



CLIMATE ACTION 100+ SECTOR STRATEGY: AVIATION – RECOMMENDED INVESTOR EXPECTATIONS

JANUARY 2021

Produced by



INTRODUCTION

Climate Action 100+ — in consultation with signatory investors, aviation companies, and aviation sector technical experts — has developed these recommended investor expectations. They are meant as guiding standards to support aviation companies in managing climate-related risks and opportunities, and in proactively positioning themselves for the transition to a net zero emissions economy. These recommended expectations will also inform and guide investor engagement with aviation companies.

They build upon the [PRI's Investor Expectations Statement on Climate Change for Airlines and Aerospace Companies](#) published in February 2020, and are also aligned with the [Climate Action 100+ Net Zero Company Benchmark](#). They are intended to complement these and other frameworks so as to better reflect the specific circumstances in the aviation sector, rather than duplicate or replace them.



AVIATION SECTOR OVERVIEW

Climate change is a systemic risk to the global economy. All sectors must be part of the low-carbon transition and aviation is no exception.

Aviation is a carbon-intensive mode of transportation and, notwithstanding the challenges presented by COVID-19, is projected to continue growing rapidly in the 21st century. While this growth presents opportunities for companies and their investors, the accompanying increase in greenhouse emissions also heightens climate change-related risks. The aviation sector currently accounts for around 2.5% of global carbon dioxide (CO₂) emissions from fossil fuel and 12% of emissions from transport. This proportion is set to rise significantly in the future.

It is also important to recognise that flying at altitude results in additional climate impacts, such as those caused by contrail and cloud formation. While there is considerable uncertainty about these additional ‘non-CO₂ impacts’, they are thought to be significant, and the overall climate impact of aviation is now believed to be three times the impact of its CO₂ emissions alone.

Airlines and aerospace companies are likely to find themselves subject to increasing regulation as the gap between the current policy framework and the policy actions needed to achieve net zero greenhouse gas emissions by 2050 becomes more apparent to global governments. In addition, the recent growth of no-fly movements—particularly in Europe—demonstrates how these companies could see their cash flows, balance sheets and reputations damaged if they are perceived to be making insufficient efforts to cut emissions.

Furthermore, airlines and aerospace companies that are unprepared for the projected physical impacts of climate change—including, for example airport flooding and increases in clear-air turbulence—could face severe disruptions to their operations and damage to the value of their assets.

The industry has taken several important and welcome measures to address aviation emissions. These include efficiency and CO₂ targets set by the International Air Transport Association (IATA), the Air Transport Action Group (ATAG), and the International Civil Aviation Organisation (ICAO), which also includes the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA).

However, as currently designed they fall far short of the emissions reductions necessary for the sector to align with the long-term goals of the Paris Agreement.

While there is some debate about the specific decarbonisation pathway that the aviation sector will need to follow, our analysis points to three main conclusions:

1. Supply-side solutions, such as new fuels and technologies, are the key to decarbonisation but these are costly and will take time to develop. Many are still at the very early stages of development and need strong policy intervention.
2. Demand-side measures, such as actions to slow air transport demand, improve operational efficiencies and improve air traffic management have less overall mitigation potential. However, if combined with supply-side measures, they will reduce the overall cost of decarbonisation. Nevertheless, limiting growth in air transport demand becomes more important in a 1.5°C global warming scenario.
3. Investment in SAFs, including advanced biofuels and synthetic fuels, is the most pressing priority for action. However, there are currently limits to the availability of sustainable biofuels and high demand from other sectors. The development of synthetic jet fuels, derived from low carbon hydrogen combined with CO₂, will therefore be essential.

For our more in-depth analysis of the aviation sector, please see the [Climate Action 100+ Sector Strategy: Aviation – Landscape Report](#). The recommended investor expectations in this document were informed by this report.

For case studies providing real-world examples of how aviation companies are aligning with the recommended investor expectations, please see the [Climate Action 100+ Sector Strategy: Aviation – Case Studies](#).

RECOMMENDED INVESTOR EXPECTATIONS ON CLIMATE CHANGE FOR AIRLINES AND AEROSPACE COMPANIES

ACTION

Investors expect airlines and aerospace companies to:

1. Make an explicit commitment to achieving net zero greenhouse gas emissions by 2050. This commitment should encompass all segments of the business, including subsidiaries and joint ventures.
2. Establish and disclose robust transition plans consistent with the goals of the Paris Agreement. These should:
 - Contain targets for the short term (to 2025), medium term (to 2036) and long term (to 2050) for achieving their commitment to net zero emissions by 2050
 - Specify the actions the company will take and the quantified contribution each will make to its short-, medium- and long-term targets¹
 - Cover all material emissions throughout the value chain (Scopes 1, 2, and 3) and, to the extent feasible, non-CO₂ impacts associated with aviation (see expectation 5 below)
 - Commit the company to aligning its future capital expenditure with its long-term net zero greenhouse gas reduction target and
 - Disclose the methodology used to align capital expenditure with the company's decarbonisation goals, including underlying assumptions and key performance indicators (KPIs).
3. Support the research, development and scaling of key decarbonisation technologies. These may include:
 - Sustainable aviation fuels (SAF)
 - New aircraft technologies that can improve efficiency as well as reduce emissions and fuel use² and
 - Alternative propulsion technologies.³
4. Accelerate the adoption of SAF, including advanced biofuels and synthetic fuels. This may include:
 - Actively supporting investment in SAF⁴
 - Developing pricing and ticketing options for consumers that cover the cost of using SAF on flights
 - Forming coalitions – with airlines and other stakeholders – that support interventions to promote SAF uptake⁵
 - Supporting the development and adoption of global standards and credible third-party certification processes to ensure that the lifecycle-emissions and overall sustainability of SAF fuels are adequately addressed and managed⁶ and
 - Supporting the development and adoption of metrics for measuring, reporting and verifying the life-cycle greenhouse emissions and other environmental impacts⁷ of SAF.
5. Support research into the impacts of non-CO₂ effects from aviation⁸ and how these can be mitigated.

GOVERNANCE

6. Implement a strong governance framework which clearly articulates board accountability and oversight of climate change risks and opportunities. This should include:
 - Nominating a board member or board committee with explicit responsibility for oversight of climate change
 - Incorporating climate change risks and opportunities into company strategy
 - Incorporating climate change performance elements – specifically the delivery of the company’s net zero commitments and short-, medium- and long-term climate change targets – into the company’s executive remuneration scheme and
 - Ensuring the board has sufficient capabilities/competencies to assess and manage climate related risks and opportunities.

7. Lobby national, regional, and international policy makers in a manner that is transparent and consistent with the goals of the Paris Agreement. This means:
 - Making a formal commitment to conducting all of the company’s lobbying in line with the goals of the Paris Agreement. This commitment should extend to the company’s trade associations and industry bodies.
 - Lobbying – whether directly or through trade associations and other organisations – consistently towards the goals of the Paris Agreement and supporting ambitious national and regional climate change policy⁹
 - Not lobbying – whether directly or through trade associations and other organisations – in a way that undermines the goals of the Paris Agreement or that undermines ambitious national or regional climate change policy
 - Establishing robust governance procedures on climate lobbying, including conducting regular reviews of whether the lobbying activities of the company’s trade associations and industry bodies align with the goals of the Paris Agreement

- Acting to correct misalignments whenever the lobbying activities of either the company or one of its trade associations or industry bodies are determined to not be aligned with ambitious climate policies
- Being transparent about the company’s lobbying activities via appropriate disclosures. This should include:
 - A comprehensive description of the position the company has taken on all relevant climate-related policies, the activities undertaken during policy engagement, such as details of meetings and policy submissions, and a detailed explanation of how the process is governed
 - A list of the company’s trade association and industry group memberships, including the payments made to each of these organisations and
 - The results of regular reviews of whether the company’s trade associations and industry groups are lobbying in line with the goals of the Paris Agreement, and details of any actions taken as a result of these reviews.¹⁰
- In the specific context of international aviation policy, lobbying the International Air Transport Association (IATA) and the Air Transport Action Group (ATAG) to support a Paris Agreement-aligned decarbonisation pathway for the industry. This may involve:
 - Setting a net zero emissions target by 2050 – along with appropriate short- and medium-term targets – for the airline industry as a whole, that is, including both international and domestic aviation
 - Developing a net zero emissions industry roadmap
 - Clearly identifying the emissions reductions that will be delivered by action within the sector, and the emissions reductions that will be delivered through offsetting
 - Setting a specific target for the use of SAFs and
 - Considering the full life-cycle fuel emissions and overall sustainability of the mitigation measures identified.¹¹

DISCLOSURE

8. Provide strong corporate disclosures in line with the final recommendations of the Task Force on Climate-related Financial Disclosures (TCFD).

This should entail:

- Committing to align disclosures with the TCFD recommendations
- Publishing a standalone TCFD report or sign-posting TCFD aligned disclosures in the company's annual reporting

- Conducting and disclosing scenario analyses to assess the robustness of company business plans against a range of climate scenarios, including a 1.5°C global warming scenario. This analysis should cover the entire company, disclose key assumptions and variables used, and report on the key risks and opportunities identified and
- Reporting, for the entire business including all subsidiaries and joint ventures, on the specific metrics set out in Box 1 below.

BOX 1: RECOMMENDED STANDARD REPORTING EXPECTATIONS SPECIFIC TO AIRLINES

For their objectives, targets, and annual performance reporting, airlines should provide the following information:

- Greenhouse gas emissions (in CO₂-equivalent terms) per Revenue Passenger Kilometre (RPK);¹²
- Greenhouse gas emissions (in CO₂-equivalent terms) per Revenue Tonne Kilometre (RTK);¹³
- Greenhouse gas emissions (in CO₂-equivalent terms) per Available Seat Kilometre passenger;¹⁴ and
- Total – i.e. Scope 1, 2 and 3 – greenhouse gas emissions in CO₂-equivalent terms;
- The contribution of carbon offsetting to reducing each of the intensity and absolute measures listed above;
 - This should include information on the types of offsets used, the vetting procedures applied in their purchase, the name(s) of the certifying organisation(s) and the average prices for these offsets.
- For SAF, including advanced biofuels, synthetic fuels, and other alternative fuels;¹⁵
 - The quantities used and company commitments to future use;
 - Sustainability certification organisations used if applicable;¹⁶ and
 - Material sustainability considerations for any fuels used, including feedstocks, lifecycle emissions, land-use changes, biodiversity, human rights and other relevant environmental or social impacts associated with their production.
- Where relevant, considerations of the impacts from transitioning to a lower-carbon business model on company workers and communities that is, in accordance with a 'just transition'.

ENDNOTES

1. For example, a company could say that changing technologies or using offsets would reduce emissions by X%.
2. For example, engine fuel efficiency, use of composite materials, and/or blended wing design.
3. For example, hydrogen flight technologies, electric and/or hybrid aircraft.
4. For example, through procurement commitments, off-take agreements, and/or buyer alliances for joint purchasing agreements.
5. For example, partnering with investors to provide funding for the construction of new SAF plants and/or encouraging policymakers to make SAF use mandatory.
6. For example, the [Roundtable on Sustainable Biomaterials](#).
7. For example, land use changes and biodiversity loss.
8. For example, contrail formation at high altitudes, which are thought to have a warming effect on the climate.
9. Depending on the jurisdiction, this may include lobbying for government funding to stimulate innovation, blending mandates for SAF, or carbon pricing.
10. In particular if any trade associations or industry groups is acting in ways that are not aligned with the goals of the Paris Agreement.
11. For example, where biofuels or synthetic fuels are used, requiring certification from credible third-party sustainability certification schemes (such as the [Roundtable on Sustainable Biomaterials](#)) or otherwise taking into account the emissions and other associated social and environmental impacts from the production of these fuels e.g. on biodiversity, human rights, and/or local communities.
12. That is, the number of revenue-earning passengers multiplied by the distance carried.
13. This metric takes into account both passengers and freight transported.
14. This metric accounts for the percentage of the available seating capacity that is actually used.
15. For example, hydrogen-powered aircraft.
16. For example, the [Roundtable on Sustainable Biomaterials](#).

ACKNOWLEDGMENTS

Editor and lead authors:

- Dr. Rory Sullivan, Chronos Sustainability
- Rhoda Byrne, Chronos Sustainability
- Robert Black, Chronos Sustainability
- Marshall Geck, PRI
- Ben Pincombe, PRI

Contributors:

- Nicky Amos, Chronos Sustainability
- Amanda Williams, Chronos Sustainability
- Elisabeth O’Leary, copy editor
- Perivan, report designer

With feedback and input from:

- Kelly Christodoulou, AustralianSuper
- Jake Barnett, Wespath Benefits and Investments
- Patrick Peura, Allianz SE
- Adam Kanzer, BNP Paribas Asset Management
- Lise Moret, AXA Investment Managers
- Elke Pfeiffer, PRI
- Paul Chandler, PRI
- Jesica Andrews, UN Environment Program
- Florent Rebatel, Caisse des Dépôts
- John Scott, Zurich Insurance Group
- Andrew Murphy, Transport & Environment
- Ned Molloy, GSCC Network



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



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.

For more information visit www.chronossustainability.com and @ChronosSustain.

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

Disclaimer: The information contained in this report is meant for the purposes of information only and is not intended to be investment, legal, tax or other advice, nor is it intended to be relied upon in making an investment or other decision. Without limiting the foregoing, this report is not intended as a voting recommendation on any shareholder proposal. This report is provided with the understanding that the authors and publishers are not providing advice on legal, economic, investment or other professional issues and services. PRI Association and Climate Action 100+ are not responsible for the content of websites and information resources that may be referenced in the report. The access provided to these sites or the provision of such information resources does not constitute an endorsement by PRI Association or Climate Action 100+ of the information contained therein. Except where expressly stated otherwise, the opinions, recommendations, findings, interpretations and conclusions expressed in this report are those of PRI Association, and do not necessarily represent the views of the contributors to the report, any signatories to the Principles for Responsible Investment or Climate Action 100+ (individually or as a whole), or the other four Climate Action 100+ investor networks (i.e., Ceres, IIGCC, IGCC, and AIGCC). It should not be inferred that any other organisation referenced on the front cover of, or within, the report, endorses or agrees with the conclusions set out in the report. The inclusion of company examples or case studies does not in any way constitute an endorsement of these organisations by PRI Association, the signatories to the Principles for Responsible Investment or the other four Climate Action 100+ investor networks (i.e., Ceres, IIGCC, IGCC, and AIGCC). While we have endeavoured to ensure that the information contained in this report has been obtained from reliable and up-to-date sources, the changing nature of statistics, laws, rules and regulations may result in delays, omissions or inaccuracies in information contained in this report. PRI Association and Climate Action 100+ are not responsible for any errors or omissions, for any decision made or action taken based on information contained in this report or for any loss or damage arising from or caused by such decision or action. All information in this report is provided “as-is” with no guarantee of completeness, accuracy or timeliness, or of the results obtained from the use of this information, and without warranty of any kind, expressed or implied.

Climate Action 100+

Global Investors Driving Business Transition



Produced by

