relevant risks are managed efficiently and effectively.

**Group Risk Governance and Reporting Structure** `102–30`

**SIA Board of Directors**

**SIA Board Safety and Risk Committee (BSRC)**

**SIA Group Risk and Compliance Management Committee (GRCMC)**

**Occupational Safety, Health and Environment Committee (OSHE)**

**Air Safety Committee (ASC)**

Other Subsidiaries
**Company Risk Management Committee or Equivalent**

**SIA and SilkAir Risk and Compliance Mangement Committee (RCMC)**

### Board of Directors

SIA's Board of Directors reviews and discusses the strategic risks and other key risks of the Group annually.

### Board Committees

The Board's oversight is supported by the BSRC and other Board Committees. They review and ensure that top risks are managed appropriately. The BSRC oversees the management's implementation of the Risk Management Framework and assesses effectiveness through regular reviews.

### Risk Management Committees

The GRCMC and various Risk Management Committees or their equivalent drive the implementation of the Risk Management Framework, through detailed reviews of risks and corresponding controls. This helps to ensure that key risks are identified, managed and surfaced to the Board Committee.

### Risk Management Department

A dedicated Risk Management department provides support to the Risk Committees and business units. This helps to ensure that risks are surfaced by business units from the bottom-up to the top-down perspectives provided by the Management and Risk Committees.

We want to instil a culture of risk-awareness in the organisation, where risks are managed proactively at all levels. To achieve this, our Risk Management (RM) department dedicates resources to reach out to all levels of employees through targeted communications and engagement activities. Continual training is another key element to equip our employees with the relevant knowledge and the right mindset to manage risks. RM department developed an interactive web-based training module, which is mandatory for all employees to complete once every two years, to complement the theoretical training for employees.

Business Continuity Plans are also tested regularly and independently verified to assess employees' readiness in responding to disruption scenarios in key operational functions. The completion of various risk management activities are tracked. The RM department also conducts employee surveys periodically to assess the programme's effectiveness so that adjustments can be made accordingly.

# RISK MANAGEMENT (CONTINUED)

## Risk Management Framework  `102-30`  `PR-1`  `PR-2`  `PR-3`  `PR-4`  `PR-5`  `PR-6`  `PR-7`  `PR-10`

### Philosophy

SIA is to be a risk-aware organisation such that the taking of risks necessary for the achievement of its corporate objectives is carried out knowingly, and risks that present a threat to SIA are managed so as to protect and enhance the value of the organisation, taking into consideration our stakeholders' and shareholders' interests.

### Principles

A set of Risk Management Principles, adapted from ISO 31000, provides the underlying basis for the scope and objectives of our risk management efforts. At SIA, risk management should:

- Create and protect value by facilitating continual improvement of the organisation
- Be an integral part of all organisational processes, including decision making
- Reduce the probability and/or consequence of the risk event
- Be systematic, structured and timely

- Be based on the best available information and reviewed regularly
- Be customised to the needs of the organisation, including taking into account human, cultural and environmental factors
- Be transparent and inclusive
- Be dynamic, iterative and responsive to change

### Corporate Risk Objectives

Our set of corporate risk objectives – **PEARLS** – guides our business units in formulating plans to manage risks:

**P**eople ........................ To protect people from harm or injury

**E**nvironment ........................ To protect the environment from damage and pollution

**A**ssets ........................ To protect the assets of the Company

**R**eputation ........................ To protect the reputation of the Company

**L**iability ........................ To protect against incurring liability

**S**upply Chain ........................ To protect the supply chain against critical disruptions

### Risk Management Process

We continually identify new and emerging risks and evaluate existing risks and associated controls to determine their relevance in the current context. A comprehensive guide and a Risk Assessment Matrix are in place to facilitate and ensure consistency in the risk assessments conducted by business units. Identified risks are graded and prioritised for more effective allocation of resources to manage the Company's risks.

**There are seven key areas in the Risk Appetite Statements[13] to guide business units in their risk management approach.**



**Environmental**   **Financial**   **Information Technology**   **Operational**   **Regulatory**   **Safety**   **Strategic**

**Our five-step Risk Management Process facilitates communication, understanding and application by all levels of employees.**



**1 Identify**   **2 Evaluate**   **3 Prioritise**   **4 Treat**   **5 Monitor**

Our risk appetite, risk policies and guidelines are developed and embedded in the Risk Management Process. This helps to ensure a sound system of risk management and internal controls, so as to safeguard the interest of the Company and that of our shareholders.

Multi-pronged risk response strategies such as avoidance, prevention, mitigation and transference, are employed to address the identified risks. A combination of control measures serves to protect the organisation, allowing for more effective management of risks. Crisis Management, Business Continuity and Disaster Recovery Plans are also developed to mitigate the impact on business operations and ensure business resilience.

The SIA Risk Management Framework emphasises the iterative process of assessing risks. In addition, all identified risks at the business unit level are consolidated to facilitate the assessment of Company and Group risks through a Group-wide Risk Management Review exercise annually. During the exercise, business units ensure that risk registers are kept current and their response strategies are adequate and relevant. These processes are embedded within the work schedules of the business units and driven by the quarterly risk review activities of the Risk Committees.

[13] *Risk Appetite Statements can be found on pages 64 and 65 of the FY2019/20 SIA Annual Report.*

# RISK MANAGEMENT
## (CONTINUED)

### Crisis Management

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

We remain vigilant against the ever-evolving global landscape. In FY2019/20, we swiftly activated our business continuity plans to manage the challenges arising from the Covid-19 outbreak. Measures were taken across the Company to ensure the health and safety of all stakeholders, as well as operational and economic resilience. A summary of our response and initiatives is available on pages 10 to 12 of this report.

# VALUES AND PRINCIPLES  102–16

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

## SIA's Core Values

Corporate sustainability begins with our core values. We design a future-fit, principles-based approach to conduct our business.

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

### Care
We care for our people and community. Every time.

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

### Excellence
We strive to be the best we can be. Every time.

### Customer-focus
We understand our guests so we can truly delight them. Every time.

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

## Supporting the Ten Principles of the United Nations Global Compact

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

### Employee Code of Conduct

We believe in bringing out the best in our people and working with them to align their values and goals with that of the Company's. All employees are expected to adhere to our staff regulations, which covers areas such as anti-corruption, competition law, personal conduct, discipline, non-discrimination and personal data protection. We have an established disciplinary inquiry process to handle cases in the event an employee violates the staff regulations. Such proceedings are recorded and a summary report of each inquiry is submitted to senior management. Our staff regulations are also reviewed regularly by our Human Resources Division and Legal department to ensure continued relevance. Changes are communicated to all employees in a timely manner for compliance.

# VALUES AND PRINCIPLES (CONTINUED)

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

SIA has a zero-tolerance stance on corruption in all forms. Incidents of corruption can cause serious damage not only to our organisation and our stakeholders, but also cascade to the communities we operate in. It has a crippling effect on global sustainable development efforts and we recognise the significance of working with our stakeholders in our value chain to drive our anti-corruption efforts.

Employees undergo a mandatory anti-corruption web-based training annually and are assessed on their knowledge and understanding at the end of the course. In FY2019/20, we achieved our annual target of at least 95% of our ground employees completing the anti-corruption training by the due date[14]. Of the 5,452 ground employees required to complete the anti-corruption training, a total of 5,221 (95.8%) employees completed the training.

### Completion of Anti-corruption Training, by Employee Type and Region

| FY2019/20 | Non-management | Management[15] | Total |
|---|---|---|---|
| Total employees required to complete, by employee type | 5,010 | 442 | 5,452 |
| Total employees completed, by employee type and region | 4,799 (95.8%) | 422 (95.5%) | 5,221 (95.8%) |
| Singapore (Head Office) | 2,593 | 341 | 2,934 |
| The Americas | 144 | 10 | 154 |
| Europe | 429 | 28 | 457 |
| North Asia | 583 | 13 | 596 |
| South East Asia | 460 | 10 | 470 |
| South West Pacific | 345 | 11 | 356 |
| West Asia and Africa | 245 | 9 | 254 |

Our business partners and service providers are also required to sign contracts that include an anti-corruption and anti-bribery clause, along with the SIA Suppliers' Code of Conduct[16].

In FY2019/20, there were zero confirmed incidents of corruption involving our employees or business partners. There were also no legal cases of corruption brought against the Company.

[14] Our target excludes line pilots and cabin crew, as they do not need to enter into transactions on behalf of the Company in the ordinary course of their work.
[15] Management refers to those who are holding managerial positions and above, and management pilots.
[16] Please refer to page 78 of this report for more information on the Suppliers' Code of Conduct.

**0** incidents of corruption involving employees or business partners in FY2019/20

**95.8%** of ground employees completed the anti-corruption training in FY2019/20

In FY2019/20, there were zero confirmed incidents of corruption involving our employees or business partners. There were also no legal cases of corruption brought against the Company.

# VALUES AND PRINCIPLES (CONTINUED)

## Conflict of Interest

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

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

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

More information on the Suppliers' Code of Conduct can be found on page 78 of this report.

We also recognise the important role we play in preventing human trafficking as there is a risk that our airline services could be used by human traffickers. We work closely with governments, national law enforcement agencies and airports in the countries and territories we operate in to ensure that all suspected trafficking on our flights are reported and dealt with appropriately. We are committed to sharing best practices with our peers through IATA platforms and believe in the importance of investing resources to train our employees so they can assess and report suspicious behaviour.

The Anti-modern Slavery and Human Trafficking Statement is available on our **website**.

## Grievance Mechanism    `102-17`

We have channels for all internal and external stakeholders to raise concerns about possible improprieties in any matter, in confidence. Our whistleblowing programme, Policy on Reporting Wrongdoing, is communicated to our employees through our internal Intranet, staff regulations and a mandatory web-based training module. External stakeholders may report suspected matters of wrongdoing affecting the Company, either through email at **ethnics_hotline@singaporeair.com.sg** or via telephone at +65 9387 5667. The Audit Committee continuously reviews the whistleblowing programme to ensure that it is adequate. In FY2019/20, two lunch-time outreach events were held for employees to inform and encourage them to do the right thing by whistleblowing on wrongdoings. All whistleblower reports on suspected wrongdoings are reviewed by the Audit Committee at its quarterly meetings to ensure independent investigation and adequate resolution.

# COMPLIANCE    `307-1`   `416-2`

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

Being compliant with the laws and regulations that govern us helps to foster trust and better relationships with our stakeholders. In FY2019/20, there were no significant fines or non-monetary sanctions for non-compliance with environmental, health and safety laws and regulations.

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

# EMPLOYEES

103-1    103-2    103-3

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

## OUR MANAGEMENT APPROACH

### Key Engagement Activities

| Engagement Mode | Frequency |
|---|---|
| Chill Out with CEO Sessions | Quarterly |
| Community Service Activities | Regular |
| Engagement with Trade Unions' Leadership | Quarterly |
| Extra-curricular Activities (Arts, Health and Wellness, Social and Recreation, Social Functions, Sports and Recreation, etc.) | Regular |
| Publications (Bulletins, Circulars, Magazines, Newsletters, Notices, etc.) | Regular |
| Safety and Security Week | Yearly |
| Surveys (Organisational Climate Survey, Transformation Pulse Survey, etc.) | Regular |

### Key Policies, Processes and Procedures

- Collective Agreements
- Global Job Mobility Policy
- Learning and Development Policy
- Learning Management System (Scoot)
- Returning Crew Scheme
- Staff Benefits Policy
- Staff Recruitment Policy
- Staff Regulations

### SIA's Ambition

We value our employees and care for their well-being and development.

### Supporting the SDGs



### FY2019/20 in Numbers

**Most Attractive Employer in Singapore**
awarded to Singapore Airlines in 2019 by Randstad

**28,160**
employees in the SIA Group

**4%**
growth in the SIA Group's workforce

**0.9:1**
gender ratio (male: female) of SIA employees

**12%**
overall new hire rate of SIA employees

**92%**
return to work rate of SIA employees who took parental leave

**S$43.5 mil**
investment in learning and development of employees

# OUR EMPLOYEES[17]

## SIA is, and always will be, a people's organisation.

As we serve and connect with people from different cultures and walks of life, it is only natural that our workforce mirrors that too. We embrace the strengths that diversity in the workforce brings – from fresh perspectives to engaging and meaningful conversations.

### Strength in Diversity  `102-7`  `202-2`

As of 31 March 2020, the SIA Group comprises a total of 28,160 employees, reflecting a four per cent increase in headcount from the previous financial year.

Of these, Singapore Airlines employs 17,204 employees (FY2018/19: 16,316 employees) based in 36 destinations. Female employees account for 52.2 per cent of our workforce, while male employees account for 47.8 per cent. Seventy per cent of our employees are Singapore Citizens or permanent residents, as are 96.4 per cent of Management[18] based at our Head Office in Singapore. Full-time employees account for 99.7 per cent of our staff. Around 35.2 per cent of our employees are under 30 years of age, 48.5 per cent are between the ages of 30 and 50, and 16.3 per cent above the age of 50.

### New Hires and Turnover  `401-1`

In FY2019/20, Singapore Airlines' overall new hire rate[19] remained stable at 12 per cent (FY2018/19: 13.2 per cent), with new hire rate for male employees at 10 per cent, and female employees at 13.9 per cent. In terms of age group, our new hire rate was the highest for employees under 30 years of age at 26.9 per cent.

In line with our continuing efforts for talent retention, we saw an improvement in our overall turnover rate[20] vis-à-vis FY2018/19 levels. In FY2019/20, Singapore Airlines' overall turnover rate was 5.4 per cent (FY2018/19: 9.7 per cent), with turnover rate for male employees at 3.3 per cent, and female employees at 7.3 per cent.



| 17,204 | 36 | 0.9:1 | 12% |
|---|---|---|---|
| employees in Singapore Airlines | destinations that our SIA employees are based in | gender ratio (male:female) of SIA employees | overall new hire rate of SIA employees |

[17] Please refer to the Appendix on pages 130 to 131 for definitions and methodologies. Due to rounding, numbers and percentages presented may not add up precisely to the absolute totals indicated.
[18] Management refers to those who are holding managerial positions and above, and management pilots.
[19] 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.
[20] 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.
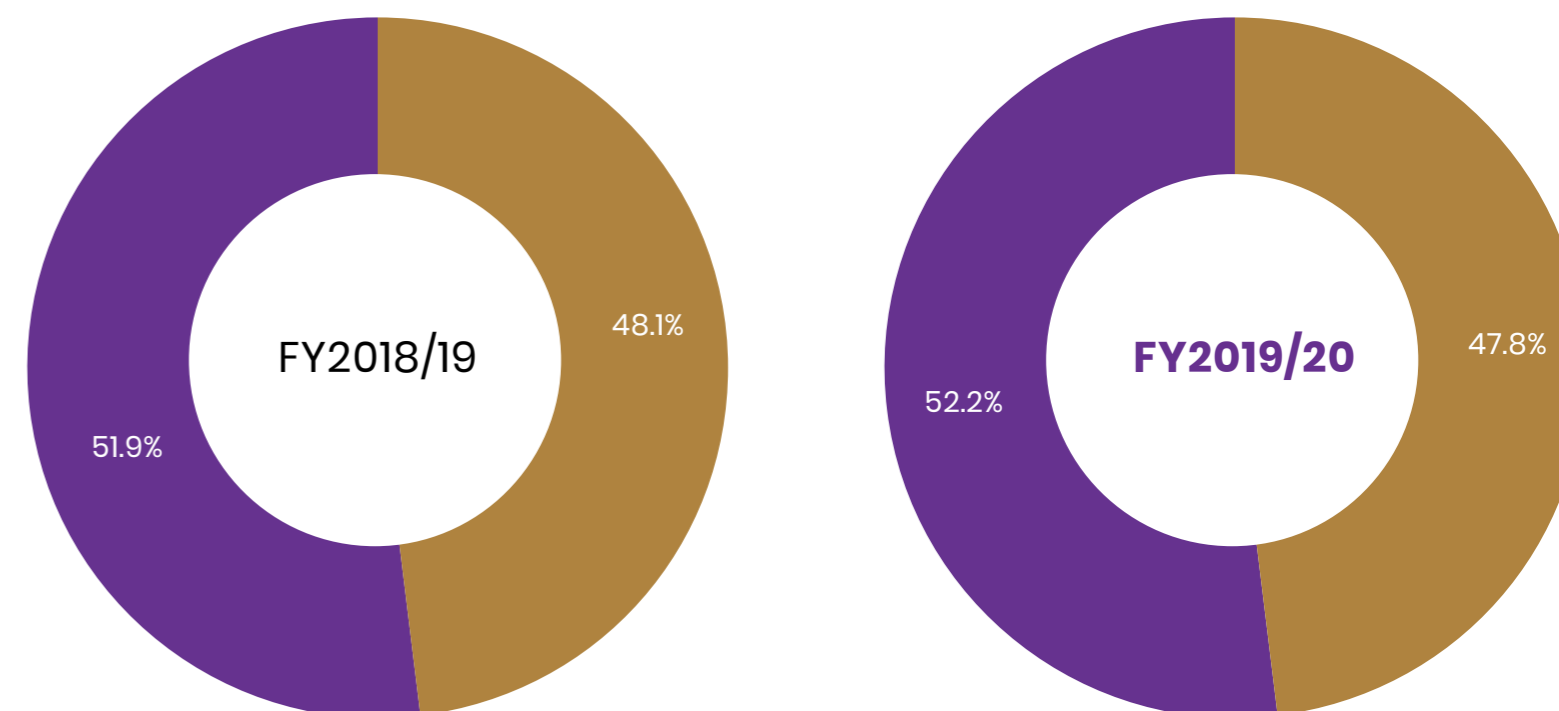
# OUR EMPLOYEES (CONTINUED)

102-8   401-1   405-1

| | FY2018/19 | FY2019/20 |
|---|---|---|
| **Employees in the SIA Group** | **27,078** | **28,160** |
| **Employees, by Subsidiary** | | |
| Singapore Airlines | 16,316* | **17,204*** |
| SilkAir | 1,484 | **1,389** |
| Scoot | 2,334 | **2,406** |
| SIA Engineering Company | 4,478 | **4,372** |
| SIAEC's Subsidiaries | 2,195 | **2,476** |
| Tradewinds Tours & Travel | 44 | **51** |
| Cargo Community Network | 76 | **77** |
| Singapore Flying College | 66 | **82** |
| SAGI | 3 | **3** |
| KrisShop | 82 | **100** |

| | FY2018/19 | | FY2019/20 | |
|---|---|---|---|---|
| **Singapore Airlines Employees** | **16,316*** | **(100.0%)** | **17,204*** | **(100.0%)** |
| **Employees, by Gender** | | | | |
| Male | 7,851 | (48.1%) | **8,223** | **(47.8%)** |
| Female | 8,465 | (51.9%) | **8,981** | **(52.2%)** |

**Employees, by Gender**



FY2018/19 — 48.1% / 51.9%
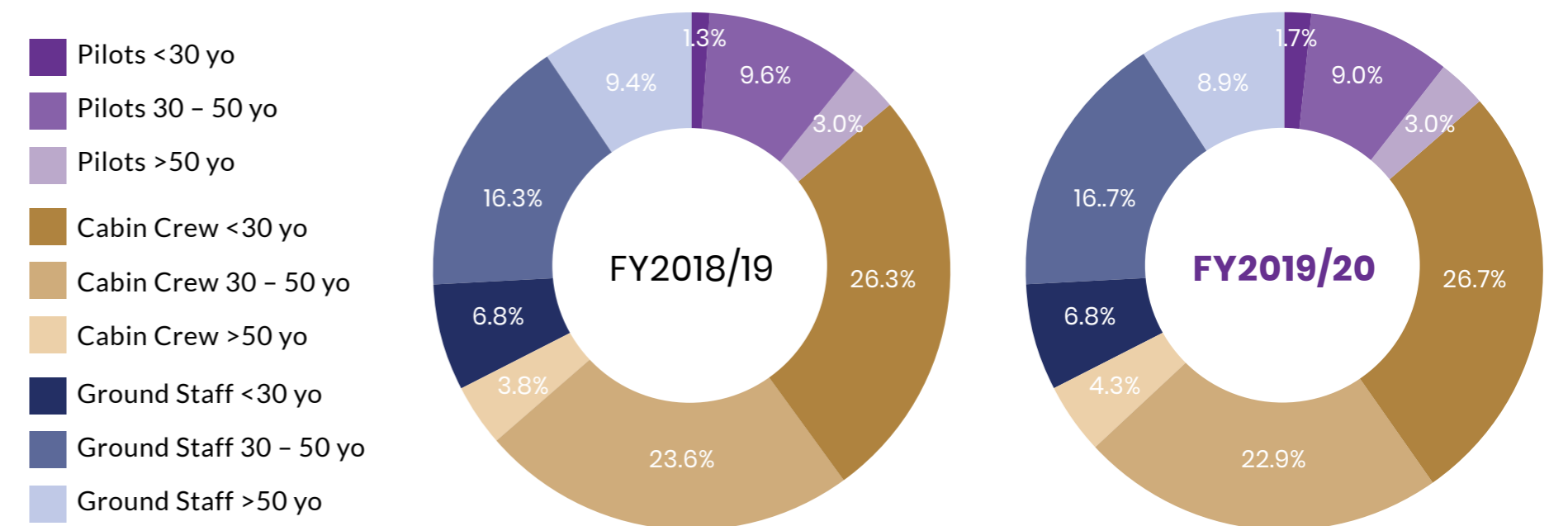FY2019/20 — 47.8% / 52.2%

■ Male ■ Female

*\* Excludes Singapore Airlines staff seconded to other companies but includes staff seconded to Singapore Airlines.*

# OUR EMPLOYEES (CONTINUED)

| Employees, by Employee Category and by Age Group | FY2018/19 | | FY2019/20 | |
|---|---|---|---|---|
| **Pilots** | **2,261** | **(13.9%)** | **2,369** | **(13.7%)** |
| <30 yo | 204 | (1.3%) | **293** | **(1.7%)** |
| 30-50 yo | 1,560 | (9.6%) | **1,549** | **(9.0%)** |
| >50 yo | 497 | (3.0%) | **527** | **(3.0%)** |
| **Cabin Crew** | **8,744** | **(53.6%)** | **9,266** | **(53.9%)** |
| <30 yo | 4,285 | (26.3%) | **4,600** | **(26.7%)** |
| 30-50 yo | 3,847 | (23.6%) | **3,932** | **(22.9%)** |
| >50 yo | 612 | (3.8%) | **734** | **(4.3%)** |

| Employees, by Employee Category and by Age Group | FY2018/19 | | FY2019/20 | |
|---|---|---|---|---|
| **Ground Staff** | **5,311** | **(32.5%)** | **5,569** | **(32.4%)** |
| <30 yo | 1,115 | (6.8%) | **1,163** | **(6.8%)** |
| 30-50 yo | 2,656 | (16.3%) | **2,869** | **(16.7%)** |
| >50 yo | 1,540 | (9.4%) | **1,537** | **(8.9%)** |

## Employees, by Employee Category and by Age Group

- Pilots <30 yo
- Pilots 30 – 50 yo
- Pilots >50 yo
- Cabin Crew <30 yo
- Cabin Crew 30 – 50 yo
- Cabin Crew >50 yo
- Ground Staff <30 yo
- Ground Staff 30 – 50 yo
- Ground Staff >50 yo



FY2018/19

FY2019/20

## OUR EMPLOYEES (CONTINUED)

| Employees, by Employment Type (Full-time and Part-time) and by Gender | FY2018/19 | | FY2019/20 | |
|---|---|---|---|---|
| **Full-time** | **16,264** | **(99.7%)** | **17,150** | **(99.7%)** |
| Male | 7,850 | (48.1%) | 8,220 | (47.8%) |
| Female | 8,414 | (51.6%) | 8,930 | (51.9%) |
| **Part-time** | **52** | **(0.3%)** | **54** | **(0.3%)** |
| Male | 1 | (~0.006%) | 3 | (~0.01%) |
| Female | 51 | (0.3%) | 51 | (0.3%) |

| Employees, by Employment Type (Full-time and Part-time) and by Gender | FY2018/19 | | FY2019/20 | |
|---|---|---|---|---|
| **Permanent** | **8,643** | **(53.0%)** | **8,883** | **(51.6%)** |
| Male | 5,687 | (34.9%) | 5,849 | (34.0%) |
| Female | 2,956 | (18.1%) | 3,034 | (17.6%) |
| **Contract** | **7,673** | **(47.0%)** | **8,321** | **(48.4%)** |
| Male | 2,164 | (13.2%) | 2,374 | (13.8%) |
| Female | 5,509 | (33.8%) | 5,947 | (34.6%) |

# OUR EMPLOYEES (CONTINUED)

| Employees, by Employment Type (Permanent and Contract) and by Region | FY2018/19 | | FY2019/20 | |
| --- | --- | --- | --- | --- |
| **Permanent** | **8,643** | **(53.0%)** | **8,883** | **(51.6%)** |
| Singapore | 6,248 | (38.3%) | **6,436** | **(37.4%)** |
| The Americas | 156 | (1.0%) | **163** | **(0.9%)** |
| Europe | 495 | (3.0%) | **508** | **(3.0%)** |
| North Asia | 579 | (3.6%) | **614** | **(3.6%)** |
| South East Asia | 445 | (2.7%) | **439** | **(2.5%)** |
| South West Pacific | 390 | (2.4%) | **390** | **(2.3%)** |
| West Asia and Africa | 330 | (2.0%) | **333** | **(1.9%)** |

| Employees, by Employment Type (Permanent and Contract) and by Region | FY2018/19 | | FY2019/20 | |
| --- | --- | --- | --- | --- |
| **Contract** | **7,673** | **(47.0%)** | **8,321** | **(48.4%)** |
| Singapore | 7,626 | (46.7%) | **8,268** | **(48.1%)** |
| The Americas | 3 | (~0.01%) | **3** | **(~0.01%)** |
| Europe | 19 | (~0.1%) | **25** | **(~0.1%)** |
| North Asia | 11 | (~0.06%) | **11** | **(~0.06%)** |
| South East Asia | 2 | (~0.01%) | **6** | **(~0.03%)** |
| South West Pacific | 1 | (~0.006%) | **1** | **(~0.005%)** |
| West Asia and Africa | 11 | (~0.06%) | **7** | **(~0.04%)** |

## OUR EMPLOYEES (CONTINUED)

| | FY2018/19 | | FY2019/20 | |
|---|---|---|---|---|
| **New Hires** | **2,152** | **(100.0%)** | **2,073** | **(100.0%)** |
| **New Hires, by Gender** | | | | |
| Male | 825 | (38.3%) | **821** | **(39.6%)** |
| Female | 1,327 | (61.7%) | **1,252** | **(60.4%)** |
| **New Hires, by Age Group** | | | | |
| <30 yo | 1,830 | (85.0%) | **1,628** | **(78.5%)** |
| 30-50 yo | 310 | (14.4%) | **417** | **(20.1%)** |
| >50 yo | 12 | (0.6%) | **28** | **(1.4%)** |

| | FY2018/19 | | FY2019/20 | |
|---|---|---|---|---|
| **New Hires, by Region** | | | | |
| Singapore | 1,900 | (88.3%) | **1,779** | **(85.8%)** |
| The Americas | 45 | (2.1%) | **31** | **(1.5%)** |
| Europe | 45 | (2.1%) | **45** | **(2.2%)** |
| North Asia | 52 | (2.4%) | **78** | **(3.7%)** |
| South East Asia | 45 | (2.1%) | **45** | **(2.2%)** |
| South West Pacific | 41 | (1.9%) | **72** | **(3.5%)** |
| West Asia and Africa | 24 | (1.1%) | **23** | **(1.1%)** |

### New Hires, by Gender



FY2018/19 — 38.3% / 61.7%
FY2019/20 — 39.6% / 60.4%

■ Male  ■ Female

### New Hires, by Age Group



FY2018/19 — 0.6% / 14.4% / 85.0%
FY2019/20 — 1.4% / 20.1% / 78.5%
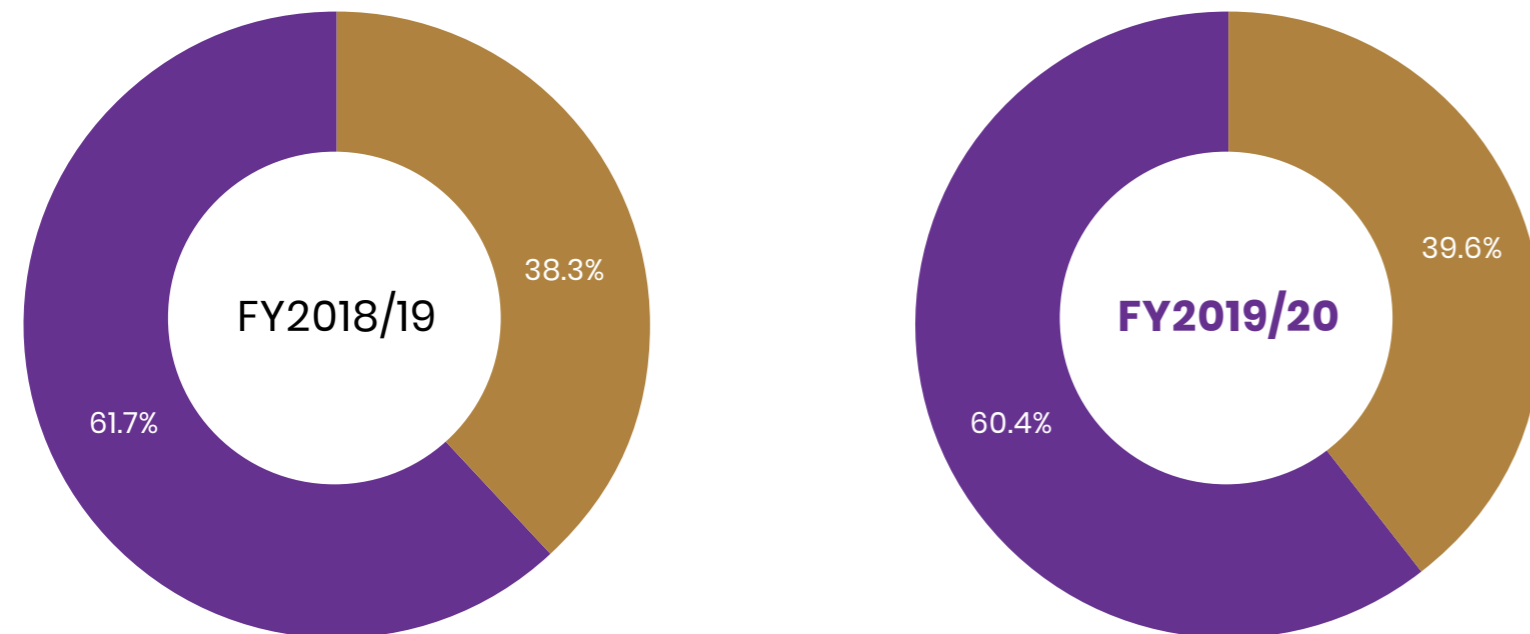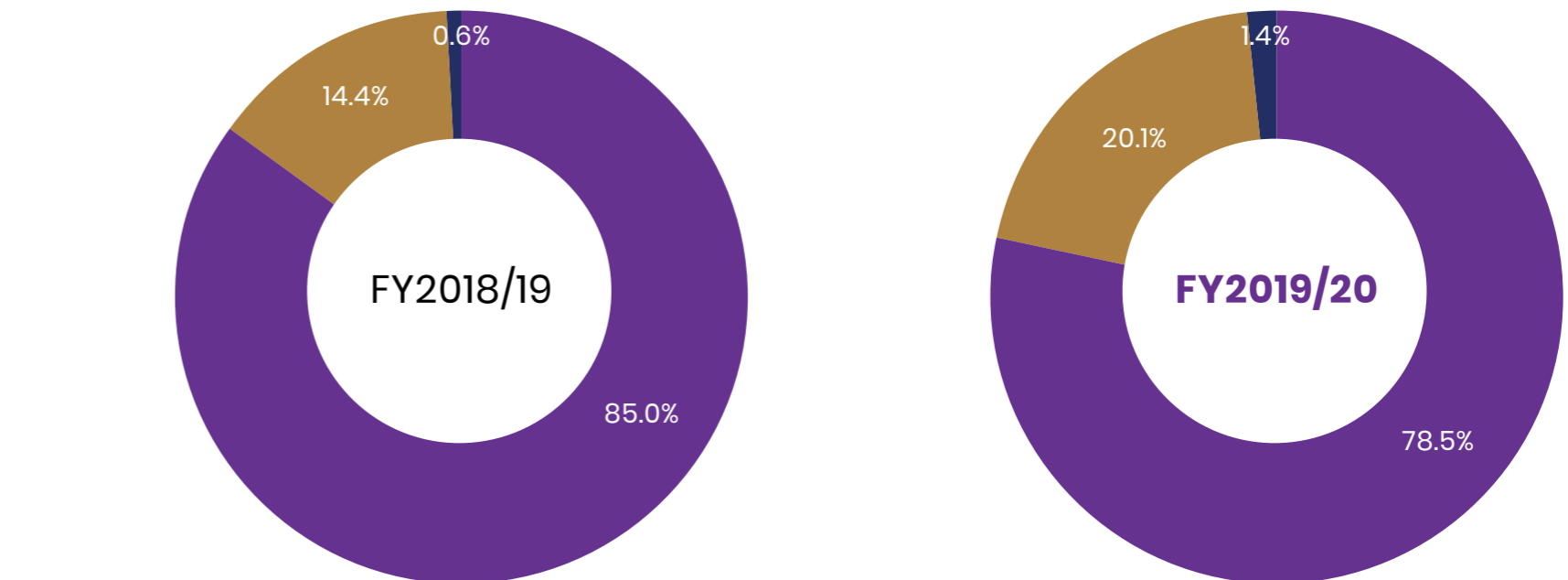
■ <30 yo  ■ 30 - 50 yo  ■ >50 yo

# OUR EMPLOYEES (CONTINUED)

| | FY2018/19 | | FY2019/20 | |
|---|---|---|---|---|
| **Turnover** | **1,582** | **(100. 0%)** | **927** | **(100.0%)** |
| **Turnover, by Gender** | | | | |
| Male | 572 | (36.2%) | **269** | **(29.0%)** |
| Female | 1,010 | (63.8%) | **658** | **(71.0%)** |
| **Turnover, by Age Group** | | | | |
| <30 yo | 696 | (44.0%) | **571** | **(61.6%)** |
| 30-50 yo | 626 | (39.6%) | **331** | **(35.7%)** |
| >50 yo | 260 | (16.4%) | **25** | **(2.7%)** |

| | FY2018/19 | | FY2019/20 | |
|---|---|---|---|---|
| **Turnover, by Region** | | | | |
| Singapore | 1,296 | (81.9%) | **742** | **(80.0%)** |
| The Americas | 37 | (2.4%) | **16** | **(1.7%)** |
| Europe | 62 | (3.9%) | **32** | **(3.5%)** |
| North Asia | 63 | (4.0%) | **45** | **(4.9%)** |
| South East Asia | 46 | (2.9%) | **39** | **(4.2%)** |
| South West Pacific | 54 | (3.4%) | **34** | **(3.7%)** |
| West Asia and Africa | 24 | (1.5%) | **19** | **(2.0%)** |
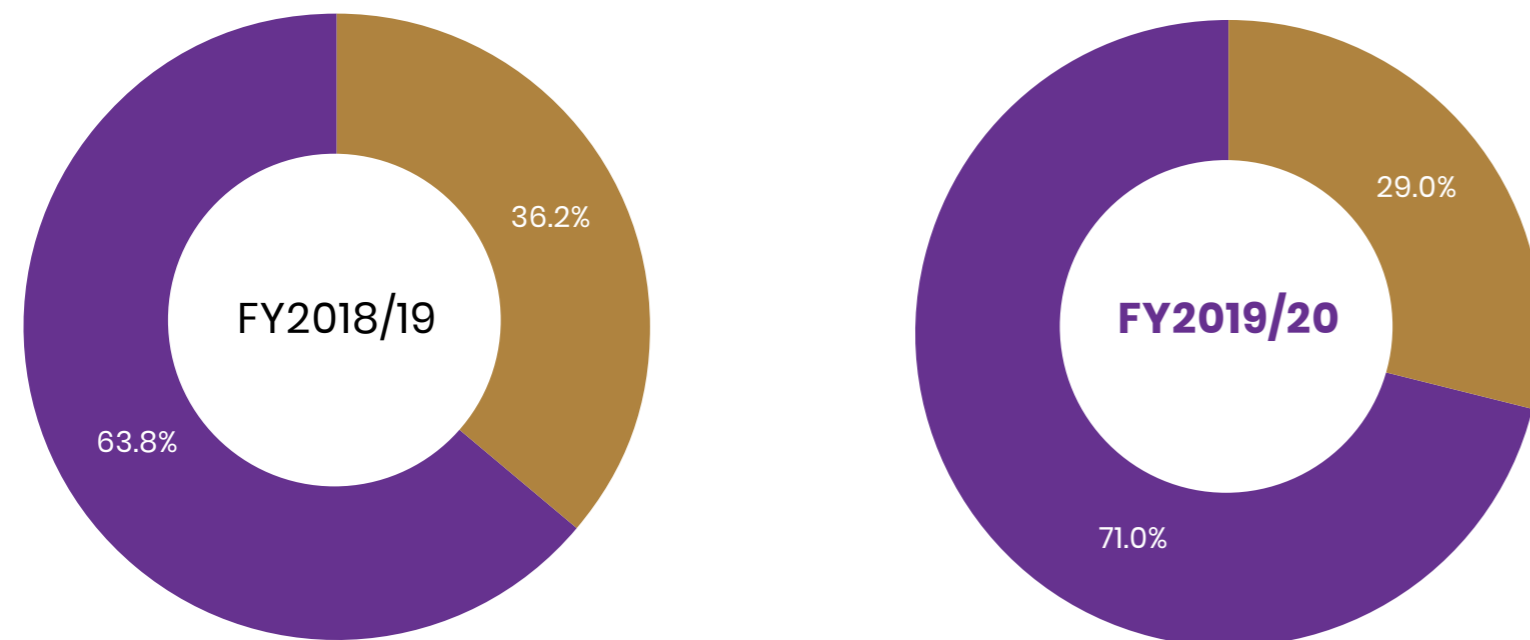
## Turnover, by Gender



FY2018/19
36.2%
63.8%

FY2019/20
29.0%
71.0%

Male    Female

## Turnover, by Age Group



FY2018/19
16.4%
44.0%
39.6%

FY2019/20
2.7%
35.7%
61.6%
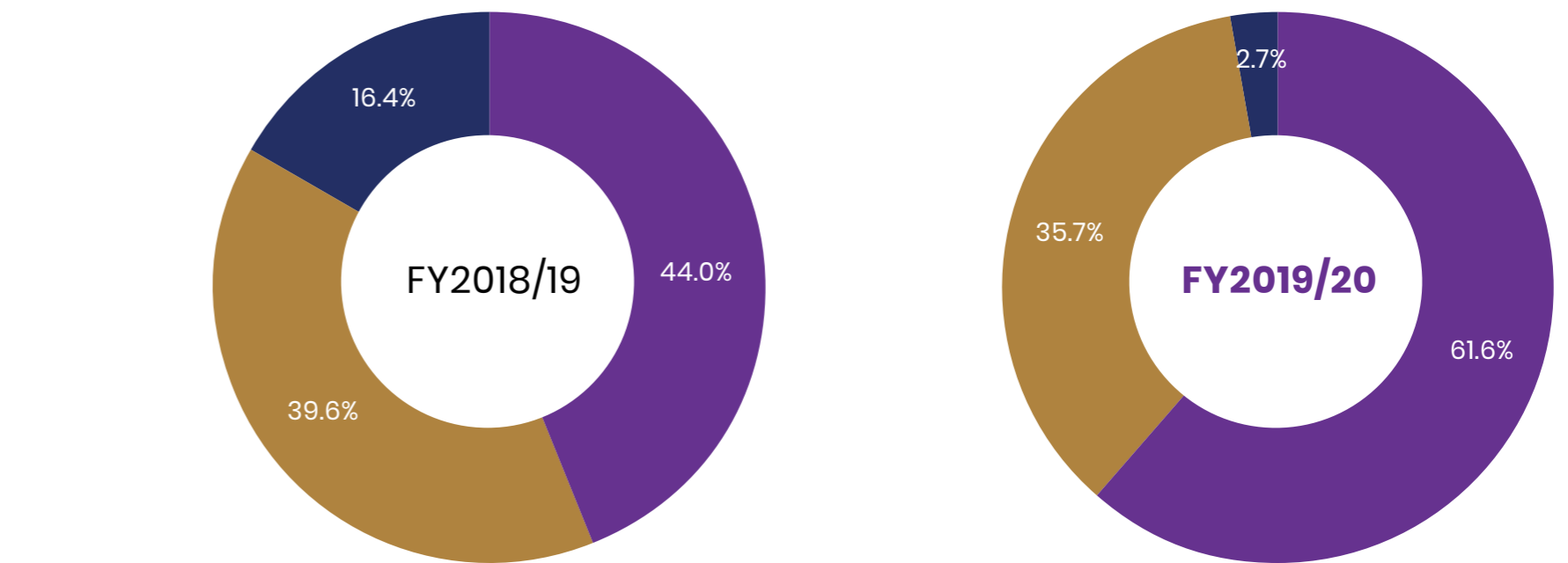
<30 yo    30 - 50 yo    >50 yo

# EMPLOYEE ENGAGEMENT

Continual engagement with our employees enables us to understand them better. These interactions allow us to address key issues, feedback and concerns that our employees may have.

## Engaging Our Employees  `102-43`

We maintain many communications channels with all our employees, both local and overseas. The following table presents a summary of the key communications channels.

| Activities and Events | Forums and Training | Online Platforms | Publications | Surveys |
|---|---|---|---|---|
| **Community Service Activities**<br>Regular | **Business Meetings**<br>Biannual | **e-Learning Platforms (SKIES, Zunos, etc.)**<br>Regular | **Bulletins, Circulars, Notices, etc.**<br>Regular | **Organisational Climate Survey and Pulse Survey**<br>Biennial |
| **Demo Day by KrisLab**<br>Regular | **Chill Out with CEO Session**<br>Quarterly | **Employee Platforms (1SQ, Employee Service Centre, W@vesWorkplace, Workplace Chat, etc.)**<br>Regular | **Cabin Crew Times**<br>Monthly | **Transformation Pulse Survey**<br>Regular |
| **Divisional Communication Sessions**<br>Quarterly | **Dialogues, Forums, Townhalls, etc.**<br>Regular | **Internal Collaboration using Microsoft Teams**<br>Regular | **Fleet e-Newsletters**<br>Biannual | |
| **Extra-curricular Activities (arts, health and wellness, sports and recreation, social functions, etc.)**<br>Quarterly | **Training and Development Programmes**<br>Regular | **Yammer Groups**<br>Regular | **Flight Safety Magazine**<br>Half-yearly | |
| **Safety and Security Week**<br>Annual | | | **Hazard Newsletters**<br>Quarterly | |
| **Staff Ideas-in-Action**<br>Regular | | | **Outlook Magazine**<br>Monthly | |

Our quarterly 'Chill Out with CEO' is a casual session for employees to interact with our CEO and engage in open dialogue.

We obtain feedback from employees through our Organisational Climate Survey (OCS), which we conduct once every two years. Last conducted in February 2019, the OCS enabled us to better understand employee engagement, as well as identify strengths and areas of improvement so that we can deliver a more positive work experience for our employees.

Our employees thrive when they feel that they can make a difference in what they do. In October 2019, we held 10 Human Resources townhall sessions, and connected with over 1,200 employees in Singapore and overseas. During these townhall sessions, the three topics discussed were career development, total reward and performance management. The townhall sessions served as opportunities for us to listen to our employees and address their feedback and concerns.

Staff Ideas-in-Action is an initiative to encourage ideation and inculcate an open, vibrant innovation culture. Employees are challenged to review their work processes and identify areas for improvement so as to enhance revenue, reduce costs, promote efficiency and improve safety, among others. In FY2019/20, close to 5,000 ideas were received and evaluated.

# EMPLOYEE ENGAGEMENT (CONTINUED)

## Leveraging Digital Tools

We are constantly on the look out for new digital tools that we can leverage to better connect with our employees, while allowing them to access functions that will increase their efficiency.

### 1SQ, SIA's One-stop Employee Mobile App

Launched in February 2018, 1SQ is designed to provide our employees with on-the-go access to the latest news, corporate deals and the ability to perform self-service functions such as leave submissions or travel requests. The launch of 1SQ was an important step to empower our workforce digitally. Around 93 per cent of our employees in Singapore are users of 1SQ.

1SQ runs on an agile methodology where new features are regularly introduced. In FY2019/20, we introduced hazard reporting, digital name cards and an interactive feature where our employees can share their memories and well-wishes with one another.

### Kaki, Scoot's Employee Chatbot

Kaki, an employee chatbot, is available on Scoot's Workchat mobile app for employees to clarify questions they may have on-the-go. As of December 2019, Kaki has serviced over 2,000 employees and successfully resolved 92 per cent of all queries. Since its launch in December 2018, Kaki's responses are continuously finetuned to better support our employees. Employees receive a short survey after each session with the chatbot, which allows the chatbot team to correct any inaccurate responses.
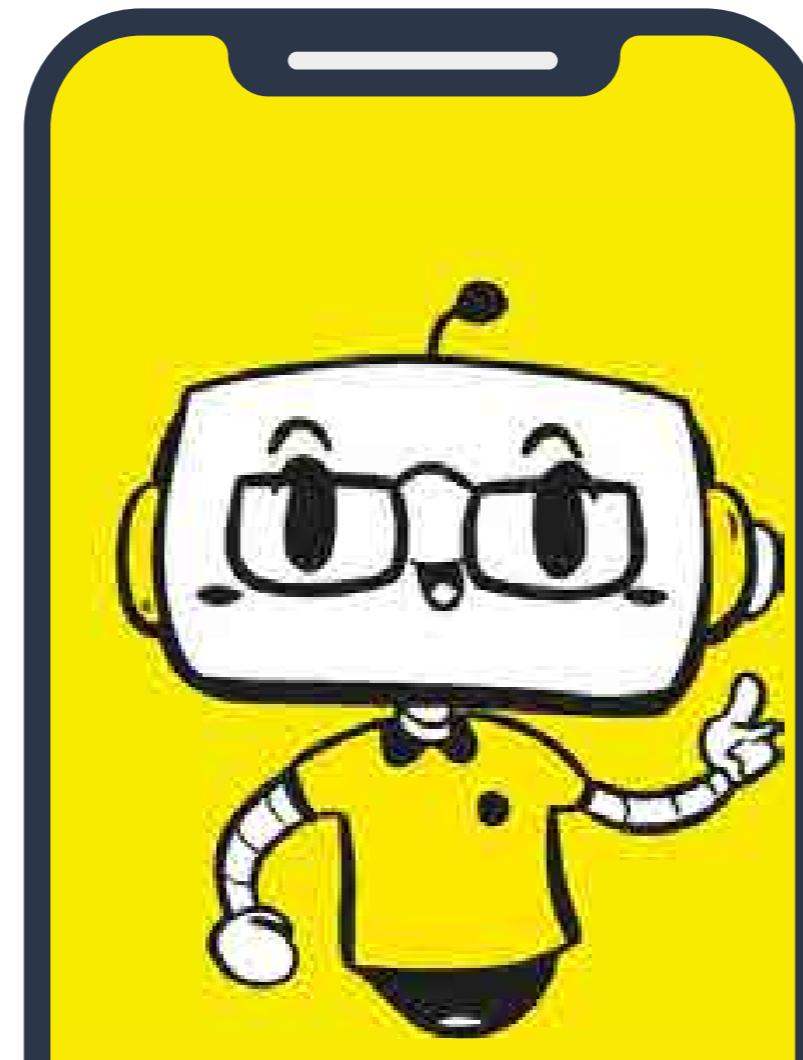
### Employee Service Centre, Scoot's One-stop Digital Solution for Service Requests

Employee Service Centre is Scoot's one-stop digital solution for all employee service requests such as insurance claims, flexible work arrangements, team bonding proposals and more. The service centre carries over 100 knowledge articles including company policies and self-help documents. In FY2019/20, it had a satisfaction rate of 83.6 per cent amongst users.

# EMPLOYMENT PRACTICES  PR-3  PR-6

We believe in investing in our employees' well-being and development and keeping them engaged with meaningful work. In 2019, Singapore Airlines was named the Most Attractive Employer in Singapore by Randstad for the fourth time. Singapore Airlines was also named one of the Most Attractive Employers in Singapore by the Universum Awards, ranking us 3rd by over 9,000 undergraduates from the four local universities.

## Collaborative Partnerships  102-41

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

In FY2019/20, we successfully concluded the annual service increment agreements with ALPA-S and SIASU, as well as the 2019 Collective Agreement with ALPA-S. An agreement was also concluded with AESU to restructure the Executive salary structures to be pegged to market conditions. In addition, to demonstrate our commitment to building a future-ready workforce, a Company Training Committee (CTC) comprising management and union representatives from AESU and SIASU was set up, to review training needs of our workforce in view of industry transformation. Our union leadership has also taken a progressive approach and supported us over the years in launching initiatives and programmes to enable our workforce to be better prepared for the future.

SIA's Chairman 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, amongst others. Union-Management retreats are also organised for both parties to discuss longer-term strategic workforce initiatives regularly.

Air Transport Executive Staff Union (AESU) is a representative body for about 50 per cent of SIA executives.

Air Line Pilots Association Singapore (ALPA-S) is a representative body for about 94 per cent of SIA pilots.

Singapore Airlines Staff Union (SIASU) is a representative body for about 65 per cent of cabin crew and associates.

## 98%
of SIA employees are covered by collective bargaining agreements

# THE MOST ATTRACTIVE EMPLOYER IN SINGAPORE
## RANDSTAND 2019 AWARDS

# EMPLOYMENT PRACTICES (CONTINUED)

### Notice Periods   `402-1`

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

Should a scenario arise that calls for a significant operational change, we work closely with our unions to coordinate the best suited response that is fair and reasonable to all parties. We also provide affected employees with reasonable notice prior to its implementation.

### SilkAir integration

We are in the midst of our multi-year SilkAir integration effort, which was announced in May 2018. Employees were informed at least two months in advance before the integration of their respective departments into SIA.

### Career Transition Programme   `404-2`

We have in place a career transition programme specially developed for our cabin crew who wish to continue working beyond their retirement. A Career Transition Guide and a list of career opportunities are shared with them six months before retirement. Potential employers will also be informed so they may get in touch with retiring crew members.

The guide offers useful links, strategies and tools to support our cabin crew in developing an effective plan so that they can make informed decisions for their career. Preparation of good cover letters, tips for interviews, contacts for counselling, as well as worksheets for self-evaluation are included in the guide. Financial management courses are also available to assist crew in making sound financial decisions in preparation for retirement.

### Returning Crew Scheme

As the safety of our employees is paramount to SIA, we do not permit pregnant crew members to carry out duties on flights. Under the Returning Crew Scheme, crew are encouraged to return to their flying duties after delivering their child, subject to a pre-set list of criteria. Cabin crew members can return to their duties with minimum disruption to their careers, while retaining their previous years of service.

To raise awareness of the scheme, talks are conducted twice a year with healthcare professionals for crew who left due to their pregnancy. The Returning Crew Scheme is reviewed during divisional level meetings on a quarterly basis, with progress assessed and appropriate action plans implemented.

# EMPLOYMENT PRACTICES (CONTINUED)

## Employee Benefits  `401-2`  `401-3`

Our employees' well-being and work-life integration is important to us. We have flexible work arrangements such as a work-from-home scheme and staggered working hours, where operationally feasible. Our employees and their eligible dependants are also covered by a range of medical benefits. These include out-patient, specialist, hospitalisation, as well as subsidised insurance benefits, where applicable. Apart from healthcare, other benefits include life insurance and parental leave. Full-time, Singapore-based employees enjoy benefits such as:

**Adoption, Annual, Childcare, Compassionate, Maternity, Matrimonial, National Service, Paternity and Shared Parental leave**

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

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

**Holiday accommodation subsidies**

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

We provide all full-time employees and their eligible dependants with the opportunity to travel overseas. This includes complimentary return air tickets once a year to any destination that SIA and SilkAir serve and discounted airfares for employees and eligible dependants. To further enhance the travel benefit offerings for our employees, we are working on launching interline travel partnerships with other airlines.

In FY2019/20, the overall retention rate and return to work rate of SIA employees who took parental leave remained stable at 90.3 per cent and 92 per cent respectively.

**Parental Leave Statistics**

| FY2018/19 | Male | Female | Total |
|---|---|---|---|
| Employees who were entitled to parental leave | 2,168 | 1,235 | **3,403** |
| Employees who took parental leave | 1,366 | 991 | **2,357** |
| Employees who returned to work after parental leave ended | 1,170 | 991 | **2,161** |
| Returned to work after parental leave ended and who were still employed 12 months after returning to work | 1,133 | 970 | **2,103** |
| **Retention rate[21] of employees who took parental leave** | **82.9%** | **97.9%** | **89.2%** |
| **Return to work rate[22] of employees who took parental leave** | **85.7%** | **100.0%** | **91.7%** |

| FY2019/20 | Male | Female | Total |
|---|---|---|---|
| Employees who were entitled to parental leave | 2,191 | 1,026 | **3,217** |
| Employees who took parental leave | 1,467 | 987 | **2,454** |
| Employees who returned to work after parental leave ended | 1,465 | 792 | **2,257** |
| Returned to work after parental leave ended and who were still employed 12 months after returning to work | 1,447 | 770 | **2,217** |
| **Retention rate[21] of employees who took parental leave** | **98.6%** | **78.0%** | **90.3%** |
| **Return to work rate[22] of employees who took parental leave** | **99.9%** | **80.2%** | **92.0%** |

[21] 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.

[22] 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.

## 90.3%
overall retention rate of SIA employees who took parental leave

## 92%
overall return to work rate of SIA employees who took parental leave

# A FUTURE-READY WORKFORCE  `404-2`

## Equipping our employees with the right skills to thrive.

We believe that the continuous development and growth of our employees are our key differentiators to remaining competitive and resilient. This is why we constantly seek opportunities to motivate our employees and equip our workforce with the right skillsets to prepare them for the future.



### SIA's Leadership and Functional Competency Framework

Following the review of the SIA Leadership Competency Framework in FY2018/19, we stepped up our focus to develop and strengthen our employees' domain expertise in this highly critical and rapidly changing business landscape.

We will continue to refine the existing Functional Competency Framework to enhance employees' competencies and further develop their professional career with SIA. This framework will provide employees with information on the functional competencies required for personal growth and development. It will also allow employees to have greater visibility of similar job roles across the organisation. Adopting a systematic approach, this multi-year project will cover key job competencies across SIA, starting from our operational and commercial functions. Functional competencies will be developed for these roles, along with the relevant training and developmental courses that employees can tap on and for management's use to guide their teams.

### Revamped Employee Portal: My Career Centre

In FY2019/20, we revamped our employee portal, myTMS, and renamed it My Career Centre. This revamped employee portal is a one-stop platform for performance development, talent management and internal job placements. Employees now have increased visibility of job opportunities within our organisation. To further support mobility across our offices worldwide, a Global Job Mobility Policy was rolled out to detail the application process and provide employees with support for their transfers. The revamped portal also enables our employees to participate in e-learning modules on performance development that cover topics such as how to give or receive feedback, performance differentiation and effective goal setting. The purpose is to strengthen competencies of both our staff and management, ultimately driving greater efficiencies and productivity.

### Continuous Learning

Under the ambit of SIA's Transformation journey, SIA strives to inspire passion in our people by providing opportunities for personal growth. We continue to focus our efforts toward building a future-ready and responsive workforce, in order to remain competitive amid an evolving business landscape. This includes equipping our employees with essential soft and hard skills, as well as upskilling and re-skilling employees to support our transformation initiatives.

We aim to continually reinforce and promote a vibrant learning and innovative culture geared towards empowered and continuous learning. Significant resources are invested to develop our employees globally. In FY2019/20, we invested a total of S$43.5 million in the learning and development of our employees, which includes a S$1.7 million grant from SkillsFuture Singapore, a Singapore government-led movement.



**S$43.5 mil**
investment in learning and development of employees in FY2019/20

# A FUTURE-READY WORKFORCE (CONTINUED)

The table below presents the average number of training days taken by our employees, by employee category. Average training days for FY2019/20 were lower as compared to FY2018/19 due to a suspension of training in the last quarter as a result of the Covid-19 outbreak.

### Average Number of Training Days, by Employee Category `404-1`

|  | FY2018/19 | FY2019/20 |
|---|---|---|
| Associates | 7 | 4 |
| Cabin Crew | 17 | 15 |
| Executives | 8 | 5 |
| Managers and Above | 5 | 3 |
| Pilots[23] | 8 | 8 |

[23] Training days for Pilots are based on Recurrent Training and Base Check hours.

## Pilot and Cabin Crew Training

Before they can perform their flight duties on board, new cabin crew members must complete a 14-week classroom and on-the-job training programme. The training programme covers topics such as food knowledge, meal service procedures, personal grooming, social etiquette and wine appreciation. Aligned with SIA's emphasis on safety, our crew also undergo training in security, safety and first aid procedures, which include learning cardiopulmonary resuscitation (CPR).

The Cabin Crew Learning and Development department implemented a series of initiatives to facilitate an enhanced learning experience that leverages technology. For example, the training programme was recently revamped to adopt a simulated flight phase training approach to enable new crew members to retain knowledge and apply their learning effectively. It also provides new crew with more hands-on opportunities to reinforce their learning.

Our cabin crew are also equipped with strong communications and passenger handling skills to cater to the needs of all of our customers. Cabin crew are taught techniques on how to deliver personalised service to young children, the elderly, and mobility-challenged individuals.

Beyond functional skills required for cabin crew to carry out their duties on board, opportunities for self-development are provided through our Self-Directed Learning programme. The programme offers a variety of courses such as culinary arts,

languages, people management, and leadership skills. The objective of the programme is to empower our crew to take charge of their development and upgrade their core skillsets with certified professional competencies.

SIA's pilot training programmes are designed to achieve the highest standards of training that meet all regulatory requirements, and to also satisfy the safety and quality objectives of our organisation. Besides mandatory training programmes, we conduct developmental programmes for all ranks of pilots to enhance their operational and flight skills. We also have a mentoring framework in place to instil our Company's core values and enhance our pilot's competencies by learning from experienced peers.

Scoot's Learning Management System was developed in 2018 for cabin crew trainees and trainers to maximise instructional time spent in classrooms. For instance, trainees can access material online before in-class training sessions, which has reduced total class time by at least half a day. The system enables Scoot's instructors to make the most of classroom hours by focusing on the application of knowledge through techniques such as role-playing.

As part of the SIA Group's Cadet Pilot Programme, SIA Flight Operations Management, along with Human Resources representatives, make regular visits to cadets stationed in Perth, Australia. This allows the cadets to have dialogues with management and share their feedback and concerns on the training programme.

# A FUTURE-READY WORKFORCE (CONTINUED)

## Refreshed Suite of Leadership and Professional Development Programmes

Following the review of the SIA Leadership and Functional Competency Framework, we introduced a suite of Leadership and Professional Development programmes in FY2019/20, with the purpose of strengthening our leadership and enhancing workforce capabilities across all employee grades. Focus areas include teamwork and personal effectiveness, change management and result-oriented leadership. Continued priority was also placed on arming our employees with future readiness and digital capabilities, with emphasis on building knowledge and skills amongst ground staff in design thinking, agile methodologies and data analytics.

Enhancements were also made to various learning platforms and resources during the year in review, through the adoption of new technologies in curriculum design and delivery. These include:

Implementation of Virtual Reality simulations in the Heavy Cargo Handling programme for faster learning applications

Introduction of interactive video technology to design custom scenario-based e-learning, on topics such as performance development to improve handling of lost baggage

Providing access to the SKIES e-learning platform to all Singapore Airlines and SilkAir employees globally. The SKIES mobile app was launched in FY2019/20, further empowering employees to take charge of their learning and self-development on-the-go

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

**Over 13,000 Bite-sized Modules**          **Learn On-the-go**          **Virtual Learning**

Globally, SIA and SilkAir employees have access to our courses on the SKIES e-learning platform. In October 2019, over 13,000 bite-sized learning modules from our e-library were made available to our employees. With the launch of SKIES on Mobile in FY2019/20, all SIA and SilkAir employees are empowered to take charge of their learning and development through distance-based learning.



Interactive Learning Video

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# A FUTURE-READY WORKFORCE (CONTINUED)



## Scoot

In August 2019, Scoot, the Scoot Tigerair Staff Union, and the Singapore Employment and Employability Institute signed a Memorandum of Agreement for the formation of the Scoot Company Training Committee to plan and introduce skills training initiatives. In FY2019/20, Scoot inculcated a culture of learning and continual growth among employees with initiatives including:

- Launch of *Zunos* in April 2019, a digital learning management platform, accessible on desktops and mobile devices to facilitate learning on the go. *Zunos* also enables managers to track their team's learning progress

- Introduction of a three-day event called Learning Fest in July 2019, in conjunction with SkillsFuture Singapore. Learning Fest comprised a roadshow and a series of talks and workshops covering themes such as digital skills, innovation, personal mastery and well-being. Over 60 per cent of Scoot's employees, including pilots, cabin crew and office staff, participated in at least one talk or workshop

- Roll out of four design-thinking workshops in FY2019/20 to equip employees with the skills to develop customer-centric solutions

- Roll out of four data analytics courses in FY2019/20 to raise employees' digital proficiency in data analysis

- Curation of a series of Career Skills Awareness workshops, sharing strategies on career planning and skills upgrading. The workshops were conducted for over 100 Scoot employees including office staff, cabin crew and pilots

- Partnership with Udemy for Business in August 2019, an online learning platform for professionals. Through this partnership, office-based employees were granted access to over 3,500 online courses for self-learning. Approximately 80 per cent of Scoot's office-based employees are now registered on Udemy with around 50 per cent participating in the online courses. Moving forward, Scoot plans to continue cultivating a learning culture through promotional activities such as its bimonthly "Learning Happy Hour" sessions, for employees, which provides them with dedicated time to learn on the Udemy platform

## SilkAir

At SilkAir, emphasis is placed on integrating new employees to the best practices and culture of the organisation. New hires undergo an induction programme to introduce them to the aviation industry and know-hows of the Company. SilkAir also has a strong mentorship scheme through which newly joined executives can learn from the experience and skills of other senior executives and managers. SilkAir offers training for ground employees through SIA's Corporate Learning Centre. In addition, SilkAir has continuing education opportunities that empower and offer scholarship assistance to employees, allowing them to further their studies and upgrade their skillsets. Moreover, all SilkAir employees have access to e-learning modules on SKIES and other digital platforms run by SIA's Corporate Learning Centre.

SIA Care Ambassadors undergoing training to provide support to patients in Singapore General Hospital
*Image courtesy of SGH*

**CASE STUDY**

# KEEPING OUR EMPLOYEES ENGAGED WHILE GIVING BACK TO THE COMMUNITY

The Covid-19 outbreak is the greatest challenge in SIA's history. Yet, it has also taught us many lessons and strengthened the bonds within the SIA family. While uncertainties may linger, the SIA Group remains steadfast and resilient, working together to overcome these challenges and emerge stronger, together.

The Covid-19 outbreak is the greatest challenge faced by SIA. Despite the challenges, our employees have shown tremendous strength and resilience, demonstrating the true spirit of SIA. In support of Singapore's healthcare and transport sectors' frontline efforts, hundreds of our cabin crew members volunteered for the roles of Care and Transport Ambassadors, using their expertise and experience as care providers to support hospitals and public transport stations. As of end-May 2020, more than 1,000 employees from the SIA Group participated in the following schemes:

| **346** | **44** | **230** | **471** |
|---|---|---|---|
| **Care Ambassadors^** | **Contact Tracing Ambassadors*** | **Social Service Office (SSO) Processing Officers^** | **Transport Ambassadors^** |
| Care Ambassadors take on a non-clinical role to provide support and attend to patients who require routine medical care, under the supervision of hospital nursing staff. | Contact Tracing Ambassadors support Singapore's contact tracing team by reaching out to potential contacts and requesting required information to aid authorities in their contact tracing efforts. | SSO Processing Officers provide administrative support to the Ministry of Social and Family Development (MSF) in processing schemes to determine applicants' suitability for relief grants. | Transport Ambassadors support the manning of thermal stations, actively remind commuters on safe distancing measures, regulate commuter flow and facilitate crowd control at various public transport stations across Singapore. |

^ *Includes Singapore Airlines, SilkAir and Scoot cabin crew employees.*
\* *Includes Singapore Airlines cabin crew employees only.*

# OUR RESPONSE TO COVID-19

*Information accurate as of 30 June 2020.*

Our relationships with our employees matter deeply to us. For us to remain sustainable in the long term, we recognise that tough decisions and sacrifices must be made now to address the rapid decline in air travel due to the tightened border controls globally. In March 2020, we announced that we will be cutting 96 per cent of the capacity that had been scheduled up to end-April. We face the unprecedented impact of Covid-19 with our employees and do our utmost to support them through these trying times.

## Collaborative Engagement

- Through collaborative engagement with union leaders, compulsory no-pay leave and leave of absence schemes for employees on re-employment contracts were implemented. Our overseas stations implemented similar measures in line with local regulations and union agreements

- To match manpower levels to the reduced level of activity due to the impact of Covid-19, we implemented the Shorter Work Month (SWM) initiative for our ground employees from May 2020, which comprises a progressive consumption of annual leave

## Communicating with Employees

- Clear and regular communications on up-to-date information relating to Covid-19 was provided to all employees through various internal communications channels

- Introduced the SIA Employee Support Portal, which is a one-stop platform comprising information on Job Support Programmes, financial and income tax relief channels, voluntary no-pay leave and furlough schemes, as well as Enrichment Day, to offer support to our employees during this period

- Introduced curated content on Scoot's online employee platform group, 'ScootToWellness', providing Scoot employees with tips on how to care for their own wellness and mental health during this period

## Financial Support

- Working with banks and agencies to support employees who require assistance to manage their finances. These include insurance relief, home loan payment relief, credit card and personal loans relief, financial support for SIA shares and mandatory convertible bonds, among others

## Health and Safety of Employees

- Please refer to pages 59 to 60 for more information on our Covid-19 response regarding the health and safety of our employees

## Job Support Programme

- Implemented a Job Support Programme to allow additional earnings and new experiences for our employees. We waived the requirement for exclusive service to enable our ground staff (on voluntary no-pay leave or furlough) and operating crew to take up alternative employment outside of SIA. Our Human Resources Division has been reaching out to organisations to provide various external job opportunities. These organisations include the Ministry of Health, Ministry of Finance, Singtel, Singapore Land Authority, and more

- Partnered with the Singapore Government's Multi-Ministry Taskforce on several programmes (Care Ambassadors, Contact Tracing Ambassadors etc.)

## Training and Enrichment

- Introduced an Enhanced Training Support Package to curate a suite of courses, providing employees with the opportunity to enhance and upgrade their skillsets and competencies

- Rolled out an Enrichment Day requirement as part of our SWM initiative for our employees. Employees can opt to use the Enrichment Day for either learning or volunteering:

  ◊ Learning: Employees can choose to complete either a company-organised instructor-led online course, online learning via SKIES or LinkedIn Learning, and other training resources (Tableau, SkillsFuture, self-funded higher education, etc.)

  ◊ Volunteering: Employees can choose to volunteer in a company-organised corporate social responsibility (CSR) activity

- Partnered with the National Trades Union Congress (NTUC) to roll out home-based virtual learning programmes to retrain and upskill Scoot crew members

# SAFETY  103-1  103-2  103-3

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

## OUR MANAGEMENT APPROACH

### Key Engagement Activities

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

### Key Policies, Processes and Procedures

- Flight Safety Policy
- Safety and Health Policy
- Security Policy
- Safety Risk Management Policy
- Flight Safety Management System (SMS)
- Occupational Health and Safety Management System (OHSMS)
- Quality Management System (QMS)
- Security Management System (SEMS)
- Various operational manuals of our divisions and departments

### Supporting the SDGs

### FY2019/20 in Numbers

**100%**
of all reported hazards have been investigated and addressed

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

**0**
cases of recordable work-related ill health for employees and key contractors

**38**
Safety Awards and Safety Citations awarded to employees at SIA's Safety and Security Week 2019

### SIA's Ambition

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

| Targets | Due | Status |
|---|---|---|
| Conduct an annual Crisis Management Exercise | Every year | Achieved |
| Review the Departmental and Corporate Risk Register (Operations) once every six months | Every six months | Achieved |
| Conduct at least two fire evacuation drills for each office location in Singapore annually | Every year | Achieved |
| Conduct an IATA Operational Safety Audit (IOSA) once every two years | By FY2019/20 | Achieved |
| Conduct a Hazard Identification and Risk Assessment for Workplace once every three years | By FY2021/22 | On Track |
| Conduct a Line Operations Safety Audit (LOSA) once every five years | By FY2022/23 | On Track |

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

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

## Safety Governance

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

### Employees

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

**Adherence to Safe Work Procedures**
- Every employee must adhere to safe work procedures at the workplace, including the use of protective gear and equipment

**Reporting of Hazards**
- Every employee is encouraged to take the initiative in identifying and addressing hazards across our operations and workplaces

**Reporting of Incidents and Accidents**
- 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 (SAGs)**
- Comprises representatives from relevant departments in the division to address safety issues and performance within its functional responsibilities

**Safety Management System (SMS) Co-ordinators**
- Appointed to facilitate the division's SMS activities and function as the secretariat for their respective SAGs

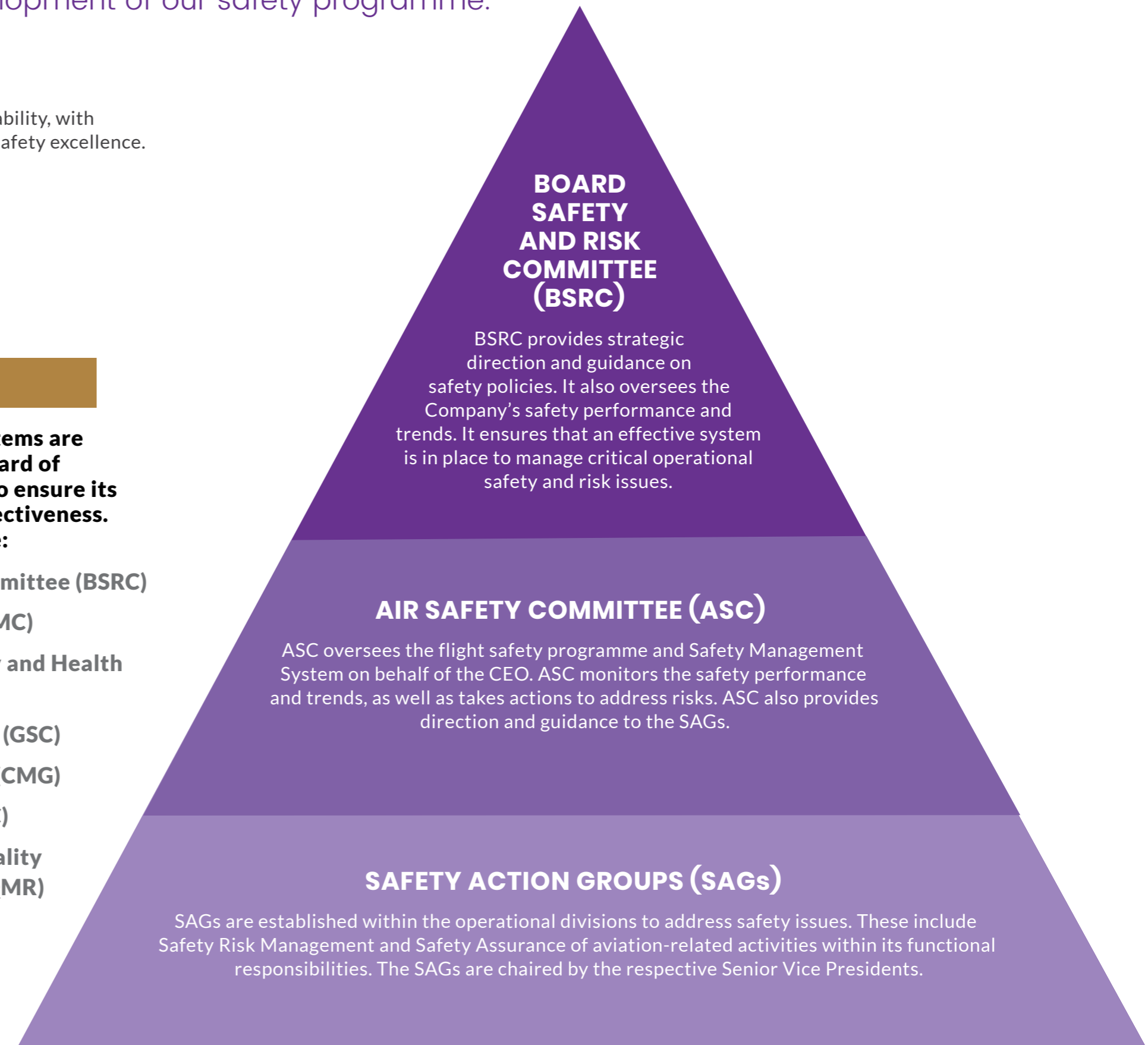**Occupational Safety & Health (OSH) Co-ordinators**
- Appointed to ensure the safety and health of all stakeholders in the workplace

### Executive Forums

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

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

### BOARD SAFETY AND RISK COMMITTEE (BSRC)

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

### AIR SAFETY COMMITTEE (ASC)

ASC oversees the flight safety programme and Safety Management System on behalf of the CEO. ASC monitors the safety performance and trends, as well as takes actions to address risks. ASC also provides direction and guidance to the SAGs.

### SAFETY ACTION GROUPS (SAGs)

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

# SAFETY MANAGEMENT (CONTINUED)

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

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

| Management Systems | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Flight Safety Management System (SMS)** | | **Occupational Health and Safety Management System (OHSMS)** | | **Quality Management System (QMS)** | | **Security Management System (SEMS)** | |
| **Based on:**<br>• CAAS Air Navigation Regulation (ANR)<br>• ICAO International Standards and Recommended Practices Annex 19 – Safety Management<br>• IOSA Standards Manual | **Coverage:**<br>• All operations<br>• All employees | **Based on:**<br>• Workplace Safety and Health (WSH) Act<br>• BS OHSAS 18001:2017 Occupational Health and Safety Management System | **Coverage:**<br>• All operations<br>• All employees<br>• All contractors working at SIA workplaces | **Based on:**<br>• CAAS Air Navigation Regulations (ANR)<br>• ISO 9001:2015 Quality Management System | **Coverage:**<br>• All operations<br>• All employees | **Based on:**<br>• Airport Police Division (APD) Security Directive for Aircraft Operators<br>• ICAO International Standards and Recommended Practices Annex 17 — Security<br>• IOSA Standards Manual | **Coverage:**<br>• All security operations<br>• All employees<br>• Applicable security providers |

| Policies and Procedures | | | | | | |
|---|---|---|---|---|---|---|
| **The lines of accountability, policies and procedures relating to safety, security and quality are governed by operational manuals of our divisions and departments.** | | | | | | |
| **Airport Operations Department** | **Cabin Crew Division** | **Cargo Division** | **Crisis Management Department** | **Engineering Division** | **Flight Operations Division** | **Safety, Security And Quality Department** |
| • Ground Services Manual (GSM)<br>• Ground Services Quality Manual (GSQM) | • Cabin Crew Division Manual (CCM)<br>• Cabin Crew Safety Management System Manual (CCSMSM)<br>• Cabin Crew Safety Manual (CCSM)<br>• Cabin Crew Safety, Security, Quality and Health Department Procedures Manual (CCSSQH DPM) | • Cargo Quality Manual (CQM)<br>• Cargo Safety Manual (CSM) | • Crisis Management Manual (CMM) | • SIA Maintenance Control Manual (SIAMCM) | • Crew Administration Manual (CAM)<br>• Flight Operations Quality Manual (FOQM) | • Air Carrier Security Programme (ACSP)<br>• Corporate Flight Safety Management and Procedures Manual (CFSM)<br>• Corporate Operational Quality (Safety) Manual (COQM)<br>• Flight Security Procedures Manual (FSPM)<br>• Ground Safety Manual (SSQ GSM)<br>• Premises Security Manual (PSM)<br>• Quality Manual (SSQ QM)<br>• Safety and Emergency Procedures Manual (SEPM)<br>• Security Management System Manual (SESM) |

# SAFETY MANAGEMENT (CONTINUED)

## Safety Audits and Assessments

Safety is our first and foremost priority. We strive for continual improvement and constantly strengthen our safety processes. As part of our corporate safety assurance, safety audits and assessments are performed on a regular basis across the organisation. We take the opportunity to evaluate the effectiveness of our management approach and make adjustments to the way we conduct our business activities when there are observations and findings from the audits.

| Key Safety Audits | Description | Frequency |
|---|---|---|
| Air Operator Certificate (AOC) Renewal Audit | • Conducted by CAAS in accordance with the Air Navigation Regulations (ANR)<br>• Assesses SIA's regulatory compliance as an Air Operator Certificate holder and safety performance | Every year |
| IATA Operational Safety Audit (IOSA) | • Conducted by an independent IATA-accredited audit organisation in accordance with standardised IOSA quality audit principles | Every two years |
| | • Assesses SIA's operational management, control systems and safety performance for continual improvement | The last audit was completed in 2019. |
| Line Operations Safety Audit (LOSA) | • Conducted by The LOSA Collaborative (TLC), Klinect Group L.L.C. | Every five years |
| | • Assesses SIA's level of organisational resilience to systemic threats through a data-driven approach, identifies threats and errors to flight safety, minimises risks that such threats may generate, and implement measures to manage human error | The last audit was completed in 2018. |

We also actively engage in other safety programmes across our operations. Together, these programmes facilitate the enhancement of safety holistically across the organisation.

| Programme | Description | Frequency |
|---|---|---|
| Cabin Operation Safety (CSO) Programme | • Conducted by our In-flight Auditors (Ward Leaders)<br>• Provides real-time assessment on the safety competency and performance of our cabin crew<br>• The results are collated and discussed with the relevant stakeholders<br>• Areas of development are identified and worked on so as to improve processes | Monthly |
| Corporate Operational Quality (Safety) Audit | • Consists of planned audits and reviews of SIA's QMS and performance<br>• Ensures established policies, practices and procedures are observed and revised for continued compliance with applicable regulatory, company and IOSA requirements for safe flight operations | At least one audit per year for each operational division* |
| Flight Data Analysis Programme (FDAP) | • Identifies systemic causes for deviation from standard operations in any part of the flight regime<br>• Captured in the aircraft's Quick Access Recorders (QAR), flight data is regularly downloaded and used to analyse the aircraft's flight and systems performance, irregularities and trends<br>• Where necessary, corrective and preventive measures will be implemented to improve flying standards and enhance safety | Every flight |
| Ground Ramp Incident Prevention (GRIP) Programme | • Promotes safety on the apron by identifying hazards and unsafe work practices<br>• Eliminates occurrences of damage to aircraft and equipment<br>• Raises safety competency levels and measures safety performance for continual improvement | Once a month for each station |
| Safety Management System (SMS) Audit | • Consists of planned audits and reviews of SIA's SMS and performance<br>• Ensures established policies, practices and procedures continue to be suitable, adequate and effective | At least one audit per year for each operational division* |
| Workplace Safety Inspection | • Ensures that the business units have implemented all necessary workplace safety and health policies, practices and procedures and that the risk control measures implemented in workplaces are effective | Fortnightly |

*Cabin Crew Division, Cargo Division, Customer Services and Operations Division (Airport Operations department), Engineering Division and Flight Operations Division.*

# PASSENGER SAFETY  `403-5`  `403-7`  `PR-1`

## Crew Competency

## Our cabin crew and pilots are trained in safety and emergency procedures.

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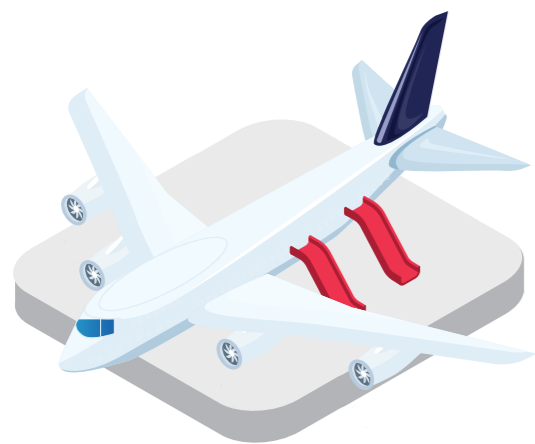
**Emergency Procedures**

**In-flight Medical Emergency**

**Safety Equipment and Systems**

**Standard Operating Procedures**

**Survival**

## Pre-flight Safety Briefing

As part of Standard Operating Procedures, pilots undergo a pre-flight safety briefing. The briefing covers general safety, as well as specific aircraft, route and weather information for the flight.

For cabin crew, a mandatory briefing is also conducted prior to each flight. During the session, a safety video of the aircraft type they will be operating in is viewed and relevant safety topics and questions are discussed. This safety briefing reinforces and refreshes our crew's safety knowledge for each flight.

## In-flight Safety Briefing

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

# PASSENGER SAFETY (CONTINUED)

## Medical Emergencies and Infectious Disease Handling

Emphasis is placed on the handling of medical emergencies when they happen on board our flights. In the event of an in-flight injury or illness, our cabin crew are equipped with the first aid skills and knowledge to administer care to the unwell passenger. The unwell passenger will be attended to by the relevant medical authorities upon landing.

We adopt strict measures on the ground and in the air to minimise the spread of infectious diseases. Our ground employees and crew 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 (CSI) are issued and communicated to all crew when there are changes to the regulations and requirements.

The procedures mentioned in the table on the right will be enhanced in line with the nature and scale of the infectious disease. We remain prepared to respond swiftly and appropriately in the face of epidemics and pandemics. For more information on our response to Covid-19, please refer to pages 59 to 60.

## Food Safety  `416-2`

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

Locally-manufactured items are procured from establishments licenced by the Singapore Food Agency (SFA), or the equivalent authority in other countries. In addition to our caterers' food safety compliance with their local regulations, we engaged Medina Quality Assurance to conduct regular audits on SATS Ltd and selected overseas stations.

Globally, all our caterers are certified by their relevant local authorities for food safety and hygiene. Caterers are required to comply with their local laws and regulations. Local authorities will advise SATS Ltd of such regulations during the development of meals, so that the meals prepared are in line with local regulations. These include allergen labelling, minimum food safety requirements for food handling for safe distribution into foreign countries, etc.

In FY2019/20, there were zero incidents of non-compliance to food safety and hygiene that resulted in any fines, penalties or warnings.

## Infectious Disease Handling Procedures

| Pre-flight |
| --- |

**Observation and Health Screening**

Before boarding, any passenger observed to be unwell will be referred to the airport medical authorities. The passenger will only be allowed to board the aircraft after a doctor certifies that the passenger is fit to travel.

**Disinfection and Grounding of Aircraft**

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

| In-flight |
| --- |

**Caring for the Passenger**

While a dedicated crew member will care for the unwell passenger, other crew members will contact our tele-medical service provider for advice. In addition, the assistance of any onboard medical professional will be sought.

**Precautionary Measures and Disposal of Biohazard Waste**

We endeavour to adopt the best possible means to ensure that there is a dedicated area for the unwell passenger to recuperate. Any biohazard waste will also be disposed of properly to minimise contamination.

**Personal Protective Equipment**

Infectious Disease Handling Kits, which include surgical face masks, protective gowns, anti-fog goggles, biohazard bags, disposable gloves and disinfectants are available on board all our aircraft. If necessary, the unwell passenger, our crew members and any medical professional assisting on board the flight will be adequately equipped with the necessary personal protective equipment.

**Alerting the Destination Airport Authorities**

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

| Post-flight |
| --- |

**Disinfection**

The aircraft cabin and lavatories will be disinfected to ensure that all surfaces are cleaned and refreshed for the next flight.

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

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

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

With our FEP setting the roles and responsibilities for occupants and building management to follow in the event of a fire emergency, our stakeholders are able to respond swiftly to a fire in any of our office premises. In FY2019/20, we conducted two fire evacuation drills at each of our owned buildings.

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

### Fire Emergency Plan (FEP)

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

### Arson Prevention Plan (APP)

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

# HAZARD IDENTIFICATION AND RISK MANAGEMENT  `403-2` `403-3` `403-4` `403-5` `403-7` `PR-1`

## Hazard identification is part of our risk management process, which is centred around the principle of managing justifiable risks at the right time and at the right level.

We evaluate the probability and potential consequences from the exposure of identified hazards, and determine the appropriate measures to prevent the occurrence of such situations.

| STEP 1 | **Hazard Identification** | We identify hazards from processes that are predictive, proactive and reactive. The scope for hazards is wide and may relate to factors that are communication, design, human, organisational, procedural, regulatory or work environment in nature. |
|---|---|---|
| STEP 2 | **Risk Assessment** | We perform risk assessments based on the probability of the hazard causing harm or adverse consequences, and take into consideration the severity of their outcomes. |
| STEP 3 | **Risk Mitigation** | We adopt three basic strategies in risk mitigation: <br>• Avoidance <br>• Reduction <br>• Segregation of exposure <br><br>A combination of measures such as administrative or engineering controls, procedures, equipment or contingency plans are taken to contain risks. Control measures that are higher up in the Hierarchy of Controls, such as elimination and substitution, will be considered first. |
| STEP 4 | **Implementation** | We communicate the adopted measures to our internal stakeholders prior to their implementation. These may come in the form of bulletins, notices or workshops. A monitoring system is also put in place to monitor compliance and to assess the adequacy of these measures. |
| STEP 5 | **Review** | We conduct reviews to assess the adequacy of risk management and ensure that the implemented controls are effective. |

## Hazard Reporting

Our employees are encouraged to identify and address hazards across our operations and workplaces without fear of reprisal. Hazard reports can be submitted electronically via our employee portal or through hard copies. In FY2019/20, we introduced a new feature in 1SQ, our one-stop employee mobile app, allowing employees to submit their hazard reports and photos on the go. All hazard reports are routed to the respective division or department to investigate and implement measures to remove these hazards. An initial risk assessment and investigation findings of the hazard will have to be submitted within two weeks.

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

### 100%
of all reported hazards have been investigated and addressed in FY2019/20

## Fatigue Risk Management

Our Flight Operations Division and Cabin Crew Division have a Fatigue Risk Management (FRM) framework in place to manage fatigue risk while operating flights. This framework includes a fatigue reporting system for crew to submit reports of fatigue that they might have experienced while performing their duties. These reports, together with tools such as a bio-mathematical fatigue model and fatigue surveys, will be used by the Management to determine areas of fatigue concern across our operations.

Employees who are involved in crew rostering and scheduling are also trained in the science of fatigue risk management. SIA is also an active member of the IATA Fatigue Management Task Force, which keeps abreast of the latest regulatory and industry developments in the area.

## Pilot Psychological Well-being

The mental well-being of our pilots is important to us. We have a comprehensive psychological support framework in place, which involves trained peer counsellors, aviation psychiatrists and psychologists, as well as the Civil Aviation Medical Board, to care for the mental well-being of our pilots. In addition to this framework, we abide by medical reporting guidelines, creating a safe environment for reporting and for pilots to seek assistance if required.

## Systematic Alcohol Screening

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

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

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

Extending beyond our legal and regulatory requirements, strong emphasis is placed on incident reporting and investigation so that an occurrence of a similar nature may be prevented in the future.

## Aircraft Incident Procedures
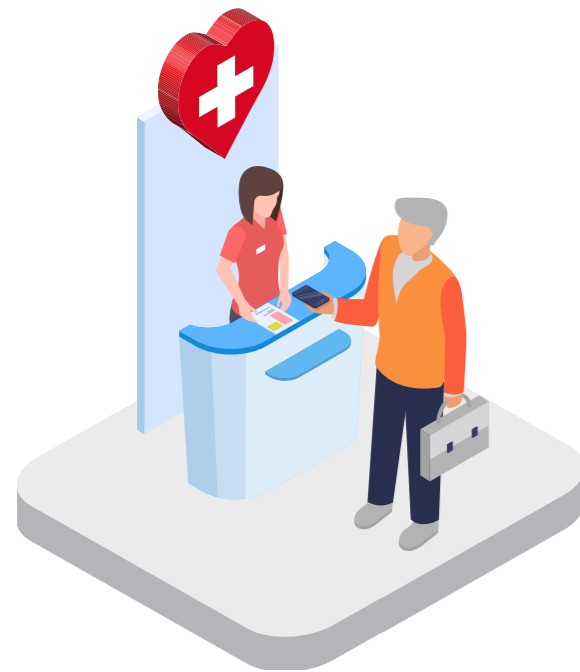


### Reporting

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

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

### Actions

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

- Fleet
- Safety, Security & Quality (SSQ)
- SIAEC
- SIA Operations Control
- Station Managers and Cargo Managers

### Investigation

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

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

### Communication

Incidents and investigation reports are made available to all employees on the SSQ W@ves portal to increase the level of safety awareness and education.

# WORKPLACE INCIDENTS `403-3` `PR-1`

SIA 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.

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

## Work-related Injuries[24] `403-9`

In FY2019/20, we reported zero work-related fatalities and zero high consequence work-related injuries. We recorded four work-related injuries for our ground employees and 577 work-related injuries for our cabin crew, with an overall work-related injury rate of 35.1 injuries per million man hours worked.

Each work-related injury is documented and the cause of each injury is identified. Additional measures are put in place to ensure that such incidents do not occur in the future. We continue to closely monitor the situation together with our stakeholders to ensure the safety and well-being of our employees.

**0** work-related fatalities and high consequence work-related injuries for employees and key contractors in FY2019/20

We regularly review potential hazards and introduce measures to prevent the possibility of such incidents from occurring. For instance, we stepped up the frequency of mopping in washrooms to keep the floors dry and increased placements of anti-slip mats at washbasin areas to reduce slip and fall incidents. During the year in review, we continued to engage our employees on occupational health and safety matters. The Cabin Crew Division focused on raising awareness on physical and mental well-being amongst crew members through a series of dialogue sessions and communication tools.

In FY2019/20, we recorded two work-related injuries for our key contractors. These were minor injuries relating to slip, trips and falls. Measures were implemented at the incident site, such as increasing illumination and installing friction strips on staircases to minimise future occurrences.

| Employees | FY2018/19 | FY2019/20 |
|---|---|---|
| Estimated number of man hours worked | 15,567,250 | 16,566,501 |
| Number (and rate*) of fatalities as a result of work-related injuries | 0 | 0 |
| Number (and rate*) of high consequence work-related injuries | 0 | 0 |
| Number (and rate*) of recordable work-related injuries | 211 (13.6) | 581 (35.1) |
| Main types of work-related injuries | • Slip, trips and falls<br>• Struck by falling objects such as cabin baggage<br>• Over-exertion and strenuous movements<br>• Exposure to extreme temperatures such as scalds | |

| Workers Who are Non-Employees | FY2018/19 | FY2019/20 |
|---|---|---|
| Scope of workers who are non-employees | | Key contractors only (cleaners, maintenance, landscaping, warehouse operations) |
| Estimated number of man hours worked | 1,213,404 | 1,294,689 |
| Number (and rate*) of fatalities as a result of work-related injuries | 0 | 0 |
| Number (and rate*) of high consequence work-related injuries (excluding fatalities) | 0 | 0 |
| Number (and rate*) of recordable work-related injuries | 0 | 2 (1.5) |
| Main types of work-related injuries | Nil | Slip, trips and falls |

[24] Please refer to the Appendix on pages 130 to 131 for definitions and methodologies.
* Rates are calculated per million man hours worked.

# WORKPLACE INCIDENTS (CONTINUED)

## Work-related Ill Health[25]  `403-10`

Due to the nature of our operations, employees may be exposed to loud noise and various chemicals. In FY2019/20, we reported zero cases of work-related illnesses for our employees and key contractors.

| Employees | FY2018/19 | FY2019/20 |
| --- | --- | --- |
| Number of fatalities as a result of work-related ill health | 0 | **0** |
| Number of recordable work-related ill health | 13 | **0** |
| Main types of work-related ill health | Noise-induced deafness | **Nil** |

| Workers Who are Non-Employees | FY2018/19 | FY2019/20 |
| --- | --- | --- |
| Scope of workers who are non-employees | Key contractors only (cleaners, maintenance, landscaping, warehouse operations) | |
| Number of fatalities as a result of work-related ill health | 0 | **0** |
| Number of recordable work-related ill health | 0 | **0** |
| Main types of work-related ill health | Nil | **Nil** |

**0** cases of recordable work-related ill health for employees and key contractors in FY2019/20

[25] *Please refer to the Appendix on pages 130 to 131 for definitions and methodologies.*

# EMPLOYEE ENGAGEMENT  403-4  403-5

We believe in involving all employees to ensure safety in SIA. Various communications channels are available for employees to share their feedback so that the safety measures implemented can be improved.

## Safety Surveys

SSQ conducts Safety Climate Surveys once every three years to identify safety issues that employees encounter in their daily operations. Their feedback and insights on potential safety implications are sought. This allows employees to clarify any doubts they may have regarding unsafe work procedures or conditions.

Divisions in SIA are encouraged to conduct customised safety surveys to dive deep into specific issues relating to the division's scope of work. For instance, Cabin Crew Division and Flight Operations Division conduct a safety survey with our pilots and cabin crew every two years. This survey assesses areas such as safety management, violations observed during operations and readiness of our crew to report on safety matters. It provides an overall assessment of the safety climate and culture, as well as safety concerns of our crew. A comprehensive list of quantitative and qualitative performance indicators helps us measure the effectiveness of our efforts. These indicators are reviewed on a quarterly basis and are benchmarked against industry standards.

## Safety Training

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

## CASE STUDY
## SAFETY AND SECURITY WEEK 2019: REINFORCING RESILIENCE, STRENGTHENING SAFETY



The theme of Safety and Security Week (SSW) 2019 was "Reinforcing Resilience, Strengthening Safety". Building on the previous year's theme of "Resilience in Operations", the focus of SSW 2019 was to encourage employees to learn from experience while inculcating a culture that values our human capital as the solution. These aim to strengthen the resilience of our employees, enabling them to cope with the demands and uncertainties that are common place in our operations.

Guest speakers were invited to share their knowledge and experience at SSW 2019. These include Professor Erik Hollnagel, an internationally-recognised specialist in resilience engineering, systems safety and human reliability analysis. He conducted workshops to reinforce our employees' understanding of resilience concepts and provided opportunities for the participants to put their learning into practice. Over the course of the week, various activities were organised across the SIA Group such as forums, seminars and campaigns to promote safety and security at their respective work areas.

Employees and stakeholders who exhibited exemplary judgment and skills toward safety were recognised at the annual Safety and Security Awards and Citations Ceremony. A total of 18 Safety Awards and 20 Safety Citations were awarded to employees from the SIA Group.

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

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

# OUR RESPONSE TO COVID-19

*Information accurate as of 30 June 2020.*

## Caring for Our Stakeholders

The health and safety of all stakeholders remains our top priority. Since January 2020, we have introduced various measures both on the ground and in the air to ensure the health and safety of our stakeholders. We continue to make adjustments to these measures based on the evolving situation, taking into account the requirements and recommendations from IATA, government authorities and international bodies such as the World Health Organisation (WHO).

### Flight Operations

#### Pre-flight

- Temperature screening and completion of health declaration for all crew before operating each flight
- Temperature screening and completion of health declaration and/or health assessment for all passengers prior to flight departure*
- All staff at the airports wear face masks and follow safety standards mandated by the local authorities*
- Markers on the ground and alternate check-in kiosks for safe distancing*
- Cleaning frequencies have been increased and long-lasting disinfectants are applied to frequently touched surfaces*
- All passengers receive a complimentary Care Kit containing a face mask, hand sanitiser, and anti-bacterial wipes

#### In-flight

- All crew are required to wear face masks throughout the flight, as well as goggles or eye visors when interacting with passengers. Gloves are also worn during meal service
- Cleaning frequencies of lavatories have been increased using manufacturer-approved high-strength disinfectants
- Adjustments to in-flight service and amenities
  - ◊ Removal of menu cards and seatback literature such as magazines and newspapers. Passengers have complimentary access to over 150 newspapers and magazines available for download via our e-Library on the SingaporeAir mobile app
  - ◊ Suspension of in-flight purchases. Passengers can order KrisShop items online for collection in-flight or have it delivered to their homes
  - ◊ Suspension of services such as distribution of hot towels, children's amenities, baby kit bags and arrival cards to minimise contact
- Adjustments to food and beverage services
  - ◊ Meal services have been suspended for all flights within South East Asia and to Mainland China in line with regulatory requirements. A snack bag with water and refreshments will be provided upon boarding instead
  - ◊ For all other flights, meal services have been simplified. First Class and Business Class meals are to be served as a one-tray offering, as per Singapore's regulations. This will consist of an appetiser, a main course and a dessert. We also adjusted the alcohol offerings in all cabin classes. For customers requiring special meals, a reduced list based on the IATA guidelines will be available upon request

#### Post-flight

- Temperature screening and completion of health declaration and/or health assessment for all passengers upon arrival*
- All staff at the airports wear face masks and follow safety standards mandated by the local authorities*
- Cleaning frequencies have been increased and long-lasting disinfectants are applied to frequently touched surfaces*
- Common surfaces and areas such as windows, tray tables, handsets, in-flight entertainment screens, lavatories and galleys are wiped with a strong disinfectant. If there is a confirmed Covid-19 case on one of our flights, our rigorous deep-cleaning procedures will be activated post-flight. These procedures take five times longer than the regular process and includes the fogging of the entire cabin with disinfectants
- Headsets, headrest covers, pillow covers, bedsheets and blankets are replaced after every flight. Used linens are washed at high temperatures to disinfect them after every use
- Enhanced measures for crew at station
  - ◊ Dedicated crew lanes for immigration clearance*
  - ◊ Charter of large buses for safe distancing, where possible
  - ◊ Relocation of crew to hotels near airports, with dedicated floors where possible
  - ◊ Layover measures such as room stays, room service and safe distancing

*\* By airport operators. May vary across airports.*

# OUR RESPONSE TO COVID-19 (CONTINUED)

## Caring for Our Stakeholders

### Ground Operations

**Employee Measures**

- Provision of PPE for employee use and availability of hand sanitisers at key areas
- Twice-daily temperature screening for employees through a webform
- Approximately 85 per cent of our employees are working from home (as at 7 April 2020). The remaining 15 per cent of our employees return to office for essential operations only
- Measures taken to avoid cross-deployment, movement and interaction of employees from different office premises
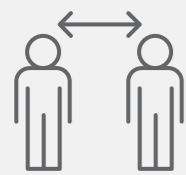
**Ground Premises**

- Temporary closure of facilities such as the SIA Group Sports Club and the SIA Training Centre canteen
- Safe distancing markings set up at all touchpoints
- Enhanced premises cleaning procedures, with fogging of high traffic areas and increased frequency of wipe-down of high contact areas

**Airport Ticketing Offices**

- Temporary closure of SIA's Service Centre at ION Orchard Singapore, in line with Singapore's circuit breaker measures
- Consolidation of services at Singapore's Changi Airport Terminal 3 (T3)
- Requests by customers to be handled through our 24-hour Contact Centre and electronic means

**SilverKris Lounges**

- All SilverKris Lounges are closed except for the SilverKris Lounge at Singapore's Changi Airport T3
- Mandatory for all customers and employees to wear masks
- Social distancing markings set up at all touchpoints
- Enhanced hygiene measures have been put in place during meal services. Customers can enjoy à la carte meals in place of a buffet service in most of our lounges

# CUSTOMER-FOCUS  `103-1` `103-2` `103-3`

Customer service is instrinsically linked to the Singapore Airlines brand promise. Whether pre-flight, in-flight or post-flight, we endeavour to make every journey personal for our customers and deliver a Great Way to Fly. We continue to place emphasis on the quality of service that our customers receive across all Singapore Airlines touchpoints.

## OUR MANAGEMENT APPROACH

### Key Engagement Activities

| Engagement Mode | Frequency |
|---|---|
| Annual Report, Sustainability Report | Yearly |
| Customer Communications Channels (Chatbot, Email, Hotline, Live Chat, Social Media, etc.) | Ad hoc |
| Press Releases | Ad hoc |
| Publications (KrisWorld Magazine, Priority Magazine, SilverKris Magazine, etc.) | Regular |
| Surveys (Voice Of Customer Post-flight Survey, etc.) | Regular |

### Key Policies, Processes and Procedures

- Customer Experience Management System
- Customer Insights Portal
- Performance Improvement Framework
- Privacy Policy
- Quality Framework
- Quality Management System
- Service Audits
- SOAR as ONE Service Philosophy

### SIA's Ambition

We endeavour to offer customers the best travel experience through service excellence and proactive customer engagement.

### Supporting the SDGs
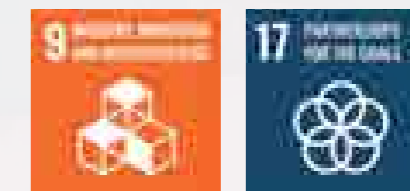
### FY2019/20 in Numbers

**>500**
brands available on our revamped KrisShop, with over 20 dedicated online shopfronts

**↑11%**
improvement in our Telephone Service Factor (TSF) from FY2018/19

**↓19%**
decrease in average delayed or lost baggage rate, an improvement from FY2018/19

**0**
substantiated complaints concerning breaches of customer privacy

# CUSTOMER-FOCUS

## We do our utmost to make every journey personal.

Understanding the needs of our customers and enhancing customer experience are the key principles that guide our business decisions. We aim to create personal, lasting bonds with all customers. We do this by improving the service that our customers receive across all touchpoints, anticipating our customers' needs and delighting them throughout their journey with us. We want our customers to be assured of the high standards of service and efficiency that they can expect from us, both on the ground and in the air.

SIA recognises the value of innovation and knows that our customers desire it too. As an innovative market leader and industry trendsetter, we are proud to have achieved significant milestones through the decades.

## Industry-leading Innovations

First to offer free headsets, a choice of meals and free drinks in Economy Class, in the 1970s

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 introduce *KrisWorld*, a state-of-the-art in-flight entertainment and communications system across all cabin classes in 1995

First to involve a panel of world-renowned chefs, the International Culinary Panel, in developing 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 in 2007

First to introduce Companion App that offers customers greater control over their in-flight entertainment experience in 2016

First to fly the lightweight and fuel-efficient Boeing 787-10 Dreamliner in 2018

First to offer pre-ordering of in-flight meals for Suites, First Class and Business Class customers in 2018

First to offer pre-ordering of Child Meals of different cuisines in 2019

## SOAR as ONE

In 2017, we introduced SOAR as ONE as our service philosophy to reinforce our longstanding commitment to service excellence with a single unified call to action across the SIA Group and our service partners.

Structured service training programmes enable our employees to appreciate and understand their roles in our service chain and their impact on overall customer experience. This allows us to align and reinforce a service culture that engenders consistently high service delivery standards across all our touchpoints. In FY2019/20, SIA's Corporate Learning Centre (CLC) conducted 27 SOAR as ONE trainings for frontline employees, including cabin crew and service partners from SATS Ltd and call centres.

Service recognition schemes were also introduced as part of SOAR as ONE to inspire frontline employees to uphold SIA's promise of service excellence. The annual CEO Service Excellence Awards event seeks to recognise exemplary individuals and teams for outstanding service and service innovation ideas. A total of 164 frontline staff were recognised during the CEO Service Excellence Awards held in June 2019.

# CUSTOMER ENGAGEMENT

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

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CASE STUDY
## GOING THE EXTRA MILE FOR OUR CUSTOMERS



**Amir Ghani Bin Musa Bakar**
Senior Customer Services Officer

As a testament to his outstanding service record, Amir received the highest number of compliments from customers in FY2018/19 through our customer feedback system at the SIA Service Centre in Singapore.

An example of Amir displaying his commitment to service excellence was when he went the extra mile to help our customers, Mr Stevenson* and his children, to return to their family in Cape Town. Mr Stevenson was unable to board the flight as his children did not have the documents required by the South African immigration authorities to clear immigration. After obtaining the necessary documents the next day, Mr Stevenson sought Amir's assistance at the SIA Service Centre to arrange for a return flight on the same night. Unfortunately, the flight was fully booked. Undeterred, Amir took the effort to seek internal approval to arrange flight tickets for Mr Stevenson and his children on their preferred flight home.

On a separate occasion, our customer, Mrs Lee*, was unable to claim her redemption ticket prior to its expiry date due to medical reasons. While it is uncommon to reissue an expired ticket, Amir took the initiative to escalate the case to his supervisor and succeeded in getting an approval to reissue the ticket as an exception.

Through these examples, Amir displayed qualities of kindness and empathy even when he faced customer service challenges. Amir's "Why Not?" mindset empowered him to challenge himself to do his best to resolve customer issues with compassion and flexibility.

*"It is in these small acts of kindness that we remember why we choose to fly with Singapore Airlines." – Mr Stevenson*

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CASE STUDY
## ADDING A PERSONAL TOUCH WHILE CARING FOR OUR CUSTOMERS



**Christine Lim**
Flight Stewardess

Christine's strong commitment to personalised customer care is the embodiment of SIA's culture of service excellence.

In September 2018, our customer, Ms Lim*, suffered from severe stomach cramps and nausea on board a flight from Singapore to Munich. Upon noticing Ms Lim's condition, Christine took the initiative to care for Ms Lim to ease her discomfort. As a result of Christine's effort, Ms Lim was able to relieve the pain and rest during the flight. In response to Christine's act of kindness, Ms Lim commented that having Christine next to her during the flight was akin to having a family member care for her.

Beyond the compassion she displays while caring for our customers, Christine picked up the German language so as to add a personal touch while serving our customers on board. As a result, she impressed a few of our German-speaking customers by speaking to them in their native language, making them feel at home on board their flight.

*"I have been on more than 160 flights in the last five years and have had a fair amount of experience with cabin crew. Christine has absolutely exceeded my expectations." – An SIA passenger*

*Customer names have been changed to protect their privacy.

# CUSTOMER ENGAGEMENT (CONTINUED)

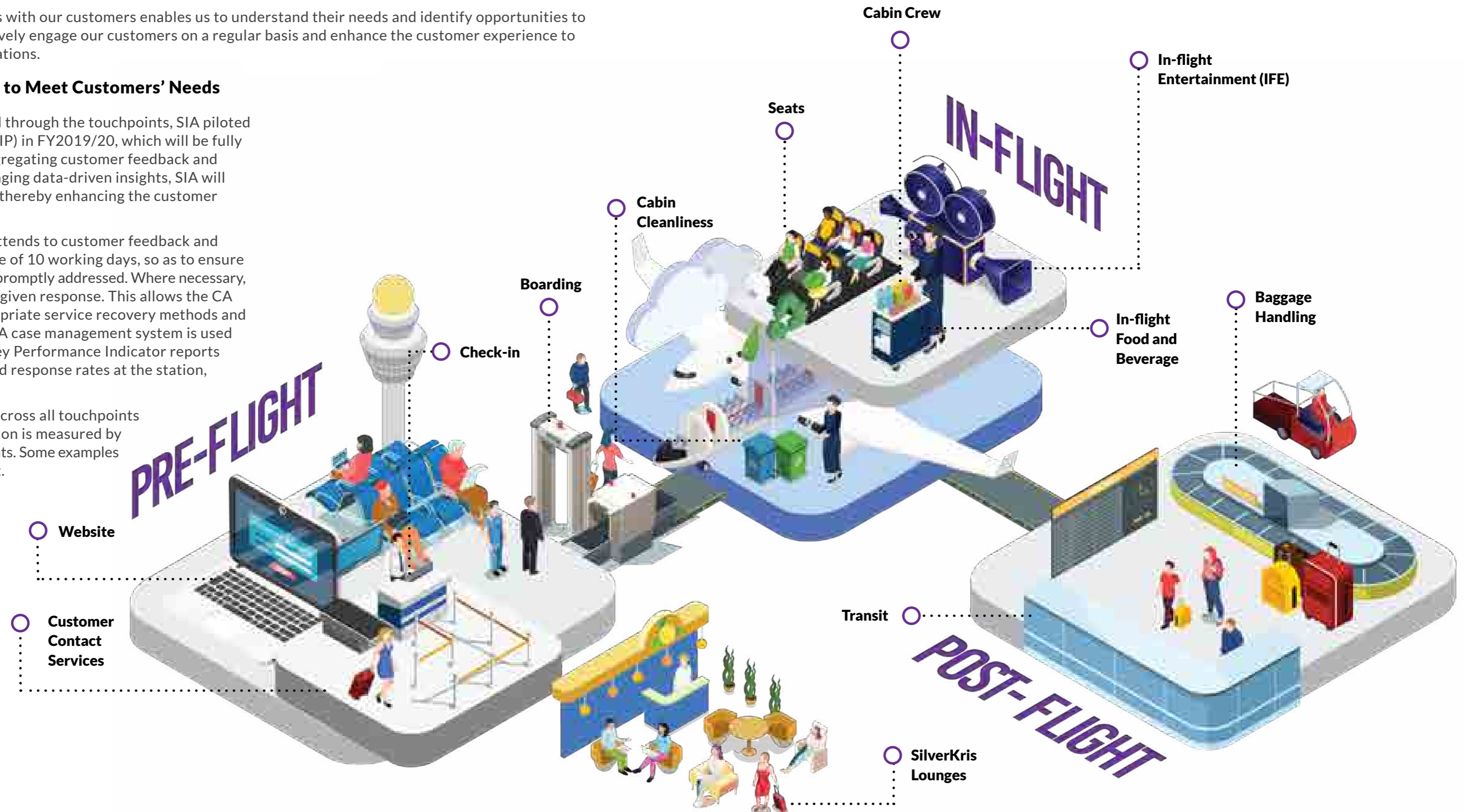## Forging Connections Through Open and Engaging Communications

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

### Monitoring Customer Touchpoints to Meet Customers' Needs

To consolidate customer insights gathered through the touchpoints, SIA piloted the use of the Customer Insights Portal (CIP) in FY2019/20, which will be fully implemented by the following year. By aggregating customer feedback and sentiments on a single platform and leveraging data-driven insights, SIA will be able to make more informed decisions, thereby enhancing the customer experience.

SIA's Customer Affairs (CA) department attends to customer feedback and enquiries daily, with a target response time of 10 working days, so as to ensure that customers enquiries and feedback are promptly addressed. Where necessary, investigations are carried out prior to any given response. This allows the CA department to assess and adopt the appropriate service recovery methods and restore our customers' confidence in SIA. A case management system is used to track case assignments and closures. Key Performance Indicator reports are regularly prepared to monitor achieved response rates at the station, department and individual levels.

Ensuring a positive customer experience across all touchpoints is a key priority for us. Customer satisfaction is measured by way of metrics across our various touchpoints. Some examples are summarised in the graphic on the right.



Touchpoints shown in graphic:

- **PRE-FLIGHT**: Website, Customer Contact Services, Check-in, Boarding
- **IN-FLIGHT**: Cabin Cleanliness, Cabin Crew, Seats, In-flight Entertainment (IFE), In-flight Food and Beverage
- **POST-FLIGHT**: SilverKris Lounges, Transit, Baggage Handling

# CUSTOMER ENGAGEMENT (CONTINUED)

## Leveraging Digital Platforms and Data Analytics

We live in a digitally connected world, with almost two-thirds of the world's population owning a mobile device[26]. SIA aims to transform our business digitally to continue thriving in a rapidly changing global environment. We are constantly on the look out for new digital tools to adopt and to further leverage data analytics to better engage our customers, streamline feedback, and respond more effectively to their concerns. Digital tools and platforms such as social media and mobile applications help us stay connected with our customers and improve on the delivery of our offerings and overall customer experience.

In FY2019/20, we continued to deliver new digital initiatives via our website and mobile applications to provide a more seamless and enhanced travel experience for our customers. These initiatives include proactively pushing relevant information as well as self-service functionalities that our customers can access on their mobile devices. For example, real-time information on boarding gate details, weather at their destination and baggage belt information are available to our customers. Self-service features that our customers have access to include a baggage tracking feature. Our latest digital enhancements include allowing customers to receive updates on the recovery status of their delayed or mishandled baggage.

SIA strives to maintain high standards in processing customer feedback. The CA department employs data analytics to automate and better manage SIA's feedback handling process. The system allows for automated extraction of customer information, better feedback classification, case routing and prioritisation. Other digital initiatives implemented by the CA department include the use of electronic payment requests and online self-help options. Beyond improving customer response time, these digital initiatives helped to reduce paper usage and time spent on manual processing, enabling the support team to perform higher-skilled tasks.

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

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CASE STUDY
## KRISSHOP TRANSFORMATION



Founded in 1974, KrisShop started as an in-flight duty-free shop on board Singapore Airlines. In August 2019, KrisShop achieved a major milestone with its brand revamp and a new website to deliver a seamless shopping experience for our customers. KrisShop has transformed into an omni-channel retailer for all customers, both travellers and non-travellers, by offering a wide range of products and experiences with fuss-free delivery options. Customers are able to shop in the comfort of their homes and have their purchases delivered to them in-flight or directly to their doorstep. KrisShop also launched a same or next day delivery and partnered with local hotels to enable travellers to collect their purchases at selected hotels in Singapore.
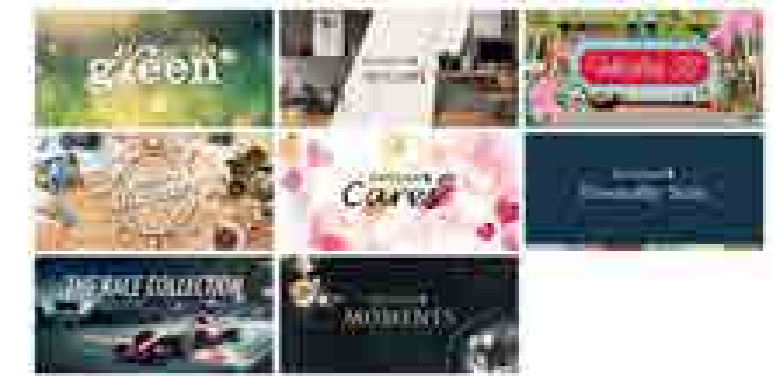


### Revamped Website

The KrisShop website sports a refreshed look with a modern interface for smoother navigation, enhanced search functionality and live chat.

### Brand Stores

KrisShop has an extensive product selection, featuring over 500 brands. Over 20 dedicated online shopfronts are also available for selected brands.

### Unique Concept Stores

KrisShop has curated concept stores that speak to customers' beliefs and passions, ranging from supporting local brands (With Love, SG) and giving back to the community (KrisShop Cares) to helping customers to reduce environmental impact (KrisShop Green).

Click here to stay updated with the latest products and brands on, lifestyle trends and more.

# CUSTOMER ENGAGEMENT (CONTINUED)

## Ensuring Customer Satisfaction Through Service Excellence

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

Ensuring high customer satisfaction levels is the goal of the Customer Contact Services (CCS) team. The team regularly collates and monitors customer satisfaction levels across SIA's customer servicing channels. A Process Improvement Framework is in place to help us achieve our service vision through collaboration and continuous learning. Our employees are trained to be on a constant lookout for opportunities to simplify and redesign processes. In addition, our Quality Framework is continuously enhanced to enable us to deliver high quality service. We also actively review and develop capabilities across our contact centres to increase the resilience of our operations. This was demonstrated during the Covid-19 outbreak where work-from-home arrangements were set up for 70 per cent of our contact centre staff in Singapore.

In addition, the use of data analytics has enabled the CCS team to accelerate and enhance decision making and implement more effective changes in our contact centres. This has translated into a higher resolution rate and faster customer response time, as demonstrated by a 11 per cent improvement in our Telephone Service Factor (TSF)[27] compared to FY2018/19.

A Service Culture and Quality (SCQ) team was formed in February 2019 to promote and imbue the SIA service culture within the SIA Group. The team tracks customer feedback and compiles monthly service quality performance reports to enable business units to monitor and refine their service performance. Moving forward, the SCQ team will be developing live dashboards, which will be used to equip business units with timely insights. This will enable them to identify opportunities to further refine their service quality.

### A Data-centric Approach for a Customer-centric Design

The Customer Experience (CE) department was formed in 2016 to expand SIA's potential to deliver exceptional customer experiences. The department works with business units across the organisation to adopt a consistent customer-centric and data-driven approach when designing and improving the end-to-end customer journey.

Building on our commitment to deliver personalised and meaningful customer service, the CE department supports other business units by guiding their decisions based on customer insights gathered from the various touchpoints. These insights are gathered through a combination of qualitative and quantitative research that helps us understand customers' needs, value drivers, concerns and potential opportunities for improvements. This information is then shared with the relevant business units to design and implement ways to enhance the SIA experience. In FY2019/20, the team mapped over 30 customer journeys and designed improved ways to service our customers.

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



**↑11%** improvement in our Telephone Service Factor from FY2018/19

To keep track of our progress, SIA continues to employ the Voice of Customer (VoC) post-flight survey, which was introduced in April 2018. Data from this survey is regularly reviewed during management forums. They are also used by SIA's business units to review existing customer-related policies, products and services. SIA also uses this survey to gather customers' sentiment, feedback and concerns on sustainability-related issues. Some of the key sustainability topics which have been highlighted by our customers include environmental sustainability, community engagement and data privacy. These feedback and concerns are raised and addressed at our Board Customer Experience, Technology and Sustainability Committee (CETSC) meetings. Through this survey, SIA derives a Net Promoter Score (NPS), which is a management key performance indicator that measures our customers' advocacy. In FY2019/20, our NPS improved for our three airline brands: Singapore Airlines, SilkAir and Scoot.

[27] TSF is a metric used to measure the percentage of calls answered within a specific time frame.

# CUSTOMER ENGAGEMENT (CONTINUED)

## Enhancing Customer Touchpoints and Service Excellence

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

### Singapore Airlines and SilkAir

### Make Boarding Amazing Initiative

In FY2019/20, SIA's Airport Operations and SATS Ltd's Passenger Services jointly embarked on a Make Boarding Amazing (MBA) initiative with the objective of simplifying the boarding process by providing a more organised and fuss-free experience for customers. Pilot tests were conducted for several Singapore Airlines flights departing Singapore Changi Airport, where the team experimented with new ways of boarding and implemented improvement measures.
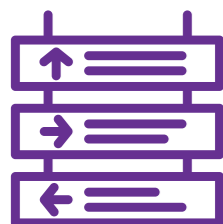
**Pre-recorded Audio Announcements**
Enables standardised quality of announcements and frees up staff to perform other duties such as queue-combing.

**Demarcation at Gatehold Rooms**
Coloured signs guide passengers to be seated according to their boarding groups. This allows for a more organised boarding experience.

**Visual Signages at Cluster Gates**
Coloured signs with group numbers light up to alert passengers when it is time for their group to board.

Through the VoC post-flight survey, we saw an improvement in our customer satisfaction scores for flights on the MBA initiative. Moving forward, we aim to implement these initiatives on all Singapore Airlines flights departing Singapore Changi Airport and continue our engagement with the airport authorities to enhance boarding announcements.

### Leave No Bags Behind Movement

In FY2019/20, nine initiatives were trialled as part of the Leave No Bags Behind movement to improve our end-to-end baggage handling journey while ensuring timely and professional handling of baggage.

### Better Collaboration with Stakeholders to Improve Efficiencies

- Enhanced baggage handling processes improved the chance of baggage being connected even during flight delays
- Flights with shorter connection time that require a quicker turnaround are allocated to gates nearer to each other
- Established closer operational collaboration with Changi Airport Group and SATS Ltd to increase baggage oversight in the Singapore Hub operations

### Proactive Handling of Mishandled Baggage Cases

- Trial initiative for a response team that proactively informs affected passengers upon arrival of their mishandled baggage
- Signboards are displayed near baggage carousels to inform passengers about baggage delays
- Ground Handling Agents provide on-the-spot settlements at the Lost and Found counter, reducing escalation and processing time

### Leveraging Digital Tools and Systems to Enable Better Service

- Agents are trained to use the WorldTracer® system, a global baggage tracing and matching system to help customers locate lost baggage
- Passengers can chat with Kris, our Chatbot, to get updates on their delayed baggage status
- SingaporeAir mobile app was enhanced to include a baggage tracking feature to allow passengers to track real-time status

Through the implementation of these initiatives, we saw an improvement in our customer satisfaction scores on baggage handling and an improvement in our average delayed or lost baggage rate, which decreased by 19 per cent. With an estimated 240,000 processing hours saved annually, we continue to enhance our efforts to bring greater convenience and efficiency to our customers.

↓**19%**
decrease in our average delayed or lost baggage rate, an improvement from FY2018/19

Approximately
**240,000**
hours saved annually to process baggage cases

# CUSTOMER ENGAGEMENT (CONTINUED)

## Singapore Airlines and SilkAir

### Introducing the Enhanced SingaporeAir Mobile App

The enhanced SingaporeAir mobile app, which was launched in August 2019, was designed for faster performance and improved usability. The new features in the app offer customers a seamless and more personalised experience. Based on a ground-up rebuild and all-new underlying technical architecture, the enhanced mobile app delivers significantly enhanced booking and check-in flows for customers, improving transaction time by up to 60 per cent.
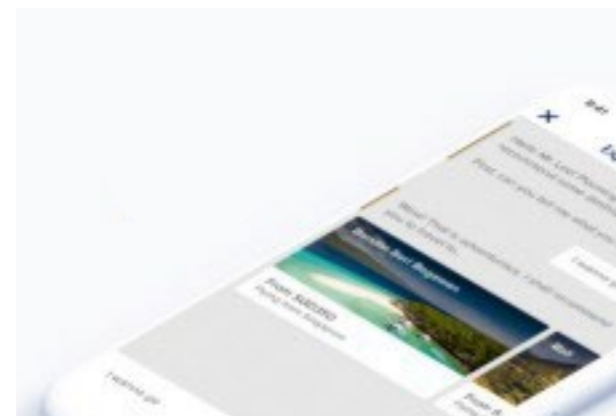
### Introducing WiFi Onboard Singapore Airlines Flights

We recognise that our customers want to stay connected even when they are on board the aircraft. To enhance the customer experience, SIA provides complimentary WiFi for selected passengers on board certain aircraft types. Suites and First Class customers enjoy unlimited in-flight WiFi, while Business Class customers, PPS members and supplementary cardholders are entitled to 100MB of complimentary onboard WiFi. In-flight WiFi price plans have been streamlined, offering customers even more reasons to stay connected while they fly. We continue to monitor our customers' needs and preferences to enhance their in-flight experience with us.



**Capture and Discover**

A search function that uses image recognition as well as speech and natural language processing matches the user's intent to a Singapore Airlines destination, with destination content and fare deals.



**e-Library**

Extended access to the e-Library magazine and newspaper content based on KrisFlyer membership tier and a new search function to allow for easier content browsing in the e-Library and *KrisWorld* catalogue.

Click here for more information on the SingaporeAir mobile app.



**Measure Your Baggage**

A feature that helps travellers determine if the size of their bag is within cabin baggage limitations.



**My Trips**

A feature that provides real-time information such as boarding gate details, the destination's weather and currency, as well as baggage belt information.



**Translation Assistant**

A feature that uses real-time language translation by voice to help travellers communicate better when they are overseas.

### Enhancement of the KrisPay Mobile App

KrisPay, the world's first blockchain-based airline loyalty digital wallet, was launched in 2018 to bring SIA's customers, assets and partners onto a common digital platform, enabling us to engage our customers beyond their flight journey. KrisFlyer members can convert their KrisFlyer miles into KrisPay miles using this app for everyday spend at our partner merchants. In FY2019/20, new privileges were added to the app, such as instant reward of KrisPay miles for spend at partner outlets, conversion of DBS rewards points to KrisFlyer miles and SIA Boarding Pass Privileges. More features such as in-app payment methods, partner rewards conversion and lifestyle features will be integrated into the app in the future.

Click here for more information on the KrisPay mobile app.
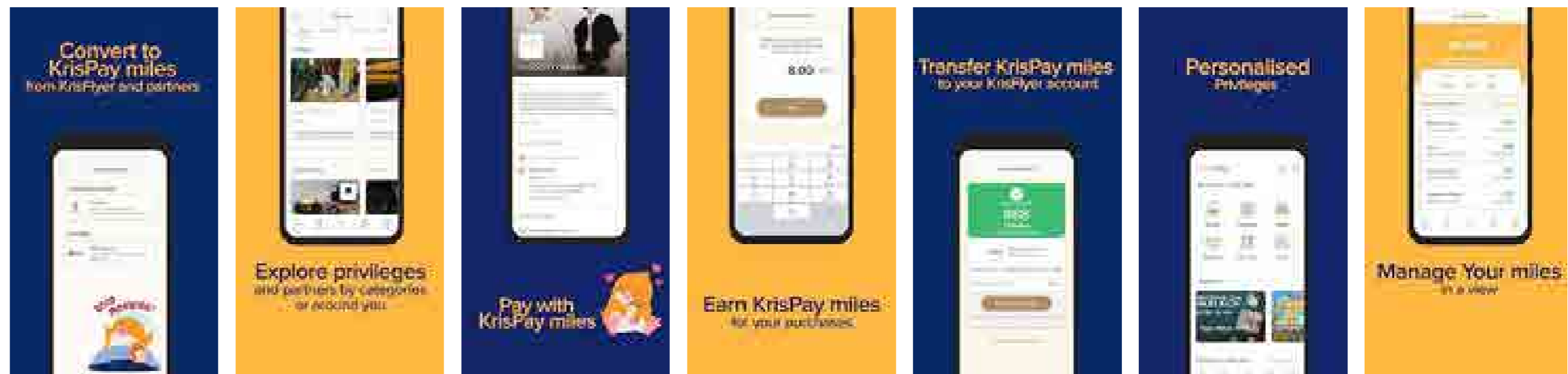
# CUSTOMER ENGAGEMENT (CONTINUED)

## Singapore Airlines and SilkAir

### Upgrading of Kris, Our Chatbot

Kris, our chatbot, answers commonly asked questions by our customers and is accessible on Facebook Messenger via our Facebook page and the Singapore Airlines website. Over the years, Kris was upgraded to provide customised responses through pre-built dialogues, which include checking of flight statuses, subscribing to flight alerts and checking of booking statuses.

In FY2019/20, additional features were added to Kris to answer customer queries relating to delayed baggage status, KrisFlyer Spontaneous Escapes, as well as lounge eligibility and location. Moving forward, there are plans to increase the capabilities of Kris for greater coverage on the Singapore Airlines website.

## Scoot

### Upgrading of M.A.R.V.I.E., Our Chatbot

Scoot's M.A.R.V.I.E. (Most Awesome Resourceful Virtual Intern Ever) was introduced in 2018. It is the first chatbot by an airline in Asia that is able to support flight transactions, in addition to responding to customer queries. Apart from its ability to assist with customer queries relating to flights, flight bookings and payments, M.A.R.V.I.E. is able to resend flight itineraries and include add-ons to bookings. In FY2019/20, M.A.R.V.I.E. handled an average of 3,000 queries per week, with an average query resolution rate of 70 per cent.

### Enhancing Scoot's Mobile App

Enhancements to Scoot's mobile app in FY2019/20 included functions to enable a more seamless flight booking experience. New payment methods such as Google Pay and Apple Pay were also made available on the mobile app. A Vietnamese version of the app was launched in July 2019.
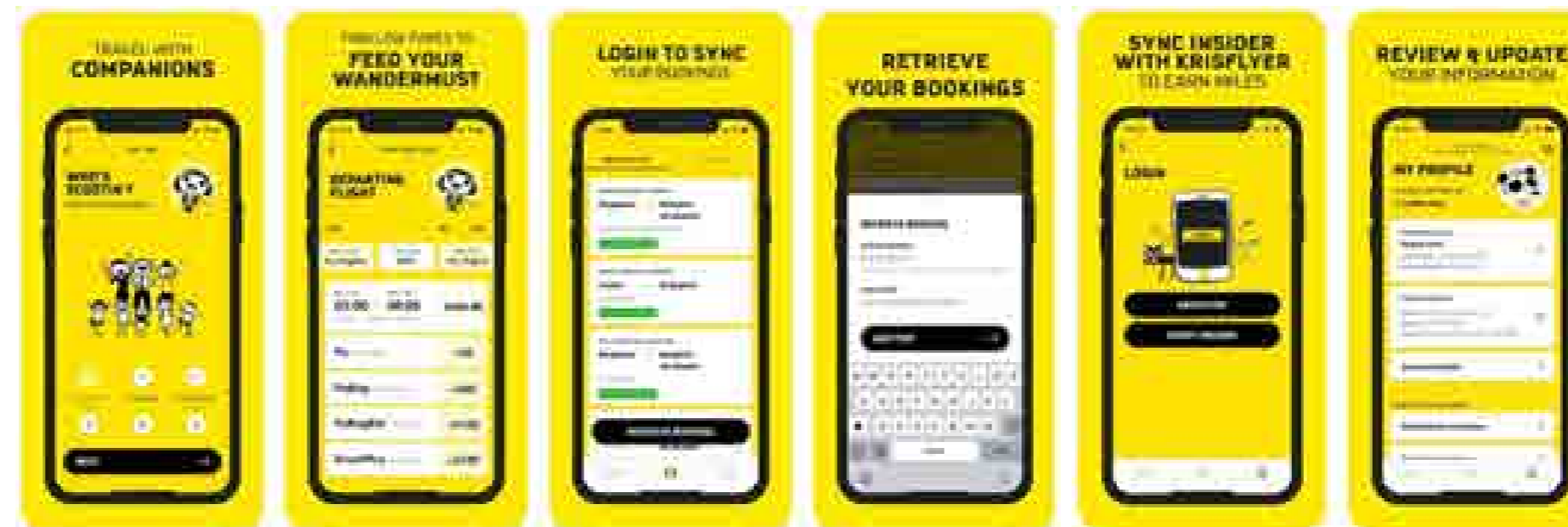
### Introducing Online and Mobile Check-in

As of 31 March 2020, customers on Scoot flights departing from Bangkok (Suvarnabhumi Airport), Chiang Mai, Gold Coast, Hat Yai, Krabi, Perth, Phuket, and Sydney are able check in online for their flights from 72 hours to one hour before flight departure. Other destinations in which Scoot's customers are able to check in online or via the mobile app include Berlin, Singapore, Seoul and all points in India. In FY2019/20, Scoot was the first airline in Singapore to introduce mobile check-in for WeChat bookings.

### New Payment Methods and Removal of Payment Processing Fees

In line with Scoot's aim of making travel attainable and accessible for all, Scoot removed payment processing fees globally for all bookings made on Scoot's direct channels from FY2019/20. In addition to existing payment methods in Vietnam, Scoot rolled out Google Pay, Apple Pay and Momo during the year in review. Scoot also offered a range of 16 different payment methods across our network in FY2019/20.

### Implementing More Self-service Options for Customers' Convenience

In FY2019/20, Scoot automated its refunds process by introducing a web-based form. During the year in review, Scoot also introduced a feature for customers to track their delayed baggage on the Scoot website. These initiatives resulted in an estimated reduction of 18 days in service time.

### Improving Operational Processes and Customer Response Times Using Digital Tools

In FY2019/20, Scoot integrated its customer case management system with their in-flight iPads to enable Scoot's cabin crew to record customer feedback directly into the system via the iPad. Information captured within the system is sent to the customer service team for review and used to guide Scoot's customer service response and recovery. As a result of this initiative, Scoot saw a 30 per cent improvement in case handling time in FY2019/20.

# AN AWARD-WINNING EXPERIENCE

Singapore Airlines is the world's most awarded airline. These are some of the awards attained in FY2019/20:

## 2019

### APRIL

**Zaker (China) 3rd Premium Travel Awards**

Top 10 Consumers Preferred Airlines of Year 2018-2019

**Business Traveller Middle East Award**

Best Asian Airline Serving the Middle East (18th consecutive year)

Airline with the Best Premium Economy Class

**TripAdvisor Travellers' Choice 2019 Awards (the United States)**

Best Airline in the World (2nd year)

Best Major Airline – Asia

Best Airline – Asia

Best Economy – World

Best Economy – Asia

### MAY

**Condé Nast Traveler China The Gold List**

Best Airline

**Randstad Award (Singapore)**

Singapore Airlines awarded title of Singapore's most attractive employer (4th time)

**Changi Airline Awards**

Top 5 Airlines and Airline Groups by Passenger Carriage

Top 5 Airlines and Airline Groups by Cargo Carriage

Top 5 Airlines by Absolute Growth

### JUNE

**Skytrax World Airline Awards 2019 (the United Kingdom)**

Best Airline in Asia

World's Best Cabin Crew

World's Best First Class

World's Best First Class Seat

Best First Class Lounge in Asia

Best Business Class Seat in Asia

Best Premium Economy Class in Asia

**Next Magazine (Hong Kong SAR, China) Top Service Awards**

Top Airline

**Hong Kong Economic Journal SME Partner Awards for Excellence 2019**

Distinguished Airline

### JULY

**Handelszeitung (Switzerland)**

Best Airline 2019

**Travel + Leisure Magazine (the United States)**

World's Best International Airline (24th consecutive year)

**Business Traveller (Germany)**

Best Airline for Business Travellers Worldwide (19th time)

**SmartTravelAsia.Com (Hong Kong SAR, China) Favourite Airline Poll Results, 2019**

Rank No. 1 in Top 25 Airlines (Worldwide)

### SEPTEMBER

**Business Traveltip Magazine (Switzerland) Swiss Business Travel Award 2019**

Best Airline for Long-haul flights (5th time)

**Business Traveller (Asia Pacific) 2019**

Best Airline (28th consecutive year)

Best Asia-Pacific Airline

Best Airline First Class

Best Airline Premium Economy Class

Best Airline Economy Class

Best Frequent Flyer Programme

**APEX Award (the United States)**

Five Star Global Airline 2020

### OCTOBER

**Danish Travel Awards (Denmark)**

Best Intercontinental Airline

**City Traveller Magazine (China)**

The Best Airline in 2019 (3rd time)

**Business Traveller (based in the United Kingdom) 2019**

Best Asian Airline

Best Economy Class

Best Cabin Staff

**Business Traveler USA 2019**

Best Overall Airline in the World (29th time)

**Travel Inside Magazine (Switzerland)**

Best Airline for Long-haul flights

**Travel Weekly Asia Readers' Choice Awards (Singapore)**

Best Airline (Asia Pacific) (3rd time)

Best Airline Service Excellence (5th time)

**World Travel Awards 2019 (the United Kingdom)**

Asia's Leading Airline 2019

Asia's Leading Airline – First Class

**Robb Report China 12th Annual "Best of the Best" Awards**

Best Airline (8th consecutive year)

**Condé Nast Traveler (the United States) 2019 Readers' Choice Awards**

Best Airline in the World (30 out of 32 years)

### NOVEMBER

**Prime Traveller Magazine (Russia) Prime Traveller Awards**

Best Airline (2nd time)

**Telegraph Travel Awards (the United Kingdom) (Daily Telegraph & Sunday Telegraph Newspapers)**

Best Long-haul Airline (6th time)

**Travel Magazine (Belgium) Best Carrier for Long-haul Airline Offline**

**APEX 2020 Regional Passenger Choice Award (the United States)**

Five Star Global Official Airline (Best Seat Comfort and Best In-Flight Entertainment for the Eastern Asia Region)

**SPRING (Japan) 11th JCSI (Japanese Customer Satisfaction Index) 2019 survey**

SIA ranked 1st in international airlines category (8th year)

**Condé Nast Traveller (India) India Readers' Travel Awards 2019**

Favourite Airline

**Travel + Leisure (India)**

Best International Airline in the World

**Business Traveller (China)**

Best Airline in the World (14th year)

Best Asian Airline serving China

Best Airline First Class

Best Airline Business Class

**Airline Economics (Hong Kong)**

Asia Pacific Airline of the Year

### DECEMBER

**Global Times Newspaper (China)**

SIA awarded as one of six most welcomed foreign airlines by Chinese Families

**New Voyage Magazine (China) New Voyage Travel awards**

Annual Innovation Experience Airline

**The BrandLaureate Awards (Malaysia)**

Brand of the Year Award – Premium Airline

**Indonesia Travel and Tourism Award 2019/20**

Indonesia's Leading International Airline

# AN AWARD-WINNING EXPERIENCE (CONTINUED)

## 2020

### JANUARY

**Forbes Korea Best Brand Awards 2020**

Best International Airline (7th consecutive year)

**Wanderlust Travel Award (the United Kingdom)**

Top Worldwide Airline

**Telegraph 'Ultras' Travel Awards (the United Kingdom)**

Best Business Class

**DesignAir (the United Kingdom)**

Best Design Airline

Best Design Airline – Asia

**Fortune Magazine (the United States)**

Top 50 World's Most Admired Companies (Ranked 28)

Highest ranked non-United States company in the list

**Hurun Report 2020 (China) "Best of the Best" ranking**

Best International First & Business Class Award (9th consecutive year)

**National Geographic Traveller (China)**

One of the 10 "Golden Airlines of the Year 2019"

### FEBRUARY

**Business Traveller 2019 (Russia)**

Best Business Class on Long-haul Flights

**DestinAsian (Indonesia) Readers' Choice Awards (15th time running)**

Best Airline – Overall (15th consecutive year)

Best Airline Premium Class

Best Airline in Economy Class

Best In-flight Entertainment

Best Frequent Flyer Programme - KrisFlyer

**Skyway Service Award (Russia)**

Best Business Class International Flights

Best Duty Free on Board

**Roy Morgan Research 2019 (Australia)**

International Airline of the Year (6th time)

### MARCH

**TravelPlus 2019 (the United Kingdom) Airline Amenity Bag Awards**

Kids' Kit – Children under 6

Sustainable Kit – Singapore Airlines Children's Amenities

First Class Amenity Kit – Male

First Class Amenity Kit – Female

# OUR RESPONSE TO COVID-19

*Information is accurate as of 30 June 2020.*

## Caring for Our Customers

It is difficult to imagine a world without travel. Even as border controls are tightened globally, we continue to remain connected with our customers and keep them updated on how we can support their travel plans. We do our utmost to bring our customers home to reunite them with their loved ones.

### Communicating With Our Customers

- A cross-divisional team was established in March 2020 to look at the various communications required to support our customers across all touchpoints.

- A dedicated **Covid-19 Information Centre** was introduced in the Singapore Airlines website to assist our customers in understanding the various options available to them, as well as a list of Frequently Asked Questions (FAQs). The **Covid-19 Assistance Request Form** enables our customers to submit Covid-19-related enquiries such as flight credits and refund requests easily. Useful links are also available in the Covid-19 Information Centre, which provides information on flight schedules, travel advisories and more.

- Proactive updates on all Covid-19-related developments are shared on our social media platforms to keep travellers up-to-date on the latest information. Customers can subscribe to mobile app alerts or visit the News Alerts section in the Singapore Airlines website for updates on the Covid-19 situation. We also encourage all travellers to update their contact details via the Manage Booking section on our website, so that they can obtain real-time updates on their personal travel plans.

### Offering Greater Flexibility For Our Customers

- **Singapore Airlines and SilkAir**: Our **Global Travel Waiver Policy** enables customers to seek a full refund or collect flight plus bonus flight credits for future travel up to 31 December 2021. Customers who hold tickets issued before 15 March 2020, and travel before 31 August 2020 are also fully protected by this policy.

- **Scoot**: Scoot's **Covid-19 Travel Waiver Policy** enables customers to either seek a full refund or obtain a 120 per cent refund in Scoot vouchers, valid for 12 months.

### Ensuring Singaporeans Return Home Safely

- Following a special arrangement with the Singapore authorities, Scoot mounted a flight to Wuhan to fly 92 Singaporeans back to Singapore in January 2020. A second Scoot flight was deployed to Wuhan in February 2020 to deliver humanitarian assistance from the Singapore Government, and to fly 174 Singaporeans and their family members back to Singapore. The flight also brought some Chinese nationals back to Wuhan. In April 2020, Scoot also mounted similar flights to Chennai in India and Kuala Lumpur in Malaysia.

- We supported the Singapore Ministry of Foreign Affairs' (MFA) plans for a special arrangement to fly Singaporeans and Singapore Permanent Residents home from London between 19 March and 31 March 2020. As part of this arrangement, a dedicated team was put together to support this effort. Customers could register for seats that have been set aside to ensure that they could return home. Priority was given to students who were studying overseas and they were offered a special travel rate.

### Enhancing Health and Safety Measures

- The well-being and safety of our customers and staff members remain our top priority. Since the beginning of the Covid-19 outbreak, we have enhanced our cleaning procedures and implemented precautionary measures to keep our customers and staff members safe. Details of measures implemented, including in-flight service adjustments, can be found **here**.

# CUSTOMER PRIVACY  `418–1`

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

A report by the Data Protection Excellence (DPEX) Centre states that in 2019, the number of organisations breaching Singapore's Personal Data Protection Act (PDPA) and the total amount of fines in Singapore reached a record high. The study also found that among the personal data breach cases in Singapore, 80 per cent of the data leaks were due to a breach of protection obligations, and not due to cyber security attacks. Recognising that these events will result in greater concerns on customer data privacy, SIA remains committed to upholding the highest standards in customer data protection while delivering the best-in-class service to our customers.

Compliance to the Personal Data Protection Act (PDPA) of Singapore is important to SIA as it cultivates confidence among customers who entrust us with their personal data. Customer data such as personal particulars and travel history are treated as strictly confidential. Complaints, queries, withdrawal of consent, requests for access, corrections and updates in relation to personal data are handled according to established internal organisational processes. These processes were developed in consultation with our Legal department to ensure strict compliance with the PDPA.

Any customer personal data that is collected or accessed when servicing customers' reservation and ticketing matters are also handled according to the guidelines laid out by the General Data Protection Regulation (GDPR) and SIA's Privacy Policy. Regular service audits are conducted to ensure that our customer service representatives comply with our customer data protection policies.

To balance customer experience and customer data protection, our verification processes are regularly reviewed and enhanced based on customer feedback and complemented with consultations with the Legal department to ensure strict compliance with customer data protection regulations.

In FY2019/20, SIA did not identify any substantiated complaints concerning breaches of customer privacy.

**0** substantiated complaints concerning breaches of customer privacy in FY2019/20

# CONNECTING COMMUNITIES

*Forging meaningful, stronger relationships with our stakeholders*
*From the investing community to our partners, aviation communities and those we serve*
*Where we weave Singapore's social fabric with a global shared heritage*
*We sustain our connections with the world*
*Because we believe in flying the extra mile, with a higher purpose*

# SUPPLIERS  `103-1` `103-2` `103-3`

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

## OUR MANAGEMENT APPROACH

### Key Engagement Activities

| Engagement Mode | Frequency |
| --- | --- |
| Audits and Assessments | Regular |
| e-Procurement Portal | Ad hoc |
| Meetings (Dialogues, Discussions, Project Milestone Meetings, Teleconferences, etc.) | Regular |
| Trade Fairs, Forums | Regular |

### Key Policies, Processes and Procedures

- Procurement Policies and Processes

- Suppliers' Code of Conduct

- Supplier Management Framework

### SIA's Ambition

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

### Supporting the SDG
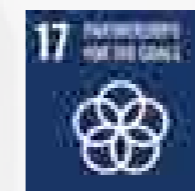


### FY2019/20 in Numbers

**S$10.3 bil**
total expenditure on supplier services

**>12,500**
suppliers globally

75

# OUR SUPPLY CHAIN  `102-9`

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

## Our Key Suppliers

SIA has more than 12,500 suppliers worldwide. We strive to support the local communities in the destinations we operate in. Our supply chain can be broadly classified into six main categories:
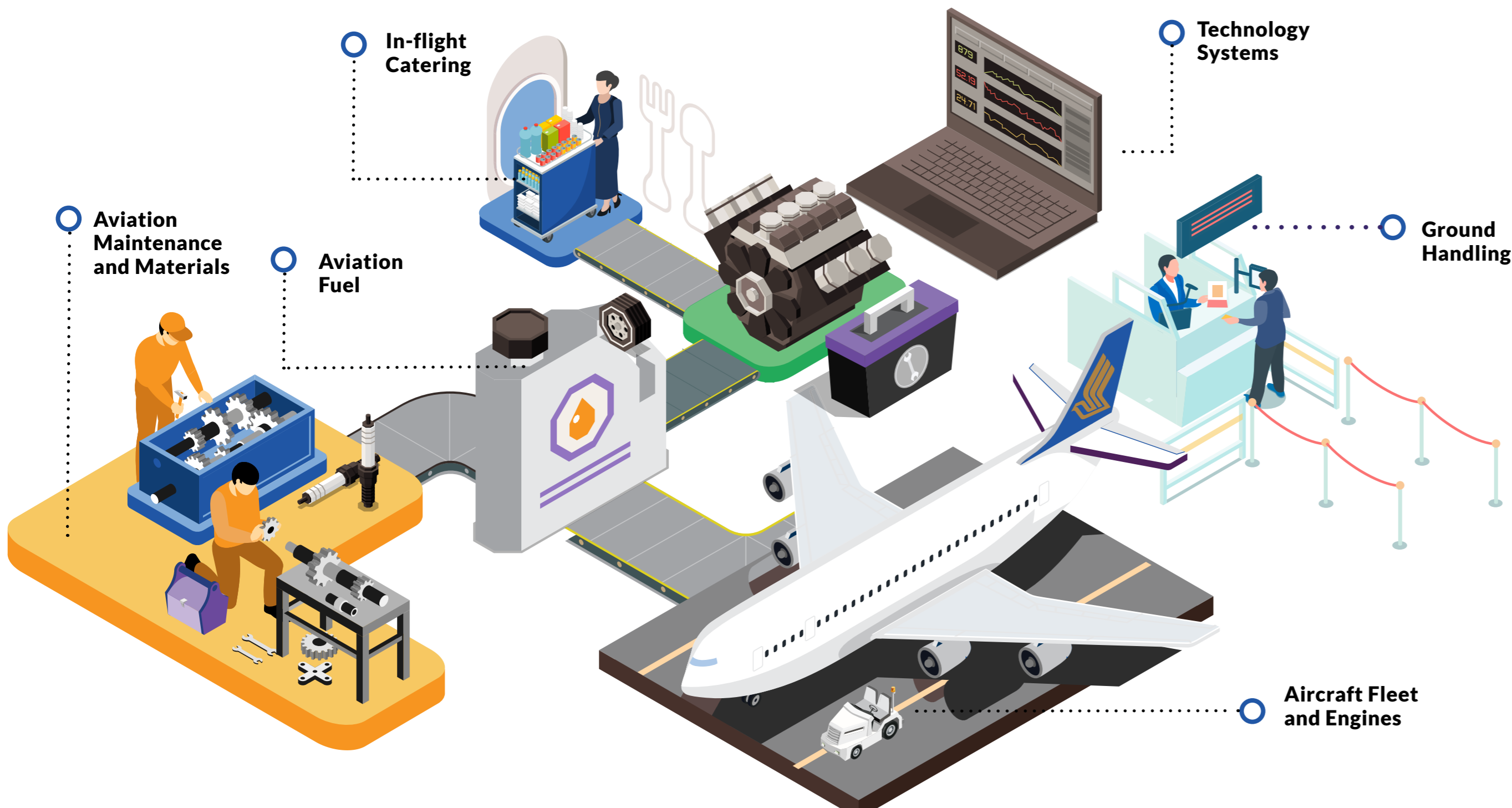


In FY2019/20, the total expenditure for suppliers' services engaged by SIA was over S$10.3 billion, with most of this going towards aircraft fleet and engines, aviation fuel, aviation maintenance and materials, ground handling and in-flight catering. Our top 10 suppliers, listed in alphabetical order, are as follows:

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

# INTEGRATING SUSTAINABILITY

We secure a sustainable future by strengthening our supply chain.

## Embedding Sustainability Within Our Procurement Process 308-1 414-1

We integrate environmental, social and governance considerations into our procurement process. We also manage supply chain risks and upkeep high sustainability performance standards through our Suppliers' Code of Conduct.

**Invitation to Request for Information, Proposal or Quotation**

**1**

**Bidding and Submission Process**

**2**
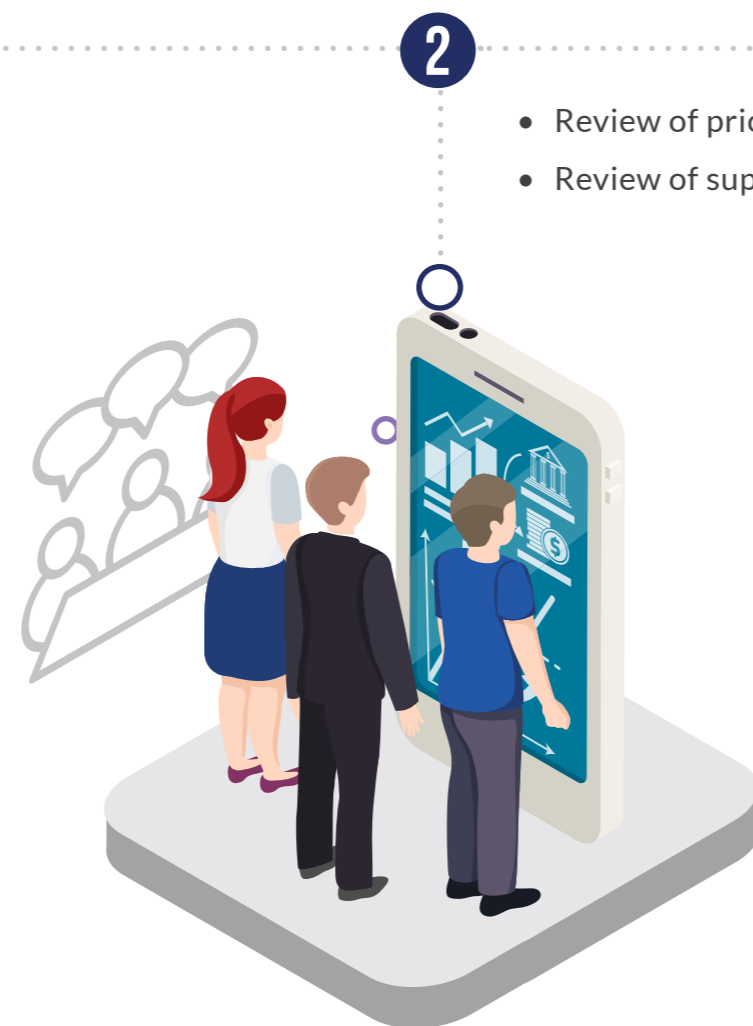
- Review of price and quality of products and services
- Review of suppliers' background and track record

**Evaluation and Selection**

**3**

- Suppliers are required to comply with SIA's Suppliers' Code of Conduct, which forms part of the contract

**Award of Contract**

**4**

# MANAGING OUR SUPPLY CHAIN RISKS

## Suppliers' Code of Conduct  `308-1`  `414-1`

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

All suppliers are required to comply with the SCOC, which forms part of SIA's contract with them. The SCOC is publicly available to all suppliers via our **website.** All contracts signed with suppliers include a clause referencing the SCOC. In the event a supplier is unable to include the SCOC in their contract, a review is carried out by the Sustainability Office and a waiver can only be approved by the Vice President Sustainability or his/her alternate. Through the introduction of the SCOC, SIA aims to have oversight of appointed suppliers' conduct, and mitigate any potential impact they may have to the environment they operate in.

### 1 Compliance with Laws and Regulations

- Accounting Practices
- Competition Compliance
- Intellectual Property
- Disclosure

Suppliers' business operations, as well as all products and services supplied to Singapore Airlines must fully comply with the laws and regulations of the countries where suppliers' operations are based, as well as where goods and services are provided to SIA.

All financial and business records must be accurately maintained in accordance with applicable laws and regulations, as well as generally accepted accounting principles.

Fair competition must be practised in accordance with local laws, and activity that restricts competition must be avoided. Commercial decisions, including prices, terms of sale, division of markets and allocation of customers, must be made independent of understandings or agreements with competitors.

### 2 Ethics and Conflict of Interest  `PR-10`

- Anti-corruption
- Financial Integrity
- Confidentiality
- Relationship of Business Partners with Company

Business dealings must be handled with integrity, transparency and honesty. No form of fraud, corruption, bribery, extortion or other behaviour involving improper benefits will be tolerated. Any situation that has actual, perceived or potential conflict of interest must be disclosed to Singapore Airlines.

Any information used in the business relationship with Singapore Airlines that is non-public and proprietary must be protected against loss and infringement. Any form of disclosure or use other than for officially stated purposes must first be authorised by Singapore Airlines.

Any form of relationship with a competitor, distributor, supplier, travel agency or any other entity with which Singapore Airlines has a business relationship must not interfere with the provision of products and services to Singapore Airlines and should demostrate high standards of ethical business behaviour.

### 3 Safety and Quality

- Health and Safety
- Quality of Products and Services

Health and safety protection policies and management systems must be in place by suppliers to provide a secure working environment. They must be designed to promote the general health of employees and reduce work-related injury and illness. For example, protective equipment and tools must be provided and replaced or maintained regularly.

The safety of all products and services must be ensured through appropriate policies, implementation and monitoring.

Policies and management systems must be developed to ensure that the quality of all products and services is as specified in the supply agreement.

### 4 Environment  `PR-7`  `PR-8`  `PR-9`

- Compliance with Laws and Regulations
- Engagement in Environmental Management Processes

Local environmental laws and practices such as those pertaining to waste disposal, air emissions and pollution must be complied with. Suppliers must endeavour to minimise the impact of their operations on the environment.

Environmental management is a key parameter that Singapore Airlines looks at when selecting its suppliers.

### 5 Labour Standards  `PR-1`  `PR-2`  `PR-3`  `PR-4`  `PR-5`  `PR-6`

- Equal Opportunity
- Non-discrimination
- Working Hours
- Minimum Age Child Labour/ Forced Labour
- Wage Standards

Employees must not be subjected to discrimination based on race, national origin, ethnicity, religion, gender, age, marital status, sexual orientation, disability or any other reason.

- All employees must meet the local legal minimum labour age
- Forced, coerced, bonded, indentured, involuntary prison labour or otherwise must not be used
- Employee working hours, including considerations for voluntary overtime work, and the granting of leave of any form, must be in accordance with applicable local and/or national laws
- Salaries must not be less than standards specified by local laws

### 6 Subcontractors and Other Service Providers

- Compliance with Code of Conduct
- On-time Payment

Subcontractors and service providers must also adhere to the principles set out in this Code of Conduct. Subcontractors and service providers must be paid accurately and promptly.

### 7 Communication, Documentation and Inspection

- Employees Awareness of Code of Conduct
- Language Translation

Employees must understand the requirements of this Code of Conduct, which must be made available in the local language where necessary.

# MANAGING OUR SUPPLY CHAIN RISKS (CONTINUED)

SIA's in-flight initiative to replace plastic polybags from our children's toys with recyclable paper packaging.

## Promoting Best Practices with Our Suppliers

Sustainable business practice involves maintaining responsible supply chains that minimise the environmental and social impact, as well as risks in the communities they operate in. Recognising that quality, environmental, health and safety (QEHS) considerations are critical to the aviation industry, SIA seeks to engage suppliers who adopt and promote good sustainable business practices. SIA encourages and welcomes suppliers to submit environmentally-friendly proposals. Such proposals are favourably considered during the product assessment and selection stage.

As part of our review of our sustainable procurement strategy, we established that all our printed items and paper products must be Forest Stewardship Council (FSC)-certified[28]. This is to ensure that the raw materials are responsibly sourced and are not from errant suppliers.

During the year in review, SIA and our supplier, Buzz Products, were awarded the 2019 TravelPlus Airline Amenity Awards (Sustainable Amenity Kits) for our Kids' Kit which uses FSC-certified paper and eco-friendly soy-based ink. From May 2019, we also replaced plastic polybags from our Kids' Kit packaging with recyclable paper packaging.

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[28] The Forest Stewardship Council (FSC)-certified is an international non-profit, multi-stakeholder organisation established in 1993 to promote responsible management of the world's forests. FSC uses the power of the marketplace to protect forests for future generations. Its main tools for achieving this are standards-setting, independent certification and labelling of forest products.

# WORKING WITH OUR SUPPLIERS ON SUSTAINABLE DEVELOPMENT

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

### Partnerships with Our Suppliers

The start of a sustainable future for aviation begins with organisations that are willing to take the first step to explore and collaborate on new sustainable offerings. SIA strives to support such advancements by supporting and sourcing from suppliers with strong sustainable value propositions. In FY2019/20, we intensified our efforts by collaborating with some of our suppliers on initiatives to provide socially and environmentally-friendly offerings.

CASE STUDY
## PROMOTING SUSTAINABLE FOOD SOURCING FOR SIA'S IN-FLIGHT DINING OFFERINGS

Introduced in 2017, our *'From Farm to Plane'* concept seeks to promote environmental sustainability while supporting local farming communities.

In FY2019/20, we made significant strides in our collaboration with AeroFarms, the world's largest indoor vertical farm of its kind based in the United States. A customised blend of fresh produce is grown indoors using a proprietary aeroponic technology for SIA's non-stop flights from New York (Newark Liberty International Airport) to Singapore from September 2019.

**95%**
less water is used compared to field farming and 40% less than hydroponics

**12-16**
days short crop cycle

**390**
times more productivity per square foot[29]

Grown indoors, without sunlight, soil or pesticides

With the farm located less than eight kilometres from Newark Liberty International Airport, the produce used for our in-flight meals on our non-stop flights from New York to Singapore no longer needs to be transported over a long distance. This not only allows us to reduce our indirect greenhouse gas emissions but also enables our customers to enjoy fresher, high quality ingredients.

Back home, we work with our in-flight catering partner, SATS Ltd, to include more sustainable, locally sourced ingredients in our dining offerings for flights departing Singapore. For instance, we source for fish from a local farm that employs best practices in aquaculture and animal husbandry across its value chain, and has been awarded the highest accreditation by Best Aquaculture Practices (BAP).
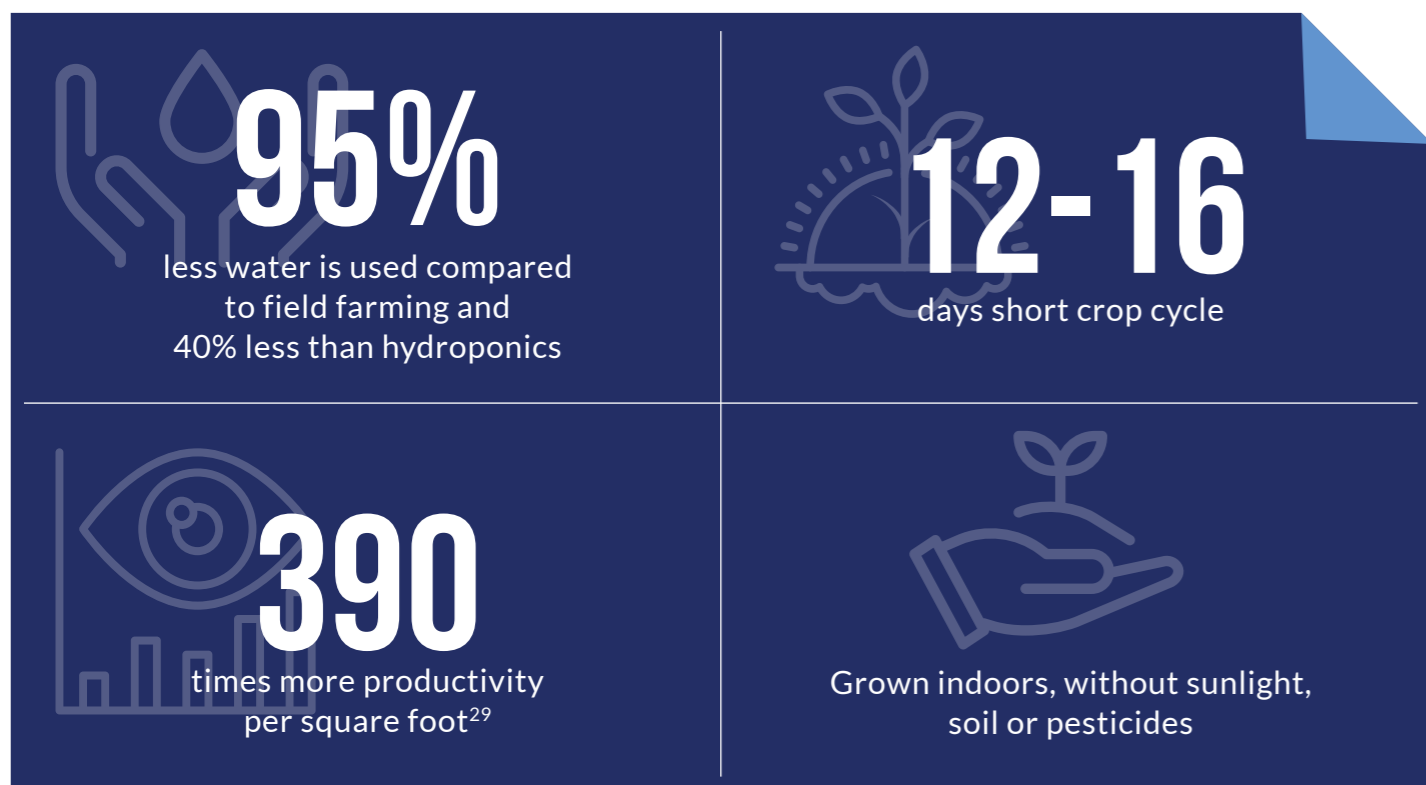
[29] Greater productivity per square foot is measured against traditional field farming.

# WORKING WITH OUR SUPPLIERS ON SUSTAINABLE DEVELOPMENT (CONTINUED)

**CASE STUDY**

## ENCOURAGING A CULTURE OF RECYCLING BY GIVING SECOND LIFE TO UNUSED BATIK TRIMMINGS

Our KrisShop Cares concept store is a platform which aims to give back to the community and support those in need. It does so by featuring curated products and artworks from partner communities. The net proceeds from KrisShop Cares go to the respective partners to continue supporting their cause and artists.

In FY2019/20, the KrisShop Cares initiative was expanded through a collaboration with SIA's Procurement department. Unused batik trimmings from our cabin crews' uniforms were consolidated and used to manufacture new products, which were sold on the KrisShop Cares concept store. This collaboration aims to give back to the community by engaging local social enterprises to manufacture products and reduce waste at the same time, by giving unused batik fabric trimmings a second life.

In October 2019, KrisShop collaborated with SPD, a Singapore-based social enterprise that specialises in making handbound notebooks using cloth and leather materials. The partnership saw 207 batik notebooks produced using recycled batik trimmings from SIA's signature batik print and sold on the KrisShop Cares concept store from March 2020.

Moving forward, KrisShop seeks to continue its collaboration with SPD, and explore collaboration opportunities with more social enterprises and local vendors.

**207**
batik notebooks produced using recycled batik trimmings

# WORKING WITH OUR SUPPLIERS ON SUSTAINABLE DEVELOPMENT (CONTINUED)

CASE STUDY
## ENHANCING OUR CUSTOMERS' WELL-BEING BY INTRODUCING WHOLESOME AND NUTRITIOUS IN-FLIGHT MEALS

SIA partnered with Singapore-based wellness brand COMO Shambhala in 2019 with a keen focus on enhancing the concept of wellness on board.

In September 2019, SIA and COMO Shambhala unveiled a new health-focused in-flight menu, which takes into consideration seasonal and sustainable ingredients, as well as practical challenges such as food freshness and nutritional needs in the air.

This menu was made available for First Class and Business Class customers on selected flights departing Singapore to Frankfurt, Hong Kong, London, Melbourne, Perth and Sydney. The dishes were also made available for pre-ordering through the Airline's 'Book the Cook' service, which allows First Class, Business Class and Premium Economy Class customers to pre-order their main course before they board their flight.

> " This has been a fascinating project for us and we have carefully curated a menu that reflects our COMO Shambhala brand ethos and approach to food — to inspire the palate with memorable flavours. We are certain that Singapore Airlines' valued customers will enjoy this gastronomical well-being in the air."
>
> **DANIEL MORAN,**
> **VICE PRESIDENT CULINARY**
> **OF THE COMO GROUP**

# WORKING WITH OUR SUPPLIERS ON SUSTAINABLE DEVELOPMENT (CONTINUED)

### CASE STUDY
## REDUCING IN-FLIGHT FOOD AND BEVERAGE WASTE THROUGH THE ADOPTION OF DIGITAL TECHNOLOGIES

According to IATA, the airline industry generated around 6.7 million tonnes of cabin waste in 2018 and between 20 per cent to 30 per cent of the total waste was untouched food and beverage[30].

As part of our sustainability journey in 2019, SIA embarked on an initiative with Lumitics, a Singapore-based food waste technology startup, to reduce catering waste from our flight operations. Their flagship product is Insight, a smart food waste tracker that leverages sensors and their proprietary image recognition technology to weigh and identify food waste. Insight provides kitchens and restaurants with essential data that enables businesses to reduce their food waste, cost and environmental footprint.

Our ongoing collaboration with Lumitics aims to automate data collection and leverage Artificial Intelligence and Machine Learning to better understand consumers' consumption patterns so as to reduce catering waste. Through an improved monitoring system of customers' consumption patterns and data analytics, SIA aims to better adjust the quantities of food items to minimise wastage without compromising on the customer experience.

> "Over the past two years of working with the F&B and hospitality sector, we have helped businesses reduce 30 per cent to 40 per cent of their food waste, which comes to about three per cent to eight per cent savings in food cost. The airline sector will also have the advantage of weight reduction, leading to additional savings in fuel costs.
>
> This collaboration with SIA required Lumitics to tweak our original product — the Insight smart dustbin — into a new solution for the airline sector. Called Insight Lite, it tracks the number and type of unconsumed meals using image recognition technology. This data will allow SIA to better understand their customers' food consumption patterns and improve meal planning, while simultaneously reducing food wastage and helping SIA to meet its sustainable development goals."
>
> **RAYNER LOI,**
> **FOUNDER OF LUMITICS**

# WORKING WITH OUR SUPPLIERS ON SUSTAINABLE DEVELOPMENT (CONTINUED)

CASE STUDY

## COLLABORATION WITH DANISH COMPANIES IN COPENHAGEN TO REINFORCE SIA'S SUSTAINABILITY MESSAGE

Copenhagen station launched SIA's first ever station-led sustainability-themed event on 5 November 2019, as they welcomed the Airbus A350 on the Cophenhagen-Singapore (CPH-SIN) route. As part of the event, sustainably-manufactured gifts were presented to customers on board the inaugural A350 flight.  These include reusable tote bags and leather key chains that were repurposed from old leather seat covers from First Class and Business Class seats.

SIA also collaborated with three Danish gourmet companies to serve sustainable, top-quality desserts for customers travelling on the route.

- **Award-winning "Vendsyssel" cheese**
  Located in North Jutland, Sønderhaven is Denmark's only dairy company that exclusively sources milk from its own cows for the production of cheese. By doing so,  Sønderhaven is able to ensure the quality of the cheese produced while reducing emissions from the transportation of milk.

- **Award-winning Friis-Holm chocolates**
  Friis-Holm is a Danish bean-to-bar chocolate manufacturer founded by Mikkel Friis-Holm Ottosen in 2007. In his business values, Mikkel seeks to uphold quality and ethics as part of the company's business operations. To cultivate a  healthier and more sustainable cocoa supply chain, Friis-Holm strives to source for cocoa beans in a responsible manner either by purchasing cocoa beans directly from growers or paying above market price or through Fairtrade buyers.

- **Skarø**
  Skarø is a Danish ice-cream company that strives to produce ice-cream that is not only unique in taste but also superior in its nutritional qualities. As part of the company's sustainable business practices, Skarø sources local ingredients such as milk, berries and other fruit to support local communities and reduce emissions from transportation. To further reduce the company's emissions, Skarø purchases electricity from renewable sources such as wind or solar power for its day-to-day business.

# OUR RESPONSE TO COVID-19

*Information is accurate as of 30 June 2020.*

## Resilience of Our Supply Chain

Covid-19 has had an unprecedented impact on the global supply chain and presents the greatest challenge in aviation history. We strive to maintain strong relationships with our suppliers and business partners to respond swiftly to our shared challenges. As disruptions continue, we recognise the role we must play to enable the continuous flow of essential goods around the world. We endeavour to maximise the use of our freighter fleet and schedule cargo-only passenger flights and ad hoc charter flights where opportunities arise.

### Cargo-only Passenger Flights

- As the Covid-19 outbreak developed, SIA worked to maintain an effective airfreight network despite the substantial reduction in passenger flights. In addition to maximising the usage of its freighter fleet, it also operated cargo charter flights with SIA and Scoot passenger aircraft. SIA also introduced a scheduled cargo-only passenger flight network to alleviate the cargo capacity constraints.

- Through close cooperation with other business units, regulatory approval was obtained for the carriage of cargo in the passenger cabin of some aircraft. Coupled with SIA's staff and its ground handling partners' emphasis on operational reliability and quality, these efforts helped to ensure the timely delivery of urgent shipments of medical relief supplies and personal protective equipment.

- Among them were two Singapore-donated consignments, which were delivered to Beijing and Wuhan in Mainland China, in February 2020. SIA has also been transporting fresh food by air to Singapore and other parts of the world during the Covid-19 outbreak, playing its part in keeping airfreight supply lines for essential goods open during this critical time.

### Working with Our Aircraft Manufacturers
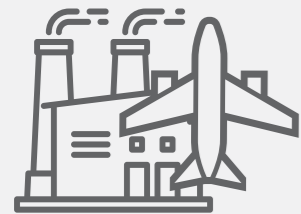
- SIA engaged the aircraft manufacturers early in the Covid-19 outbreak to discuss adjustments to our delivery stream of existing aircraft orders. This will help to moderate capacity growth in the near term, while we remain committed to our longer-term fleet renewal programme.

### Anticipating Potential Supply Chain Disruptions

- As countries around the world imposed mandatory lockdowns, SIA collaborated with our suppliers and partners to monitor the evolving situation and put in place measures to reduce the impact of supply chain disruptions. For instance, we explored sourcing from alternative suppliers and increased stock holdings of goods to meet our operational needs. We also monitored inventory levels closely and planned our resource requirements ahead of time.

# SHAREHOLDERS   103-1   103-2   103-3

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

## OUR MANAGEMENT APPROACH

### Key Engagement Activities

| Engagement Mode | Frequency |
| --- | --- |
| Analyst and Media Briefings | Half-yearly |
| Annual General Meeting | Yearly |
| Annual Report, Sustainability Report | Yearly |
| Financial Results | Quarterly |
| Investor Relations Channels | Ad hoc |
| Meetings (Post-results Briefings, Conferences, Roadshows, etc.) | Regular |
| Press Releases (Website, SGXnet, etc.) | Ad hoc |

### SIA's Ambition

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

### Supporting the SDGs

### FY2019/20 in Numbers[31]

**S$15,976 mil**
Group revenue

**S$59 mil**
Group operating profit

**S$4,775 mil**
total value added for distribution

**1,185,128,325**
total issued shares (excluding treasury shares) as at 31 March 2020

[31] For more information, please refer to the FY2019/20 SIA Annual Report.

# OUR SHAREHOLDERS  102–5

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

At SIA, we value dialogue with our shareholders and strive to strengthen our relationship with the investing community. Our investors acknowledge that while traditional financial information is quick to recognise short-term changes in profitability, it does not account for the investments that were made to innovate and implement our long-term strategies. Providing holistic and robust non-financial information bridges this disconnect and brings clarity to our investors on how SIA creates long-term value for them and our stakeholders.

| Information on Shareholdings (as at 9 June 2020) | |
|---|---|
| Number of Issued Shares | 2,977,543,505 |
| Number of Issued Shares (excluding Treasury Shares) | 2,962,820,811 |
| Number/Percentage of Treasury Shares | 14,722,694 (0.49%) |
| Number/Percentage of Subsidiary Holdings* | 0 (0%) |
| Class of Shares | Ordinary shares<br>One special share held by the Minister for Finance |
| Voting Rights (excluding Treasury Shares) | 1 vote for 1 share |

| Range of Shareholdings | Number of Shareholders | % | Number of Shares | % |
|---|---|---|---|---|
| 1-99 | 297 | 0.43 | 9,749 | 0.00 |
| 100-1,000 | 17,988 | 25.94 | 12,853,070 | 0.43 |
| 1,001 - 10,000 | 41,883 | 60.40 | 175,035,174 | 5.91 |
| 10,001 - 1,000,000 | 9,143 | 13.19 | 267,707,411 | 9.04 |
| 1,000,001 and above | 26 | 0.04 | 2,507,215,407 | 84.62 |
| **Total** | **69,337** | **100.00** | **2,962,820,811** | **100.00** |

\* 'Subsidiary holdings' is defined in the Listing Manual to mean shares referred to in Sections 21(4), 21(4B), 21(6A) and 21(6C) of the Companies Act, Chapter 50 of Singapore.

# OUR SHAREHOLDERS (CONTINUED)

## Twenty Largest Shareholders (as at 9 June 2020)

| | Twenty Largest Shareholders | Number of Shares | %^ |
|---|---|---|---|
| 1 | Napier Investments Pte. Ltd. | 985,959,900 | 33.27 |
| 2 | Temasek Holdings (Private) Limited | 657,306,600 | 22.18 |
| 3 | DBS Nominees Pte Ltd | 276,634,932 | 9.34 |
| 4 | Citibank Nominees Singapore Pte Ltd | 246,814,085 | 8.33 |
| 5 | DBSN Services Pte. Ltd. | 79,460,058 | 2.68 |
| 6 | Raffles Nominees (Pte) Limited | 56,871,339 | 1.92 |
| 7 | HSBC (Singapore) Nominees Pte Ltd | 54,451,675 | 1.84 |
| 8 | United Overseas Bank Nominees Private Limited | 31,663,119 | 1.07 |
| 9 | Morgan Stanley Asia (Singapore) Securities Pte Ltd | 17,947,022 | 0.61 |
| 10 | BPSS Nominees Singapore (Pte.) Ltd. | 15,082,661 | 0.51 |
| 11 | BNP Paribas Nominees Singapore Pte Ltd | 12,600,834 | 0.43 |
| 12 | Phillip Securities Pte Ltd | 12,354,681 | 0.42 |
| 13 | OCBC Nominees Singapore Pte Ltd | 10,346,262 | 0.35 |
| 14 | OCBC Securities Private Limited | 9,511,308 | 0.32 |
| 15 | UOB Kay Hian Private Limited | 9,320,342 | 0.31 |
| 16 | DB Nominees (Singapore) Pte Ltd | 5,092,506 | 0.17 |
| 17 | DBS Vickers Securities (Singapore) Pte Ltd | 4,289,070 | 0.15 |
| 18 | IFAST Financial Pte Ltd | 4,020,862 | 0.14 |
| 19 | Societe Generale Singapore Branch | 3,395,379 | 0.11 |
| 20 | Maybank Kim Eng Securities Pte. Ltd. | 3,009,956 | 0.10 |
| | **Total** | **2,496,132,591** | **84.25** |

## Substantial Shareholders (as shown in the Register of Substantial Shareholders)

| Substantial Shareholder | Direct Interest Number of Shares | %^ | Deemed Interest Number of Shares | %^ | Total Interest Number of Shares | %^ |
|---|---|---|---|---|---|---|
| Temasek Holdings (Private) Limited | 657,306,600 | 22.18 | 994,679,097[32] | 33.57 | 1,651,985,697 | 55.75 |
| Tembusu Capital Pte. Ltd. | - | - | 986,754,900[33] | 33.30 | 986,754,900 | 33.30 |
| Napier Investments Pte. Ltd. | 985,959,900 | 33.27 | - | - | 985,959,900 | 33.27 |

### Shareholdings Held By the Public

Based on the information available to the Company as at 9 June 2020, 44.14 per cent of the issued ordinary shares of the Company are held by the public. Therefore, Rule 723 of the Listing Manual issued by SGX-ST is complied with.



^ Based on 2,962,820,810 ordinary shares issued as at 9 June 2020 (this is based on 2,977,543,504 shares issued as at 9 June 2020, excluding 14,722,694 Shares held in treasury as at 9 June 2020). Figures are rounded down to the nearest 0.01 per cent, and any discrepancies in aggregated figures are due to rounding.
[32] Temasek Holdings (Private) Limited is deemed to be interested in 994,679,097 shares in which its subsidiaries and associated companies have direct or deemed interests.
[33] Tembusu Capital Pte. Ltd. is deemed to be interested in 986,754,900 shares in which its subsidiaries have direct or deemed interests.

# OUR TRANSFORMATION JOURNEY

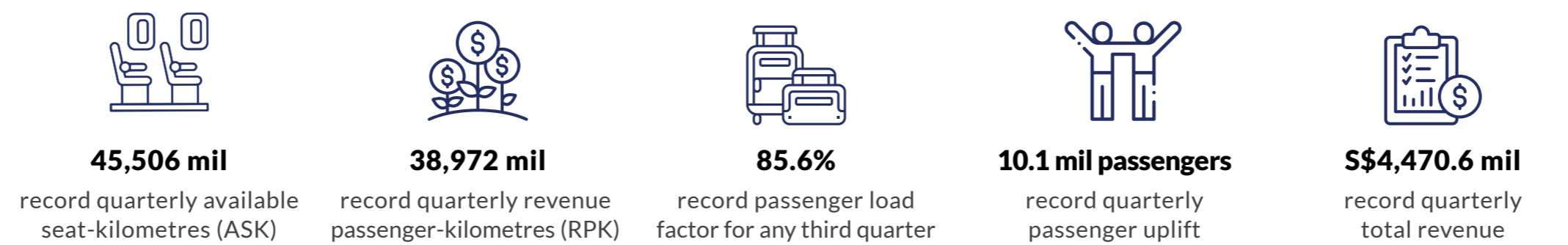**We leave no stone unturned in identifying opportunities to strengthen the SIA Group with our Transformation Programme.**

In 2017, SIA embarked on a three-year Transformation Programme[34] to increase our competitiveness and ensure that we are well-positioned to tackle the increasingly challenging operating environment. The programme covered new revenue-generation initiatives, operational enhancements and organisational structure, reviewing opportunities to improve our processes to make us more effective and efficient. We also looked at rebasing our cost structure so that we can be a lot more competitive moving forward.

SIA had an unbroken operating track record and historical financial position through past cyclical and unexpected downturns, prior to the Covid-19 outbreak. Our Transformation Programme successfully mobilised us to drive tangible results in terms of financial and operational resilience. In the third quarter of FY2019/20, we achieved five record-highs for available seat-km, revenue passenger-km, passenger load factor, passenger uplift, and total revenue.

[34] For more information on our Transformation Programme, please refer to pages 12 to 13 of the FY2019/20 SIA Annual Report.
[35] The SIA Group's unaudited financial results for the third quarter and nine months ended 31 December 2019 were announced on 14 February 2020. For more information on the full-year financial results, please refer to pages 46 to 61 of the FY2019/20 SIA Annual Report.

## Record-high Financial[35] and Operating Results in 3Q FY2019/20, Pre-Covid-19 Outbreak

**45,506 mil**
record quarterly available seat-kilometres (ASK)

**38,972 mil**
record quarterly revenue passenger-kilometres (RPK)

**85.6%**
record passenger load factor for any third quarter

**10.1 mil passengers**
record quarterly passenger uplift

**S$4,470.6 mil**
record quarterly total revenue

## Operational Excellence Statistics in FY2019/20 (three-year)

**Net Promoter Score**
trending upwards

**270 awards**
won to date

**Arrival On-time Performance**
trending upwards

**18%**
reduction in engineering-related delays

**8.9%**
productivity improvement in crew resource planning

**>900,000**
of customer cases reduced through proactive service

**>12 mil hours**
of customer effort saved with revamped processes

**>800,000 hours**
saved from process simplification

**1,000 ideas**
generated internally from KrisLab

**41% faster**
delivery to market due to the use of Agile Methodology

There has been an unprecedented collapse in the demand for air travel globally due to the Covid-19 outbreak. This especially affects airlines such as SIA, which are dependent on international air travel and open borders.

In the near term, the Covid-19 outbreak is expected to continue weighing upon the global aviation industry. We expect air travel restrictions to be gradually relaxed, but in a managed way, as countries continue to manage the risk of imported Covid-19 cases. The effectiveness of collective efforts by governments around the world to flatten the curve of the virus spread will also shape timings for the opening of borders.

To address the current challenges faced by the aviation industry, SIA has cut its scheduled capacity by approximately 94 per cent that had been originally scheduled for up to end-July. Today, SIA operates only a small number of its passenger aircraft to serve a limited network. SIA expects to operate a significantly reduced capacity for the foreseeable future until global travel restrictions and border controls are progressively lifted, and the demand for air travel begins to pick up once again. However, it is not clear when this will happen.

It is also not clear how the airline industry will recover, and which segments or markets will first see growth. The SIA Group's portfolio strategy, which maintains presence in both full-service premium and low-fare segments, allows us the flexibility to match the right products to demand as it returns. Our extensive global network will also help us to flexibly deploy capacity to meet the demand from different markets as air travel returns.

# OUR RESPONSE TO COVID-19

*Information accurate as of 30 June 2020.*

## Overcoming the Current Challenges

Apart from actively taking steps to build up our liquidity, reduce capital expenditure and operating costs, we have also set up an internal task force to look into all aspects of the airline's operations during this time, and to ensure that we are ready to ramp up our services when air travel eventually begins to recover. The way we respond to challenges posed by the Covid-19 outbreak will shape our long-term sustainability and boost our capability for sustainable value creation.

### Getting Ready For Recovery

**Establishing an Internal Task Force**

- We have set up an internal task force to look into all aspects of the airline's operations to ensure that we are ready to ramp up our services when air travel eventually begins to recover. We will continue to work closely with governments, aviation authorities and industry partners in a coordinated manner to plan our recovery response and to ensure resilience in our value chain

**A New Transformation Chapter, Post-Covid-19**

- The aviation industry will continue to be impacted by changing trends and evolving customer expectations. As new global norms are shaped during the recovery process, we strive to adapt, build resilience and leverage opportunities to strengthen our position as a global aviation leader

- Short-term
  ◊ Ramp up efforts to increase productivity and effectiveness
  ◊ Upskill our employees to enhance human capital

- Medium- to long-term
  ◊ Review of customer value drivers, zero-based review of product definition, service delivery and work processes to achieve leadership in product and service delivery
  ◊ Explore new revenue and business opportunities while leveraging our core strengths to ensure that SIA is prepared to be first off the blocks when the recovery eventually comes

### Managing Liquidity and Cash Requirements

- Decisive capacity cuts across the network in response to a collapse in global air travel demand

- Deferred non-essential expenditure and imposed tighter controls on discretionary expenditure

- Cuts in Management salaries and Director fees, voluntary and compulsory no-pay leave schemes, as well as a hiring freeze

- Engagement with aircraft manufacturers to negotiate adjustments to delivery schedules for existing aircraft orders

- Tapped on lines of credit maintained for contingency situations

- Continued to explore other sources of funding, including secured financing and sale and leaseback transactions

### Raising Capital Through the Issuance of Rights Shares and Rights Mandatory Convertible Bonds

**Building Liquidity and Strengthening Balance Sheet**

- The Rights Issue will bolster equity in SIA's balance sheet. An additional S$6.2 billion through additional Mandatory Convertible Bonds (MCBs) will provide the Group with additional liquidity if the crisis prolongs, and to be tapped on only if required

**Ensuring Financial Flexibility to Capture Future Growth Opportunities**

- This will address our near-term operational and cashflow requirements, while providing for committed capital expenditure. As our strategic priorities continue to be in focus, this will position us for a quick response to ramp up once the crisis is over

# INCLUSIVE WEALTH FOR ALL STAKEHOLDERS

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

SIA recognises the role we play in furthering sustainable development locally and globally. This starts with a shift towards inclusive wealth for all stakeholders, an aggregate value of our six capitals – financial, human, intellectual, manufactured, natural, as well as social and relationship capitals. The aviation sector is a key pillar of Singapore's economy, supporting more than 12 per cent of the country's gross domestic product (GDP) and over 375,000 jobs. We are at the heart of the aviation ecosystem, with Singapore Airlines, SilkAir and Scoot accounting for more than half of all passenger transits and cargo movements at Singapore Changi Airport.

## Value Creation at SIA

**1 Capital Inputs**
Using all forms of capital in the company to produce value

**2 Value Drivers**
Identifying key value drivers, performance measures and targets

**3 Value Creation for Stakeholders**
Defining value creation outcomes, performance measures and targets

| Inputs → | Key Value Drivers (KPIs) → | Value Creation (Outcomes) |
|---|---|---|

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

**Financials**
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

**For Shareholders**
Achieving Economic Value Added (EVA) 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[+] (TSR))

**For Other Stakeholders**
Sustainable value creation for other stakeholders (employees, customers, suppliers, communities)

*Sustainability-based Value Drivers.
[+] Includes share price change and dividend yields.

# INCLUSIVE WEALTH FOR ALL STAKEHOLDERS (CONTINUED)

Value added is a measure of wealth created for our stakeholders. The statement below shows the Group's value added and its distribution by way of payments to employees, the government, and to those who have provided capital. It also indicates the portion retained in the business for future capital requirements.

| Statements of Value Added and Its Distribution ($ million)  102–7  202–1 | FY2018/19 | FY2019/20 |
|---|---|---|
| Total Revenue | 16,323.2 | 15,975.9 |
| **Less:** Purchase of Goods and Services | (11,049.4) | **(11,147.3)** |
| | 5,273.8 | **4,828.6** |
| **Add:** | | |
| Interest Income | 41.9 | **42.1** |
| Surplus/(Loss) on Disposal of Aircraft, Spares and Spare Engines | (5.8) | **6.9** |
| Dividends from Long-term Investments | 3.1 | **3.2** |
| Other Non-operating Items | (47.4) | **(31.9)** |
| Share of Profits of Joint Venture Companies | 26.5 | **49.3** |
| Share of (Losses)/Profits of Associated Companies | 22.2 | **(122.9)** |
| **Total Value Added for Distribution** | 5,314.3 | **4,775.3** |
| Applied as Follows: | | |
| **To Employees:** | | |
| - Salaries and other Staff Cost | 2,816.9 | **2,563.6** |
| **To Government:** | | |
| - Corporation Taxes | 269.9 | **55.9** |
| **To Suppliers of Capital:** | | |
| - Interim and Proposed Dividends | 355.1 | **94.8** |
| - Finance Charges | 116.1 | **220.9** |
| - Non-controlling Interests | 38.9 | **42.6** |
| **Retained for Future Capital Requirements:** | | |
| - Depreciation, Amortisation and Impairment | 1,389.8 | **2,205.9** |
| - Retained (loss)/profit | 327.6 | **(408.4)** |
| **Total Value Added** | 5,314.3 | **4,775.3** |
| **Value Added Per Dollar Revenue ($)** | 0.33 | **0.30** |
| **Value Added Per Dollar Employment Cost ($)** | 1.89 | **1.86** |
| **Value Added Per Dollar Investment in Property, Plant and Equipment ($)** | 0.20 | **0.15** |

**S$4,775.3 mil**
total value added for distribution in FY2019/20

**S$358.3 mil**
value added for distribution to suppliers of capital in FY2019/20

**S$2,563.6 mil**
value added for distribution to employees in FY2019/20

**S$1,797.5 mil**
value retained for future capital requirements

**S$55.9 mil**
value added for distribution to the government in FY2019/20

**S$0.30**
value added per dollar revenue in FY2019/20

# SOCIETY

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

## OUR MANAGEMENT APPROACH

### Key Engagement Activities

| Engagement Mode | Frequency |
|---|---|
| Annual Report, Sustainability Report | Yearly |
| Community Support Programmes (Corporate Donations, Ticket Sponsorships, Volunteerism, etc.) | Regular |
| Press Releases | Ad hoc |

### SIA's Ambition

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

### Supporting the SDGs

# COMMUNITY PROJECTS IN SINGAPORE  413-1

SIA believes in fostering strong relationships not only with our customers and business partners, but also with the many communities we serve. Support is extended to community groups through corporate donations, ticket sponsorships and staff volunteerism, among others. We actively support initiatives which promote education and sports excellence, the arts, as well as environmental conservation.






## Community

### KrisFlyer and Make-A-Wish Singapore

KrisFlyer, the SIA Group's frequent flyer programme, partners Make-A-Wish Singapore to fulfil the wishes of children with life-threatening illnesses. KrisFlyer miles donated by members go toward supporting flights on SIA and SilkAir for beneficiaries.

Since the partnership began in 2017, KrisFlyer members donated generously to the programme, and over 30 million miles have been redeemed to fulfil the travel wishes of the beneficiaries and their families. In FY2019/20, as part of the Make-A-Wish Singapore Christmas celebrations, SIA prepared gifts such as LEGO® sets and travel bags, to share the festive joy with beneficiaries.

### MINDS Partnership

Since 1992, SIA has been providing employment opportunities for the beneficiaries of the Movement for the Intellectually Disabled of Singapore (MINDS) by engaging them to pack and service our Economy Class earphones and headphones. Our partnership impacts the lives of more than 340 trainees at MINDS, keeping them socially active and agile.

### Willing Hearts

In FY2019/20, Scoot employees volunteered at Willing Hearts, a charity in Singapore that operates a soup kitchen for beneficiaries. Over 5,000 meals were prepared with the help of 21 Scoot volunteers.

### Community Chest Fú Dài Event

Since 2015, SIA has been actively participating in the Community Chest Fú Dài event, helping to pack and share bags of food and household items with the less fortunate.

## Arts

### Growing Singapore's Arts Scene

We believe that creative pursuits are the key to building a better world. With our longstanding commitment to help grow Singapore's arts scene, SIA continued to sponsor the following organisations in FY2019/20:

- National Arts Council (since 1994)
- Singapore Chinese Orchestra (since 2002)
- Singapore Dance Theatre (since 1988)
- Singapore Lyric Opera (since 1991)
- Singapore Symphony Orchestra (since 1979)

Our ticket sponsorships enable these organisations to send our local talents overseas to perform and widen their horizons and invite international artistes to perform in Singapore.

## Education

### Equipping Singapore's Workforce with Future-ready Skills

Education is a powerful tool for sustainable development. We believe in investing in our society's future and nurturing the minds of tomorrow's leaders. Together with SIAEC, we committed a cash contribution of S$1 million to the NTUC Education and Training Fund (NETF). The NETF was set up in 1998 to help upgrade and reskill eligible workers.

### Scoot's Learning Journey

In FY2019/20, eight Scoot employee volunteers organised an experiential learning journey for students in collaboration with Glyph Asia, a social enterprise for children and youths from lower income households or challenging family environments. Twenty-five students attended the event, which aimed to raise awareness about the airline industry through talks by a Scoot pilot, cabin crew and ground staff.

### Sharity Day 2019

Sharity Day 2019, an annual initiative by the Community Chest, seeks to foster interaction among youths of different abilities. In FY2019/20, 19 Scoot employees volunteered as guides for over 100 students from mainstream and special needs schools, guiding them along the event activities.

## Sports

### Recognising Sporting Excellence in Singapore

We recognise the value of a strong sports ecosystem in Singapore to forge bonds within our community, build team spirit and foster a greater sense of belonging.

We continued to sponsor the following organisations in FY2019/20:

- 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

# COMMUNITY PROJECTS AROUND THE WORLD  `413-1`

Beyond Singapore, our overseas stations are equally passionate and committed in reaching out to their communities. As a global airline, we work with charities in support of various initiatives and causes.

### AUSTRALIA
### The Smith Family

Since 2012, SIA has been supporting The Smith Family, a national independent children's charity helping disadvantaged Australians. We believe in providing disadvantaged children and youths with the right support and resources to achieve their full potential. As a national sponsor of The Smith Family's 'Learning for Life' educational assistance programme, we provided financial support for 12 disadvantaged students across Australia in 2019. Support is also provided in the form of air tickets to destinations that SIA serves for their fundraising efforts. Throughout the year, SIA staff volunteered for programmes such as the Christmas Toy and Book Appeal and online student mentoring programme, iTrack.

**S$192,000**
raised since 2012

### MAINLAND CHINA
### Supporting Mainland China During the Covid-19 Outbreak

To support the fight against the Covid-19 virus in Mainland China in early 2020, SIA donated over 16,500 personal protective equipment (PPE), 3,500 hand sanitisers and 80,000 wet wipes to charities and airport partners in Mainland China. SIA also provided complimentary freightage for the transport of the medical supplies on our flights.

**> 16,500**
PPE donated

### JAPAN
### Celebrating 30 Years of Direct Service to Nagoya

In October 2019, SIA hosted a children's social studies event for 30 local elementary school students to embrace new experiences with a global mindset. They were given an exclusive tour of our Boeing 787-10 aircraft and had fun role-playing with our cabin crew. From making in-flight announcements to learning about international dining etiquette, the students had a fulfilling day of learning.

In November 2019, a teachers' forum was conducted to bring together the teaching fraternities of Nagoya and Singapore in the spirit of mutual learning and friendship. Over 50 teachers from schools across Nagoya, as well as six teachers and two guest speakers from Singapore participated in the forum. The theme of the forum was 'Our Youth, Our Future', and discussions were focused on pressing topics such as mental health, critical thinking and media literacy. Through group activities, teachers shared actionable ideas on how to help students thrive and rise above these challenges, learnt first-hand about each country's education system and built friendships, kindling interest in future school visits and exchange programmes.

**30** children's lives touched

### JAPAN
### Fukuoka Children's Hospital

SIA staff have been visiting the Fukuoka Children's Hospital to bring festive cheer to children and their families since 2014. Our volunteers dressed up as Santa Claus accompanied by our cabin crew and brought presents to distribute to more than 50 children. They also sang songs and interacted with the children and staff in the hospital during the festive season. The children also had the opportunity to don the SIA cabin crew's uniform – the Sarong Kebaya.

**>50** children's lives touched

# COMMUNITY PROJECTS AROUND THE WORLD (CONTINUED)

### MEKONG SUB-REGION
## Child's Dream Foundation

SilkAir supported Child's Dream Foundation, a non-profit organisation committed to empowering marginalised children and youths in the areas of education, employment and health. In FY2019/20, we sponsored air tickets for the charity's fundraising and training activities in the region, such as Cebu, Chiang Mai, Siem Reap and Yangon.

### NEW ZEALAND
## Cancer Society of New Zealand

Since 2009, SIA has been a proud sponsor of the Canterbury-West Coast Division of the Cancer Society of New Zealand, an organisation dedicated to improving community well-being by reducing the incidence and impact of cancer. Donations were used to support cancer research and care for those diagnosed with cancer. In recent years, we extended our support to the Cancer Society in other regions including Waikato-Bay of Plenty, Wellington and Otago-Southland.

**>S$36,000** raised in FY2019/20

### NEW ZEALAND
## New Zealand Arts Foundation

In 2019, SIA began supporting the New Zealand Arts Foundation, which seeks to recognise and reward artists who have an impact on New Zealand's society. In FY2019/20, over S$21,000 was raised to support six recipients and six mentors for their Springboard programme.

**>S$21,000** raised in FY2019/20

### THE PHILIPPINES
## Bantay Bata 163

Since 2004, SIA has been supporting Bantay Bata 163, a welfare programme that aims to protect disadvantaged and at-risk children. In FY2019/20, we extended our financial support to over 70 elementary school students nationwide under the Bantay Edukasyon programme, which allowed them to participate in field trips and tree-planting activities.

**>70** students received financial support in FY2019/20

### SOUTH KOREA
## Jongno Community Welfare Center

In December 2019, SIA employees in South Korea brought cheer to 45 underprivileged children in the Jongno Community Welfare Center during the festive season. Our volunteers brought the children out to watch a magic show and treated them to a delicious meal.

**45** children's lives touched

### TAIWAN
## Eden Social Welfare Foundation

Since 2018, SIA has been supporting Eden Social Welfare Foundation, a charitable trust founded to serve persons with disabilities as well as socially marginalised groups. In 2019, SIA helped to raise over S$42,000 through online donation drives for children with developmental delays. We also engaged children and parents from underprivileged migrant families through fun-filled activities such as movie screenings as well as a virtual tour of Singapore.

**434** children's lives touched since 2018     **S$42,000** raised in FY2019/20

INTRODUCTION

SUSTAINABILITY APPROACH

CONNECTING LIVES

CONNECTING COMMUNITIES

CONNECTING THE FUTURE

APPENDICES

# CONNECTING THE FUTURE

*Implementing solutions to reduce our environmental footprint*
*Doing all we can to future-proof the wonders of travel*
*For the adventurers of tomorrow and generations to come*
*We sustain our connections with nature*
*Because we believe in conserving our planet and the destinations we serve*

# ENVIRONMENT  103-1  103-2  103-3

The future of travel depends on the world's approach towards environmental sustainability. We acknowledge that our business-as-usual practices are insufficient in ensuring the aviation industry's sustainability in the long run. We remain committed to collaborating with our stakeholders to reduce our environmental impact. We also work with our stakeholders to implement innovative solutions to protect the environment.

**CLIMATE CHANGE**  **WASTE**  **NOISE**  **OTHER POLLUTANTS**  **WATER**  **BIODIVERSITY**
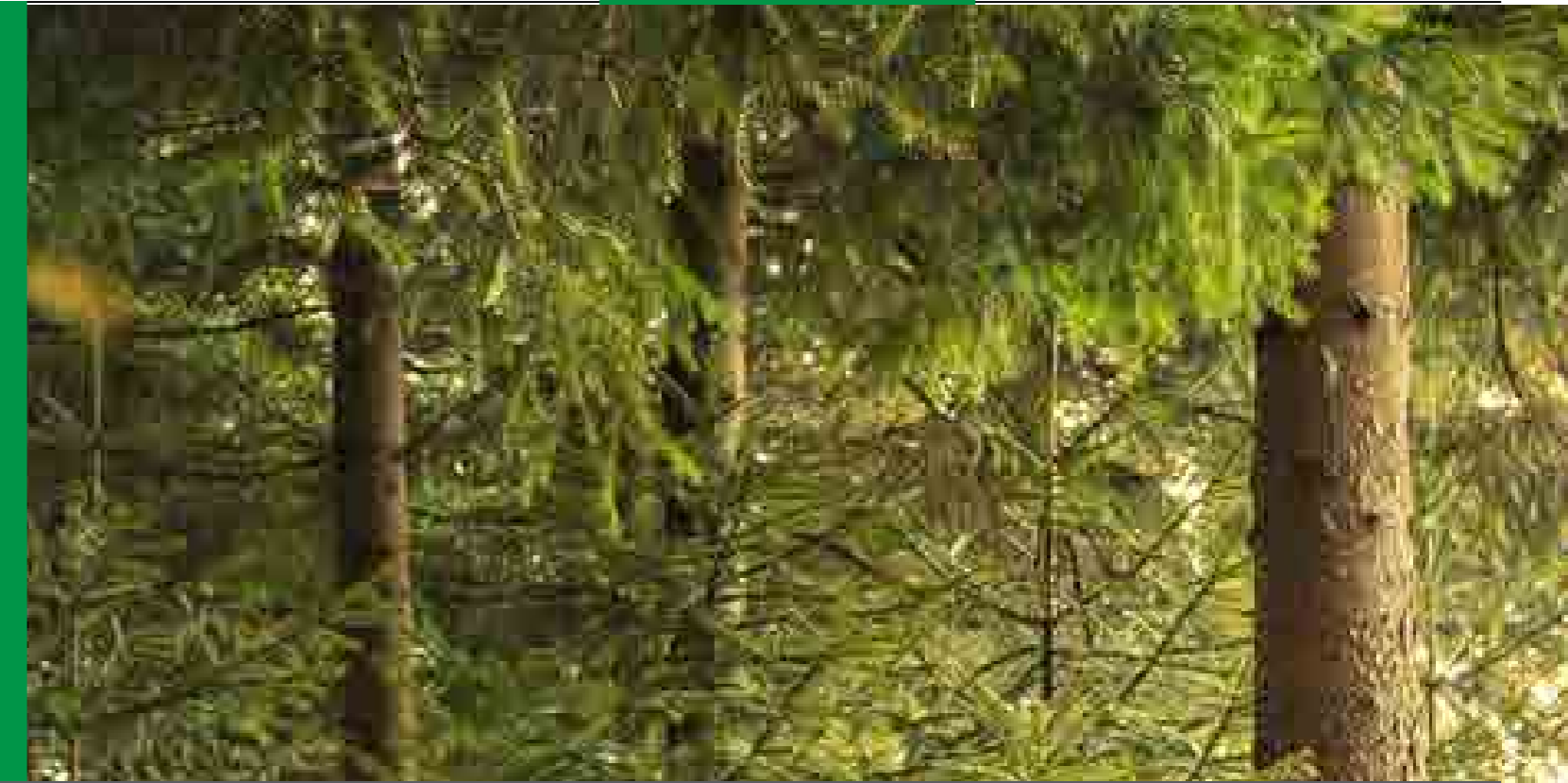
## OUR MANAGEMENT APPROACH

### Key Policies, Processes and Procedures

- Adopted IATA's Four-Pillar Climate Strategy
- ISO 14001:2015 Environmental Management System (for Engineering Division and Flight Operations Division)

### SIA's Ambition

We remain committed to environmental sustainability and for our operations to be carried out responsibly in support of the industry's climate goals.

| Targets | Due | Status |
|---|---|---|
| Be plastic straw-free by FY2019/20 | FY2019/20 | Achieved |
| Achieve a 15 per cent reduction in electricity consumption from our buildings* by FY2020/21, from base year FY2010/11 | FY2020/21 | On Track |
| Achieve a 30 per cent reduction of waste generated from our buildings* by FY2020/21, from base year FY2010/11 | FY2020/21 | On Track |

*Locations covered include SIA's four buildings (Airline House, SIA Supplies Centre, SIA Training Centre, TechSQ), SIAEC's Engine Testing Facility and six hangars.*

### Supporting the SDGs

## FY2019/20 in Numbers

**228,317 TJ**
of energy consumed for all SIA operations

**11.13 LTK/AG**
overall fuel productivity for fleet

**120 kWh/m²**
electricity intensity for SIA buildings and offices in Singapore

**16.3 mil tonnes CO₂e**
total Scope 1 and 2 GHG emissions

**63,803 tonnes CO₂**
total estimated GHG emissions saved as a result of our fuel reduction and efficiency measures across our fleet

**1,455 tonnes**
of waste generated at SIA buildings in Singapore

**0.7 tonnes**
estimated staff canteen waste recycled onsite by eco-digester daily

**77 tonnes**
of waste recycled at SIA buildings in Singapore

**388 tonnes**
of waste recycled from our flights

**171,042 m³**
total water withdrawal for SIA buildings and offices in Singapore

**18,568 m³**
rainwater harvested at Airline House, SIA's headquarters in Singapore

**100%**
of our fleet meets the 2004 ICAO CAEP/6 or the stricter CAEP/8 emissions standards for NOx

**100%**
of our fleet meets ICAO Chapter 4 noise standards

**98,555 hectares**
of lowland tropical forest covered by the ecosystem restoration concession under the Harapan Rainforest Initiative

**2,787 trees**
replanted under the Harapan Rainforest Initiative, with 260 hectares of forest restored

# CLIMATE CHANGE

We are experiencing the adverse effects of climate change, ranging from extreme weather events to a loss of sea ice. This is projected to intensify over the next decade if anthropogenic GHG emissions continue to rise. An Intergovernmental Panel on Climate Change (IPCC) special report[36] found that the impact on our climate will continue to worsen if we do not take action.

Minimising global warming could reduce the environmental impact, ensuring the sustainability of people, economies and ecosystems around the world. However, this would require rapid and far-reaching changes across multiple industries and a globally coordinated approach to reduce GHG emissions by about 45 per cent from 2010 levels by 2030 and achieve net zero by 2050. At SIA, we will do all we can to contribute to the industry's climate goals and targets.

[36] IPCC, "Global Warming of 1.5°C.

Singapore's Ministry of the Environment and Water Resources marked 2018 as the Year of Climate Action for the nation. In support of this, SIA submitted a Climate Action Pledge to signal our dedication towards environmental protection and sustainable operations, as we take action to recognise and anticipate climate-related risks.

### SIA's Climate Action Pledge

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

# CLIMATE CHANGE (CONTINUED)

## Supporting IATA's Climate Targets And Four-Pillar Strategy

PR-7  PR-8  PR-9

Despite contributing approximately two per cent of global anthropogenic GHG emissions[37], the aviation industry recognises the pressing need to address the global challenge of climate change. According to IATA, the expansion of air travel worldwide, the proliferation of low-cost airlines and the growth of the global tourism industry are expected to the double air traffic between 2018 and 2037. This will lead to an increase in the aviation industry's contribution to global GHG emissions.

Underpinning the aviation industry's commitment towards reducing emissions in the medium- to long-term is IATA's Four-Pillar Strategy, which was introduced in 2009. SIA adopted the Four-Pillar Strategy in our operations and we support IATA's climate targets to reduce our carbon footprint.

### IATA's Climate Targets

An average improvement in fuel efficiency of 1.5 per cent per year from 2009 to 2020
A cap on net aviation $CO_2$ emissions from 2020 (carbon-neutral growth)
A reduction in net aviation $CO_2$ emissions of 50 per cent by 2050, relative to 2005 levels

### IATA's Four-Pillar Strategy

| PILLAR 1 | PILLAR 2 | PILLAR 3 | PILLAR 4 |
|---|---|---|---|
| Improved technology, including the deployment of Sustainable Aviation Fuel (SAF) | More efficient aircraft operations | Infrastructure improvements, including modernised air traffic management systems | A single global Market-based Measure (MBM), to fill the remaining emissions gap |

### SIA's Commitments

| | | | |
|---|---|---|---|
| We are committed to our fleet renewal programme and operating a modern and fuel-efficient fleet that generates lower emissions and less noise.<br><br>We invest in engineering improvement packages for airframes and engines. This helps to reduce drag and improve engine efficiency.<br><br>We will also drive the adoption of sustainable aviation fuel in the industry. | We improve fuel productivity through initiatives such as implementing green operations and reducing fuel usage through aircraft weight management and optimisation of flight routes. | We partner with air navigation service providers to find opportunities to reduce emissions from fuel burn during all flight phases.<br><br>We collaborate with stakeholders in air traffic management to explore ways to improve airspace incremental efficiency. We believe that innovation and data analytics will pave the way for more significant improvements, and continue to engage research institutions to explore such ideas. | We participate in a single global 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. |

[37] IATA, "Fact Sheet on Climate Change & CORSIA".

# CLIMATE CHANGE (CONTINUED)

## Climate-related Risks and Opportunities   `102-11`   `PR-7`   `PR-8`   `PR-9`

### Governance and Risk Management

The review of climate-related risk falls within the SIA's Enterprise Risk Management framework, which is overseen by the Board Safety and Risk Committee (BSRC). Further details of the established risk governance and reporting structure can be found in the Governance section on pages 18 to 27 of this report. Additionally, climate-related risks and mitigation are also considered at various forums such as the Board Customer Experience, Technology and Sustainability Committee (CETSC), as well as the Sustainability Steering Committee (SSC), which involves Senior Management and the relevant business units.

SIA identifies climate-related risks and opportunities through various channels, both internally and externally. Specifically, these reviews include the annual Group-wide Risk Management Review exercise involving stakeholder-driven risk assessment, as well as on-going discussions with industry and business partners. As both transition and physical risks could impact the financial, operational and strategic aspects of SIA's operations, the review and mitigation is integral to shaping our long-term business strategy.

### Identification and Mitigation of Climate-related Risks

As climate change issues continue to gain importance, various polces and measures are introduced to progressively drive the aviation industry transition towards a sustainable and low-carbon economy. SIA supports CORSIA as the only global MBM to achieve carbon-neutral growth beyond 2020. SIA recognises that climate change issues are constantly evolving, which brings about transition risks. The potential emergence of uncoordinated climate policies and mandates on SAF at the regional or national level may create market distortion and lead to increased compliance cost. To mitigate these risks, SIA works closely with CAAS, IATA and industry partners to ensure successful implementation of CORSIA and also to advocate policies that incentivise the large-scale adoption of SAF. In addition, we acknowledge that there are potential reputational risks tied to changing stakeholder expectations and consumer behaviour. In response to these challenges, we adopted IATA's Four-Pillar Strategy and actively engage all stakeholders to reduce our GHG emissions and environmental footprint.

Beyond transitional risks, climate change could also bring about acute and chronic physical risks. Acute physical risks such as the rise in the frequency, severity and uncertainty of extreme weather events could result in increased frequency of in-flight re-routings, delays and cancellations. Chronic physical risks such as rising global temperatures and sea levels will also have longer-term strategic and operational impact to the entire aviation industry. With these risks in mind, SIA continues to develop and update our crisis response and business continuity plans to minimise potential business disruptions. SIA actively participates in external multi-agency airport emergency exercises to validate existing crisis management response plans, capabilities, and the management of communications with external stakeholders. Additionally, the review of climate change scenarios potentially leading to operations disruptions are also being considered.
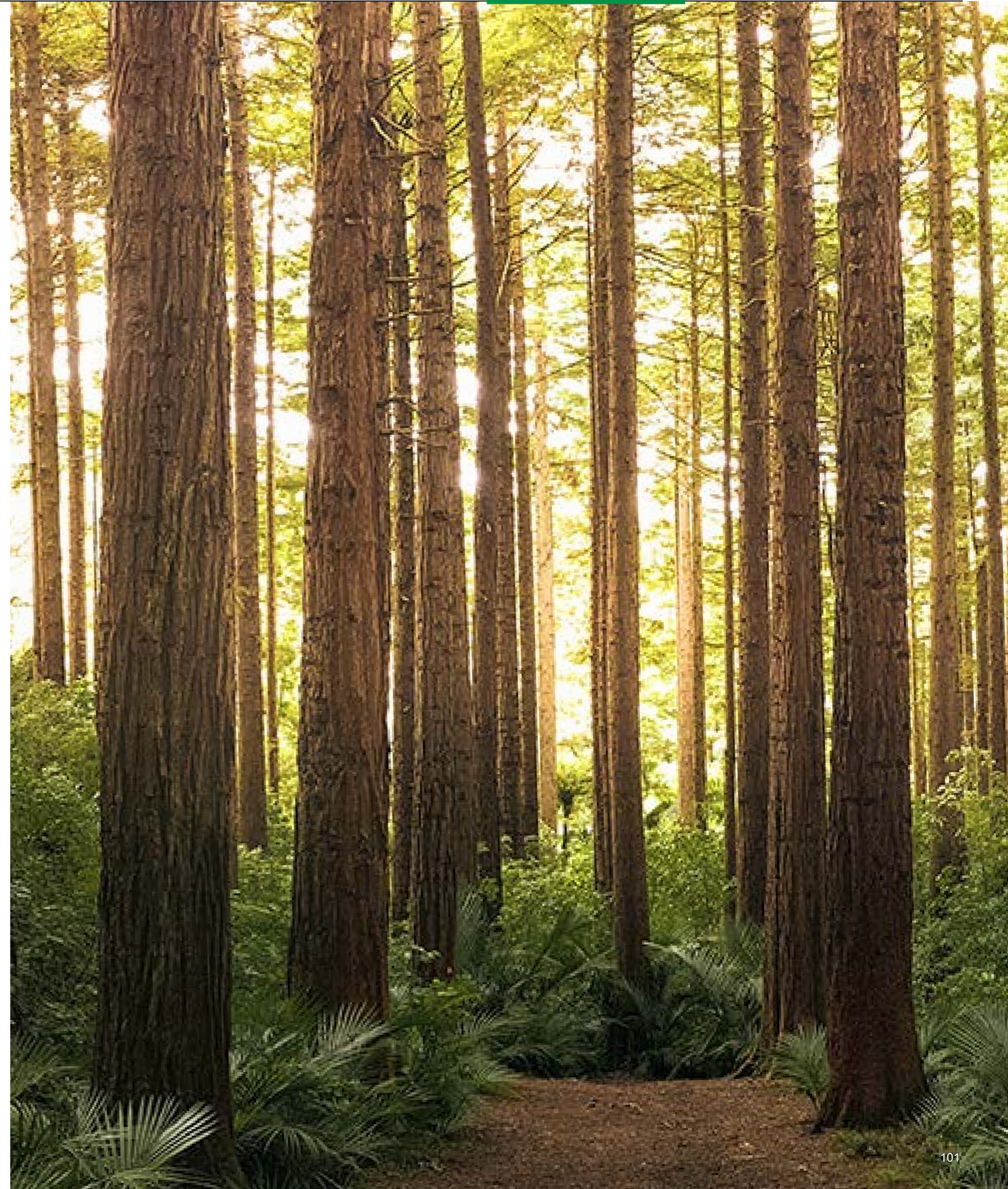
# MANAGEMENT OF ENERGY AND EMISSIONS `302-4` `305-5` `PR-7` `PR-8` `PR-9`

## GHG Accounting and Reporting

SIA adopts the GHG Protocol Corporate Accounting and Reporting Standard. Unless otherwise stated, we account for GHG emissions for operations under the SIA Group and report our direct (Scope 1) and energy indirect (Scope 2) GHG emissions. Fuel consumption from our flight operations contributes to the bulk of our Scope 1 emissions. It also constitutes more than 95 per cent of our Scope 1 and 2 GHG emissions combined.

| Scope | Description | Boundary |
|---|---|---|
| **Scope 1**<br>Direct GHG emissions | Direct GHG emissions occur from sources that are owned or controlled by the SIA Group. These include emissions from consumption in owned or controlled vehicles and equipment. | • Passenger and freighter aircraft<br>• Ground support vehicles and equipment |
| **Scope 2**<br>Energy indirect GHG emissions | Indirect GHG emissions occur from the generation of purchased electricity consumed by the SIA Group. These emissions physically occur at the facility where electricity is generated. | • Purchased electricity at SIA's four buildings, which include Airline House (ALH), SIA Supplies Centre (SC), SIA Training Centre (STC), TechSQ (TSQ) and other offices |
| **Scope 3**<br>Other indirect 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 will identify and report our indirect (Scope 3) GHG emissions in future reporting periods when data is available |

Please refer to the Appendix on page 132 for definitions and methodologies.

## IN THE AIR ✈

SIA adopted IATA's Four-Pillar Strategy in our operations to reduce GHG emissions and supports the industry's ambition towards carbon-neutral growth from 2020.

### Pillar 1: Improved technology, including the deployment of Sustainable Aviation Fuel (SAF)

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

Our investment in modern and fuel-efficient aircraft helps to reduce our Scope 1 GHG emissions. In line with SIA's fleet renewal programme, SIA has one of the youngest operating passenger aircraft fleet in the world, comprising over 120 aircraft with an average age of five years and five months.

We have been investing in more fuel-efficient aircraft such as the Airbus A350s and Boeing 787s, which are known for their advanced technology and high fuel-efficient performance. These newer-generation aircraft help to boost fuel efficiency by 26 per cent and 29 per cent for medium- and long-haul operations respectively over previous-generation aircraft. This is made possible by our aircraft manufacturers through the use of new composite materials, advanced fuel-efficient engines and modified winglets or sharklets to improve aerodynamics. Looking ahead, SIA will continue to take delivery of fuel-efficient aircraft.

**Average Fleet Age (years), as of 31 March 2020**

| | FY2015/16 | FY2016/17 | FY2017/18 | FY2018/19 | FY2019/20 |
|---|---|---|---|---|---|
| **Singapore Airlines (Passenger Aircraft)** | 7.4 | 7.7 | 7.4 | 6.6 | **5.4** |
| **Singapore Airlines (Freighter Aircraft)** | 13.7 | 13.3 | 14.3 | 15.3 | **16.3** |
| **SilkAir** | 4.0 | 4.3 | 4.6 | 4.8 | **6.2** |
| **Scoot** | 0.7 | 1.6 | 4.7 | 5.1 | **5.7** |
| **Tigerair**[38] | 4.8 | 5.9 | | | |

**Total Fleet, by Age Group (%)**



203 aircraft

- 25%
- 65%
- 10%

Legend:
- <7 years
- 7-13 years
- >13 years
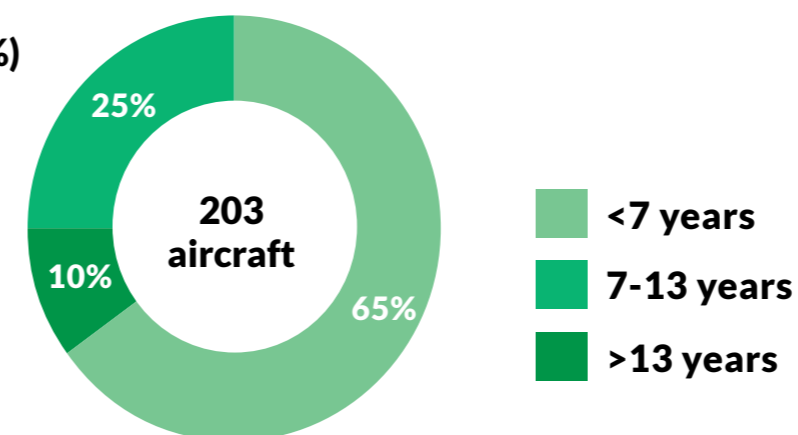
[38] Scoot and Tigerair merged under the Scoot brand on 25 July 2017.

# MANAGEMENT OF ENERGY AND EMISSIONS (CONTINUED)

## Airbus A350–900

The Airbus A350-900 is built with carbon-fibre reinforced plastic, making it lighter and more cost-efficient with reduced maintenance requirements.

**Rolls-Royce Trent XWB-84**

**48** aircraft in SIA's fleet

**19** aircraft on order

**The Airbus A350-900 is the quietest Airbus aircraft in SIA's fleet**

**25%** more fuel-efficient than previous-generation aircraft*
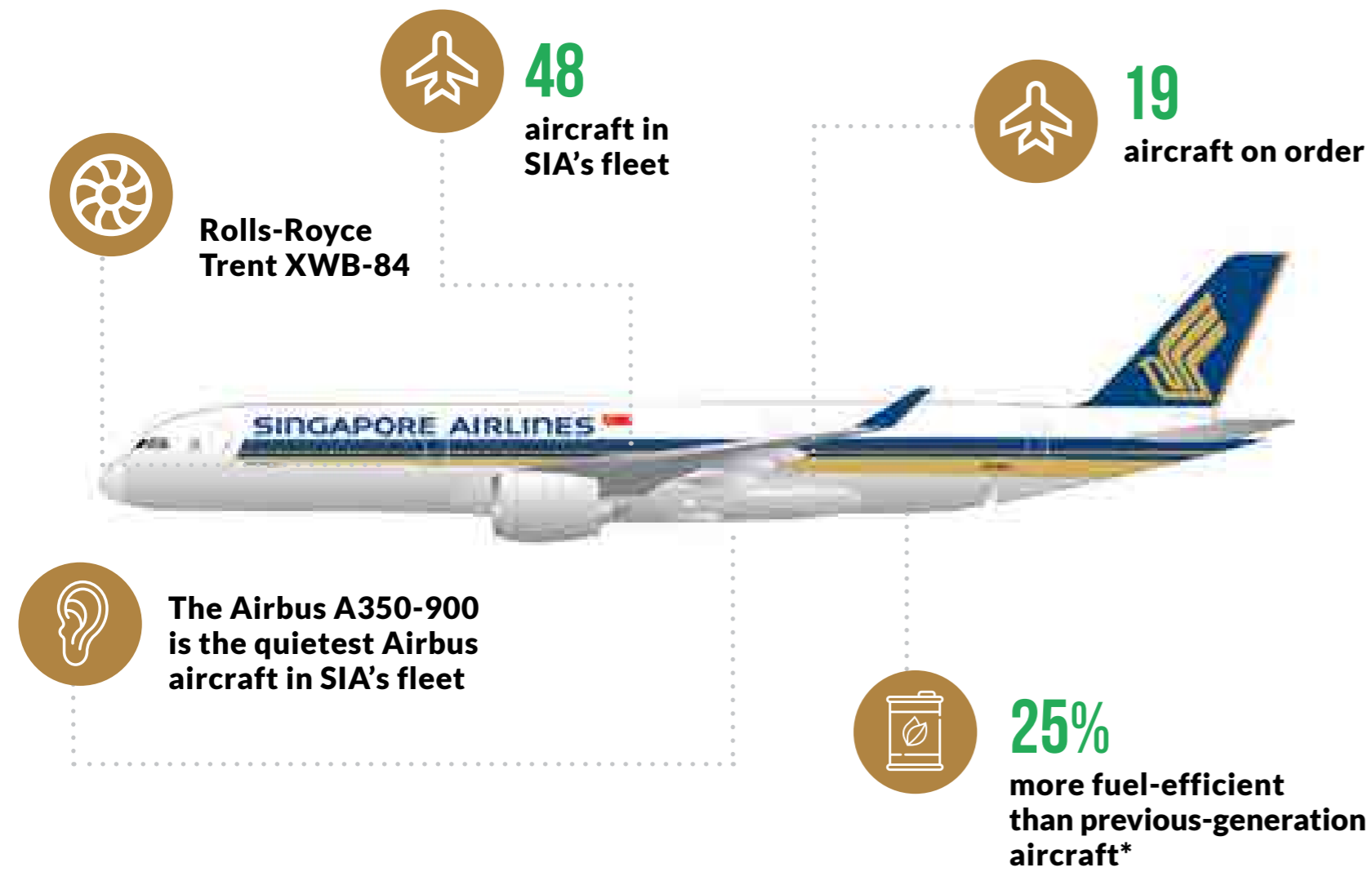
## Boeing 787-10

The Boeing 787-10 is the largest variant of the Dreamliner series. It is built with the latest technologies in aerodynamics with features such as raked wing tips and low drag empennages, with systems such as dimmable windows.

**Rolls-Royce Trent 1000 TEN**

**15** aircraft in SIA's fleet

**29** aircraft on order

**The Boeing 787-10 is the quietest Boeing aircraft in SIA's fleet**

**25%** more fuel-efficient than the aircraft that it replaces
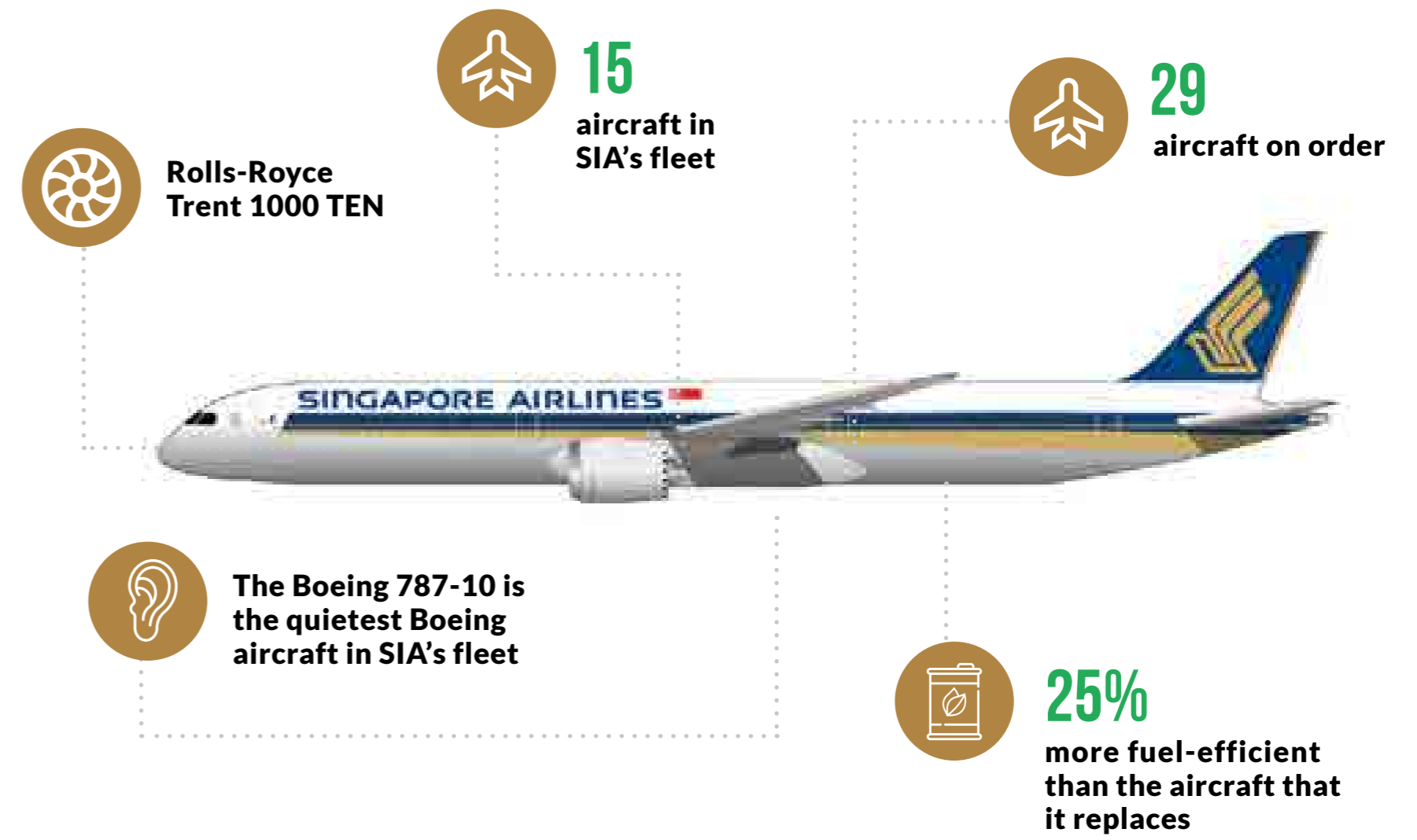
*\* According to the Original Equipment Manufacturer's website.*

# MANAGEMENT OF ENERGY AND EMISSIONS (CONTINUED)

## CASE STUDY
## A JOURNEY TOWARDS SUSTAINABLE AVIATION WITH SUSTAINABLE AVIATION FUEL

SIA sees SAF as a bridging solution between conventional jet fuel and electric commercial aircraft. Compared to conventional jet fuel, SAF can potentially reduce lifecycle GHG emissions by at least 80 per cent[39]. Since 2011, we have embarked on our journey to adopt SAF where we actively engage stakeholders, increase our understanding on SAF and deploy SAF in overseas airports. Moving forward, our aim is to support greater use of SAF in Singapore, as well as the adoption of an integrated SAF supply chain at Changi Airport.



**Exploring New Horizons in the Adoption of SAF**
**Learning From International Industry Stakeholders, Working Towards the Commercialisation of SAF**

Leveraging the traction gained from the green package flights operated in 2017, a Singapore delegation with representatives from CAAS, Changi Airport Group, Economic Development Board (EDB) and SIA went on an SAF study trip to Swedavia Airport in Stockholm and Geneva Airport in 2018.

Through this study trip, Singapore's aviation industry stakeholders were able to gain valuable insights on the key policies and business environment conditions needed to accelerate the deployment of SAF.

## 2011

### Charting Our Flight Path
**Joining the Sustainable Aviation Fuel Users Group (SAFUG)**

SIA started as a member of SAFUG, which was established to accelerate the development and commercialisation of SAF. Through this platform, stakeholders including airlines, original equipment manufacturers (OEMs) and verification bodies can exchange knowledge, experiences and best practices, equipping members with the latest developments on SAF.

Since joining SAFUG in 2011, SIA has been actively engaging our stakeholders to explore the feasibility of SAF deployment. These engagements paved the way for our first deployment of SAF in May 2017.

## 2017

### Taking Off Into a World of Greener and Cleaner Flights
**Implementing the World's First Green Package Flights**

In conjunction with SIA's 70th anniversary in 2017, SIA operated a series of 12 green package flights, incorporating the use of SAF, fuel-efficient aircraft and optimised air traffic management (ATM) measures. This was done in collaboration with the Civil Aviation Authority of Singapore (CAAS) and the Ministry of the Environment and Water Resources (MEWR) over a three-month period on our non-stop San Francisco-Singapore route.

These flights were powered by a combination of Hydro-processed Esters and Fatty Acids (HEFA), a sustainable biofuel produced from used cooking oils and conventional jet fuel. The use of this fuel has a life cycle potential reduction of 80 per cent GHG emissions as compared to traditional jet fuel.

Beyond reducing GHG emissions, this initiative raised the awareness of SAF in Singapore and provided valuable industry insights relating to the economics, logistical requirements and impact on engine performance. It also led to further engagements to implement a more efficient and integrated SAF supply chain in Singapore.

> **Approximately**
> **320 tonnes $CO_2$**
> GHG emissions savings in FY2017/18

## 2018

## 2020

### Collaborating to Integrate the Use of SAF in Our Supply Chain
**Entering into Partnership with Swedavia**

In January 2020, SIA entered into a year-long partnership with Swedish airport operator Swedavia. As part of Swedavia's SAF Incentive Scheme, we began to use a blend of jet fuel and SAF on our flights between Stockholm and Moscow. Supplied by Air BP Sweden and produced by Neste, this SAF is produced from used cooking oil, which is blended with regular jet fuel and delivered to the aircraft via the Stockholm Arlanda Airport's hydrant system. In addition, this trial with Swedavia will equip SIA with a better understanding of the logistics around the procurement of renewable fuels, placing SIA in a better position to scale up the adoption of SAF in Singapore in future.

*About Swedavia's SAF Incentive Scheme*

Swedavia, which operates Stockholm Arlanda Airport, targets to achieve five per cent renewable fuel for all jet fuels used at its airports by 2025. To achieve this target, Swedavia implemented the SAF Incentive Scheme, which subsidises 50 per cent of the premium between renewable fuel and jet fuel spot prices. SIA is one of the first few airlines to embark on this incentive programme with Swedavia.

> **Approximately**
> **47 tonnes $CO_2$**
> GHG emissions savings in FY2019/20

> " SAF is an important part of the airline industry's goal of reducing its GHG emissions. This trial with Swedavia will provide us with valuable insights into the procurement, economics and logistical requirements of renewable fuels. This knowledge and experience will also allow us to begin discussions and partnerships with other industry stakeholders around the world.
>
> **- LEE WEN FEN, SENIOR VICE PRESIDENT CORPORATE PLANNING OF SINGAPORE AIRLINES** "

[39] IATA, "Sustainable Aviation Fuels Fact Sheet".

# MANAGEMENT OF ENERGY AND EMISSIONS (CONTINUED)

## Pillar 2: More efficient aircraft operations

As part of our ongoing commitment to sustainability, SIA is constantly looking for opportunities to reduce our carbon emissions to mitigate the impact of climate change. This is done through various fuel productivity and savings initiatives, which are implemented across our engineering, flight and ground operations. SIA also leverages digital technologies to identify and implement further fuel productivity initiatives.

### Engineering Operations

Measures for our engineering operations include the regular monitoring of aircraft performance levels and working with aircraft OEMs to manage aircraft weight, reduce fuel usage during flights and improve aircraft fuel efficiency.

Tailored water uplift based on flight sector of fuel savings requirements through a tailored potable water programme
**Approximately 5,900 tonnes of fuel savings**

Removing footrests on selected aircraft, resulting in a potential weight reduction ranging from 120kg to 300kg
**Approximately 1,060 tonnes of fuel savings**

Utilising more fuel-efficient aircraft and engines for long-haul flights to reduce the amount of fuel burnt during a flight
**Approximately 210 tonnes of fuel savings**

Modification of Boeing 787-10 Trent 1000 engine software to implement "slow taper climb" schedule

Optimising Airbus A350 engines based on flight sectors served
**Approximately 160 tonnes of fuel savings**
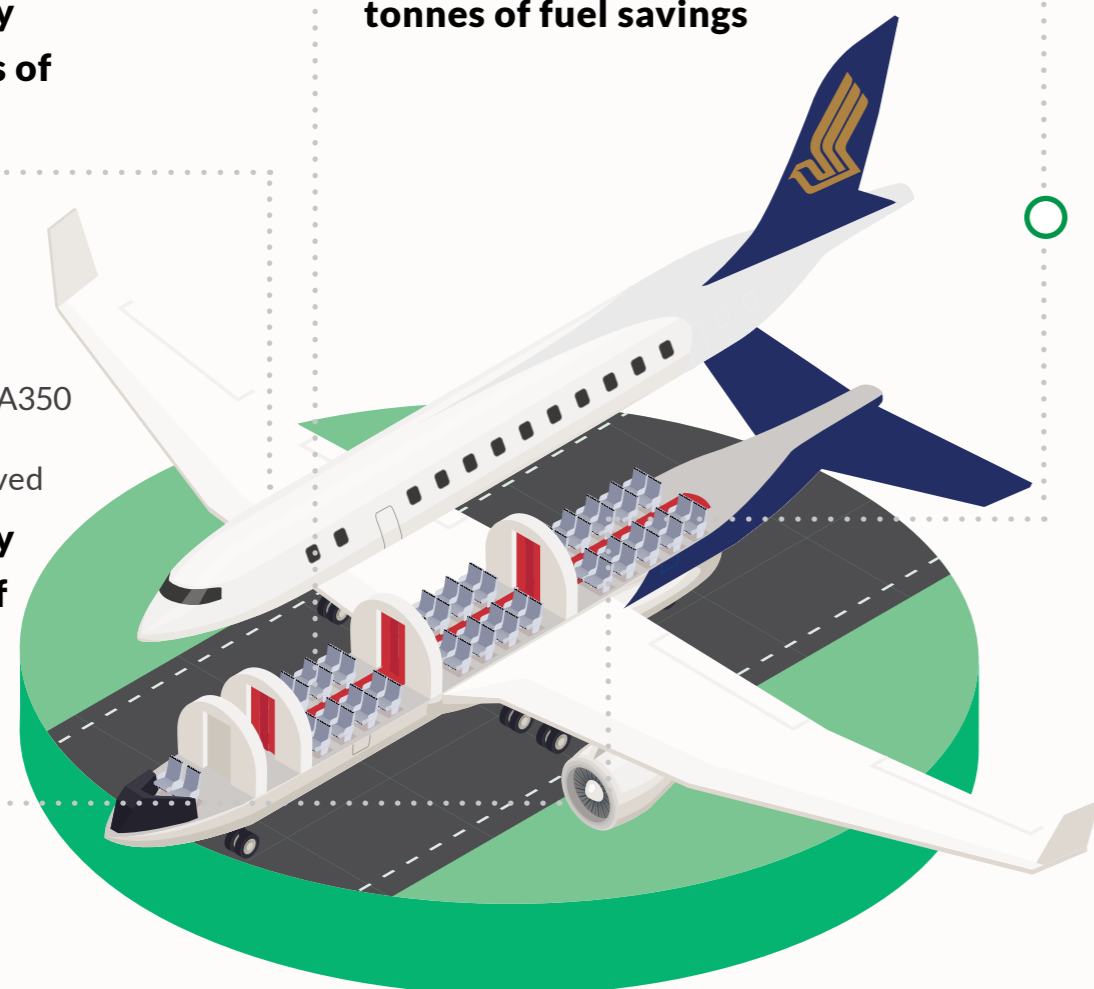
Approximately **23,090 tonnes CO$_2$** GHG emissions savings across engineering operations in FY2019/20[40]

## CASE STUDY
## TAILORED WATER UPLIFT PROGRAMME

The Tailored Water Uplift Programme involves the customisation of water uplift based on flight sector requirements. This reduces the amount of fuel used during our flight operations. During the initial stages of this programme, data on water usage was manually collected by our cabin crew for selected flights and assessed by the Engineering Division to analyse the potential of reducing water uplift.

In FY2019/20, an additional feature was introduced in the electronic Cabin Crew Voyage Report (eCCVR) system to facilitate the collection of accurate data and close monitoring of water usage. This allows cabin crew to digitally record the amount of water in the tank at the start and end of each flight. Data collected by the eCCVR system is then automatically integrated into the Voyage Report System (VRS), where it is compiled and analysed by our Engineering Division to identify opportunities for further reduction.

Today, this programme has been implemented for all flights operated by our Airbus A350-900 and Boeing 787-10 aircraft, as well as selected Airbus A380-800 and Boeing 777-300ER aircraft. Approximately 5,900 tonnes of fuel was saved in FY2019/20.



[40] Based on net calorific value and effective CO$_2$ emissions factor from 2006 IPCC Guidelines for National Greenhous Gas Inventories, Volume 2: Energy, Table 1.2 and Table 1.4 respectively (IPCC, 2006).

# MANAGEMENT OF ENERGY AND EMISSIONS (CONTINUED)

**Flight Operations**

Measures for our flight operations include initiatives aimed at optimising flight plans, routes and management.

Approximately

## 31,500 tonnes $CO_2$

GHG emissions savings across flight operations in FY2019/20

### Implementing Operational Excellence

- Reviewing route planning procedures to optimise route efficiency
- Monitoring fuel usage to ensure an optimal level of fuel to uplift
- Migrating to an enhanced flight planning system in FY2019/20 to plan optimised flight routes that balances fuel efficiency and other operational constraints, such as weather systems and airspace closures

### Collaboration Across Divisions

- Pilots following green operational procedures to enable more efficient flights
- Engaging crew through fleet meetings and e-learning tools to promote fuel-efficient practices such as Reduced Engine Taxi-In and Continuous Descent Approach
- Extending the fuel efficiency programme across divisions, sharing data and working closely to implement a more consolidated approach to optimising flight plans and routes

### Engaging the Ecosystem

- Working closely with ATM experts to improve airspace congestion
- Participating in international forums and discussions to identify more efficient routes and supporting research into ATM

### CASE STUDY
## OUR PILOT'S CONTRIBUTION TO GREEN FLIGHT OPERATIONS

SIA's pilots play a significant role in contributing to sustainable operations by reducing the amount of fuel used during flights. Our Flight Operations Division developed green operational procedures, which pilots are encouraged to adopt to reduce fuel usage during flight operations.

Some of these green operational procedures include shutting down one engine when taxiing and engaging idle reverse thrust during landing. In addition, to facilitate the implementation of green operational procedures, SIA adopted the use of digital applications to provide our pilots with historical and real-time information relating to fuel usage. This enables them to make more informed decisions with regard to fuel uplift. These efforts have reduced fuel burn by 10,000 tonnes in FY2019/20.

# MANAGEMENT OF ENERGY AND EMISSIONS (CONTINUED)

## Ground Operations

Measures for our ground operations include reducing fuel usage during ground operations.
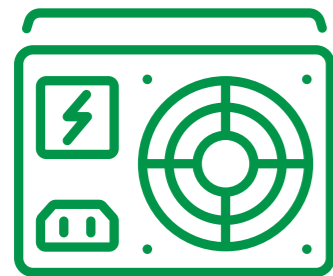


### Reducing Reliance on Aircraft Auxiliary Power Units (APU)

- Deploying mobile ground power units and pre-conditioned units during night stops and long transits to reduce reliance on aircraft APUs

- In FY2019/20, these contributed to an estimated 910 tonnes of fuel savings, translating to estimated GHG emissions savings of 2,867 tonnes $CO_2$

### Improving Aircraft Zero Fuel Weight (ZFW) Used to Plan Fuel Uplift

- ZFW is the total weight of the aircraft and all its contents, excluding the total weight of the usable fuel on board. Unusable fuel is included in the ZFW

- By improving ZFW accuracy, the correct amount of fuel is uplifted, which reduces the overall weight of the aircraft. We implemented a range of measures to improve aircraft ZFW accuracy, the latest being the deployment of the ZFW Monitoring Dashboard. It enables our Airport Operations department to monitor the ZFW more closely

- In FY2019/20, these contributed to an estimated 1,800 tonnes of fuel savings, translating to estimated GHG emissions savings of 5,670 tonnes $CO_2$

### Approximately
## 8,537 tonnes $CO_2$
GHG emissions savings across ground operations in FY2019/20

## Adoption of Digital Technologies Across Our Operations

SIA recognises that digital technologies are key enablers to facilitate emissions reduction across our engineering, flight and ground operations. We adopted data analytics and digital platforms to measure aircraft performance, as well as to identify and prioritise measures to better support our fuel efficiency strategies.

### Analytical Tools

- Using fuel efficiency analytical tools to evaluate, measure and identify more fuel efficiency opportunities

### Operational Data

- Equipping pilots with up-to-date operational data using iPads and applications, which facilitate more fuel-efficient operations
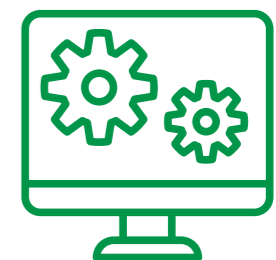
### Tail-centric Digital Solutions

- As part of an ongoing initiative with Airbus, we adopted a suite of tail-centric digital solutions to optimise the monitoring of air-conditioning performance in all flight phases

# MANAGEMENT OF ENERGY AND EMISSIONS (CONTINUED)

CASE STUDY
## STATISTICAL CONTINGENCY FUEL TO OPTIMISE FUEL UPLIFT



Approximately
## 630 tonnes $CO_2$
GHG emissions savings from the Statistical Contingency Fuel approach in FY2019/20
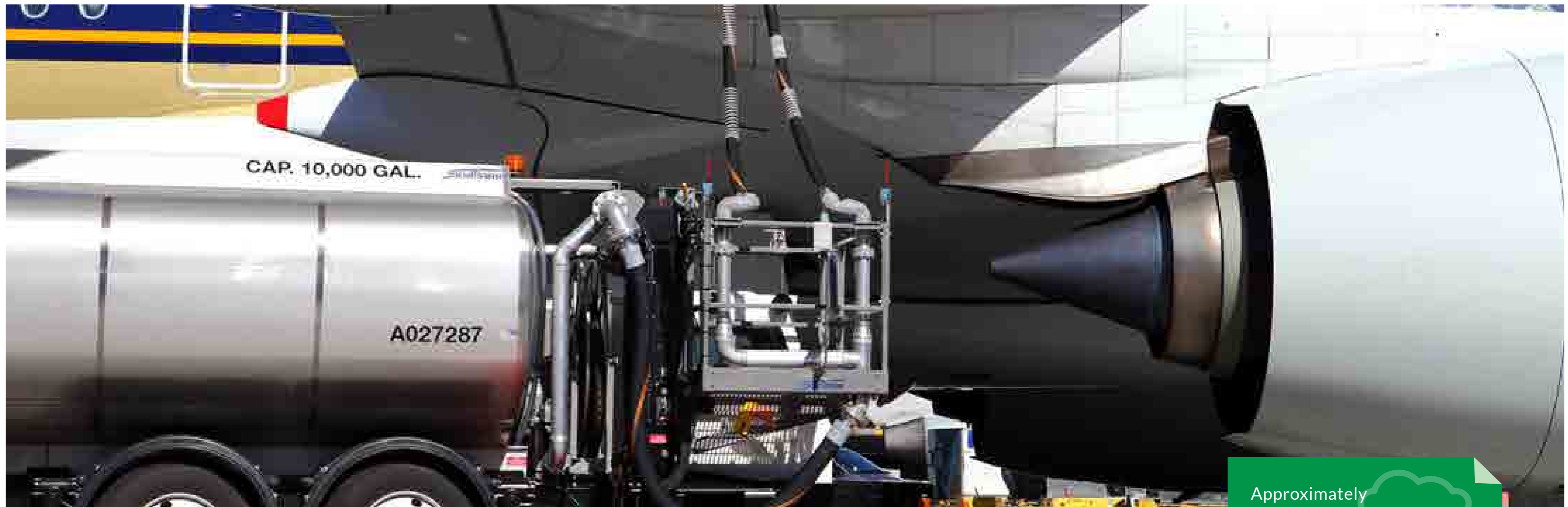
Contingency fuel refers to fuel required to account for unforeseen factors that could influence the consumption of fuel. Standard regulations and industry practices require a fixed percentage of planned fuel to be used as contingency fuel for all flights.

In FY2019/20, SIA successfully developed the Statistical Contingency Fuel approach that adopts a data driven methodology to determine the amount of contingency fuel needed for each flight. SIA implemented the use of Statistical Contingency Fuel on one of our aircraft fleet, which resulted in an estimated fuel savings of 200 tonnes. Moving forward, SIA plans to expand the use of this approach across our entire network, which is estimated to allow for a total fuel savings of about 4,000 tonnes annually.

# MANAGEMENT OF ENERGY AND EMISSIONS (CONTINUED)

## Pillar 3: Infrastructure improvements, including modernised air traffic management (ATM) systems

With global passenger numbers expected to reach eight billion by 2036 and ongoing capacity constraints, modern air traffic services will face considerable challenges that may lead to inefficiencies, resulting in billions of dollars in annual costs[41]. We seek to address these challenges through two approaches.

### Innovation and Data Analytics

We believe that innovation and data analytics play a critical role in paving the way for more significant improvements. We engaged research institutions to explore such ideas.

SIA aims to assist with the improvements in air route optimisation to cope with escalating traffic growth, while striving to reduce fuel use and emissions.

### Partnerships with Stakeholders

We recognise that close coordination among industry stakeholders such as airlines, airports, air navigation service providers and governments, is critical to enable airspace optimisation. SIA actively collaborates with stakeholders on ATM to explore ways to improve airspace incremental efficiency.

## Pillar 4: A single global market-based measure (MBM) to fill the remaining emissions gap

The aviation industry has been experiencing an increase in $CO_2$ emissions. ICAO predicts that without additional measures, emissions from the aviation industry could increase by more than 300 per cent[42]. As part of the ICAO's Member States commitment towards carbon-neutral growth from 2020, the Member States have adopted a global MBM, known as CORSIA. CORSIA seeks to offset the share of $CO_2$ emissions from international flights exceeding their 2020 levels. The CORSIA scheme will be activated during a voluntary pilot period from 2021 and will become mandatory for all airlines from 2027.

The implementation of CORSIA is applicable to international aviation emissions. It is forecasted that CORSIA will mitigate approximately 2.5 billion tonnes $CO_2$ emissions between 2021 and 2035, equivalent to an average of 165 million tonnes $CO_2$ emissions annually. CORSIA's approach compares the total annual GHG emissions from 2021 onwards against a baseline of $CO_2$ emissions, which will be determined by using the average $CO_2$ emissions from international aviation under CORSIA in 2019 and 2020.

SIA recognises that CORSIA plays an integral role in helping the aviation industry achieve its target in a cost-efficient manner. Singapore will voluntarily participate in CORSIA between 2021 and 2026 before the mandatory implementation of the scheme. SIA strives to support ongoing efforts by meeting the requirements under the CORSIA Monitoring, Reporting and Verification system for $CO_2$ emission. We began monitoring and reporting our $CO_2$ emissions on an annual basis in January 2019.

The Covid-19 outbreak led to a drastic reduction in air traffic, which will likely result in lower levels of emissions in 2020. As the CORSIA emissions baseline is determined based on the emissions in 2019 and 2020, reviews are continuing among industry stakeholders to consider appropriate adjustments aimed at providing stakeholders with the certainty and confidence required to ensure the successful implementation of CORSIA, whilst preserving the scheme's environmental benefits.
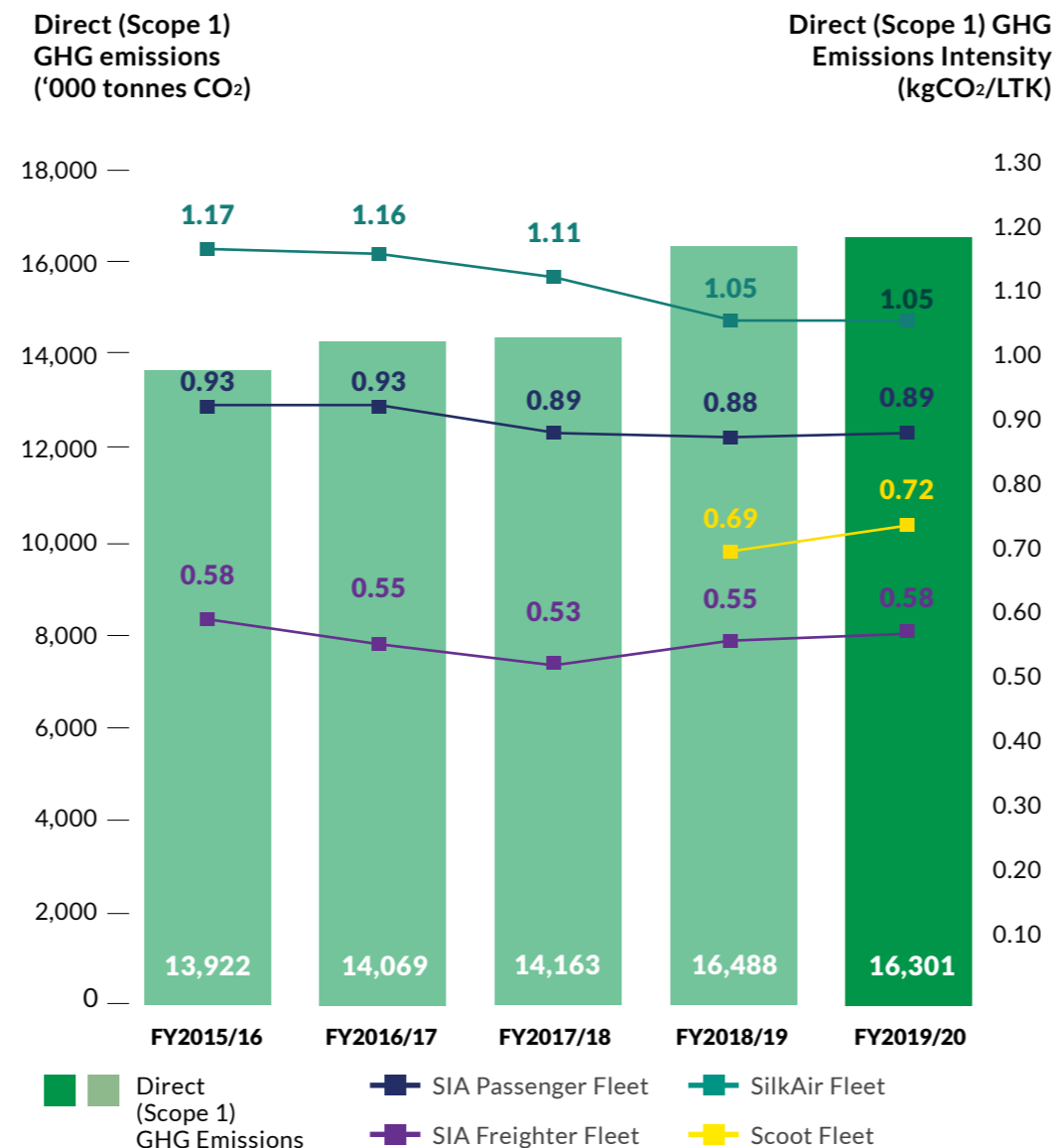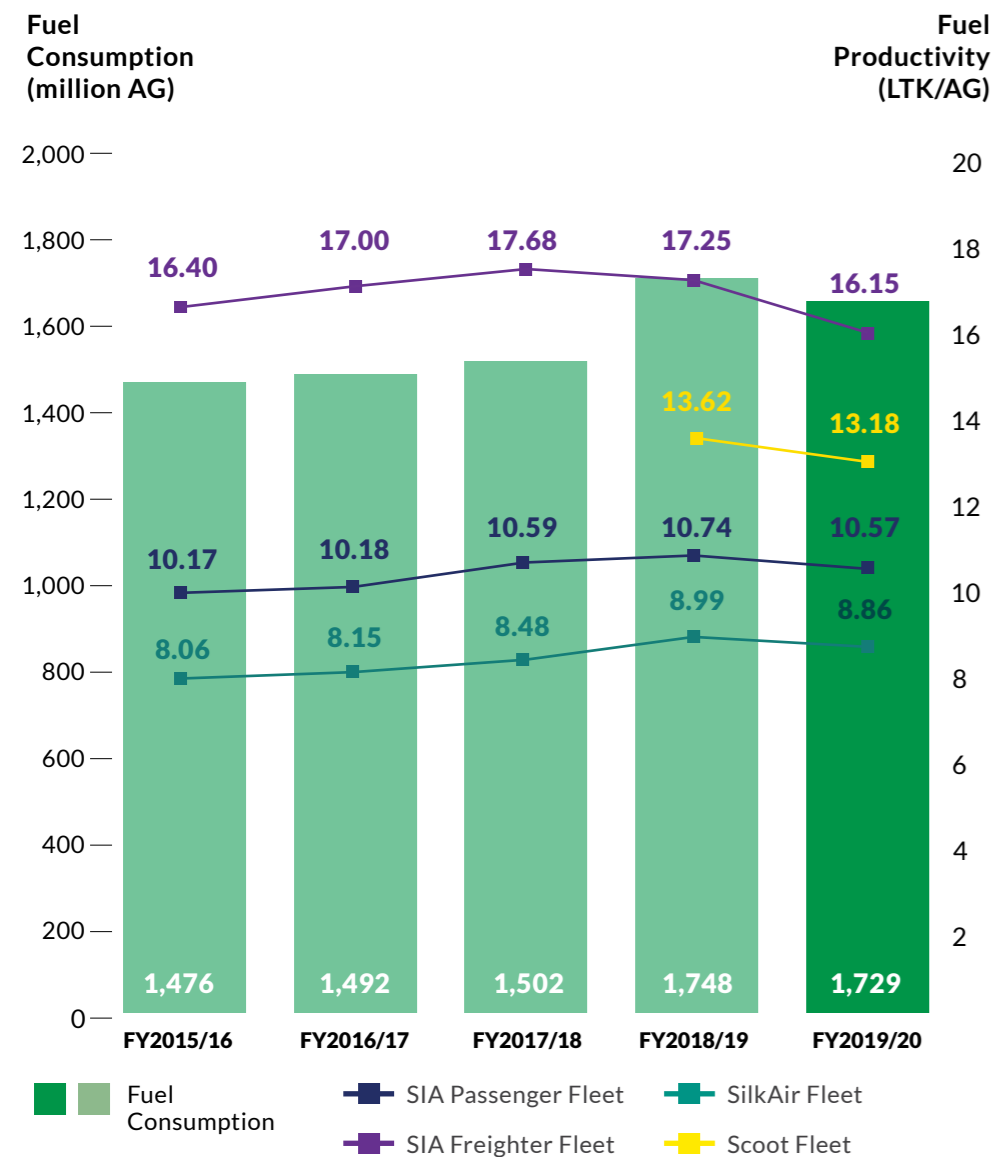


*Image courtesy of Shawn Ang*

41 IATA, "Airspace Optimisation".
42 IATA, "CORSIA: final decisions before take-off".

# MANAGEMENT OF ENERGY AND EMISSIONS (CONTINUED)

**Performance of SIA's Flight Operations[43]**  `302-1`  `302-3`  `302-4`  `305-1`  `305-4`  `305-5`



Fuel Consumption (million AG) / Fuel Productivity (LTK/AG)

| | FY2015/16 | FY2016/17 | FY2017/18 | FY2018/19 | FY2019/20 |
|---|---|---|---|---|---|
| Fuel Consumption | 1,476 | 1,492 | 1,502 | 1,748 | 1,729 |
| SIA Freighter Fleet | 16.40 | 17.00 | 17.68 | 17.25 | 16.15 |
| SIA Passenger Fleet | 10.17 | 10.18 | 10.59 | 10.74 | 10.57 |
| Scoot Fleet | | | | 13.62 | 13.18 |
| SilkAir Fleet | 8.06 | 8.15 | 8.48 | 8.99 | 8.86 |



Direct (Scope 1) GHG emissions ('000 tonnes CO2) / Direct (Scope 1) GHG Emissions Intensity (kgCO2/LTK)

| | FY2015/16 | FY2016/17 | FY2017/18 | FY2018/19 | FY2019/20 |
|---|---|---|---|---|---|
| Direct (Scope 1) GHG Emissions | 13,922 | 14,069 | 14,163 | 16,488 | 16,301 |
| SilkAir Fleet | 1.17 | 1.16 | 1.11 | 1.05 | 1.05 |
| SIA Passenger Fleet | 0.93 | 0.93 | 0.89 | 0.88 | 0.89 |
| Scoot Fleet | | | | 0.69 | 0.72 |
| SIA Freighter Fleet | 0.58 | 0.55 | 0.53 | 0.55 | 0.58 |

The Covid-19 outbreak has impacted the SIA Group's fleet environmental performance. Concerns about the spread of the Covid-19 virus, as well as the border controls and entry restrictions imposed by countries globally, has significantly reduced the overall demand for air travel and passenger traffic. In response, we have implemented capacity cuts across our network, which contributed to a significant reduction in our operations.

Due to the drop in demand for passenger carriage, the total fleet fuel consumption saw a decrease of 1.1 per cent from 1,748 million AG consumed in FY2018/19, to 1,729 million AG in FY2019/20. This corresponds with the 1.1 per cent decrease in our Direct (Scope 1) GHG emissions from 16,488,318 tonnes $CO_2$ in FY2018/19 to 16,301,082 tonnes $CO_2$ in FY2019/20. The reduction in operational productivity and load factors as a result of reduced demand for passenger travel saw a decrease in fuel productivity and our Direct (Scope 1) GHG emissions.

In FY2019/20, we implemented various fuel reduction and efficiency measures across our aircraft fleet to reduce our GHG emissions. This enabled us to achieve an estimated GHG emissions savings of 63,803 tonnes $CO_2$ in FY2019/20.

[43] Please refer to the Appendix on pages 130 and 132 for definitions and methodologies.
[44] Global Alliance for Buildings and Construction & International Energy Agency, "Global Status Report 2018".

## ON THE GROUND

Buildings are a major driver of global energy demand, accounting for approximately 39 per cent of energy-related global GHG emissions[44]. Of this, 28 per cent relates to operational GHG emissions associated with energy used to operate the building or infrastructure. SIA aims to transition into a decarbonised built environment through our retrofit and renovation efforts, which will facilitate a reduction in resource usage and improved performance.

### Energy Reduction Initiatives

A large amount of energy consumption at our buildings and offices is due to the use of electricity for air-conditioning systems, lightings and lifts. To manage the energy performance of our buildings, SIA reviews the performance of major building equipment including the plans for refurbishment or upgrading on an annual basis.

In FY2019/20, we continued to implement energy reduction initiatives and achieved an estimated 800 MWh of energy savings mainly through adjusting the operating parameters of our chiller plants and air-handling units (AHU), and replacing lightings with more energy efficient light-emitting diode (LED) light fittings.

We remain committed to our efforts to refresh aged equipment and explore new technologies to enhance the energy efficiency of our buildings. These include longer-term initiatives such as adopting smart lighting systems in our offices, and upgrading our existing chiller plants and AHUs.

Recognising that innovation is key to unlocking the potential of future energy reduction opportunities, we also leverage platforms such as the Singapore Airlines AppChallenge 2019 to ideate resource management solutions. The Singapore Airlines AppChallenge 2019 is an international digital innovation forum that invites startups and innovators around the world to pitch their ideas to address some of the challenges faced by the aviation industry.

### Adoption of Renewable Energy

In addition to our energy reduction initiatives, we started adopting the use of renewable energy. In FY2019/20, SIA entered into a partnership with SembCorp Solar to install rooftop solar panels on three of our buildings – Airline House, SIA Training Centre and TechSQ. The solar panels are expected to be commissioned in the second quarter of FY2020/21 and will generate a projected 5,382 MWh of renewable energy annually to support up to 18 per cent of our buildings' electricity demand.

### Cleaner Ground Operations

To manage GHG emissions from SIA's ground operations, all diesel and petrol powered vehicles in our fleet are required to comply with the National Environmental Agency's (NEA) requirements on motor vehicle emissions. In addition, our vehicles undergo regular inspections such as the Chassis Dynamometer Smoke Test annually to ensure the smoke opacity limit meets local standards. Our employees are also reminded to adhere to anti-idling engine regulations and switch off idle engines to conserve fuel and promote cleaner air.

Approximately **800 MWh** energy savings from initiatives across buildings and offices in FY2019/20

# MANAGEMENT OF ENERGY AND EMISSIONS (CONTINUED)

## Performance of SIA's Buildings and Offices[45]    `302-1` `302-3` `302-4` `305-2` `305-4` `305-5`

**Electricity Consumption (MWh)** / **Electricity Intensity (kWh/m²)**

| FY2015/16 | FY2016/17 | FY2017/18 | FY2018/19 | FY2019/20 |
|---|---|---|---|---|
| 31,012 | 28,280 | 27,805 | 28,144 | 27,907 |
| 134 | 122 | 120 | 121 | 120 |

Legend: ■ Electricity Consumption — Electricity Intensity

**Energy Indirect (Scope 2) GHG Emissions (tonnes CO₂)** / **Energy Indirect (Scope 2) GHG Emissions Intensity (tonnes CO₂/m²)**

| FY2015/16 | FY2016/17 | FY2017/18 | FY2018/19 | FY2019/20 |
|---|---|---|---|---|
| 13,264 | 11,945 | 11,781 | 11,798 | 11,687 |
| 0.057 | 0.052 | 0.051 | 0.051 | 0.050 |

Legend: ■ Energy Indirect (Scope 2) GHG Emissions — Energy Indirect (Scope 2) GHG Emissions Intensity

SIA's electricity consumption data includes electricity consumed at SIA's buildings and offices. In FY2019/20, the total electricity consumption at our buildings and offices[46] was 27,906.9 MWh, a 0.8 per cent decrease from our FY2018/19 levels. The electricity intensity has also improved by 0.8 per cent to 120.3 kWh/m². Correspondingly, our energy indirect (Scope 2) GHG emissions and intensity improved by 0.9 per cent from FY2018/19. This is indicative of the resource management initiatives implemented throughout the year to reduce our energy consumption and improve our energy efficiency.

We are also on track to achieve our FY2020/21 target of a 15 per cent reduction of electricity consumption, from the base year FY2010/11 level of 59,553.7 MWh. This target takes into account the electricity consumption of 11 assets[47] that SIA and SIAEC have operational control over. In FY2019/20, the total electricity consumption of these 11 assets was 47,107.4 MWh, a 20.9 per cent improvement from FY2010/11.

[45] Please refer to the Appendix on page 130 for definitions and methodologies.
[46] Locations include SIA's four buildings (Airline House, SIA Supplies Centre, SIA Training Centre and TechSQ) and offices.
[47] Locations include SIA's four buildings (Airline House, SIA Supplies Centre, SIA Training Centre and TechSQ), SIAEC's Engine Testing Facility and six hangars.

# MANAGEMENT OF ENERGY AND EMISSIONS (CONTINUED)

## Performance Summary Of Energy And Emissions[48] `302-1` `302-3` `305-1` `305-2` `305-4`

| Operating Statistics | FY2015/16 | FY2016/17 | FY2017/18 | FY2018/19 | FY2019/20 |
|---|---|---|---|---|---|
| **SIA Group** | | | | | |
| **Passengers Carried (thousand)** | 22,865 | 23,096 | 24,192 | 36,095 | **35,800** |
| **Revenue Pax-km (million)** | 100,783.6 | 100,051.8 | 104,198.5 | 140,838.1 | **140,998.5** |
| **Available Seat-km (million)** | 127,484.3 | 127,748.6 | 129,492.6 | 169,606.6 | **171,211.2** |
| **Singapore Airlines (Passenger Fleet)** | | | | | |
| **Passengers Carried (thousand)** | 19,029 | 18,990 | 19,505 | 20,738 | **20,906** |
| **Revenue Pax-km (million)** | 94,267.4 | 92,913.8 | 95,855.0 | 102,571.9 | **104,134.6** |
| **Available Seat-km (million)** | 118,366.5 | 117,662.3 | 118,126.7 | 123,486.2 | **127,165.8** |
| **Singapore Airlines (Freighter Fleet)** | | | | | |
| **Cargo and Mail Carried (million kg)** | 1,170 | 1,248 | 1,301.2 | 1,298.3 | **1,205** |
| **Cargo Load (million tonne-km)** | 6,510.9 | 6,895.8 | 7,260.3 | 7,006.5 | **6,389.2** |
| **Gross Capacity (million tonne-km)** | 10,513.3 | 10,912.3 | 11,126.7 | 11,210.4 | **10,778.2** |
| **SilkAir** | | | | | |
| **Passengers Carried (thousand)** | 3,836 | 4,106 | 4,687 | 4,902 | **4,440** |
| **Revenue Pax-km (million)** | 6,516.2 | 7,138.0 | 8,343.5 | 8,940.3 | **8,195.4** |
| **Available Seat-km (million)** | 9,117.8 | 10,086.3 | 11,365.9 | 11,731.8 | **10,599.6** |
| **Scoot[49]** | | | | | |
| **Passengers Carried (thousand)** | - | - | - | 10,455 | **10,454** |
| **Revenue Pax-km (million)** | - | - | - | 29,325.9 | **28,668.5** |
| **Available Seat-km (million)** | - | - | - | 34,388.6 | **33,445.8** |

[48] Please refer to the Appendix on pages 130 and 132 for definitions and methodologies.
[49] Energy and emissions data for Scoot is available from FY2018/19 due to the merger of Tigerair under the Scoot brand in July 2017.

# MANAGEMENT OF ENERGY AND EMISSIONS (CONTINUED)

| Flight Operations | FY2015/16 | FY2016/17 | FY2017/18 | FY2018/19 | FY2019/20 |
|---|---|---|---|---|---|
| **SIA Group** | | | | | |
| Fuel Consumption (million AG) | 1,477.4 | 1,491.9 | 1,501.8 | 1,748.5 | **1,728 .7** |
| Fuel Consumption (TJ) | 214,201.4 | 219,884.1 | 223,877.9 | 230,836.5 | **228,215.1** |
| Fuel Productivity (LTK/AG) | 10.57 | 10.61 | 10.98 | 11.37 | **11.13** |
| Direct (Scope 1) GHG Emissions ('000 tonnes $CO_2$) | 13,921.9 | 14,069.1 | 14,162.8 | 16,488.4 | **16,301.1** |
| Direct (Scope 1) GHG Emissions Intensity (kg$CO_2$/LTK) | 0.89 | 0.89 | 0.86 | 0.83 | **0.85** |
| **Singapore Airlines (Passenger Fleet)** | | | | | |
| Fuel Consumption (million AG) | 1,277.0 | 1,288.1 | 1,296.1 | 1,332.7 | **1,334.3** |
| Fuel Productivity (LTK/AG) | 10.17 | 10.18 | 10.59 | 10.74 | **10.57** |
| Direct (Scope 1) GHG Emissions ('000 tonnes $CO_2$) | 12,033 .0 | 12,146.8 | 12,222.9 | 12,567.6 | **12,582.6** |
| Direct (Scope 1) GHG Emissions Intensity (kg$CO_2$/LTK) | 0.93 | 0.93 | 0.89 | 0.88 | **0.89** |
| **Singapore Airlines (Freighter Fleet)** | | | | | |
| Fuel Consumption (million AG) | 122.2 | 118.9 | 110.8 | 99.1 | **92.8** |
| Fuel Productivity (LTK/AG) | 16.40 | 17.00 | 17.68 | 17.25 | **16.15** |
| Direct (Scope 1) GHG Emissions ('000 tonnes $CO_2$) | 1,151.9 | 1,120.8 | 1,044.7 | 934.3 | **874.7** |
| Direct (Scope 1) GHG Emissions Intensity (kg$CO_2$/LTK) | 0.58 | 0.55 | 0.53 | 0.55 | **0.58** |
| **SilkAir** | | | | | |
| Fuel Consumption (million AG) | 78.2 | 85.0 | 94.9 | 95.6 | **87.4** |
| Fuel Productivity (LTK/AG) | 8.06 | 8.15 | 8.48 | 8.99 | **8.86** |
| Direct (Scope 1) GHG Emissions ('000 tonnes $CO_2$) | 737 .0 | 801.5 | 895.2 | 901.7 | **824.2** |
| Direct (Scope 1) GHG Emissions Intensity (kg$CO_2$/LTK) | 1.17 | 1.16 | 1.11 | 1.05 | **1.05** |
| **Scoot** | | | | | |
| Fuel Consumption (million AG) | - | - | - | 221.1 | **214.2** |
| Fuel Productivity (LTK/AG) | - | - | - | 13.62 | **13.18** |
| Direct (Scope 1) GHG Emissions ('000 tonnes $CO_2$) | - | - | - | 2,084.8 | **2,019.6** |
| Direct (Scope 1) GHG Emissions Intensity (kg$CO_2$/LTK) | - | - | - | 0.69 | **0.72** |

# MANAGEMENT OF ENERGY AND EMISSIONS (CONTINUED)

| Buildings, Offices and Ground Operations | FY2015/16 | FY2016/17 | FY2017/18 | FY2018/19 | FY2019/20 |
|---|---|---|---|---|---|
| **Buildings and Offices (Electricity)** | | | | | |
| Electricity Consumption (GWh) | 31 .0 | 28.3 | 27.8 | 28.1 | **27.9** |
| Electrical Energy Consumption (TJ) | 112 | 102 | 100 | 101 | **100** |
| Electricity Intensity (kWh/m²) | 133.73 | 121.95 | 119.90 | 121.36 | **120.34** |
| Energy Indirect (Scope 2) GHG Emissions (tonnes $CO_2$) | 13,264 | 11,945 | 11,781 | 11,798 | **11,687** |
| Energy Indirect (Scope 2) GHG Emissions Intensity (tonnes $CO_2$/m²) | 0.057 | 0.052 | 0.051 | 0.051 | **0.050** |
| **Ground Operations (Diesel)** | | | | | |
| Diesel Consumption (litres) | 5,594 | 4,991 | 2,533 | 5,216 | **10,014** |
| Diesel Consumption (TJ) | 0.20 | 0.18 | 0.09 | 0.19 | **0.36** |
| Direct (Scope 1) GHG Emissions from Diesel (tonnes $CO_2e$) | 15 | 14 | 7 | 14 | **27** |
| **Ground Operations (Petrol)** | | | | | |
| Petrol Consumption (litres) | 11,939 | 14,036 | 18,411 | 22,142 | **20,870** |
| Petrol Consumption (TJ) | 0.39 | 0.46 | 0.60 | 0.73 | **0.68** |
| Direct (Scope 1) GHG Emissions from Petrol (tonnes $CO_2e$) | 28 | 33 | 43 | 51 | **49** |

# MANAGEMENT OF ENERGY AND EMISSIONS (CONTINUED)

| Summary of Energy and Emissions Performance | FY2015/16 | FY2016/17 | FY2017/18 | FY2018/19 | FY2019/20 |
|---|---|---|---|---|---|
| **Total Energy Consumption within SIA** | | | | | |
| Energy Consumption from Flight Operations (TJ) | 214,201 | 219,884 | 223,878 | 230,836 | **228,215** |
| Energy Consumption from Buildings and Offices (TJ) | 112 | 102 | 100 | 101 | **100** |
| Energy Consumption from Ground Operations (TJ) | 0.59 | 0.64 | 0.70 | 0.91 | **1.05** |
| Total Energy Consumption within SIA (TJ) | 214,314 | 219,987 | 223,979 | 230,939 | **228,317** |
| **Total Scope 1 and 2 GHG Emissions** | | | | | |
| Direct (Scope 1) GHG Emissions from Flight Operations (tonnes $CO_2$) | 13,921,890 | 14,069,120 | 14,162,780 | 16,488,320 | **16,301,080** |
| Direct (Scope 1) GHG Emissions from Ground Operations (tonnes $CO_2e$) | 43 | 46 | 50 | 66 | **76** |
| Energy Indirect (Scope 2) GHG Emissions from Buildings and Offices (tonnes $CO_2e$) | 13,264 | 11,945 | 11,781 | 11,798 | **11,687** |
| Total Direct (Scope 1) GHG Emissions (tonnes $CO_2e$) | 13,921,933 | 14,069,166 | 14,162,830 | 16,488,386 | **16,301,156** |
| Total Energy Indirect (Scope 2) GHG Emissions (tonnes $CO_2e$) | 13,264 | 11,945 | 11,781 | 11,798 | **11,687** |
| Total Scope 1 and 2 GHG Emissions (tonnes $CO_2e$) | 13,935,197 | 14,081,112 | 14,174,610 | 16,500,183 | **16,312,843** |

# WASTE   `306-1`  `306-2`  `PR-7`  `PR-8`  `PR-9`

The world is facing a mounting waste issue. Waste generation is expected to drastically outpace population growth by 2050. Against a backdrop of rapid urbanisation and consumerism, global annual waste generation is expected to increase to over three billion tonnes over the next 30 years, up from around two billion tonnes today[50]. SIA recognises that sustainable waste management is crucial and requires urgent action.

In August 2019, Singapore launched the inaugural Zero Waste Masterplan, which maps out the country's key strategies to build a sustainable, resource-efficient and climate-resilient nation. This includes reducing the amount of waste sent to Singapore's landfill and encouraging the adoption of sustainable production and consumption practices. As part of our commitment to minimise our environmental footprint through a prudent waste hierarchy, we practise the five Rs – Refuse, Reduce, Reuse, Repurpose and Recycle – across our operations.

**Refuse**
Refusing the use of single-use disposables such as plastics and straws

**Reduce**
Reducing the use of materials and waste generated

**Reuse**
Minimising disposables and replacing cabin items with more reusable and sustainable alternatives

**Repurpose**
Repurposing and upcycling of materials that have lost their functionality

**Recycle**
Making a conscious effort to recycle waste such as electronics and plastics purposefully

SIA adopts a four-pronged approach as part of our waste management:

- Reducing waste generation through the adoption of digital technologies and introducing waste and materials reduction initiatives across our operations

- Reducing waste disposal through recycling, reusing and repurposing of materials

- Implementing operational improvements to reduce waste generation and disposal

- Building partnerships with like-minded industry partners to explore new collaboration opportunities

## IN THE AIR ✈

The sustainable management of aircraft cabin waste comprises two primary waste-streams: cleaning waste and catering waste.

**Aircraft Cabin Waste**



**Cleaning Waste**
Cleaning waste includes amenity kits, earphones, lavatory waste, magazines, newspapers, plastic bottles, textiles, as well as litter left behind by passengers.

**Catering Waste**
Catering waste is generated by in-flight meals and beverages distributed on board the flight. These include food and beverages (both part-consumed and untouched), as well as packaging which are returned to the galley carts, static bins and/or compactor boxes.

A study by IATA estimated that the aviation industry generated 6.1 million tonnes of cabin waste in 2018 and this figure is expected to double in the next decade[51]. An average of 352.7kg of waste is generated per flight, with an average passenger generating 1.4kg worth of cabin waste per flight[52]. To put this in perspective, the average person on Earth generates 0.7kg of waste per day[53].

SIA does not collect, store or dispose of cabin waste. These activities are performed by contracted cleaners and caterers and are subjected to the relevant national waste management controls. Nonetheless, SIA remains committed to play our part to reduce and manage cabin waste in a more sustainable manner. SIA is working with our caterers worldwide to explore various initiatives and conduct waste audits to gain a better understanding of the make-up of our waste. This allows us to step up our efforts in segregating and recycling of waste, promoting circular economy concepts where possible.

[50] World Bank, "What a Waste 2.0: A Global Snapshot of Solid Waste Management to 2050".
[51] IATA, "Cabin Waste Handbook".
[52] IATA, "Aircraft Cabin Waste Project Report".
[53] World Bank, "What a Waste 2.0: A Global Snapshot of Solid Waste Management to 2050".

# WASTE (CONTINUED)

### Reducing In-flight Food Waste

Today, over 23.4 per cent of cabin waste comprises unconsumed food and beverages[54]. With food waste emerging as a key global issue, SIA explored various methods to reduce food wastage in our in-flight operations. In FY2019/20, we leveraged customer surveys, data analytics and staff feedback to better understand our customers' preferences and worked with our caterers to explore adjustments in our food offerings to reduce food wastage.

We will continue to leverage digital technologies to allow us to adjust the quantities of food items. This will allow us to minimise food wastage without compromising on the in-flight experience.

### Refusing the Use of In-flight Plastic

The world produces about 300 million tonnes of plastic waste every year. Almost half of all plastic produced is designed to be used once. About 60 per cent of plastic produced ends up in landfills or the natural environment[55]. Coupled with the increased visibility of the impact of plastic on the marine environment, plastic waste has become a growing concern for our stakeholders. In FY2019/20, SIA implemented several initiatives to reduce the use of single-use plastics and replace plastic materials with alternative sustainable materials.

[54] IATA, *"Cabin Waste Handbook"*.
[55] UN Environment, *"Banning single-use plastic: Lessons and experiences from countries"*.

**820,000**
plastic straws saved each year

**3.8 mil**
pieces of swizzle sticks replaced with wooden ones

Approximately
**250km**
of plastics saved as a result of replacement of plastics polybags (equivalent to the length of 3,416 A380 aircraft)

SIA replaced plastic polybags (left) for children's toys to recyclable paper packaging (right)

# WASTE (CONTINUED)

## Reducing the Use of Paper In-flight

Paper is the second largest source of waste, accounting for approximately 17 per cent of global waste composition[56]. To reduce the amount of paper used on board SIA's flights, SIA implemented several initiatives in FY2019/20.

### Digitalisation of Reports and Records

Approximately three million pieces of paper saved annually as a result of the adoption of the BEST app for in-flight operations.

### e-Library Feature in the SingaporeAir Mobile App

Increasing the number of publications on our e-Library in the SingaporeAir mobile app and encouraging passengers to download their reading materials before the flight to reduce the amount of newspapers and magazines uplifted.

Moving forward, other initiatives that SIA will be embarking on include the replacement of paper menus with digital alternatives. FSC-certified paper is also used in our serviettes, packaging, toilet paper and toilet rolls.

## Reducing the Use of Cabin Items

Cleaning waste accounts for approximately 20 per cent of in-flight cabin waste by weight[57]. To reduce this, SIA started offering its in-flight amenity kits on request to Premium Economy Class and Economy Class customers in FY2019/20, instead of distributing them to all passengers. Moving forward, SIA plans to expand this initiative to other amenities such as slippers, socks and eyeshades for our Business Class customers.

SIA made several modifications to the Economy Class earphones in FY2019/20. The modifications include the removal of the spare earbuds and loose adaptor, as well as modification of the earphone jack to a flexi dual pin design. With these modifications, customers can reuse these earphones during their subsequent flights or for their own personal electronic devices.

**1** Removing spare earbuds

**2** Removing the loose adaptor

**3** Modifying the earphone jack to a flexi dual pin design

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[56] World Bank, "What a Waste 2.0: A Global Snapshot of Solid Waste Management to 2050."
[57] IATA, "Cabin Waste Handbook".

# WASTE (CONTINUED)

## ON THE GROUND

The amount of waste disposed of in Singapore has increased seven-fold over the last 40 years. Assuming this rate continues, Singapore's only landfill, Semakau Landfill, will run out of space by 2035. Singapore has limited land for new incineration plants or landfills. Thus, the need to develop a more sustainable waste management approach is increasingly pressing.

The Singapore Government declared 2019 as the Year of Zero Waste and unveiled Singapore's inaugural Zero Waste Masterplan, which maps out the country's key strategies to build a sustainable, resource-efficient and climate-resilient nation. As part of the Masterplan, Singapore's zero waste aspirations include reducing waste sent to Semakau Landfill each day by 30 per cent and increasing our overall recycling rate to 70 per cent by 2030[58].

SIA strives to align our approach with Singapore's waste management strategies. In FY2019/20, SIA explored various waste reducing and recycling initiatives to minimise waste from three main waste streams: food waste, electrical and electronic waste (e-waste) and plastics.

### Recycling Canteen Waste and Reducing the Use of Styrofoam-based Foodware at Airline House

A recent study done by NEA found that the amount of food waste generated has grown by almost 30 per cent[59] over the past 10 years and is expected to increase further with a growing population. In 2018, food waste made up approximately 20 per cent of the total amount of waste disposed of in Singapore. However, only 17 per cent of food waste was recycled.

To reduce our canteen's food and material waste footprint, SIA introduced the concept of an eco-friendly canteen at Airline House in FY2017/18. As part of this concept, SIA installed an eco-digester at the bin centre, which has the ability to convert approximately 600kg to 800kg worth of canteen food waste and 80kg of non-food waste (including disposable foodware and general waste) to Refuse Derived Fuels (RDF) everyday. The eco-digester uses heat and an enzymatic process to digest canteen waste into RDF on site. RDF is a renewable fuel source that can be used in thermal power plants to generate electricity and produces lesser GHG emissions compared to traditional fossil fuels. In addition to the reduction of canteen waste disposed, SIA also reduced GHG emissions from the transportation of canteen waste for incineration and the burning of incineration waste.

Other initiatives implemented as part of this concept include switching our foodware from styrofoam to paper-based ones for 25 stalls, placing 22 new recycling bins to encourage a culture of recycling, organising roadshows and displaying posters on canteen tables to encourage our staff to sort their cans and bottles for recycling before disposing their food waste.

### Reducing Paper Usage and Single-use Plastics at SilverKris Lounges

To encourage more sustainable consumer practices among our customers, SIA implemented various measures to reduce single-use plastics and paper usage at our SilverKris Lounges.

In FY2019/20, we digitalised many processes to reduce paper usage and improve our work processes. Some of the digitalisation initiatives include:

- Digitalising the process for handling lost baggage and reducing the use of hardcopy forms. This enables our customers to receive updated information on their baggage recovery conveniently
- Developing of Kristal, a mobile app, to reduce the use of physical manuals, enabling SilverKris Lounge staff to readily access information and response effectively to our customers

We will progressively replace plastic straws and single-use plastic bottles with more eco-friendly alternatives. We will also continue our efforts to review the use of non-recyclable materials in our SilverKris Lounges worldwide.

### Recycling Electronic Waste at our Offices

Although e-waste makes up less than one per cent of the total waste generated in Singapore, it usually contains hazardous substances such as mercury and cadmium that may be potentially harmful to human health and the environment if not properly disposed. However, e-waste also contains valuable resources such as precious metals and working components, which can be extracted and reused.

To encourage a culture of recycling e-waste, SIA implemented an initiative called "Let's Erase e-Waste". Since its introduction in 2016, our employees collected and recycled more than 7,000kg of e-waste through Cimelia Resource Recovery Pte Ltd. This is an ongoing initiative which has developed an awareness among employees on the proper treatment and disposal of e-waste through various educational programmes and the introduction of e-waste recycling bins at our Singapore offices.



Approximately
## 0.7 tonnes
of canteen waste treated in the eco-digester daily



Approximately
## 2,504kg
of e-waste collected and recycled in FY2019/20

[58] Ministry of Environment & Water Resources, "Singapore's Zero Waste Masterplan".
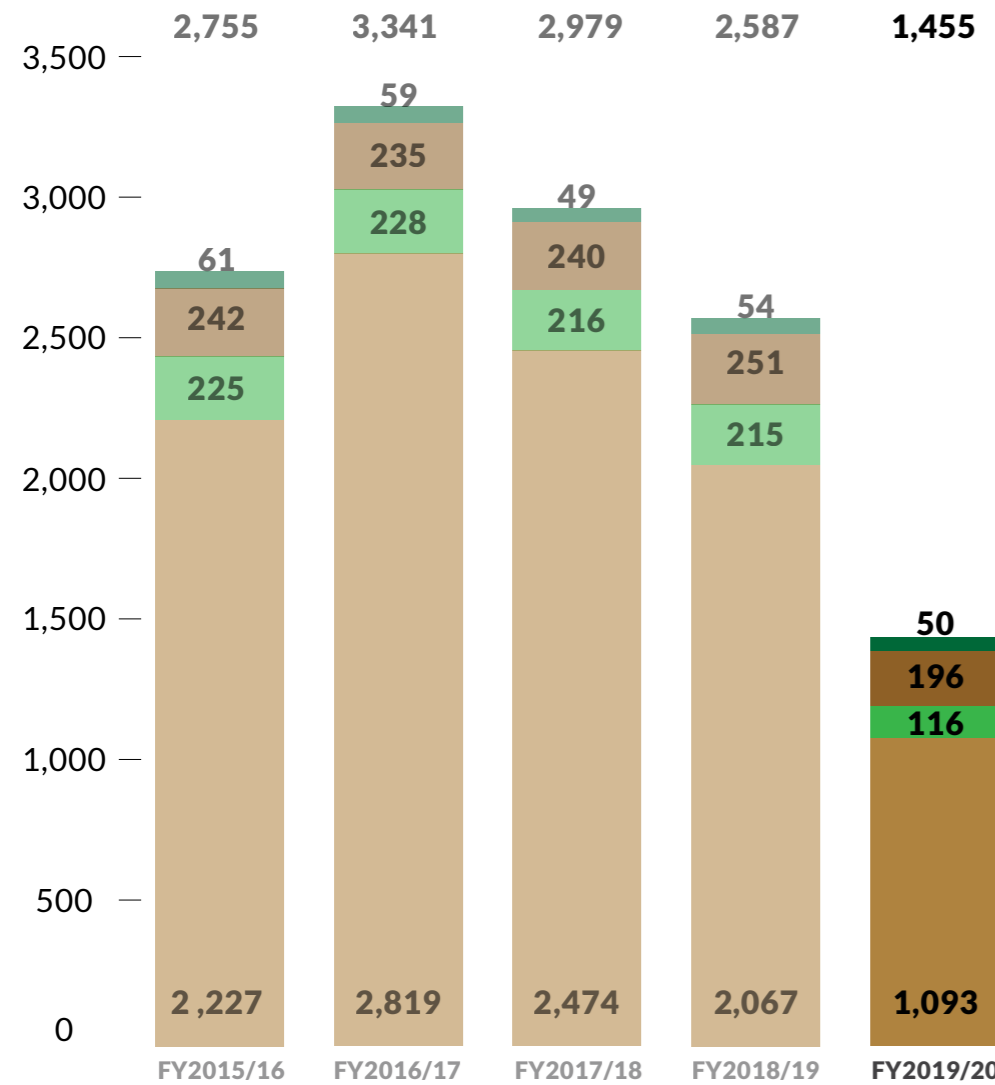[59] National Environment Agency, "Food Waste Management".

# WASTE (CONTINUED)

## Performance of SIA's Buildings[60]

As a testament to SIA's prudent waste management initiatives, total waste generated by our buildings[61] decreased by 43.8 per cent from 2,587 tonnes in FY2018/19 to 1,455 tonnes in FY2019/20. We also began monitoring the total amount of waste recycled at our buildings. In FY2019/20, we recycled a total of 76.9 tonnes of waste, which includes paper, plastics, ferrous metals and glass materials.

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

| FY | Total | Airline House and Hangars 1, 2, 3 | SIA Supplies Centre | SIA Training Centre | TechSQ |
|---|---|---|---|---|---|
| FY2015/16 | 2,755 | 2,227 | 225 | 242 | 61 |
| FY2016/17 | 3,341 | 2,819 | 228 | 235 | 59 |
| FY2017/18 | 2,979 | 2,474 | 216 | 240 | 49 |
| FY2018/19 | 2,587 | 2,067 | 215 | 251 | 54 |
| FY2019/20 | 1,455 | 1,093 | 116 | 196 | 50 |

■ Airline House and Hangars 1, 2, 3   ■ SIA Supplies Centre   ■ SIA Training Centre   ■ TechSQ

### Total Waste Recycled at Buildings in FY2019/20, by Location and Waste Type (tonnes)

| | Paper | Plastic | Ferrous Metal | Glass | Total |
|---|---|---|---|---|---|
| **Airline House and Hangars 1, 2, 3** | 62.08 | 5.03 | 3.25 | 0.03 | **70.40** |
| **SIA Supplies Centre** | 0.48 | 0.00 | 0.03 | 0.03 | **0.54** |
| **SIA Training Centre** | 5.28 | 0.03 | 0.05 | 0.00 | **5.36** |
| **TechSQ** | 0.56 | 0.02 | 0.03 | 0.00 | **0.61** |
| **Total Waste Recycled (tonnes)** | 68.40 | 5.08 | 3.37 | 0.06 | **76.91** |

SIA is on track to achieve our FY2020/21 target of a 30 per cent reduction of waste generation, from the base year FY2010/11 level of 5,787 tonnes. This target takes into account the waste data of 11 assets[62], which SIA and SIAEC have operational control over. In FY2019/20, the total waste generated by these 11 assets was 2,058 tonnes, a 64.4 per cent improvement from FY2010/11.

[60] Please refer to the Appendix on page 133 for definitions and methodologies.
[61] Locations covered include SIA's four buildings (Airline House, SIA Supplies Centre, SIA Training Centre, and TechSQ) and Hangars 1, 2 and 3, which are under SIAEC's operational control. Data for Hangars 1, 2 and 3 are included as data could not be segregated.
[62] Locations covered include SIA's four buildings (Airline House, SIA Supplies Centre, SIA Training Centre, and TechSQ), SIAEC's Engine Testing Facility and six hangars.

# WASTE (CONTINUED)

## Performance Summary of Waste Generated, Diverted and Disposed of[63]  `306-3`  `306-4`  `306-5`

| Buildings | FY2015/16 | FY2016/17 | FY2017/18 | FY2018/19 | FY2019/20 |
|---|---|---|---|---|---|
| **Total Waste Generated (tonnes)**<br>Non-hazardous Waste | | | | | |
| Airline House and Hangars 1, 2, 3 | 2,227 | 2,819 | 2,474 | 2,067 | 1,093 |
| SIA Supplies Centre | 225 | 228 | 216 | 215 | 116 |
| SIA Training Centre | 242 | 235 | 240 | 251 | 196 |
| TechSQ | 61 | 59 | 49 | 54 | 50 |
| Total Waste Generated (tonnes) | 2,755 | 3,341 | 2,979 | 2,587 | 1,455 |
| **Total Waste Diverted from Disposal (tonnes)**<br>Non-hazardous Waste - Recycling[64] | | | | | |
| Airline House and Hangars 1, 2, 3 | - | - | - | - | 70.4 |
| SIA Supplies Centre | - | - | - | - | 0.5 |
| SIA Training Centre | - | - | - | - | 5.4 |
| TechSQ | - | - | - | - | 0.6 |
| Total Waste Diverted from Disposal (tonnes) | - | - | - | - | 76.9 |

[63] Please refer to the Appendix on page 133 for definitions and methodologies.
[64] Data on recycled waste for buildings is available from FY2019/20.

# WASTE (CONTINUED)

## Performance Summary of Waste Generated, Diverted and Disposed of    306-3  306-4  306-5

| Buildings | FY2015/16 | FY2016/17 | FY2017/18 | FY2018/19 | FY2019/20 |
|---|---|---|---|---|---|
| **Total Waste Directed to Disposal (tonnes)** Non-hazardous Waste - Waste-to-Energy (WTE) Incineration | | | | | |
| **Airline House and Hangars 1, 2, 3** | - | - | - | - | **1,023** |
| **SIA Supplies Centre** | - | - | - | - | **115** |
| **SIA Training Centre** | - | - | - | - | **191** |
| **TechSQ** | - | - | - | - | **49** |
| **Total Waste Directed to Disposal (tonnes)** | - | - | - | - | **1,378** |

| Flight Operations[65] | | | | | |
|---|---|---|---|---|---|
| **Total Waste Diverted from Disposal (tonnes)** Non-hazardous Waste - Recycling[66] | | | | | |
| **Magazines** | - | - | 270 | 268 | **267** |
| **Newspapers** | - | - | 326 | 239 | **121** |
| **Total Waste Diverted from Disposal (tonnes)** | - | - | 596 | 507 | **388** |

[65] Data on total waste generation for flight operations is presently unavailable.
[66] Data on recycled waste for flight operations was available from FY2017/18.

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

The roar of an aircraft engine is a familiar sound amidst the hustle and bustle of a metropolis. To some, it brings fond memories of the start of an adventure. To others, it is an exciting holler to the remarkable feat of mankind's engineering. However, excessive noise can also be detrimental to the physical and mental health of people and wildlife, both on land and in the skies. This is why managing noise pollution is important to SIA as it enables peaceful skies, quieter flights and a more tranquil experience for our customers.

Aircraft engines are a major source of noise pollution, especially during the landing and take-off cycle where it can exceed 140 decibels (dB). It is also one of the main causes of adverse community reactions during airport operations[67]. While inherent to the nature of the industry, SIA is continually exploring ways to reduce our noise pollution and the impact on local communities situated near the airports.

ICAO's international standards for aircraft noise was adopted in 1971. Since then, standards have been progressively made more stringent. In 2006, ICAO introduced stricter noise standard, the ICAO Annex 16, Volume 1, Chapter 4 Standards as part of its Balanced Approach to Aircraft Noise Management, to reduce noise at source. The continual improvements in noise certification standards ensure that aircraft manufacturers will continue to incorporate the latest noise reduction technology into aircraft designs and airlines will prioritise procuring aircraft which meets the industry standard.

SIA seeks to minimise our noise pollution through compliance with ICAO noise standards, investments in newer and quieter aircraft, continuous improvements to existing fleets and adopting appropriate noise abatement procedures in the airport vicinity. As of FY2019/20, 100 per cent of SIA's aircraft fleet meets the latest ICAO Chapter 4 noise standard. SIA has also ordered 20 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 air emissions such as nitrogen oxides (NOx), sulphur oxides (SOx), carbon monoxide (CO), unburned hydrocarbons (HC), smoke, particulate matter (PM) and other trace compounds that affect the local air quality. Over the years, improved engine designs have gradually reduced emissions of NOx and CO and have almost eliminated emissions of HC and smoke[68].

ICAO sets the international standards for NOx, $CO_2$, hydrocarbons and exhaust levels from aircraft engine emissions under ICAO Annex 16, Volume III. This standard is applicable to new aircraft designs as of 2020, as well as new deliveries of current in-production aircraft types from 2023. SIA supports the new $CO_2$ standard set by ICAO, to meet the aviation industry's long-term commitment to reduce GHG emissions.

SIA seeks to minimise our NOx footprint through compliance with ICAO's emissions standards for NOx. The NOx standard, endorsed in 2004, is applicable to new engines manufactured from 2008 and requires certification to CAEP/6 standards. A subsequent NOx standard, endorsed in 2010, is applicable to new engines manufactured from 2014 and requires certification to CAEP/8 standards. As of FY2019/20, the SIA Group's fleet meets the 2004 ICAO CAEP/6 Emissions Standards for NOx. SIA's Airbus A350s and Boeing 787s meet the CAEP/8 standards.

[67] ICAO, "Aircraft Noise".
[68] IATA, "Local Air Quality".

**100%**
of our aircraft fleet meets ICAO Chapter 4 noise standards

**100%**
of our aircraft fleet meets the 2004 ICAO CAEP/6 or the stricter CAEP/8 emissions standards for NOx

# WATER  `PR-7`  `PR-8`  `PR-9`

We recognise that the world is facing a water crisis, exacerbated by rapid population growth and the effects of climate change. Today, over two billion people live in countries experiencing high water stress[69]. In addition, over two billion people lack safely managed drinking water[70]. Within Singapore, access to a reliable water source has been an ongoing challenge since our founding days. Cognizant of this problem, water is not just a resource we take for granted at SIA. It is a basic human right we seek to safeguard for our future generations.

## SIA's Approach to Water Conservation  `303-1`  `303-2`

The majority of water usage in SIA's buildings relates to the use of water for air-conditioning and sanitary appliances. As such, most of our water management initiatives relates to the reduction of water usage through water-saving devices and the harvesting of rainwater. Water used at SIA's buildings are mainly provided by the Public Utilities Board (PUB) of Singapore. No industrial effluents are generated from our commercial activities and all waste water from sanitary and washing are discharged to government-operated water reclamation plants for treatment. Surface water is channelled to open drains and processed at the Government Water Treatment Plant.

In line with MEWR's Clean Water Policy, SIA strives towards continual improvement of water management and more efficient usage of water across our buildings. In FY2019/20, SIA implemented several water conservation and improvement initiatives which include:

- Harvesting rainwater for flushing purposes and watering of external landscape. Rainwater harvested is equivalent to 46 per cent of total non-potable water demand for Airline House. SIA is also exploring the implementation of this initiative for the SIA Training Centre

- Exploring the harvesting of ground water to potentially replace approximately 42 per cent of Airline House's non-potable water demand

- Exploring the recycling of condensate water from air-conditioning units for cooling towers to reduce water withdrawal

- Installing water saving taps and foam soap dispensers in our washrooms

- Displaying educational posters provided by PUB in shower rooms and public hand wash areas in the canteen to encourage water conservation

- Conducting regular water audits and submission of water efficiency management plan to the PUB annually

- Partnering a leading waste management contractor for wastewater treatment for the aircraft maintenance activities in our hangars

SIA will progressively replace the current sanitary wares to sensor types in our upcoming toilet renovations to minimise water wastage. The project is expected to begin in 2021.
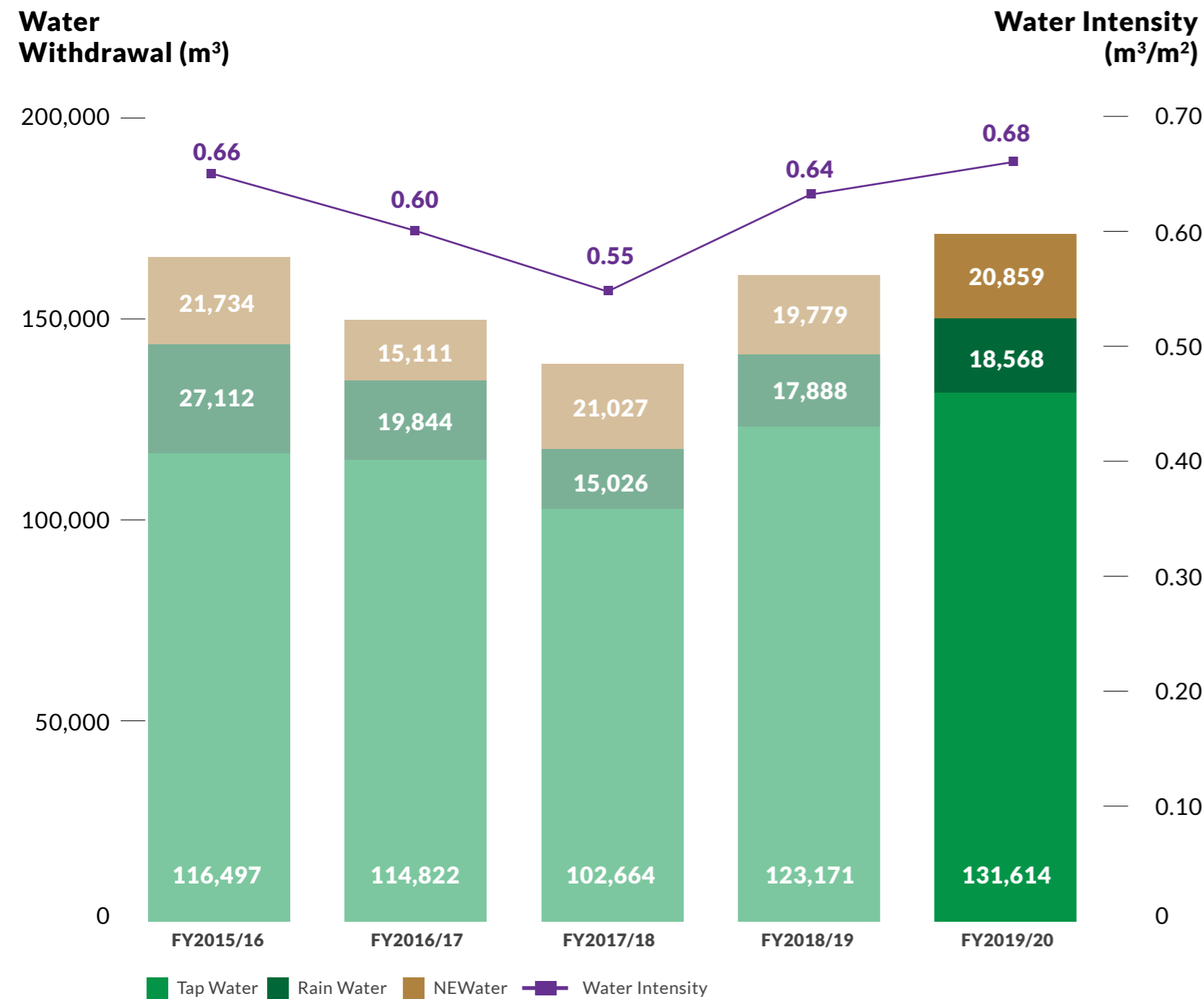
[69] United Nations, "Water Scarcity".
[70] World Health Organisation, "Water Supply, Sanitation and Hygiene Monitoring".

Approximately

# 1,350m³

rain water conserved per month as a result of rain water harvesting efforts

# WATER (CONTINUED)

## Performance of SIA's Buildings and Offices[71]

**Water Withdrawal (m³)** | **Water Intensity (m³/m²)**



Legend: Tap Water | Rain Water | NEWater | Water Intensity

## Performance Summary of Water[72]  `303-3`

| Buildings and Offices | FY2015/16 | FY2016/17 | FY2017/18 | FY2018/19 | FY2019/20 |
|---|---|---|---|---|---|
| **Water Withdrawal, by Source** | | | | | |
| Tap Water (m³) | 116,497 | 114,822 | 102,664 | 123,171 | **131,614** |
| Rain Water (m³) | 27,112 | 19,844 | 15,026 | 17,888 | **18,568** |
| NEWater (m³) | 21,734 | 15,111 | 21,027 | 19,779 | **20,859** |
| Total Water Withdrawal (m³) | 165,343 | 149,777 | 138,717 | 160,838 | **171,042** |
| **Water Intensity** | | | | | |
| Water Intensity (m³/m²) | 0.66 | 0.60 | 0.55 | 0.64 | **0.68** |

Water withdrawn from our buildings and offices increased by 6.3 per cent from 160,838 m³ in FY2018/19 to 171,042 m³ in FY2019/20. Water intensity figures also saw an increase by 6.3 per cent from 0.64m³/m² in FY2018/19 to 0.68m³/m² in FY2019/20. The increase in water consumption and water intensity was due to an increase in maintenance activities by SIAEC at Hangar 1.

[71] Please refer to the Appendix on pages 133 for definitions and methodologies.
[72] Locations covered include SIA's four buildings (Airline House, SIA Training Centre, SIA Supplies Centre and TechSQ) and Hangars 1, 2 and 3, which are under SIAEC's operational control. Data for Hangar 1, 2 and 3 are included as data could not be segregated.

# BIODIVERSITY  304-3   PR-8

Forests cover approximately four billion hectares or 31 per cent of the world's land area. They play a huge role in regulating the atmospheric water-cycle and in combating climate change. Forests are home to more than 80 per cent of the Earth's terrestrial biodiversity. Around 1.6 billion people depend on them for their livelihood. Yet, deforestation continues to occur at an alarming rate of approximately 10 million hectares per year between 2015 and 2020[73]. Today, the United Nations estimates that over a million animal and plant species are threatened with extinction[74], largely driven by anthropogenic environmental degradation and destruction.

## The Harapan Rainforest Initiative

SIA recognises that preserving our connection with nature is key to sustainable development. We must collaborate with our stakeholders to protect, restore, and revitalise nature. Since 2010, we have been involved in forest conservation by being the exclusive airline partner for the large-scale green initiative in Hutan Harapan, aimed at protecting one of the world's most threatened and biodiverse ecosystems.

The Harapan Rainforest Initiative, also known as Hutan Harapan, is an ecosystem restoration concession covering more than 98,555 hectares of lowland tropical rainforest in Sumatra, Indonesia. The area is rich in biodiversity and remains an important habitat for over 1,350 documented animal species, including the critically endangered Sumatran tiger and Sumatran elephant, as categorised by the IUCN Red List.

This initiative is driven by a consortium of three organisations, namely Burung Indonesia, the Royal Society for the Protection of Birds (RSPB) and BirdLife International (BLI). With strong support from the Government of Indonesia, the Harapan Rainforest Initiative was able to continually expand its biodiversity efforts and support the indigenous communities, among other initiatives. Some of the key developments and outcomes from Hutan Harapan in FY2019/20 are highlighted in this section.

## Forest Restoration

In 2019, the severe dry season in Indonesia resulted in longstanding forest fires, which escalated to a state of emergency in six provinces, including South Sumatra and Jambi, where Hutan Harapan is situated. The raging forest fires lasted from July to October 2019, affecting a total of 12,700 hectares of land in Hutan Harapan.

In the restoration phase, the Hutan Harapan team swiftly embarked on several initiatives to support the restoration of forests and habitats. Various technologies such as geographical information systems, drones and cyber-trackers were deployed to assess the damage. The data derived from these platforms helped to determine the type of rehabilitation and restoration techniques required.

Replantation efforts have already begun in the south-eastern part of Hutan Harapan, particularly the 260 hectares of forests in Sungei Jerat, which was one of the most severely fire-damaged areas. A variety of multipurpose trees were planted, including agarwood, durian, jelutung, jengkol, and rubber. Natural wood trees such as bulian and meranti will be planted in the future. With a forward-looking strategy, a nursery has been established to supply the seedlings needed for replantation.

To help the Batin Sembilan indigenous peoples resume their nomadic and semi-nomadic lifestyles as soon as possible, a team from Batin Sembilan has joined hands with the Hutan Harapan staff to secure the burnt areas and bolster the forest restoration strategy.



**2,787**
trees replanted under the Harapan Rainforest Initiative, with 260 hectares of forest restored

*Image courtesy of BirdLife International*

## Agroforestry Programme

As both biodiversity and community livelihoods protection are integral to ecosystem restoration activities, agroforestry has been implemented within Hutan Harapan to meet a variety of needs. This 10-year agroforestry plan has been the mainstay of Hutan Harapan's work with the Batin Sembilan indigenous people and other groups surrounding Hutan Harapan. Such land use farming practice involves the deliberate integration of trees, agricultural crops and/or animals on the same land management unit.

Rubber tree-based agroforestry was implemented in Hutan Harapan, where rubber exists as the main crop planted alongside fast growing intercrops. Another tree crop planted is agarwood, which has high cultural value and is one of the most expensive woods in the world. Agarwood is also known for its medicinal properties and commercial applications such as the conversion of its resin into essential oils.

Agroforestry has been a leading agricultural practice due to its positive environmental, economic and social impacts. Through the integration of agricultural and forestry systems, Hutan Harapan seeks to achieve the following objectives:

- Protect the environment by maintaining biodiversity and environmental services such as carbon sequestration
- Improve soil quality and land productivity
- Protect livelihood security of the local communities
- Increase production of raw materials for commercial purposes



**3,718**
trees planted as part of the agroforestry plan in FY2019/20

*Image courtesy of BirdLife International*

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[73] FAO and UNEP, "The State of the World's Forests 2020: Forests, biodiversity and people".
[74] IPBES, "Summary for policymakers of the global assessment report on biodiversity and ecosystem services of the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services".

# BIODIVERSITY (CONTINUED)

## Sustainable Rubber

In FY2019/20, several initiatives were carried out at Hutan Harpan to facilitate sustainable harvesting of rubber to achieve zero net deforestation while benefiting local businesses. This includes the direct sourcing of sustainably produced natural rubber by Halcyon Agri's local processor in Jambi from the communities living in and around Hutan Harapan. Communities are provided guidance on how rubber is priced daily and trained on improving the quality, or dry rubber content, of tapped rubber.

This not only improved productivity of the local rubber plantations, but also boosted the morale of the local farmers significantly. As a result, local farmers increased their monthly delivery of rubber from two tonnes to four tonnes in FY2019/20. Moving forward, the Hutan Harapan team seeks to conduct more capacity-building progammes relating to sustainable rubber cultivation and help the locals improve the quality and yield of rubber produced.

**25**
local farmers trained
on sustainable rubber cultivation
and tapping in FY2019/20

## Sustainable Honey

The sialang tree is a majestic and iconic tree that grows in lowland tropical rainforests in South East Asia. Growing as tall as 80 metres, it is one of the tallest tree species in the forest. These trees are home to the Asian giant honey bees, with a single tree housing as many as 50 bee hives.

Local communities depend on the collection of sialang honey as a source of income. Traditional harvesting methods have not always been sustainable because fire was often used to drive bees out of their hives for harvest. This resulted in long periods of hive regeneration that led to honey scarcity. In a bid to achieve sustainable procurement, 15 local honey handlers received sustainable hive harvest training from the Honey Farmer's group located in Riau, with the support of Hutan Harapan.

In FY2019/20, the Hutan Harapan team facilitated an increase in the quality of honey by introducing processing standards in the local supply chain. Looking forward, the local team continuously strives to improve the honey supply chain so that it betters communities and protects the environment.

## Biodiversity Education

Public awareness and education are important elements of ecosystem restoration in Hutan Harapan. In September 2019, the Hutan Harapan team supported a community outreach programme for a group of junior and senior high school students from Al Azhar Jambi. As part of this outreach programme, the students interacted with the local Batin Sembilan children and learnt more about the Harapan Hutan ecosystem restoration activities. This initiative not only increased the student's understanding of the livelihoods and circumstances of the Batin Sembilan children, but also resulted in them appreciating the environment and having a better understanding of the consequences of encroachment and forest fires.



**75**
students participated in
the outreach programme in
FY2019/20

*Image courtesy of BirdLife International*

# BIODIVERSITY (CONTINUED)

## Buckingham Palace Declaration

Wildlife crime is a billion-dollar business and is ranked the fourth most lucrative illegal trade after drugs, counterfeit and human trafficking. Over the years, increasing transport connectivity across the world has led to the rapid expansion of wildlife trade globally, threatening the survival of many wildlife species. Recognising this, the United for Wildlife Transport Taskforce was established in 2014 to facilitate the transport sector examining its role in the illegal wildlife trade and to break the illegal wildlife trade chains. On 15 March 2016, the United for Wildlife Transport Taskforce member organisations signed up to recommendations developed over 12 months, with the first ever signing of a declaration at Buckingham Palace.

The Buckingham Palace Declaration is a landmark agreement committed to take real steps to shut down the routes exploited by traffickers of the illegal wildlife trade moving their products. The declaration takes steps to remove the vulnerabilities in transportation and customs to tackle the criminals currently exploiting them. The Declaration contains 11 commitments to raise standards across the transportation industry with a focus on information sharing, staff training, technological improvements, and resource sharing with companies and organisations around the world.

Today, with more than 100 signatories, of which more than 50 are airlines including Singapore Airlines and SilkAir, we have pledged to do our part to combat illegal wildlife trade through the signing of the Buckingham Palace Declaration.
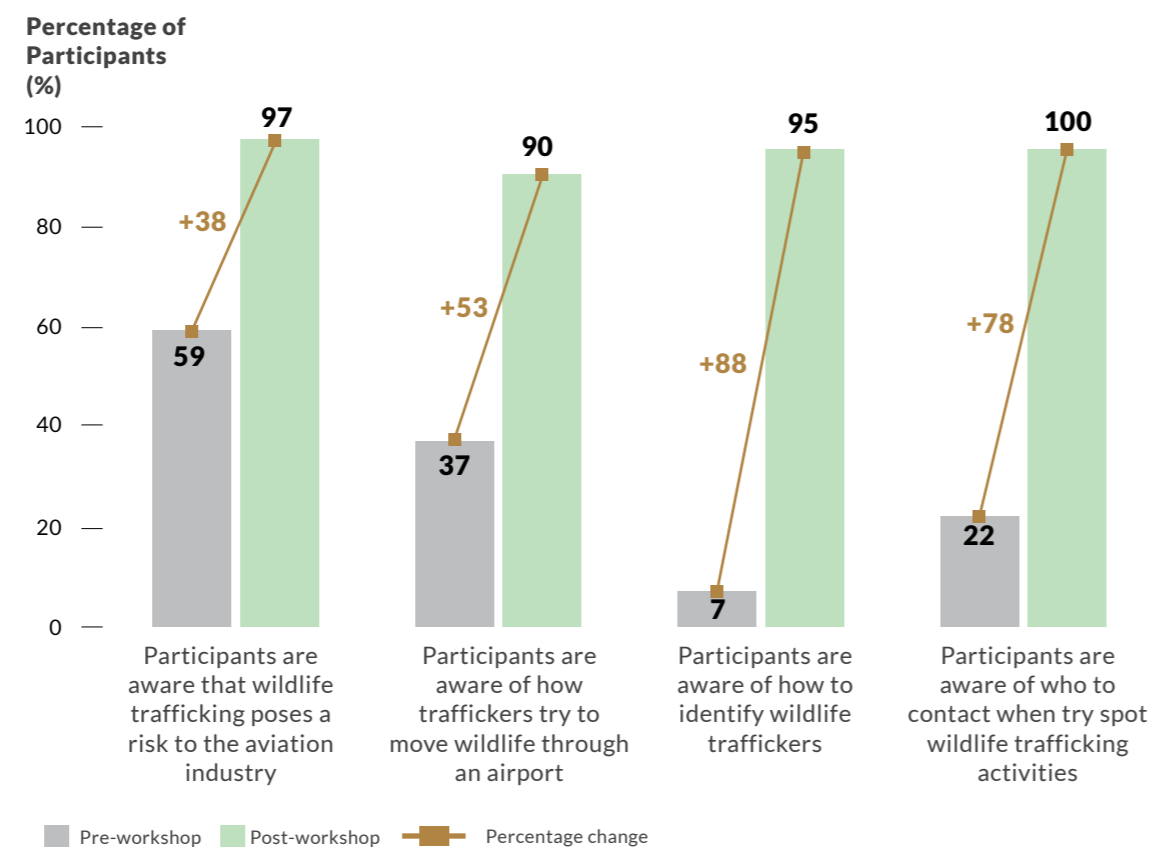
**CASE STUDY**

## DOING OUR PART TO PREVENT ILLEGAL WILDLIFE TRAFFICKING

On 28 May 2019, SIA collaborated with CAG to organise a half-day workshop to educate our employees on Ilegal Wildlife Trafficking (IWT). This workshop was attended by over 40 attendees from SIA, CAG, other airlines and stakeholders.

The session focused on four key modules, known as the Four ROUTES (Reducing Opportunities for Unlawful Transport of Endangered Species), and was led by Ms Renee Yee from TRAFFIC[75], Southeast Asia. The four modules covered wildlife trafficking, wildlife trafficking in airlines, ways in which wildlife can be smuggled through airports and responsive measures in the occasion of a suspected incidence of wildlife smuggling.

As a result of this workshop, attendees learnt more about illegal wildlife trafficking and the risks it can pose to the aviation industry, as shown in the post-workshop evaluation responses.

### Participants' Knowledge on IWT Pre- and Post-workshop

**Percentage of Participants (%)**

| | Participants are aware that wildlife trafficking poses a risk to the aviation industry | Participants are aware of how traffickers try to move wildlife through an airport | Participants are aware of how to identify wildlife traffickers | Participants are aware of who to contact when try spot wildlife trafficking activities |
|---|---|---|---|---|
| Pre-workshop | 59 | 37 | 7 | 22 |
| Post-workshop | 97 | 90 | 95 | 100 |
| Percentage change | +38 | +53 | +88 | +78 |

■ Pre-workshop   ■ Post-workshop   ■— Percentage change



*A suitcase depicting how illegal wildlife products are trafficked*

[75] TRAFFIC is a non-governmental organisation working globally on trade in wild animals and plants in the context of both biodiversity conservation and sustainable development.

# LIST OF KEY ABBREVIATIONS AND ACRONYMS

| | | | |
|---|---|---|---|
| **AAMP** | Airline Alcohol Management Programme | **COP** | Communication on Progress |
| **AAPA** | Association of Asia Pacific Airlines | **COQM** | Corporate Operational Quality (Safety) Manual |
| **AATP** | Airport Alcohol Testing Programme | **COQMR** | Corporate Operational Quality Management Review |
| **AC** | Audit Committee | **CORSIA** | Carbon Offsetting and Reduction Scheme for International Aviation |
| **ACSP** | Air Carrier Security Program | | |
| **AESU** | Air Transport Executive Staff Union | **CPR** | Cardiopulmonary Resuscitation |
| **AG** | American Gallon | **CQM** | Cargo Quality Manual |
| **AGM** | Annual General Meeting | **CSI** | Cabin Safety Instructions |
| **ALH** | Airline House | **CSM** | Cargo Safety Manual |
| **ALPA-S** | Air Line Pilots Association Singapore | **CSO** | Cabin Operation Safety |
| **ANR** | Air Navigation Regulations | **CSR** | Corporate Social Responsibility |
| **AOC** | Air Operator Certificate | **CTC** | Company Training Committee |
| **APP** | Arson Prevention Plan | **eCCVR** | Electronic Cabin Crew Voyage Report |
| **ASC** | Air Safety Committee | **EDB** | Economic Development Board (Singapore) |
| **ASK** | Available seat-kilometres | **ERP** | Emergency Response Plan |
| **ATM** | Air Traffic Management | **ESG** | Environmental, Social, Governance |
| **BCIRC** | Board Compensation and Industrial Relations Committee | **ETF** | Engine Testing Facility |
| | | **EXCO** | Board Executive Committee |
| **BEST** | Beyond Excellence Service through Technology | **FDAP** | Flight Data Analysis Programme |
| **BLI** | BirdLife International | **FEP** | Fire Emergency Plan |
| **BSRC** | Board Safety and Risk Committee | **FOQM** | Flight Operations Quality Manual |
| **CA** | Customer Affairs | **FRM** | Fatigue Risk Management |
| **CAAS** | Civil Aviation Authority of Singapore | **FSM** | Fire Safety Manager |
| **CAG** | Changi Airport Group | **FSPM** | Flight Security Procedures Manual |
| **CAM** | Crew Administration Manual | **GHG** | Greenhouse gas |
| **CCM** | Cabin Crew Division Manual | **GRCMC** | SIA Group Risk and Compliance Management Committee |
| **CCSM** | Cabin Crew Safety Manual | | |
| **CCSMSM** | Cabin Crew Safety Management System Manual | **GRI** | Global Reporting Initiative |
| **CERT** | Company Emergency Response Team | **GRIP** | Ground Ramp Incident Prevention |
| **CETSC** | Customer Experience, Technology and Sustainability Committee | **GSM** | Ground Services Manual |
| | | **GSQM** | Ground Services Quality Manual |
| **CFSM** | Corporate Flight Safety Management and« Procedures Manual | **ha** | Hectare |
| | | **HACCP** | Hazard Analysis and Critical Control Points |
| **CMG** | Crisis Management Group | **HC** | Hydrocarbons |
| **CMM** | Crisis Management Manual | **HEFA** | Hydro-processed Esters and Fatty Acids |
| **CO₂** | Carbon dioxide | **IATA** | International Air Transport Association |
| **CO₂e** | Carbon dioxide equivalent | **ICAO** | International Civil Aviation Organisation |
| **CO** | Carbon monoxide | **IFE** | In-flight Entertainment |
| | | **ILO** | International Labour Organisation |

| | | | |
|---|---|---|---|
| **IOSA** | IATA Operational Safety Audit | **RDF** | Refuse Derived Fuels |
| **IPCC** | Intergovernmental Panel on Climate Change | **RM** | Risk Management |
| **ISO** | International Organisation for Standardisation | **RSPB** | Royal Society for the Protection of Birds |
| **kg** | kilogrammes | **SAF** | Sustainable Aviation Fuel |
| **kWh** | Kilowatt-hour | **SAFUG** | Sustainable Aviation Fuel Users Group |
| **L** | Litre | **SAG** | Safety Action Groups |
| **LOSA** | Line Operations Safety Audit | **SC** | SIA Supplies Centre |
| **LTK** | Load tonne-kilometre | **SCDF** | Singapore Civil Defence Force |
| **m²** | Square metre | **SDG** | Sustainable Development Goals |
| **m³** | Cubic metre | **SEMS** | Security Management System |
| **MBM** | Market-Based Measure | **SEPM** | Safety and Emergency Procedures Manual |
| **MC** | Management Committee | **SESM** | Security Management System Manual |
| **MEWR** | Ministry of the Environment and Water Resources (Singapore) | **SFA** | Singapore Food Agency |
| | | **SGX** | Singapore Exchange |
| **MINDS** | Movement for the Intellectually Disabled of Singapore | **SGXNet** | Singapore Exchange Net |
| | | **SIAEC** | Singapore Airlines Engineering Company |
| **MOM** | Ministry of Manpower (Singapore) | **SIAMCM** | SIA Maintenance Control Manual |
| **MRV** | Monitoring, Reporting and Verification | **SIAOCC** | SIA Operations Control Centre |
| **MSF** | Ministry of Social and Family Development (Singapore) | **SIASU** | Singapore Airlines Staff Union |
| | | **SID** | Singapore Institute of Directors |
| **MSG** | Monosodium Glutamate | **SMS** | Safety Management System |
| **MWh** | Megawatt-hour | **SO** | Sustainability Office |
| **NC** | Board Nominating Committee | **SOx** | Sulphur oxides |
| **NEA** | National Environment Agency (Singapore) | **SSC** | Sustainability Steering Committee |
| **NETF** | NTUC Education and Training Fund | **SSO** | Social Service Office |
| **NOx** | Nitrogen oxides | **SSQ** | Safety, Security and Quality |
| **OCS** | Organisational Climate Survey | **SSQ GSM** | Ground Safety Manual |
| **OEM** | Original Equipment Manufacturer | **SSQ QM** | Quality Manual |
| **OHSMS** | Occupational Health and Safety Management System | **SSW** | Safety and Security Week |
| | | **SSWC** | Sustainability Strategic Working Committee |
| **OSHE** | Occupational Safety, Health and Environment Committee | **STC** | SIA Training Centre |
| | | **TJ** | Terajoules |
| **PM** | Particulate matter | **TLC** | The LOSA Collaborative |
| **PPE** | Personal Protective Equipment | **TSQ** | TechSQ |
| **PSM** | Premises Security Manual | **UN** | United Nations |
| **PUB** | Public Utilities Board | **UNEP** | United Nations Environment Programme |
| **QAR** | Quick Access Recorders | **VRS** | Voyage Report System |
| **QMS** | Quality Management System | **WHO** | World Health Organisation |
| **RCMC** | Risk and Compliance Management Committee | | |

# DEFINITIONS AND METHODOLOGIES

## General

| | |
|---|---|
| **Mode of Narration** | Throughout this Sustainability Report, "Singapore Airlines", "SIA", "we", "us" and "our" are generally used to make reference to Singapore Airlines Limited (the Company) and its employees, unless otherwise stated. The term "Parent Airline Company" refers to "Singapore Airlines", unless the context otherwise requires. "SIA Group" is used to make reference to Singapore Airlines Limited and its subsidiaries and employees, unless otherwise stated.<br><br>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 FY2019/20 SIA Annual Report. |
| **Reporting Scope** | All sustainability data and information presented in our report primarily relates to three of our reportable businesses – Singapore Airlines, SilkAir 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 our subsidiary.<br><br>More information on our reportable businesses can be found in the FY2019/20 SIA Annual Report.<br><br>More information on the boundary for key social and environmental data can be found on pages 131 and 132 to 133 respectively. |
| **Future-looking Statements** | Aside from statements of historical fact, this Sustainability Report contains statements that are future-looking in nature relating to SIA's sustainability management approach. These are identified by terms and phrases such as "aim", "ambition", "anticipate", "believe", "continue", "expect", "goal", "maintain", "objective", "plan", "seek" and "target" and could also be expressed by way of future or conditional verbs such as "could", "should", "would". These statements are based on assumptions and expectations at the time of publication, and are subject to risks and uncertainties determined by factors beyond the control of SIA. As we operate in a continually changing environment, readers are cautioned not to place undue reliance on forward-looking statements. |

## Operating Statistics

| | | |
|---|---|---|
| **Passenger Operations** | Revenue passenger-km: | Number of passengers carried multiplied by distance flown (in km) |
| | Available seat-km: | Number of available seats multiplied by distance flown (in km) |
| | Passenger load factor: | Revenue passenger-km expressed as a percentage of available seat-km |
| | Passenger yield: | Passenger revenue from scheduled services divided by revenue passenger-km |
| | Revenue per available seat-km: | Passenger revenue from scheduled services divided by available seat-km |
| | Passenger unit cost: | Passenger operating expenditure divided by available seat-km |
| **Cargo Operations** | Cargo load: | Cargo and mail load carried (in tonnes) multiplied by distance flown (in km) |
| | Gross capacity: | Cargo capacity production (in tonnes) multiplied by distance flown (in km) |
| | Cargo load factor: | Cargo and mail load (in tonne-km) expressed as a percentage of gross capacity (in tonne-km) |
| | Cargo yield: | Cargo and mail revenue from scheduled services divided by cargo load (in tonne-km) |
| | Cargo unit cost: | Cargo operating expenditure divided by gross capacity (in tonne-km) |
| **Overall Operations** | Overall load: | Passenger, cargo and mail load carried (in tonnes) multiplied by distance flown (in km) |
| | Overall capacity: | Passenger and cargo capacity production (in tonnes) multiplied by distance flown (in km) |
| | Overall load factor: | Overall load (in tonne-km) expressed as a percentage of overall capacity (in tonne-km) |
| | Overall yield: | Passenger, cargo and mail flown revenue from scheduled services divided by overall load (in tonne-km) |
| | Overall unit cost: | Operating expenditure divided by overall capacity |

# DEFINITIONS AND METHODOLOGIES (CONTINUED)

## Employees

| | |
|---|---|
| **Employee** | • **Employee:** An individual who is in an employment relationship with the organisation. All employee data relates to the financial year's headcount as at 31 March.<br>• **Worker who is a non-employee:** An individual whose work, or workplace, is controlled by the organisation. This Sustainability Report has scoped to include key contractors only (cleaners, maintenance, landscaping, warehouse operations), unless otherwise stated. |
| **Employee Category** | Breakdown of employees by function and level, in line with our human resources system. Throughout this Sustainability Report, this includes a breakdown by function (i.e. Ground Staff, Cabin Crew and Pilots) and level for Ground Staff (i.e. Associates, Executives, Managers and above). |
| **New Hires and Turnover** | • **New hires:** Employees who joined the organisation during the financial year.<br>• **New hire rate:** Number of new hires over number of employees, expressed as a percentage. This can be computed by the respective demographic cuts (e.g. new hire rate for employees <30 yo is computed by number of new hires (<30 yo) over number of employees (<30 yo), expressed as a percentage).<br>• **Turnover:** Employees who left the organisation during the financial year.<br>• **Turnover rate:** Number of turnover over number of employees, 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). |
| **Parental Leave** | Leave granted to male and female employees on the grounds of the birth of a child.<br>• **Return to work rate:** Number of employees who returned to work after parental leave ended, over number of employees who took parental leave, expressed as a percentage.<br>• **Retention rate:** 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. |
| **Training Day** | A day used for staff learning and development.<br>• **Average training days:** Number of training days attended by employees, divided by number of employees. 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). |

## Safety

| | |
|---|---|
| **Aircraft Incident** | • **Incident:** An occurrence, other than an accident, associated with the operation of an aircraft, which affects or could affect the safety of operation.<br>• **Serious incident:** An incident involving circumstances indicating that there was a high probability of an accident and associated with the operation of an aircraft which, in the case of a manned aircraft, takes place between the time any person boards the aircraft with the intention of flight until such time as all such persons have disembarked.<br>*These definitions are based on ICAO Annex 13, Aircraft Accident and Incident Investigation.* |
| **Hazard** | Any source or any situation with the potential to cause bodily injury or ill health in the workplace.<br>*This definition is based on the International Labour Organisation (ILO) Guidelines on Occupational Safety and Health Management Systems.* |
| **Man Hours Worked** | Total scheduled number of hours worked by employees during the year in review, as at 31 March. |
| **Work-related Fatality** | Death arising from an injury or ill health sustained while performing work that is controlled by the organisation or that is being performed in a workplace controlled by the organisation. Data reported relates to employees and workers who are non-employees (scoped to key contractors only). |
| **Work-related Injury and Ill Health** | Negative impact on health arising from exposure to hazards at work. Data reported relates to employees and workers who are non-employees (scoped to key contractors only).<br>• **Recordable work-related injury:** A work-related injury that results in any of the following: death, hospitalisation for at least 24 hours, more than three days of medical leave from work (whether consecutive or not). Likewise for cabin crew, we record a work-related injury should our cabin crew be issued medical leave for four days or more (whether consecutive or not) for the related or same injury.<br>• **Recordable high consequence work-related injury:** 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 six months.<br>*This definition is based on GRI 403: Occupational Health and Safety 2018.*<br>• **Recordable work-related ill health:** A work-related ill health (including diseases, illnesses and disorders) that is contracted.<br>*The coverage is based on the occupational diseases under Singapore's Workplace Safety and Health Act or Work Injury Compensation Act.*<br>The respective rates are calculated per million man hours worked. |
| **Work-related Injury Types** | Incident types reported include the following main categories: caught in between objects; cut or stabbed by objects; exposure to electric current; exposure to extreme temperatures; over-exertion or strenuous movements; slips, trips and falls; strike against objects; struck by falling objects; struck by moving objects.<br>*This is based on Singapore's Ministry of Manpower major and minor injury incident types.* |

# DEFINITIONS AND METHODOLOGIES (CONTINUED)

## Environment

### Energy Consumption Within the Organisation

Total energy consumption, within the stated organisational boundary below.

- **Fuel consumption:** Total fuel consumed within the organisation, expressed in American gallons (AG), joules or multiples. Unless otherwise stated, this relates to jet fuel consumption of SIA's passenger and freighter aircraft fleet; diesel or petrol consumption of ground support vehicles and equipment*.
- **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 buildings – Airline House (ALH), SIA Supplies Centre (SC), SIA Training Centre (STC), TechSQ (TSQ), and offices*.

*For this FY2019/20 SIA Sustainability Report, we refined our reporting boundary to focus on three of our reportable businesses – Singapore Airlines, SilkAir and Scoot – unless otherwise stated. The sustainability data and information relating to SIAEC is disclosed separately in SIAEC's Sustainability Report published annually by our subsidiary. Data and information have been restated accordingly for past reporting cycles (FY2015/16, FY2016/17, FY2017/18 and FY2018/19).*

### Greenhouse Gas (GHG) Emissions

Gas that contributes to the greenhouse effect by absorbing infrared radiation.

The GHG Protocol Corporate Accounting and Reporting Standard was adopted. SIA accounts for GHG emissions using the operational control criteria and reports its direct (Scope 1) and electricity indirect (Scope 2) GHG emissions.

- **Direct (Scope 1) GHG emissions:** Direct GHG emissions occur from sources that are owned or controlled by SIA, expressed in kilograms of carbon dioxide ($kgCO_2$), kilograms of carbon dioxide equivalents ($kgCO_2e$), or multiples. These include emissions from fuel consumption in owned or controlled vehicles aforementioned. Emissions factors used are as follows:

| Emissions Source | Emissions Factor | Unit | References |
|---|---|---|---|
| **Jet Fuel (mobile)** | 3.15 | tonnes $CO_2$/tonne of jet fuel | - 2006 IPCC Guidelines for National Greenhouse Gas Inventories |
| **Motor Gasoline (mobile)** | 70.92 | tonnes $CO_2e$ / TJ | - 2006 IPCC Guidelines for National Greenhouse Gas Inventories<br>- 2014 IPCC Fifth Assessment Report (AR5) |
| **Diesel Oil (mobile)** | 75.24 | tonnes $CO_2e$ / TJ | - 2006 IPCC Guidelines for National Greenhouse Gas Inventories<br>- 2014 IPCC Fifth Assessment Report (AR5) |

The 2006 IPCC Guidelines for National Greenhouse Gas Inventories provide methodologies for estimating national inventories of anthropogenic GHG emissions by sources.

For jet fuel, $CO_2$ was included in the GHG calculation. Direct GHG emissions were calculated using the net calorific value and default emissions factor from the 2006 IPCC Guidelines for National Greenhouse Gas Inventories. The emissions factor of 3.15 tonnes $CO_2$/tonne of jet fuel is also the internationally recognised constant representing the amount of $CO_2$ produced from combustion of a tonne of aviation fuel.

For motor gasoline and diesel oil, $CO_2$, methane ($CH_4$) and nitrous oxide ($N_2O$) were included in the GHG calculation. Direct GHG emissions were calculated using default emissions factors from the 2006 IPCC Guidelines for National Greenhouse Gas Inventories and the respective global warming potential (GWP) on a 100-year time horizon from the 2014 IPCC Fifth Assessment Report.

### Greenhouse Gas (GHG) Emissions (continued)

- **Electricity indirect (Scope 2) GHG emissions:** Indirect GHG emissions from the generation of purchased electricity consumed by SIA's buildings (total gross floor area) and offices (total leased area) aforementioned, expressed in kilograms of carbon dioxide ($kgCO_2$) or multiples. It excludes purchased electricity at Scoot's offices due to the unavailability of data. These emissions physically occur at the facilities where electricity is generated.

A location-based method was adopted to reflect the average emissions intensity of the national grid on which energy consumption occurs. For consistency, the grid emissions factor (GEF) used for the reporting year was sourced from the latest published factor at time of publication from the Singapore Energy Statistics (SES), the Energy Market Authority's (EMA) annual publication on energy statistics in Singapore.

| Emission Source | SIA's Reporting Year | Emissions Factor | Unit | References |
|---|---|---|---|---|
| Electricity Generation (Singapore grid) | FY2015/16 | 0.4277 | $kgCO_2$/kWh | EMA, Singapore GEF 2014 |
| | FY2016/17 | 0.4224 | $kgCO_2$ /kWh | EMA, Singapore GEF 2015 |
| | FY2017/18 | 0.4237 | $kgCO_2$ /kWh | EMA, Singapore GEF 2016 |
| | FY2018/19 | 0.4192 | $kgCO_2$ /kWh | EMA, Singapore GEF 2017 |
| | FY2019/20 | 0.4188 | $kgCO_2$ /kWh | EMA, Singapore GEF 2018 |

EMA's methodologies for the compilation of the GEF are based on the United Nations Framework Convention on Climate Change (UNFCCC) Clean Development Mechanism (CDM) Methodological Tool. The GEF measures the average $CO_2$ emissions emitted per unit net electricity generated. It is calculated using the Average Operating Margin (OM) method, the generation-weighted average $CO_2$ emissions per unit of net electricity generation of all generating power plants serving the electricity grid (Source: EMA).

- **Other indirect (Scope 3) GHG emissions:** Other indirect GHG emissions that are a consequence of SIA's activities, but occur from sources that are not owned or controlled by SIA. This is presently not reported. SIA will be identifying and may be reporting on its indirect (Scope 3) GHG emissions in future reporting periods.

### Intensity Ratios

Intensity ratios define resource consumption or emissions in the context of a specific metric.

- **Flight operations:** Fuel productivity is expressed in load tonne-kilometre per American gallon (LTK/AG). Direct (Scope 1) GHG emissions intensity is expressed in kilograms of carbon dioxide per load tonne-kilometre ($kgCO_2$/LTK) or multiples.
- **Buildings and offices:** Electricity intensity is expressed in kilowatt-hours per square metre ($kWh/m^2$) or multiples. Electricity indirect (Scope 2) GHG emissions intensity is expressed in kilograms of carbon dioxide per square metre ($kgCO_2/m^2$) or multiples. Water intensity is expressed in cubic metres per square metres ($m^3/m^2$).

# DEFINITIONS AND METHODOLOGIES (CONTINUED)

## Environment

### Water Withdrawal

Total water drawn for the organisation's use, expressed in cubic metre (m³) or multiples, within the stated organisational boundary below*.

- **Third-party Water:** Defined as 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.
- **Surface Water:** Defined as water that occurs naturally on the Earth's surface. This includes rain water harvested.

| Category | Source | Details | Boundary* |
|---|---|---|---|
| Third-party Water | (1) 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*<br><br>*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 buildings (ALH, SC, STC, TSQ) and offices<br>• Includes SIAEC's water withdrawal at Hangar 1, as data could not be segregated<br>• Excludes water withdrawal at Scoot's offices due to the unavailability of data |
| | (2) 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 airconditioning cooling purposes at SIA's buildings. NEWater is delivered to SIA via a dedicated pipe network. | SIA's building (STC) |
| Surface Water | (3) Rain Water Harvested | Collection and storing of rain water from surfaces on which rain falls. | SIA's building (ALH) |

These definitions are based on GRI 303: Water and Effluents 2018.

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### Waste

- **Waste:** Anything that the holder discards, intends to discard, or is required to discard, expressed in kilograms (kg) or multiples, within the stated organisational boundary
  *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, 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 or 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.*

| Category | Operation | Details | Boundary* |
|---|---|---|---|
| Waste Directed to Disposal | Waste-to-energy (WTE) Incineration | In Singapore, licensed waste contractors transport incinerable waste to the WTE plants for incineration. Heat from combustion generates superheated steam in boilers, and the steam drives turbo generators to produce electricity. Ferrous scrap metal contained in the ash is recovered and recycled. Ash is sent for disposal at the offshore Semakau Landfill. | SIA's four buildings (ALH, SC, STC, TSQ)<br>• Includes SIAEC's waste disposal from Hangars 1, 2 and 3, as data could not be segregated<br>• Excludes waste disposal at Scoot's offices due to data unavailability<br>• Excludes waste disposal from SIA's offices and cabin waste from passenger aircraft fleet due to unavailability of data |
| Waste Diverted From Disposal | Recycling | Recycling is the reprocessing of products or components of products that have become waste, to make new materials. At our buildings, recyclables are broken down by paper, plastic, ferrous metal and glass. For cabin waste from passenger fleets, recyclables are broken down by newspapers, and magazines. | SIA's four buildings (ALH, SC, STC TSQ) and cabin waste from flight operations<br>• Includes SIAEC's waste disposal from Hangars 1, 2 and 3, as data could not be segregated |

*For this FY2019/20 SIA Sustainability Report, we refined our reporting boundary to focus on three of our reportable businesses – Singapore Airlines, SilkAir and Scoot – unless otherwise stated. The sustainability data and information relating to SIAEC is disclosed separately in SIAEC's Sustainability Report published annually by our subsidiary. Data and information have been restated accordingly for past reporting cycles (FY2015/16, FY2016/17, FY2017/18 and FY2018/19).*

# GRI CONTENT INDEX

The GRI Content Index has been prepared in accordance with the GRI Standards: Core option. It summarises the GRI Standards Disclosures we have selected for reporting and directs readers to the appropriate references in this Sustainability Report and other publicly available resources published by SIA. The full GRI Standards is available on the GRI website.

References:
**AR:** FY2019/20 SIA Annual Report     **SR:** FY2019/20 SIA Sustainability Report

## GENERAL DISCLOSURES

| GRI Standards Disclosures | Response and/or Reference(s) | Identified Omission(s) and Reason(s) for Omission(s) |
|---|---|---|
| **Organisational Profile** | | |
| **102-1** Name of the organisation | Singapore Airlines Limited | - |
| **102-2** Activities, brands, products, and services | **SR:** 3-7 | - |
| **102-3** Location of headquarters | **SR:** Back Cover | - |
| **102-4** Location of operations | **SR:** 5 | - |
| **102-5** Ownership and legal form | **AR:** 120, 152, 214-215 | - |
| **102-6** Markets served | **SR:** 5 | - |
| **102-7** Scale of the organisation | **SR:** 5, 7, 30 **AR:** 109-119,140-144 | - |
| **102-8** Information on employees and other workers | **SR:** 29-35 | - |
| **102-9** Supply chain | **SR:** 76-84 | - |
| **102-10** Significant changes to the organisation and its supply chain | **SR:** 6, 10-12, 85 **AR:** 8-15, 112-117 | - |
| **102-11** Precautionary principle or approach | **SR:** 22-24, 54, 101 **AR:** 64-65, 81-84 | - |
| **102-12** External initiatives | **SR:** 2, 15 | - |
| **102-13** Membership of associations | **SR:** 4 | - |
| **Strategy** | | |
| **102-14** Statement from senior decision-maker | **SR:** 1, 13 | - |
| **Ethics and Integrity** | | |
| **102-16** Values, principles, standards, and norms of behavior | **SR:** 2, 25-27 | - |
| **102-17** Mechanisms for advice and concerns about ethics | **SR:** 27 | - |
| **Governance** | | |
| **102-18** Governance structure | **SR:** 13, 19, 22, 48 **AR:** 69-71 | - |
| **102-19** Delegating authority | **SR:** 13 **AR:** 66, 71 | - |
| **102-20** Executive-level responsibility for economic, environmental, and social topics | **SR:** 13 | - |
| **102-22** Composition of the highest governance body and its committee | **SR:** 19 **AR:** 66-71, 86-91 | - |
| **102-23** Chair of the highest governance body | **SR:** 19 **AR:** 67-68 | - |
| **102-24** Nominating and selecting the highest governance body | **SR:** 20 **AR:** 70 | - |
| **102-25** Conflicts of interest | **SR:** 19 | - |

| GRI Standards Disclosures | Response and/or Reference(s) | Identified Omission(s) and Reason(s) for Omission(s) |
|---|---|---|
| **Governance** (Continued) | | |
| **102-26** Role of the highest governance body in setting purpose, values, and strategy | **SR:** 13, 19 **AR:** 66, 69-71 | - |
| **102-30** Effectiveness of risk management processes | **SR:** 22-23 **AR:** 81-84 | - |
| **102-31** Review of economic, environmental, and social topics | **SR:** 13 | - |
| **102-32** Highest governance body's role in sustainability reporting | **SR:** 13-14 | - |
| **102-33** Communicating critical concerns | **AR:** 84-85 | - |
| **102-35** Remuneration policies | **AR:** 72-80 | - |
| **102-36** Process for determining remuneration | **AR:** 72-80 | - |
| **Stakeholder Engagement** | | |
| **102-40** List of stakeholder groups | **SR:** 15 | - |
| **102-41** Collective bargaining agreements | **SR:** 38 | - |
| **102-42** Identifying and selecting stakeholders | **SR:** 14-15 | - |
| **102-43** Approach to stakeholder engagement | **SR:** 10-12, 18, 28, 47, 61, 75, 86, 93, 100, 126-128 | - |
| **102-44** Key topics and concerns raised | **SR:** 10-12, 14-15, 24 | - |
| **Reporting Practice** | | |
| **102-45** Entities included in the consolidated financial statements | **SR:** 3 **AR:** 168-176, 207 | - |
| **102-46** Defining report content and topic boundaries | **SR:** 14, 130-133 | - |
| **102-47** List of material topics | **SR:** 15 | - |
| **102-48** Restatement of information | **SR:** 132-133 | - |
| **102-49** Changes in reporting | **SR:** 132-133 | - |
| **102-50** Reporting period | **SR:** 3 | - |
| **102-51** Date of most recent report | **SR:** 3 | - |
| **102-52** Reporting cycle | **SR:** 3 | - |
| **102-53** Contact point for questions regarding the report | **SR:** Back Cover | - |
| **102-54** Claims of reporting in accordance with the GRI Standards | **SR:** 2 | - |
| **102-55** GRI content index | **SR:** 134-146 | - |
| **102-56** External assurance | **SR:** 3 | - |

# GRI CONTENT INDEX

## TOPIC–SPECIFIC DISCLOSURES

| GRI Standards Disclosures | Response and/or Reference(s) | Identified Omission(s) and Reason(s) for Omission(s) |
|---|---|---|
| **Material topic: Governance** | | |
| **GRI 103 (2016): Management Approach** | | |
| **103-1** Explanation of the material topic and its boundary | **SR:** 18-27 | - |
| **103-2** The management approach and its components | **SR:** 18-27 | - |
| **103-3** Evaluation of the management approach | **SR:** 18-27 | - |
| **GRI 205 (2016): Anti-corruption** | | |
| **205-2** Communication and training about anti-corruption policies and procedures | **SR:** 26 | - |
| **205-3** Confirmed incidents of corruption and actions taken | **SR:** 26 | - |
| **GRI 307 (2016): Environmental Compliance** | | |
| **307-1** Non-compliance with environmental laws and regulations | **SR:** 27 | - |
| **GRI 416 (2016): Customer Health and Safety** | | |
| **416-2** Incidents of non-compliance concerning the health and safety impacts of products and services | **SR:** 27 | - |
| **Material topic: Employees** | | |
| **GRI 103 (2016): Management Approach** | | |
| **103-1** Explanation of the material topic and its boundary | **SR:** 28-46 | - |
| **103-2** The management approach and its components | **SR:** 28-46 | - |
| **103-3** Evaluation of the management approach | **SR:** 28-46 | - |
| **GRI 202 (2016): Market Presence** | | |
| **202-2** Proportion of senior management hired from the local community | **SR:** 29 | - |
| **GRI 401 (2016): Employment** | | |
| **401-1** New employee hires and employee turnover | **SR:** 29, 34-35 | - |
| **401-2** Benefits provided to full-time employees that are not provided to temporary or part time employees | **SR:** 40 | - |
| **401-3** Parental leave | **SR**: 40 | - |

| GRI Standards Disclosures | Response and/or Reference(s) | Identified Omission(s) and Reason(s) for Omission(s) |
|---|---|---|
| **Material topic: Employees** (Continued) | | |
| **GRI 402 (2016): Labor/Management Relations** | | |
| **402-1** Minimum notice periods regarding operational changes | **SR:** 39 | - |
| **GRI 404 (2016): Training and Education** | | |
| **404-2** Programmes for upgrading employee skills and transition assistance programmes | **SR:** 39, 41-44 | - |
| **GRI 405 (2016): Diversity and Equal Opportunity** | | |
| **405-1** Diversity of governance bodies and employees | **SR:** 29-35 **AR**: 87-91 | - |
| **Material topic: Safety** | | |
| **GRI 103 (2016): Management Approach** | | |
| **103-1** Explanation of the material topic and its boundary | **SR:** 47-60 | |
| **103-2** The management approach and its components | **SR:** 47-60 | - |
| **103-3** Evaluation of the management approach | **SR:** 47-60 | - |
| **GRI 403 (2018): Occupational Health and Safety** | | |
| **403-1** Occupational health and safety management systems | **SR:** 48-50 | - |
| **403-2** Hazard identification, risk assessment, and incident investigation | **SR:** 54-55 | - |
| **403-3** Occupational health services | **SR:** 54, 56 | - |
| **403-4** Worker participation, consultation, and communication on occupational health and safety | **SR:** 48-50, 53-54, 58 | - |
| **403-5** Worker training on occupational health and safety | **SR:** 51-55, 58 | - |
| **403-6** Promotion of worker health | **SR:** 56 | - |
| **403-7** Prevention and mitigation of occupational health and safety impacts directly linked by business relationships | **SR:** 48-54 | - |
| **403-8** Workers covered by an occupational health and safety management system | **SR:** 49 | - |
| **403-9** Work-related injuries | **SR:** 56 | - |
| **403-10** Work-related ill-health | **SR:** 57 | - |
| **GRI 416 (2016): Customer Health and Safety** | | |
| **416-1** Assessment of the health and safety impacts of product and service categories | **SR:** 49 | - |
| **416-2** Incidents of non-compliance concerning the health and safety impacts of products and services | **SR:** 27 | - |

# GRI CONTENT INDEX

## TOPIC–SPECIFIC DISCLOSURES

| GRI Standards Disclosures | Response and/or Reference(s) | Identified Omission(s) and Reason(s) for Omission(s) |
|---|---|---|
| **Material topic: Customer Focus** | | |
| **GRI 103 (2016): Management Approach** | | |
| **103-1** Explanation of the material topic and its boundary | **SR**: 61-73 | - |
| **103-2** The management approach and its components | **SR**: 61-73 | - |
| **103-3** Evaluation of the management approach | **SR**: 61-73 | - |
| **GRI 418 (2016): Customer Privacy** | | |
| **418-1** Substantiated complaints concerning breaches of customer privacy and losses of customer data | **SR**: 73 | - |
| **Material topic: Suppliers** | | |
| **GRI 103 (2016): Management Approach** | | |
| **103-1** Explanation of the material topic and its boundary | **SR**: 75-85 | - |
| **103-2** The management approach and its components | **SR**: 75-85 | - |
| **103-3** Evaluation of the management approach | **SR**: 75-85 | - |
| **GRI 308 (2016): Supplier Environmental Assessment** | | |
| **308-1** New suppliers that were screened using environmental criteria | **SR**: 77-78 | - |
| **GRI 414 (2016): Supplier Social Assessment** | | |
| **414-1** New suppliers that were screened using social criteria | **SR**: 77-78 | - |
| **Material topic: Shareholders** | | |
| **GRI 103 (2016): Management Approach** | | |
| **103-1** Explanation of the material topic and its boundary | **SR**: 86-92 | - |
| **103-2** The management approach and its components | **SR**: 86-92 | - |
| **103-3** Evaluation of the management approach | **SR**: 86-92 | - |
| **GRI 201 (2016): Economic Performance** | | |
| **201-1** Direct economic value generated and distributed | **SR**: 92 | - |

| GRI Standards Disclosures | Response and/or Reference(s) | Identified Omission(s) and Reason(s) for Omission(s) |
|---|---|---|
| **Material topic: Environment** | | |
| **GRI 103 (2016): Management Approach** | | |
| **103-1** Explanation of the material topic and its boundary | **SR**: 98-128 | - |
| **103-2** The management approach and its components | **SR**: 98-128 | - |
| **103-3** Evaluation of the management approach | **SR**: 98-128 | - |
| **GRI 302 (2016): Energy** | | |
| **302-1** Energy consumption within the organisation | **SR**: 110-111, 113-115, 132 | - |
| **302-3** Energy intensity | **SR**: 110-115, 132 | - |
| **302-4** Reduction of energy consumption | **SR**: 102-115, 132 | - |
| **GRI 303 (2018): Water and Effluents** | | |
| **303-1** Interactions with water as a shared resource | **SR**: 124-125, 132 | - |
| **303-2** Management of water discharge-related impacts | **SR**: 124, 132 | - |
| **303-3** Water withdrawal | **SR**: 125, 132 | - |
| **GRI 304 (2016): Biodiversity** | | |
| **304-3** Habitats protected or restored | **SR**: 126-127 | - |
| **GRI 305 (2016): Emissions** | | |
| **305-1** Direct (Scope 1) GHG emissions | **SR**: 110, 113-115, 132 | - |
| **305-2** Energy indirect (Scope 2) GHG emissions | **SR**: 111, 114-115, 132 | - |
| **305-4** GHG emissions intensity | **SR**: 110-115, 132 | - |
| **305-5** Reduction of GHG emissions | **SR**: 102-115, 132 | - |
| **GRI 306 (2020): Waste** | | |
| **306-1** Waste generation and significant waste-related impacts | **SR**: 116-122 | - |
| **306-2** Management of significant waste-related impacts | **SR**: 116-122 | - |
| **306-3** Waste generated | **SR**: 120-121 | - |
| **306-4** Waste diverted from disposal | **SR**: 120-122 | - |
| **306-5** Waste directed to disposal | **SR**: 120-122 | - |
| **GRI 307 (2016): Environmental Compliance** | | |
| **307-1** Non-compliance with environmental laws and regulations | **SR**: 27 | - |

SINGAPORE AIRLINES

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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