



# CLIMATE ACTION 100+ SECTOR STRATEGY: AVIATION – CASE STUDIES

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Produced by



# ABOUT THIS PROJECT

There are 10 aviation focus companies in Climate Action 100+. The PRI coordinates investor engagements for nine of these companies.

In February 2020, the PRI published its [Investor Expectations Statement on Climate Change for Airlines and Aerospace Companies](#), which was initially signed by over 122 investors with nearly \$6 trillion in collective assets under management. The purpose of this statement was to publicly signal investor support for key high-level actions airlines and aerospace companies can take to manage their climate risks and opportunities.

In May 2020, the PRI commissioned Chronos Sustainability to prepare a more-detailed investor engagement guide for the aviation sector that would build upon the PRI's February 2020 statement and serve as the Climate Action 100+ sector strategy for aviation. This sector strategy consists of three documents:

- [A list of recommended investor expectations for the aviation sector;](#)
- [A list of case studies aligned to these expectations; and](#)
- [An in-depth landscape report of the aviation sector.](#)

Between June-November 2020, drafts of these documents underwent two rounds of feedback with investors, aviation companies, and aviation sector technical experts.

These documents are intended to inform Climate Action 100+ investor engagements with airline and aerospace companies by setting out recommended investor expectations for net-zero climate strategies from such companies, exploring potential pathways for the aviation sector to decarbonise by 2050 and showcasing examples of good practice by aviation companies.

For further questions or feedback on this project, please email [marshall.geck@unpri.org](mailto:marshall.geck@unpri.org)

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# SECTION 1: INTRODUCTION

This document presents current examples of aviation company activity related to the [Climate Action 100+ Sector Strategy: Aviation – Recommended Investor Expectations](#). The structure aligns with these investor expectations, although certain examples are applicable to multiple expectations.

Investors can use this document to support their understanding of the range of real-world activities that aviation companies – airlines and/or aerospace companies – might take to align with the recommended expectations on climate change for the sector.

However, the case-studies do not necessarily meet the full specifications of the recommended investor expectations. Their inclusion in this report should, therefore, not be interpreted as an endorsement of the company’s actions or as suggesting that these companies have robust plans to align with the goals of the Paris Agreement. For example, the net-zero commitment case studies illustrate the types of commitments companies have already made and how these might be presented and communicated.

For an in-depth analysis of the aviation sector, please see the [Climate Action 100+ Sector Strategy: Aviation – Landscape Report](#).



## SECTION 2: ACTION CASE STUDIES

## 1

MAKE AN EXPLICIT COMMITMENT TO ACHIEVING  
NET-ZERO GREENHOUSE GAS EMISSIONS BY 2050.

## AIRLINE EXAMPLE: IAG'S NET-ZERO COMMITMENT

Flightpath  
net zero

IAG has published a Flightpath net zero<sup>1</sup> strategy in which it commits to a suite of actions on climate change. This includes a decarbonisation transition plan to achieve its stated target of net zero CO<sub>2</sub> emissions by 2050 as well as its 2025 and 2030 targets. IAG makes clear statements and targets in the document, including:

**Figure 1:** Excerpt from IAG's Flightpath net zero report showing the company's net zero emissions targets.

*"In line with [the] United Nation's objective to limit global warming to 1.5 degrees."*

**"New targets:**

*By 2050: Net zero CO<sub>2</sub>*

*By 2030: 20% reduction in net CO<sub>2</sub>*

*By 2025: 10% reduction in CO<sub>2</sub> per passenger kilometre"*

IAG also refers to the importance of policy engagement and calls for regulatory support from governments to enable it to achieve its net zero commitment.

**Figure 2:** Excerpt from IAG's Flightpath net zero report highlighting the importance of policy in achieving its net zero targets.

*“But we can't succeed alone, we will need strong policies to support our actions. We are therefore asking Governments to:*

- 1. Support a long term climate goal for aviation via United Nations agency ICAO*
- 2. Support smart global carbon pricing for aviation which directly reduces climate impacts and avoids blunt taxation*
- 3. Create policies and incentives to increase funding for research and development for low carbon aircraft, sustainable aviation fuels and carbon removal technologies”*

## AEROSPACE COMPANY EXAMPLE: ROLLS-ROYCE'S NET-ZERO COMMITMENT THAT INCLUDES SCOPE 3 EMISSIONS

Rolls-Royce<sup>2</sup> has set a clear target to reach net-zero emissions in its operations by 2030. In its commitment to net zero, it acknowledges the role of other stakeholders in supporting the aviation sector's broader transition to net zero by 2050.

**Figure 3:** Banner image and title from Rolls-Royce's June 2020 press release announcing its net-zero commitment





**Figure 4:** Excerpt from a June 2020 Rolls-Royce press release announcing its net zero commitments.

*“This will see Rolls-Royce become net zero carbon in its operations by 2030 and, more fundamentally, set an ambition to play a leading role in enabling the sectors in which we operate to reach net zero carbon by 2050 through the development of new products and technologies.*

*As part of this commitment, Rolls-Royce will:*

- Align its business to the Paris Agreement goals, to limit global temperature rise to 1.5°C;*
- Use its technological capabilities to play a leading role in enabling vital parts of the economy to get to net zero carbon by 2050, including aviation, shipping, rail, and power generation;*
- Continue to, and seek to accelerate, progress against stated company and industry carbon reduction targets and goals;*
- Continue our investment in research & development (R&D) in pursuit of ever more efficient products and novel solutions to the climate challenge;*
- Publish a clear roadmap later this year, setting out a pathway to enabling net zero carbon emissions by 2050, including interim milestones.”*



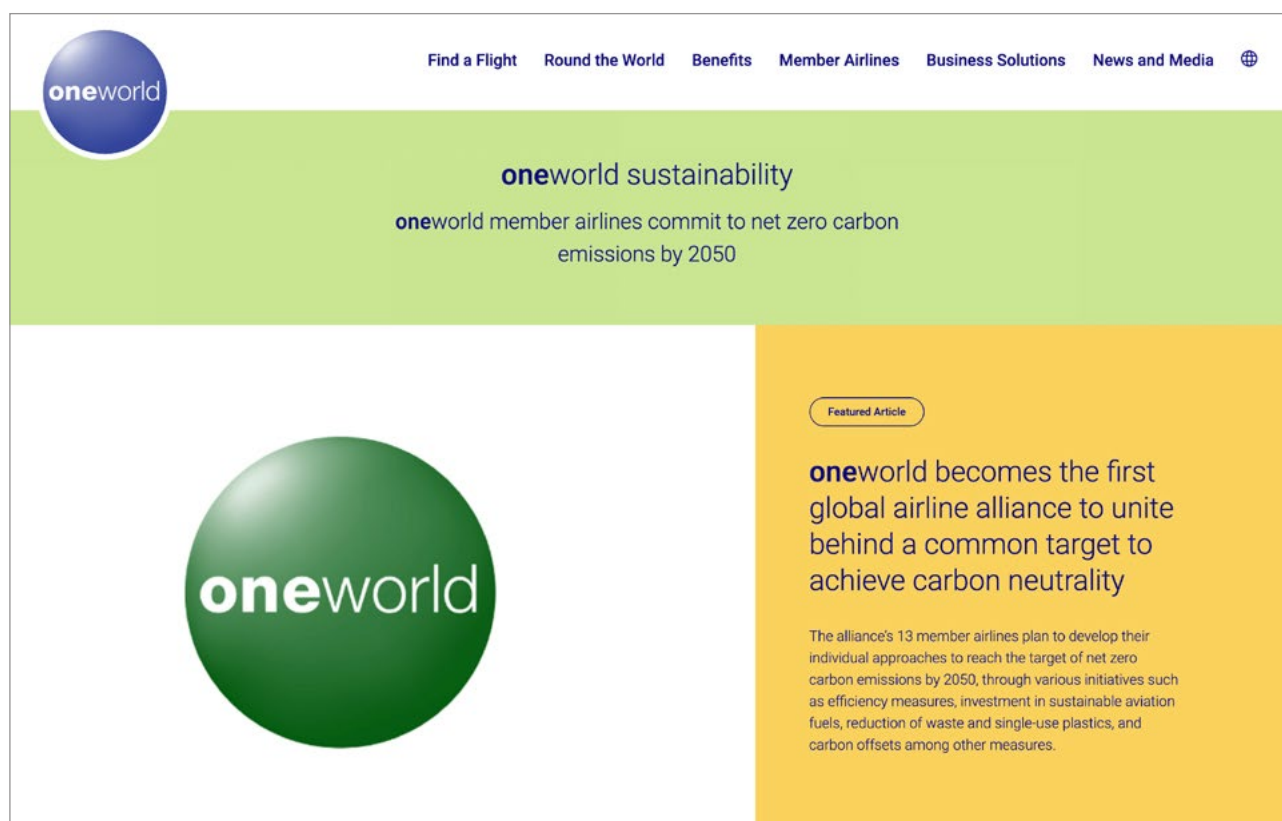


## AVIATION INDUSTRY BODY EXAMPLE: ONEWORLD MEMBER AIRLINES' JOINT COMMITMENT TO NET ZERO CARBON EMISSIONS BY 2050

The oneworld Alliance's 13 global airline members have committed to net zero carbon emissions by 2050<sup>3</sup> using strategies such as efficiency measures, investments in sustainable aviation fuels, reduction of waste and single-use plastics, and carbon offsets, among other measures. Each airline will develop its own approach to reach the shared target. Some members have already done so. The Alliance has also established a working group for collaboration on certain initiatives.

This is a positive example of the sector working collaboratively and making unified commitments. However, investors should not rely completely on overarching commitments but should scrutinise individual company commitments and push for robust transition plans consistent with the goals of the Paris Agreement.

**Figure 5:** Image of the oneworld net zero commitment web page.



## 2

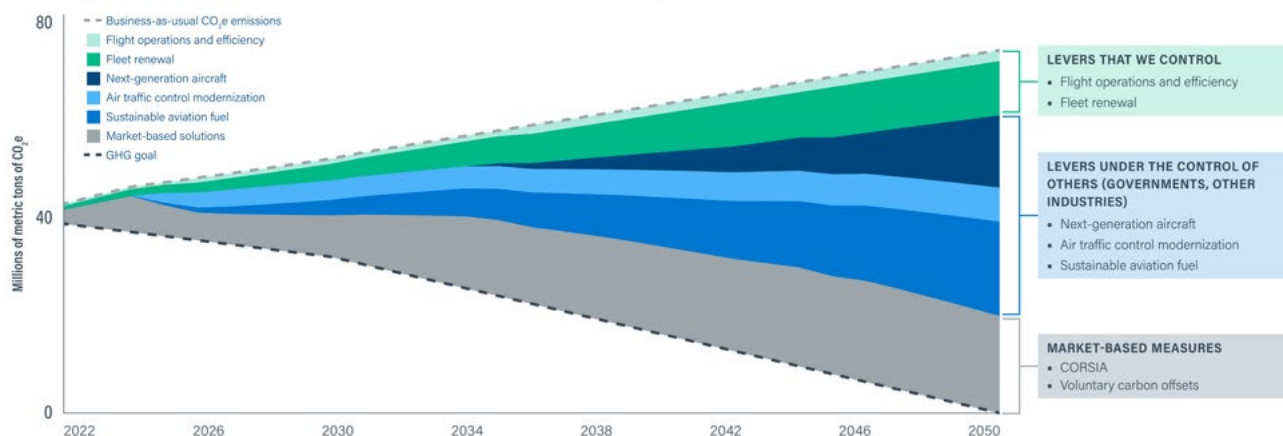
ESTABLISH AND DISCLOSE ROBUST TRANSITION PLANS  
CONSISTENT WITH THE GOALS OF THE PARIS AGREEMENT.AIRLINE EXAMPLE #1: AMERICAN AIRLINES' PATHWAY FOR MEETING ITS 2050  
NET-ZERO COMMITMENT

American Airlines in its 2019-2020 ESG Report<sup>4</sup> presents an illustrative wedge diagram and associated descriptive text to detail how it intends to meet its 2050 net-zero commitment. The measures for reduction include flight operations and efficiency, new aircraft technology, air traffic control efficiency improvements, sustainable aviation fuels, and carbon offsets.

The illustration of the methods used to decarbonise and their relative importance is useful, although it would benefit from additional detail on how the pathway is consistent with the goals of the Paris Agreement and the actions American Airlines will take within each wedge.

**Figure 6:** Wedge diagram from American Airlines' 2019-2020 ESG report illustrating its emissions reduction pathway.

## Getting to Net Zero in 2050: American's Initial Pathway

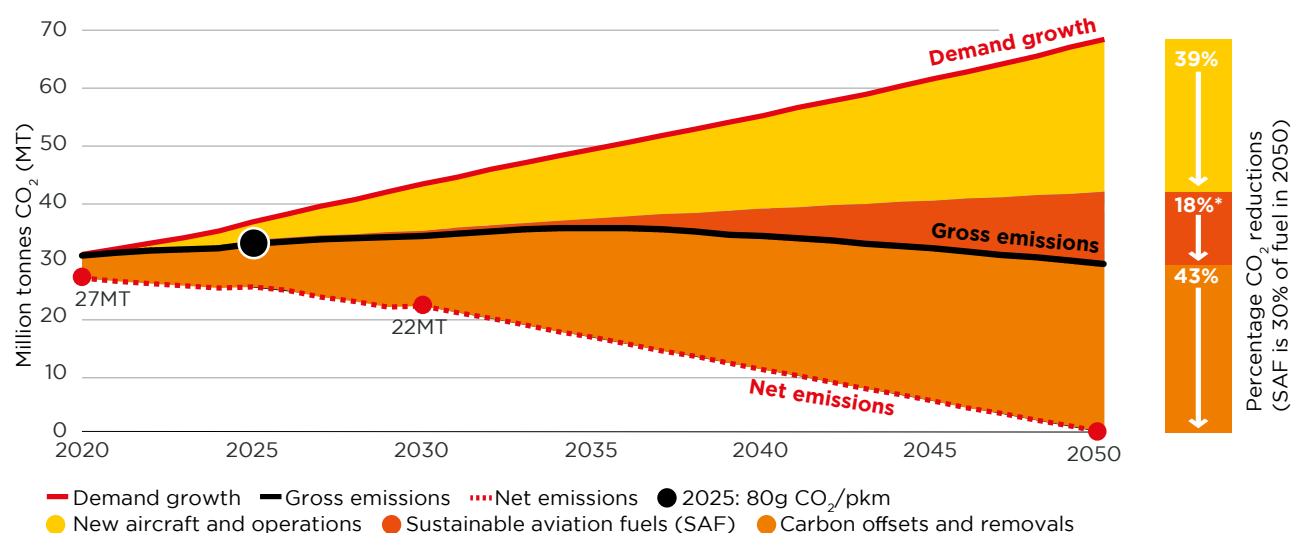


## AIRLINE EXAMPLE #2: IAG'S EMISSIONS BREAKDOWN AND ILLUSTRATION OF ITS DECARBONISATION PATHWAY

IAG in its Annual Report 2019<sup>5</sup> gives a clear breakdown of its greenhouse gas emissions by scope. It also provides a clear explanation of how it will meet its 2050 net zero emissions target by showing the methods it will use and the percentage reduction each method will achieve, breaking it down in a wedge diagram by new aircraft and operations, sustainable aviation fuels, and carbon offsets and removals.

A further breakdown of the carbon offsets and removals wedge would provide useful information to help investors understand IAG's projected reliance on carbon offsetting, compared with negative emissions technologies.

**Figure 7:** Excerpt from IAG's 2019 Annual Report illustrating its decarbonisation pathway through a wedge diagram.



## 3

SUPPORT THE RESEARCH, DEVELOPMENT AND SCALING  
OF KEY DECARBONISATION TECHNOLOGIES.AEROSPACE COMPANY EXAMPLE: AIRBUS' RESEARCH INTO ZERO-EMISSION  
FLIGHT TECHNOLOGIES

Airbus has stated that it is committed to developing zero-emission (“ZEROe”) aviation technologies and is aiming to “develop the world’s first zero-emission commercial aircraft by 2035”. It has presented three “ZEROe” concepts, powered by hydrogen combustion through modified gas turbine engines, which will each be used to explore various technology pathways of using hydrogen for zero-emission flight.<sup>6</sup>

**Figure 8:** Infographic of Airbus' ZEROe concepts.





## AIRLINE EXAMPLE #1: EASYJET'S RESEARCH PARTNERSHIP TO PROMOTE ELECTRIC PROPULSION TECHNOLOGY

EasyJet<sup>7</sup> has partnered with Wright Electric<sup>8</sup> to support the development of a commercial all electric plane, the Wright 1. This airliner aims to enable EasyJet and other airlines to achieve their long-term goals of carbon-free aviation. The Wright 1 is designed to carry 186 passengers on short-haul flights of up to two hours and Entry in Service (EIS) is planned in 2030.

**Figure 9:** Image of the Wright 1 electric plane. Courtesy: EasyJet

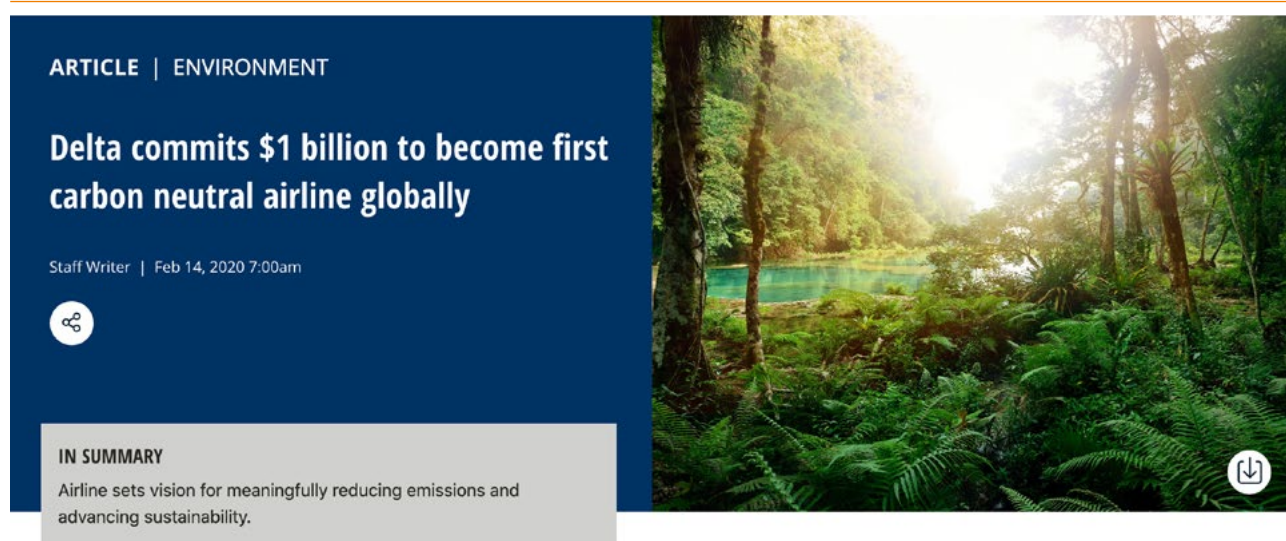


EasyJet provides commercial, operational and maintenance insight to Wright, ensuring that development is commercially viable. Wright has partnered with NASA, ARPA-E and multiple industry partners to prototype the distributed electric propulsion system for the new plane and aims to hold a flight demonstration in the 2023 timeframe.

## AIRLINE EXAMPLE #2: DELTA AIR LINES' INVESTMENT SUPPORT FOR NEW TECHNOLOGY

Delta Air Lines, in an effort to mitigate its emissions, is committing \$1 billion over the next 10 years to research and invest in new technologies related to carbon reduction and carbon removal, though it is not clear where specifically the money will be spent.

**Figure 10:** Banner image and title from Delta Air Lines' February 2020 press release announcing its carbon neutrality commitment



**Figure 11:** Excerpt from Delta's February 2020 press release describing its investment in mitigating emissions.

*"Starting March 1, 2020, Delta Air Lines is committing \$1 billion<sup>9</sup> over the next 10 years on its journey to mitigate all emissions from its global business going forward. The airline will invest in driving innovation, advancing clean air travel technologies, accelerating the reduction of carbon emissions and waste, and establishing new projects to mitigate the balance of emissions...*

*...Here is how the company is focusing its efforts to become carbon neutral:*

- **Carbon reduction:** Reducing Delta's carbon footprint through enterprise-wide efforts to decrease the use of jet fuel and increase efficiency. Areas of focus include an ambitious fleet renewal program, improved flight operations, weight reduction, and increased development and use of sustainable aviation fuels.
- **Carbon removal:** Investing in innovative projects and technology to remove carbon emissions from the atmosphere that go beyond the airline's current commitments, and investigating carbon removal opportunities through forestry, wetland restoration, grassland conservation, marine and soil capture, and other negative emissions technologies.
- **Stakeholder engagement:** Building coalitions with our employees, suppliers, global partners, customers, industry colleagues, investors and other stakeholders to advance carbon reduction and removal goals and maximize our global impact."

# 4

## ACCELERATE THE ADOPTION OF SUSTAINABLE AVIATION FUELS (SAF), INCLUDING ADVANCED BIOFUELS AND SYNTHETIC FUELS.

### MULTI-STAKEHOLDER PARTNERSHIP EXAMPLE #1: SCANDINAVIAN AIRLINES' COLLABORATIVE APPROACH TO PRODUCING ECONOMICALLY VIABLE SAF



Scandinavian Airlines (SAS) is part of a Danish cross-sectoral and collaborative initiative to develop renewable hydrogen and sustainable fuels at competitive prices. SAS, with Copenhagen Airports, A.P. Moller - Maersk, DSV Panalpina, DFDS and Ørsted, formed a partnership, announced in May 2020, that envisions developing what they suggest could become “one of the world’s largest electrolyser and e-fuel facilities.”<sup>10</sup>

**Figure 12:** Quote from a fact sheet about the sustainable fuels partnership between Copenhagen Airports, A.P. Moller- Maersk, DSV Panalpina, DFDS and Ørsted.

*“The vision of the partnership is to develop a new ground-breaking hydrogen and e-fuel production facility as soon as 2023 which, when fully scaled-up by 2030, could deliver more than 250,000 tonnes of sustainable fuel for busses, trucks, maritime vessels and airplanes every year.”*

### MULTI-STAKEHOLDER PARTNERSHIP EXAMPLE #2: MICROSOFT CORP. PARTNERSHIP WITH ALASKA AIRLINES AND SKYNRG TO USE SAF FOR BUSINESS TRAVEL

This case study highlights how corporate entities from other industries can support the aviation industry’s transition to SAF. Microsoft Corp. employees who fly between their global headquarters in Redmond, Washington, and California on Alaska Airlines will use SAF to cover their business travel.<sup>11</sup>

Microsoft will purchase SAF credits from SkyNRG and the fuel itself, produced from waste oil, will be delivered to the airport fuelling system used by Alaska Airlines. The agreement applies to CO<sub>2</sub> emissions from journeys made by Microsoft employees between Seattle-Tacoma International Airport to San Francisco International Airport, San Jose International Airport, and Los Angeles International Airport — the three most popular routes travelled by Microsoft employees on Alaska Airlines.



## SEVERAL AIRLINES: SUPPORTING THE DEVELOPMENT OF SUSTAINABLE AVIATION FUELS (SAF) THROUGH OFF-TAKE AGREEMENTS

### AIRLINE EXAMPLE #1: AIR TRANSAT

Air Transat and SAF+ Consortium<sup>12</sup> have signed an offtake agreement in Canada to support development of SAF. The offtake agreement commits Air Transat to “buying a significant portion of the future SAF production which SAF+ will be producing.” The company describes SAF as “an important part of Air Transat’s strategy to meet aviation’s greenhouse gas emissions reductions targets.”



“SAF+ Consortium is finalizing the fabrication of a pilot plant in Montreal East to make kerosene from carbon dioxide (CO<sub>2</sub>). The process consists in capturing CO<sub>2</sub> produced from large industrial emitters and converting it to synthetic jet fuel by using a process called Fisher Tropsch (FT). It is estimated that SAF+ kerosene will have an 80% lower carbon footprint than conventional jet fuel.”

### AIRLINE EXAMPLE #2: QANTAS

Qantas has a 10-year agreement beginning in 2017 to purchase blended renewable jet fuel from SG Preston.<sup>13</sup> The commitment is for Qantas to annually purchase eight million gallons (30 million litres) of renewable jet fuel for its aircraft operating from Los Angeles International Airport (LAX) to Australia.



“The fuel consists of 50 percent renewable jet fuel produced from non-food plant oils, blended with 50 percent traditional jet fuel. Compared to standard jet fuel, the biofuel emits half the amount of carbon emissions per gallon over its life cycle.”

### AIRLINE EXAMPLE #3: KLM ROYAL DUTCH AIRLINES

“KLM Royal Dutch Airlines has committed itself for a 10-year period to the development and purchase of 75,000 tonnes of sustainable aviation fuel a year.<sup>14</sup> KLM Royal Dutch Airlines is the first airline in the world to invest in SAF on this scale. SkyNRG, global market leader for SAF, will develop Europe’s first dedicated plant for the production of SAF in Delfzijl.”



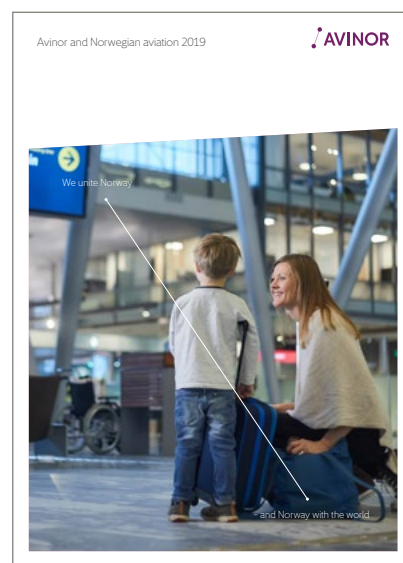
The new production plant will annually produce 100,000 tonnes of SAF, as well as 15,000 tonnes of bioLPG as a by-product. It will run on sustainable hydrogen and produce the fuel from waste and residue streams such as used cooking oil. KLM says: “This sustainable aviation fuel delivers a CO<sub>2</sub> reduction of at least 85%, compared to fossil fuel. The use of SAF will also contribute to a significant decrease in ultra-fine particles and sulphur emissions.”



## AIRPORT-AIRLINE PARTNERSHIP EXAMPLE: AIRLINE SUPPORT OF NORWEGIAN AIRPORT COMPANY AVINOR'S SCHEME TO INCREASE BIOFUEL REFUELLING

In January 2016, Lufthansa Group, KLM Royal Dutch Airlines and SAS, in collaboration with AirBP, Neste, and SkyNRG, supported Avinor (a Norwegian state-owned company that operates most civil airports in Norway) to help it become “the first international airport in the world to supply biofuel for all airlines refuelling there. This scheme was expanded in August 2017 to include Bergen Airport, Flesland. In 2018, a small volume of jet biofuel was blended with aviation fuel at Oslo Airport and Bergen Airport. The biofuels sold to airlines in Norway are produced without palm oil or palm oil products.”<sup>15</sup>

**Figure 13:** Image from the Avinor and Norwegian aviation 2019 report



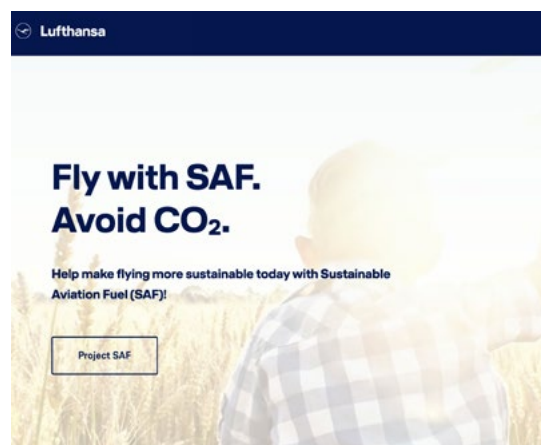
## SEVERAL AIRLINES: OFFERING CUSTOMERS THE OPPORTUNITY TO OFFSET THE EMISSIONS OF THEIR FLIGHTS WITH SAF

A number of airlines are now offering customers green ticket options and/or the opportunity to offset the emissions of their flight through the purchase of SAF. The below list is not exhaustive.

### AIRLINE EXAMPLE #1:

Lufthansa has initiated Compensaid,<sup>17</sup> which enables individuals to offset emissions from their flights by contributing to the purchase of SAF that Lufthansa will use on flights within the next 6 months, or to reforestation projects.

**Figure 14:** Image from the Lufthansa Compensaid web page



## AIRLINE EXAMPLE #2:

Finnair's Push For Change<sup>18</sup> initiative, which is not currently live, will allow consumers to offset their emissions through the purchase of biofuels.

**Figure 15:** Image from the Finnair Push For Change web page



## AIRLINE EXAMPLE #3:

SAS<sup>19</sup> offers passengers the opportunity to purchase biofuel blocks corresponding to 20 minutes of flight time, which it calculates reduces CO<sub>2</sub> emissions by 80 percent compared to conventional jet fuel. In September 2019 prices were set at 10 USD / 10 EUR per block of biofuel.

**Figure 16:** Excerpt from the SAS September 2019 press release describing its product launch where passengers can purchase biofuel.



## 5

SUPPORT RESEARCH INTO THE IMPACTS OF NON-CO<sub>2</sub> EFFECTS FROM AVIATION AND HOW THESE CAN BE MITIGATED.

At publication there is very little clear activity by airlines and aerospace companies of actions that support this recommended investor expectation. We were unable to find relevant published case-studies.





## SECTION 3: GOVERNANCE CASE STUDIES



# 6

## IMPLEMENT A STRONG GOVERNANCE FRAMEWORK WHICH CLEARLY ARTICULATES THE BOARD'S ACCOUNTABILITY AND OVERSIGHT OF CLIMATE CHANGE RISKS AND OPPORTUNITIES.

### AIRLINE EXAMPLE: EXPLANATION OF BOARD OVERSIGHT OF CLIMATE CHANGE

Many aviation companies now explain their governance of climate change. Best practice in this area should describe if and how the board has oversight of climate change risks and opportunities.

For example, Singapore Airlines, in its 2019 Sustainability Report, outlines its sustainability governance structure and how climate-related risks are integrated into that structure.<sup>21</sup>

**Figure 17:** Excerpt from Singapore Airlines' 2019 Sustainability Report related to its sustainability governance structure.

#### SUSTAINABILITY GOVERNANCE

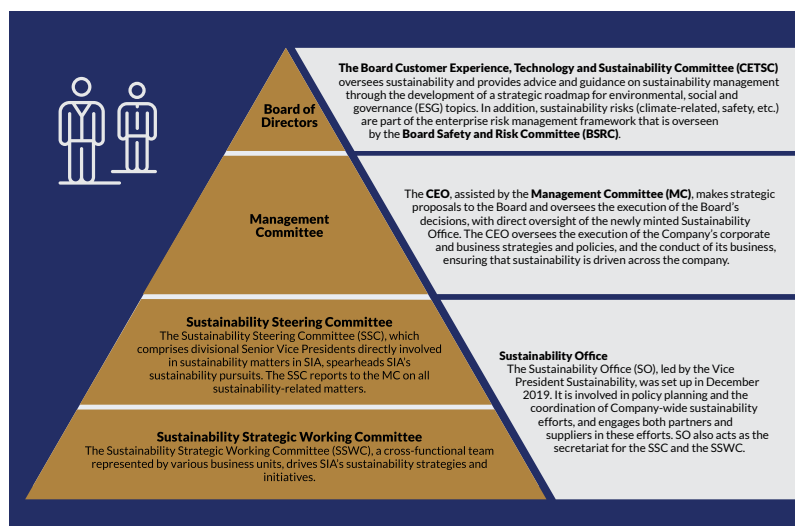
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We have a long-standing commitment in the continual integration of sustainability into every aspect of our business.

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.



### CLIMATE CHANGE (CONTINUED)

#### Climate-related Risks and Opportunities

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#### 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.

## 7

## LOBBY NATIONAL, REGIONAL, AND INTERNATIONAL POLICY MAKERS IN A MANNER THAT IS TRANSPARENT AND CONSISTENT WITH THE GOALS OF THE PARIS AGREEMENT.

### AIRLINE EXAMPLE: AIR FRANCE KLM GROUP'S PUBLIC REPORTING OF EFFORTS TO PROMOTE A POLICY ENVIRONMENT FOR SUSTAINABLE AVIATION FUELS

Air France KLM Group have made public their work to promote a regulatory environment for sustainable aviation fuels<sup>22</sup> and to stimulate the industry.

Air France is partnering with ATAG and the French Civil Aviation Research Council to “raise public authority awareness of the need to support a French biofuels industry. Air France is also actively participating in the establishment of the French national road map on aviation biofuels managed by the National Alliance for Coordination of Research on Energy (ANCRE).”

Additionally, Air France has signed an Engagement for Green Growth with multiple French Ministries that aims “to promote the emergence of sustainable aviation biofuel industries, in economically viable conditions.”

KLM is co-chairing the European Advanced Biofuels Flightpath Initiative, and is “actively involved in the BioPort Holland, a collaboration between the Dutch Government and several private parties with a collective ambition of launching sustainable aviation fuel production in the Netherlands.” The European Advanced Biofuels Flightpath Initiative<sup>23</sup> sees the European Commission in partnership with airlines and biofuel producers promote the production, storage and distribution of sustainably produced biofuels by tackling current barriers identified for the deployment of SAF.

**Figure 18:** Excerpt from Air France KLM Group’s 2019 Sustainability Report describing its activities to promote and develop the Sustainable Aviation Fuel industry.

#### STIMULATING THE INDUSTRY

Air France and KLM are members of working groups and support research projects aimed at the creation of a Sustainable Aviation Fuel market. For example:

- Air France has joined forces with the ATAG (Air Transport Aviation Group) to promote, with the French Civil Aviation Research Council, greater knowledge of biofuels for aviation and thus raise public authority awareness of the need to support a French biofuels industry. Air France is also actively participating in the establishment of the French national road map on aviation biofuels managed by the National Alliance for Coordination of Research on Energy (ANCRE).
- KLM continued to purchase an annual 120,000 liters of SAF for its Växjö (Sweden) flights, equaling 5% of the total fuel use on all flights to/from that destination. Together with Södra and the City of Växjö, KLM and SkyNRG are investigating the feasibility of producing SAF locally.
- In 2017, Air France signed an Engagement for Green Growth (Engagement pour la Croissance Verte – ECV) with the French Ministry for the Ecological and Inclusive Transition, the French Ministry of Transport and the French Ministry of the Economy and Finance, along with four other major French industrial companies (Airbus, Safran, Suez and Total). This Engagement for Green Growth aims to promote the emergence of sustainable aviation biofuel industries, in economically viable conditions that fully integrate circular economy principles. Its conclusions were published in January 2020, together with a French governmental roadmap to set, on the basis of the ECV recommendations, the principles and ambition for Sustainable Aviation Fuel incorporation and the launch of a call for expressions of interest to build production facilities in France.

#### SUPPORTING REGULATORY INCENTIVES IN FRANCE AND THE NETHERLANDS, AND AT INTERNATIONAL LEVEL

Air France and KLM are actively involved (KLM co-chairing) in the European Advanced Biofuels Flightpath initiative. They are also members of the ART Fuels Forum.

Furthermore, Air France has participated in the Ini-FCA French Future Alternative Fuels initiative, spearheaded by the French Civil Aviation Authority (DGAC). Within the CORAC (Council for Civil Aeronautical Research), the company actively participates in formulating a sustainable biofuels strategy involving coordinated actions to further technological research and innovation towards the attainment of ecological transition objectives within a global context.

KLM is actively involved in the BioPort Holland, a collaboration between the Dutch Government and several private parties with a collective ambition of launching sustainable aviation fuel production in the Netherlands.



## SECTION 4: DISCLOSURE CASE STUDIES

# 8

## PROVIDE STRONG CORPORATE DISCLOSURE IN LINE WITH THE FINAL RECOMMENDATIONS OF THE TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES (TCFD).

### AIRLINE EXAMPLE: IAG'S TCFD REPORTING

IAG, in its 2019 annual report,<sup>24</sup> provides corporate disclosure in line with the final recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). IAG reports that it conducted a scenario analysis for “a two-degree temperature rise scenario, consistent with the goals of the Paris Agreement; and a four-degree temperature rise scenario, as an alternative high-emission scenario.” It then presents the risks and opportunities of a number of factors related to low-carbon transition, physical climate change impacts, and other sustainability challenges. It also provides a description of how each risk is managed.

**Figure 19:** Excerpt of IAG's TCFD reporting from its 2019 annual report.

Climate transition risks and opportunities	
Description and potential impact	How we manage it
<p><b>Higher carbon price and strong policy incentives</b></p> <p>Risk: higher cost of carbon adds to our operating cost.</p> <p>Opportunity: support stronger business case for investment in low-carbon technologies which would accelerate decarbonisation progress.</p>	<ul style="list-style-type: none"> <li>• IAG supports ambitious climate targets and effective global regulation and strong policies to meet global climate goals.</li> <li>• Continued investment in modern fleet and innovations to ensure continual improvement in operational fuel efficiency.</li> <li>• Effective procurement strategy for carbon credits to protect against price volatility.</li> <li>• Innovating and collaborating on future fuels and carbon technologies through our Hangar 51 accelerator programme.</li> </ul>

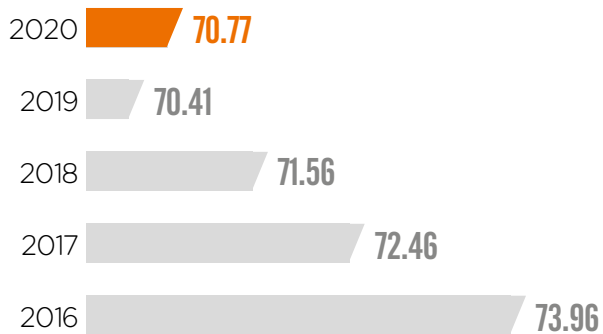


## AIRLINE EXAMPLE #1: EASYJET'S CLIMATE CHANGE REPORTING METRIC

EasyJet's Annual Report 2020<sup>25</sup> presents a clear intensity metric of CO<sub>2</sub> emissions per passenger kilometre. EasyJet explains that the metric shows the amount of CO<sub>2</sub> in grams produced from jet fuel combustion for each passenger per kilometre they fly. EasyJet also presents the year-on-year data allowing for easy comparison.

**Figure 20:** Table from EasyJet's 2020 annual report illustrating its emissions intensity metric year-on-year performance.

### EMISSIONS PER PASSENGER KILOMETRE SINCE 2016



## AIRLINE EXAMPLE #2: DELTA AIR LINES' EMISSIONS REPORTING

In its 2019 Corporate Responsibility Report<sup>26</sup> (pages 37-41) Delta Air Lines presents several clear climate change metrics and data in its emissions inventory, breaking emissions down by source and scope and detailing trends. Delta also shows the effect of purchased carbon offsets on its net emissions totals. The report provides further information on one of the carbon offset schemes it uses, TIST East Africa, which is a Verified Carbon Standard (VCS) certified project (page 34).

**Figure 21:** Excerpt from Delta Air Lines' 2019 CSR Report presenting its emissions reporting.

### EMISSIONS INVENTORY

#### SUMMARY—in metric tons CO<sub>2</sub>e

	2005	2017	2018	2019
Total Jet Fuel Emissions	45,550,256	39,720,583	40,498,906	41,506,746
Scope 1 TOTALS	41,945,222	35,781,844	36,994,401	38,161,781
Scope 2 TOTALS	420,418	296,274	306,727	290,839
Scope 3 TOTALS	3,808,637	4,129,530	3,677,438	3,516,714
Total Verified Gross Emissions	46,174,277	40,207,647	40,978,566	41,969,334
Carbon Offsets Purchased	--	2,524,277	3,293,160	1,706,500
Total Verified Net Emissions	46,174,277	37,683,370	37,685,405	40,060,531*

\*2019 emissions are still undergoing third-party verification. We will retire some offsets toward our 2019 flights, but we expect the cumulative emissions from FY19/20 to be lower than our internal emissions cap level (at 2012 levels) because of what was nearly a global freeze on airline travel. Verification of 2019 emissions data is still underway.

In 2019, Delta's total emissions were 41.9 million metric tons of CO<sub>2</sub>e, a 2.4% increase from 2018. Despite our reductions since 2005, Delta's absolute emissions have trended upward since 2012 due to a 19% increase in revenue ton miles flown. Due to COVID-19's impact, carbon-neutral in growth 2019 was not achieved. However we expect the cumulative emissions from FY19/20 to be lower than our internal emissions cap level of 2012 levels because of what was nearly a global freeze on airline travel.

We remain committed to meeting the industry's 2050 target: a 50% reduction in emissions relative to a 2005 baseline. We will continue to move forward on our path toward carbon neutrality through our \$1 billion commitment.



## ENDNOTES

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2. <https://www.rolls-royce.com/media/press-releases/2020/05-06-2020-rr-puts-net-zero-carbon-by-2050-at-the-heart-of-future-innovation-and-growth.aspx>
3. <https://www.oneworld.com/news/2020-09-11-oneworld-member-airlines-commit-to-net-zero-carbon-emissions-by-2050>
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16. See, further, the discussion in the Climate Action 100+ Sector Strategy: Aviation – Landscape Analysis report.
17. <https://lufthansa.compensaid.com/#belief>
18. <https://www.finnair.com/fi/gb/pushforchange>
19. <https://www.sasgroup.net/newsroom/press-releases/2019/sas-travelers-can-now-buy-biofuel/>
20. For example, contrail formation at high altitudes, which are thought to have a warming effect on the climate.
21. <https://www.singaporeair.com/saar5/pdf/Investor-Relations/Annual-Report/sustainabilityreport1920.pdf>
22. <https://sustainabilityreport2019.airfranceklm.com/sustainable-aviation-fuel/>
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24. <https://www.iairgroup.com/-/media/Files/I/IAG/documents/IAG%20Annual%20report%20and%20accounts%202019.pdf>
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### The Principles for Responsible Investment (PRI)

Although this document forms part of the Climate Action 100+ sector strategy for aviation, the report and its contents were produced by the PRI.

The PRI is an investor initiative in partnership with the UN Finance Initiative and UN Global Compact. The PRI works with its international network of signatories to put the six Principles for Responsible Investment into practice. Its goals are to understand the investment implications of environmental, social and governance (ESG) issues and to support signatories in integrating these issues into investment and ownership decisions. The PRI acts in the long-term interests of its signatories, of the financial markets and economies in which they operate and ultimately of the environment and society as a whole.

The six Principles for Responsible Investment are a voluntary and aspirational set of investment principles that offer a menu of possible actions for incorporating ESG issues into investment practice. The Principles were developed by investors, for investors. In implementing them, signatories contribute to developing a more sustainable global financial system.

More information: [www.unpri.org](http://www.unpri.org)



### Chronos Sustainability

The PRI commissioned Chronos Sustainability to develop this document.

Chronos Sustainability was established in 2017 with the objective of delivering transformative, systemic change in the social and environmental performance of key industry sectors through expert analysis of complex systems and effective multi-stakeholder partnerships. Chronos works extensively with global investors and global investor networks to build their understanding of the investment implications of sustainability-related issues, developing tools and strategies to enable them to build sustainability into their investment research and engagement.

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