



TCFD-aligned report

Red Wing Aviation



Details

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Acronyms and abbreviations

CO ₂	carbon dioxide
CO ₂ e	carbon dioxide equivalent
GHG	greenhouse gas
RCP	Representative Concentration Pathway
SAF	Sustainable Aviation Fuels
TCFD	Task Force on Climate-Related Financial Disclosures
US	United States





Introduction

As one of the fastest growing private aviation jet operators in North America, Red Wing Aviation aims to develop a growth strategy that takes into account the different ways that climate change could influence the company and its operating environment. To this end, Red Wing Aviation undertook a climate scenario analysis following the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD), for the first time in 2022.

Created in 2017 and spearheaded by Mark Carney and Michael Bloomberg with the endorsement of more than 1000 stakeholders, the TCFD framework seeks to guide organisations in disclosing relevant information about how climate change might impact their business strategies, particularly in the areas of governance, strategy, risk management, and targets and metrics.

The purpose of the climate scenario analysis – carried out with support from an external consultant – was to identify and analyse the impact of relevant climate-related risks and opportunities, but also to review the existing governance structures and processes the company already has in place to manage the respective issues.

The outcomes of the climate risk scenario analysis, as well as a short description of the methodology and key assumptions underpinning the analysis, are disclosed in the first section of the report.

The second section of this summary report provides an overview of the governance and risk management processes followed by Red Wing Aviation to identify, assess, and manage all relevant risks, including, to some extent, climate change-related risks.

The final section of the summary report provides an overview of the metrics and targets adopted by the company, including a summary of the greenhouse gas (GHG) emissions by scope, and the initiatives Red Wing Aviation has in place to reduce emissions and implicitly the exposure to climate risks





Strategy

The possible impacts of climate change-related risks on Red Wing Aviation were assessed by exploring various climate scenarios.

Red Wing Aviation operates private flights in North America, mostly concentrated on the east coast of the United States (US).

The analysis evaluated the impacts that both physical and transition risks might have on Red Wing Aviation, particularly in the medium (2030) and long term (2050).

A climate scenario analysis was carried out to understand how climate change might impact Red Wing Aviation, with a focus on its operations in the US.

The following scenarios were considered for the analysis:

Table 1: Scenarios considered for the climate risk assessment

Risk type	Scenario
Physical risks	RCP 8.5, a high-impact scenario The Representative Concentration Pathway (RCP) 8.5 assumes that the GHG emissions will continue rising at today's rate until the end of the century, with little mitigation efforts. Under this scenario, significant increases in the frequency and intensity of extreme weather events are projected to occur already by the middle of the century.
	A business-as-usual scenario This scenario models the implications that the current and announced policies would have on the energy sector in the next decades.
Transition risks	A below 2°C scenario In line with the Paris Agreement, this scenario explores what policies, technologies, and market changes would need to be put in place to reach the goal of limiting the global temperature rise to well below 2°C by the end of the century compared to pre-industrial levels.

There are several ways in which Red Wing Aviation, a private aviation operator, might be impacted by risks related to climate change. Physical risks resulting from weather hazards such as flooding and tropical cyclones might disrupt the flight operations and affect the infrastructure of key airports. Policy and market developments, for example concerning the introduction of carbon pricing schemes targeting

the aviation sector or the introduction of Sustainable Aviation Fuels (SAFs) mandates, might increase the operating costs for Red Wing Aviation. A climate risk scenario analysis was carried out to understand how these risks might change in two scenarios with varying level of climate ambition; an overview of the results is provided below.

2.1 Key findings: physical risks

The physical risks selected for the scenario analysis were extreme temperatures, flooding, tropical cyclones / windstorms, convective weather, and clear air turbulence / wind shear.

It was found that heat waves are projected to become more frequent and severe, particularly in urban areas such as New York. At the same time, more frequent extreme precipitation events, along with storms and sea level rise, might in turn increase the intensity and frequency of riverine and coastal flooding. Considerable damage to the airport infrastructure and disruptions in flight operations might occur as a result of these events.

More intense tropical cyclones and convective weather might also cause delays and interruptions in flight

operations. In the US, an increase in thunderstorms is projected in the central and south-eastern half of the country, which might increase the costs associated with aircraft maintenance. Under the RCP 8.5 scenario, these types of weather hazards are expected to become more severe and more frequent, especially in the long term.

A qualitative rating was assigned, ranging from low to high, which reflects the future changes in the frequency and / or severity of the hazard from current conditions. The figure summarises the climate risk ratings for each risk under a RCP8.5 scenario for a long-term horizon.

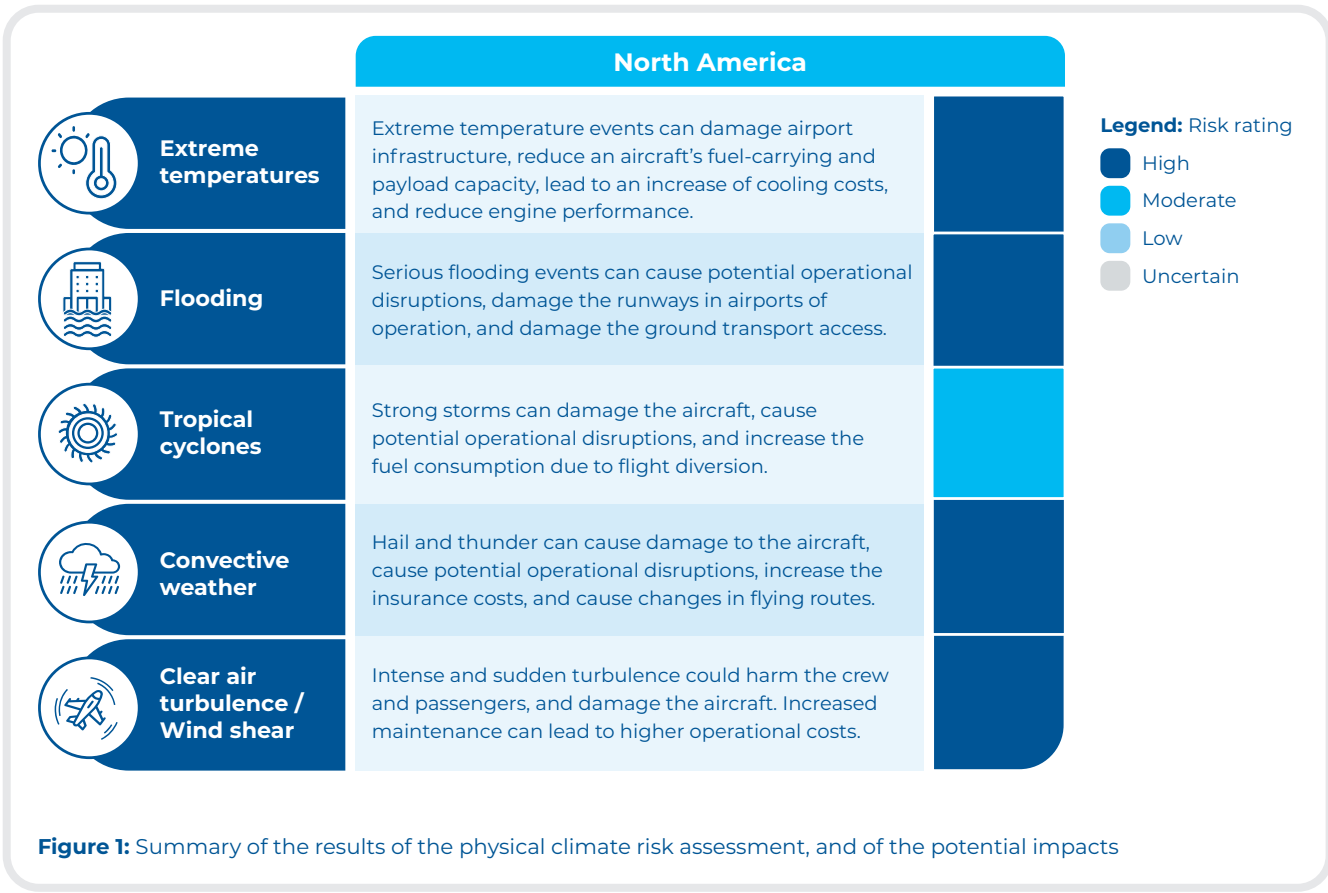


Figure 1: Summary of the results of the physical climate risk assessment, and of the potential impacts

2.2 Key findings: transition risks

The transition risks evaluated were changes in customer preferences and behaviour, reduced demand for air travel due to rising flight costs, the carbon pricing policy risk, and changes in the market of biofuels.

Customer preference for flying is expected to shift to alternative, low-carbon modes of transportation, particularly in advanced economies such as the US. This trend is projected to become more pronounced in a below 2°C scenario, although certain technological developments, if adopted on a commercial scale, might reduce the emission intensity of flights and reverse this trend.

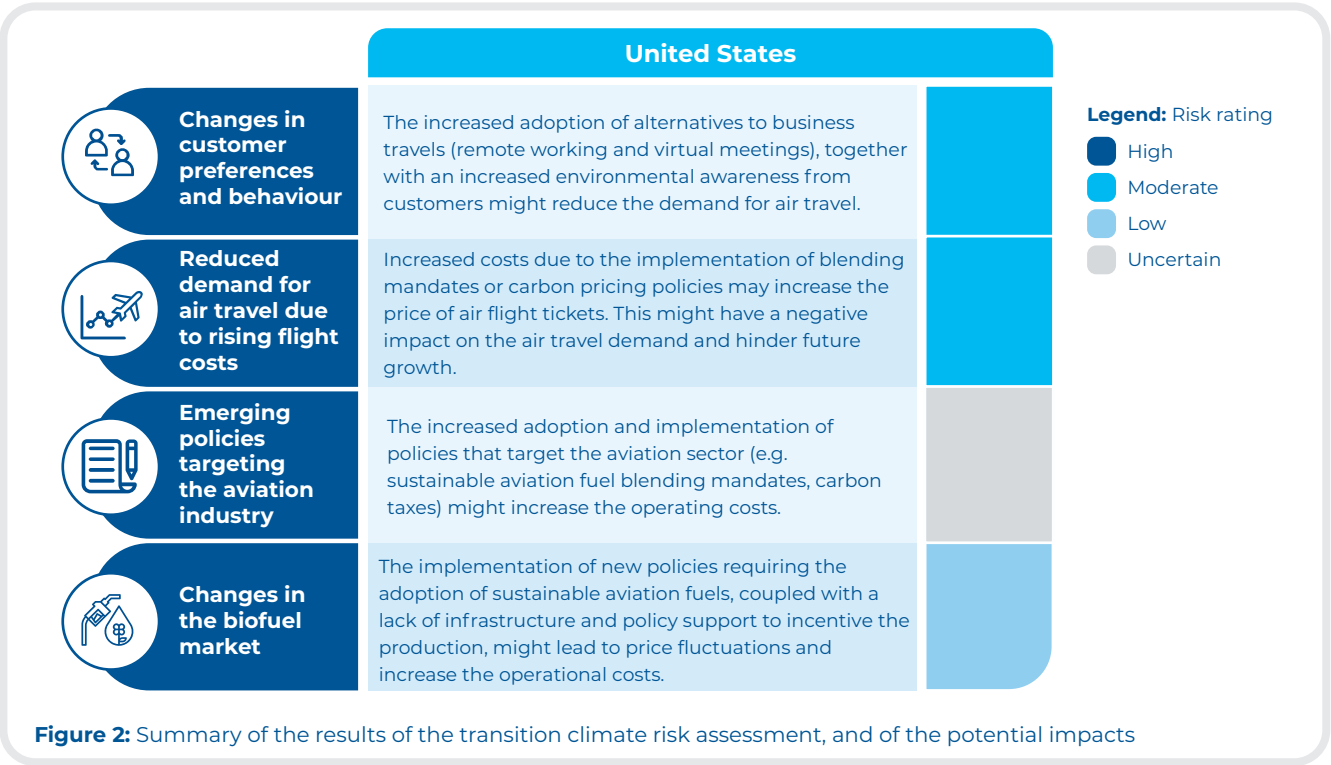
Another factor that could reduce the demand for air travel might be higher ticket costs. Some of the sources reviewed project an increase of up to 10% in the price of air tickets due to carbon taxes or policies that require the adoption of SAFs. The changes are more significant in a below 2°C scenario, as stronger support for alternative means of transport, such as high-speed rail systems, is expected in a scenario with a higher level of climate ambition. However, in the US specifically, the adoption of high-speed rail systems is expected to take place at a slower pace than in other advanced economies that already have adequate infrastructure and policy support.

In regard to risks deriving from emerging policies targeting the aviation industry, currently in the US the existing carbon pricing schemes are implemented at a state level, and do not include the aviation industry. This is not expected to change significantly in the short term, and the evolution in the medium term is uncertain.

Concerning the risk related to changes in the market of biofuels, strong policy support to incentivise the adoption of SAFs has been announced by the US government. This might reduce the price volatility of biofuels as well as the production costs, facilitating the adoption of SAFs by the aviation industry in the medium term. For example, the Sustainable Aviation Fuel Grand Challenge initiative launched in 2021 in the US set as a goal the production of three billion gallons of sustainable fuel by 2030, with the aim of further driving emission reductions in the aviation industry.

The figure below reflects how the transition risks are expected to change in a below 2°C scenario, and their potential impacts on Red Wing Aviation.

The risk rating took into account the strength and direction of the change relative to current conditions. The figure summarises the climate risk ratings for each risk in a below 2°C scenario for a medium-term horizon.



Governance and Risk Management

Existing governance structures and risk management processes to support the further integration of climate-related risks.

Vista governance structures and risk management processes, including in relation to sustainability and climate issues, are applicable to Red Wing Aviation and to all entities in which Vista has a significant investment.

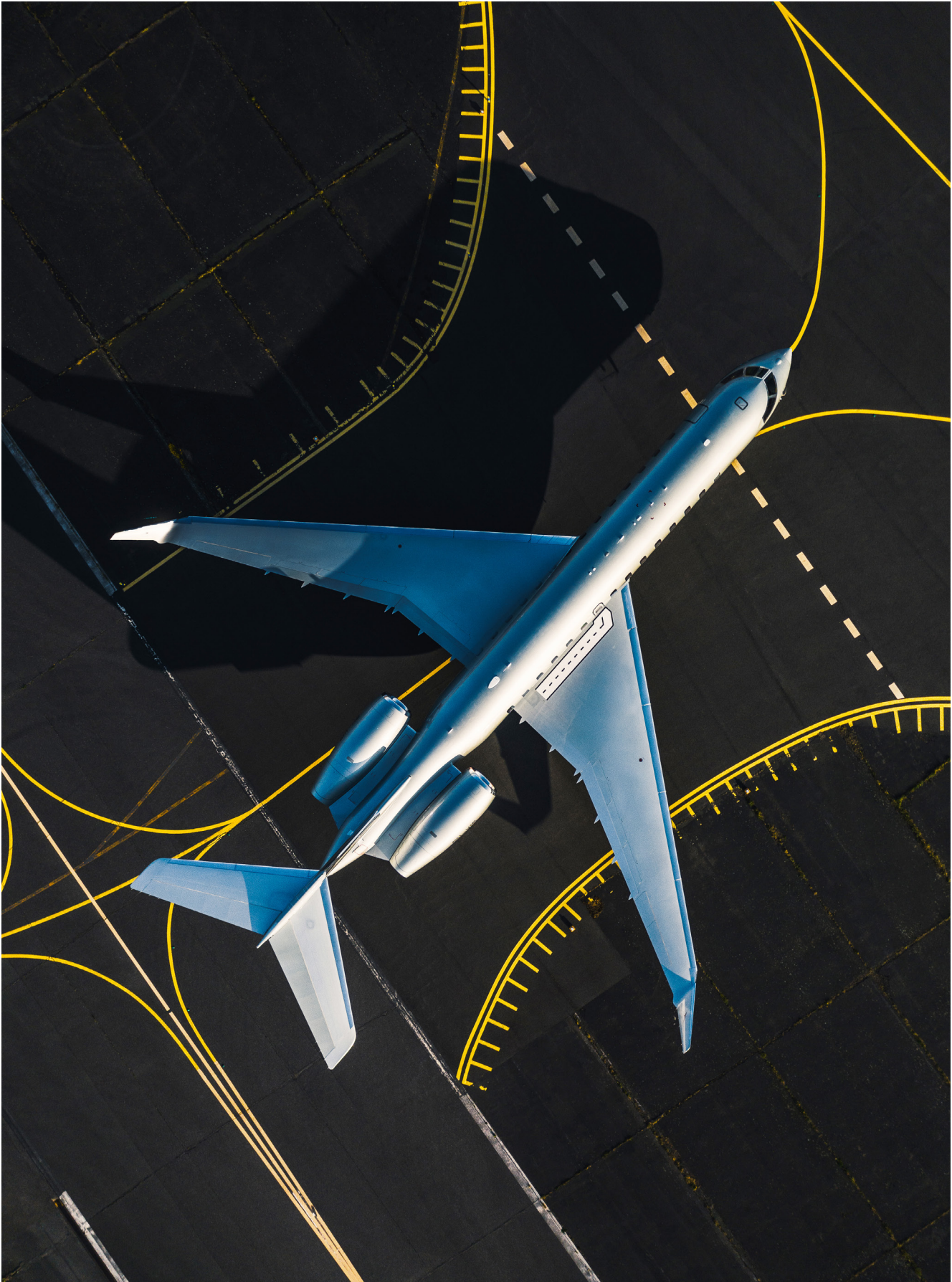
A summary of the responsibilities and roles within Vista that relate to safety, risk management, and sustainability is provided below.

Table 2: Responsibilities and roles relating to safety, risk management, and sustainability

Department	Responsibilities and roles
Executive Committee	<ul style="list-style-type: none">• Oversees climate-related issues• Monitors responsibilities linked to risks and opportunities• Approves the company’s climate strategy and targets
Sustainability Department	<ul style="list-style-type: none">• Monitors the climate strategy and targets• Supports the development of the GHG inventory• Coordinates the reporting activities regarding sustainability and climate change issues
Safety Review Board	<ul style="list-style-type: none">• Evaluates the status of the implementation of safety policies, including policies relating to weather hazards• Defines safety performance indicators• Reviews the hazard identification and mitigation processes
Safety Action Group	<ul style="list-style-type: none">• Provides updates on the risk assessments performed• Coordinates the implementation of actions related to safety risk controls• Assesses the safety impact of operational changes or new technologies

The risks relating to market and compliance requirements as well as risks that concern weather hazards are closely monitored to ensure that there are

strategies in place to respond to such issues. For more information about Vista risk management process, please refer to the [VistaJet 2021 TCFD-aligned Report](#).



Metrics and Targets

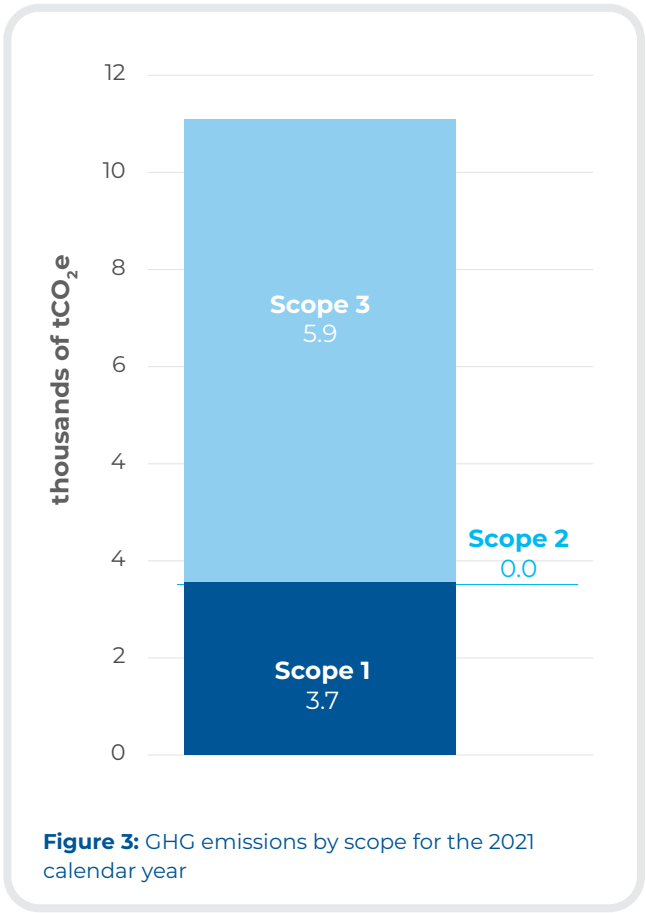
Measuring emissions and establishing initiatives to reduce them is key to addressing the risks related to climate change.

Starting from 2022, Red Wing Aviation is set to conduct annual greenhouse gas (GHG) inventories following the guidelines of the 'The Greenhouse Gas Protocol: GHG Protocol: A Corporate Accounting and Reporting Standard, Revised Edition' (GHG Protocol) and the complementary 'Corporate Value Chain (Scope 3) Accounting and Reporting Standard'.

In line with best practices, Red Wing Aviation has started to report its Scope 1, Scope 2 and Scope 3 emissions from the 2021 calendar year.

Table 3: Scope 1, Scope 2 and Scope 3 definitions based on the GHG Protocol

Scope	Description
Scope 1	Emissions directly generated from sources owned or controlled by the company
Scope 2	Emissions generated by the generation of purchased electricity
Scope 3	Emissions indirectly generated as a result of the activities of the company from sources that the company does not own or control



Red Wing Aviation's total carbon footprint for the year 2021 was estimated at 9,580 tonnes of carbon dioxide equivalent (tCO₂e). Both direct and indirect emissions were measured, and a breakdown by scope (Scope 1, Scope 2 and Scope 3) can be seen in Figure 3. Scope 3 has the highest contribution to the overall GHG emissions, accounting for 61.09% of the total footprint, followed by Scope 1 with 38.46% and Scope 2 with 0.45%.

In addition to being a private flight operator, Red Wing Aviation offers an aircraft repair and maintenance service which extends the lifetime of an aircraft while ensuring its optimal performance. This has a positive impact as it enables a lower use of resources than would be needed to produce a new aircraft.





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