Welcome to your CDP Climate Change Questionnaire 2023

C0. Introduction

C0.1

(C0.1) Give a general description and introduction to your organization.

Every day, more than half a million people depend on American Airlines to take them to the moments that matter most in their lives. We fly over borders, walls and stereotypes to connect people from different races, religions, nationalities, economic backgrounds and sexual orientations. We make the world a more connected and inclusive place. And we do it professionally and safely for more than 500,000 customers per day across five continents.

American Airlines Group Inc. is a holding company whose primary business activity is the operation of a major network carrier headquartered in Fort Worth, Texas, providing scheduled air transportation for passengers and cargo through our mainline operating subsidiary, American Airlines, Inc. and our wholly-owned regional airline subsidiaries, Envoy Aviation Group Inc., PSA Airlines, Inc. and Piedmont Airlines, Inc., as well as contracted third-party regional carriers. American is also a founding member of the **one**world alliance, whose members in 2020 set a goal to achieve net zero emissions by 2050, making **one**world the first global airline alliance to set that goal. Shares of American Airlines Group Inc. trade on Nasdaq under the ticker symbol AAL and the company's stock is included in the Fortune 500.

C0.2

(C0.2) State the start and end date of the year for which you are reporting data and indicate whether you will be providing emissions data for past reporting years.

Reporting year

Start date

January 1, 2022

End date

December 31, 2022

Indicate if you are providing emissions data for past reporting years

No

C0.3

(C0.3) Select the countries/areas in which you operate.

Anguilla
Antigua and Barbuda
Argentina
Aruba
Australia
Bahamas
Barbados
Belize
Bermuda
Bolivia (Plurinational State of)
Brazil
British Virgin Islands
Canada
Cayman Islands
Chile
Colombia
Costa Rica
Croatia
Curaçao
Czechia
Democratic People's Republic of Korea
Dominica
Dominican Republic
Germany
Greece
Grenada
Guadeloupe
Guatemala
Guyana
Haiti
Honduras
Hungary
Iceland
India
Ireland
Israel
Jamaica
Japan
Martinique
Mexico
Netherlands
New Zealand
Nicaragua

Panama
Peru
Portugal
Puerto Rico
Qatar
Saint Kitts and Nevis
Saint Lucia
Saint Vincent and the Grenadines
Sint Maarten (Dutch part)
Switzerland
Trinidad and Tobago
Turks and Caicos Islands
United Kingdom of Great Britain and Northern Ireland
United States of America
United States Virgin Islands
Uruguay
Venezuela (Bolivarian Republic of)

C0.4

(C0.4) Select the currency used for all financial information disclosed throughout your response.

USD

C0.5

(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your chosen approach for consolidating your GHG inventory.

Operational control

C-TO0.7/C-TS0.7

(C-TO0.7/C-TS0.7) For which transport modes will you be providing data?

Aviation

C0.8

(C0.8) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?

Indicate whether you are able to provide a unique identifier for your organization	Provide your unique identifier
Yes, a Ticker symbol	AAL

C1. Governance

C1.1

(C1.1) Is there board-level oversight of climate-related issues within your organization?

Yes

C1.1a

(C1.1a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.

Position of individual or committee	Responsibilities for climate-related issues
Board-level committee	Although American's full Board oversees our sustainability efforts, in 2020 we assigned primary responsibility for coordinating oversight of the Company's sustainability strategy to the Corporate Governance and Public Responsibility (CGPR) Committee. Notably, the CGPR Committee has oversight responsibility for the Company's climate change strategy and in 2022 dedicated significant time to review the Company's climate change strategy, risks and opportunities. We review our climate change strategy with our CGPR Committee several times throughout the year.
Chief Executive Officer (CEO)	At the management level, in 2022 we formally assigned responsibility for oversight of our climate change strategy to our Chief Executive Officer.

C1.1b

(C1.1b) Provide further details on the board's oversight of climate-related issues.

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Please explain
Scheduled – all meetings	Reviewing and guiding strategy Monitoring the implementation of a transition plan Monitoring progress towards corporate targets	American takes a coordinated approach to implementing robust governance of climate-related risks and opportunities. It begins with Board-level oversight and accountability and extends to our day-to-day operations. At the Board level, the Corporate Governance and Public Responsibility (CGPR) Committee has primary responsibility for overseeing most of our

	Reviewing and guiding the risk management process	sustainability efforts, including climate change. Our Board received updates on climate change at each quarterly Board meeting in 2022.

C1.1d

(C1.1d) Does your organization have at least one board member with competence on climate-related issues?

	Board member(s) have competence on climate-related issues	Criteria used to assess competence of board member(s) on climate-related issues
Row 1	Yes	Please see pages 7-14 of our 2023 Proxy Statement, filed March 30, 2023.

C1.2

(C1.2) Provide the highest management-level position(s) or committee(s) with responsibility for climate-related issues.

Position or committee

Chief Executive Officer (CEO)

Climate-related responsibilities of this position

Assessing climate-related risks and opportunities
Managing climate-related risks and opportunities

Coverage of responsibilities

Reporting line

Reports to the board directly

Frequency of reporting to the board on climate-related issues via this reporting line

Quarterly

Please explain

Please see page 6 of our 2022 Sustainability Report.

Position or committee

Sustainability committee

Climate-related responsibilities of this position

Assessing climate-related risks and opportunities
Managing climate-related risks and opportunities

Coverage of responsibilities

Reporting line

CEO reporting line

Frequency of reporting to the board on climate-related issues via this reporting line

Quarterly

Please explain

Please see page 6 of our 2022 Sustainability Report.

C1.3

(C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?

	Provide incentives for the management of climate-related issues	Comment
Row 1	Yes	American Airlines provides monetary incentives for the management of climate-related issues.

C1.3a

(C1.3a) Provide further details on the incentives provided for the management of climate-related issues (do not include the names of individuals).

Entitled to incentive

Corporate executive team

Type of incentive

Monetary reward

Incentive(s)

Bonus - % of salary

Performance indicator(s)

Reduction in total energy consumption

Incentive plan(s) this incentive is linked to

Both Short-Term and Long-Term Incentive Plan

Further details of incentive(s)

Short- and long-term incentive pay for the management group is based on company financial performance. Since jet fuel consumption is the leading source of American's GHG emissions and is also one of American's largest categories of expense, the

management group can raise its incentive pay if it is successful in reducing the company's fuel consumption – which in turn increases the company's profitability -- and the associated emissions.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

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Entitled to incentive

Business unit manager

Type of incentive

Monetary reward

Incentive(s)

Bonus - % of salary

Performance indicator(s)

Energy efficiency improvement

Incentive plan(s) this incentive is linked to

Short-Term Incentive Plan

Further details of incentive(s)

Managers and above receive a bonus through the short-term incentive program, which is driven by profitability. Lowering costs of jet fuel -- one of the company's largest categories of expense -- and improving efficiency across the operation drives profitability, thus determining the outcome of the incentive.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

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Entitled to incentive

All employees

Type of incentive

Monetary reward

Incentive(s)

Profit share

Performance indicator(s)

Reduction in total energy consumption

Incentive plan(s) this incentive is linked to

Short-Term Incentive Plan

Further details of incentive(s)

All employees below the management level benefit from American's profit-sharing program. Since jet fuel consumption is the leading source of American's GHG emissions and is also one of American's largest categories of expense, all employees eligible for profit-sharing have the ability to increase their compensation if the company is successful in reducing its fuel consumption and the associated emissions.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan

C2. Risks and opportunities

C2.1

(C2.1) Does your organization have a process for identifying, assessing, and responding to climate-related risks and opportunities?

Yes

C2.1a

(C2.1a) How does your organization define short-, medium- and long-term time horizons?

	From (years)	To (years)	Comment
Short-term	0	2	Our short-term horizon aligns with the International Air Transport Association (IATA) short-term strategy to improve the industry's carbon efficiency annually.
Medium-term	2	15	Our medium-term horizon aligns with our goal to replace 10% of our jet fuel with SAF by 2030 and our target -- validated by the Science Based Targets initiative (SBTi) -- to reduce our carbon intensity by 45% by 2035.
Long-term	15	30	Our long-term horizon aligns with our goal to reach net zero emissions by 2050.

C2.1b

(C2.1b) How does your organization define substantive financial or strategic impact on your business?

American takes an integrated approach to risk identification, assessment and management. Through our multidisciplinary company-wide risk identification, assessment and management processes , we monitor climate risks on an ongoing basis and assess those risks across short, intermediate and long-term time horizons on a case-by-case basis. We define substantive financial and strategic impacts when assessing climate-related risks as those impacts that meet

or surpass our financial thresholds, or those impacts that have a direct or indirect impact on our operations, such as risks that may cause significant flight delays, increase flight input prices, limit our ability to maximize our weight load on flights, etc. The quantifiable indicators used to define substantive financial or strategic impacts are those that would cause the firm a loss or gain great enough to change our internal approach to managing the risk or opportunity, which we have determined to be 1% of our pre-tax income. Because the company's pre-tax income was negative in 2021 due to the COVID pandemic, we decided that the 1% of pre-tax income in 2019 remained relevant for 2022 as well, given the company's financial recovery from the pandemic.

C2.2

(C2.2) Describe your process(es) for identifying, assessing and responding to climate-related risks and opportunities.

Value chain stage(s) covered

Direct operations
Upstream

Risk management process

Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment

More than once a year

Time horizon(s) covered

Short-term
Medium-term
Long-term

Description of process

Please see pages 19-29 of our 2022 Sustainability Report.

C2.2a

(C2.2a) Which risk types are considered in your organization's climate-related risk assessments?

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	Aviation is a highly regulated industry. We continuously monitor regulatory developments to assess their potential impact. Given American's large carbon footprint and potential exposure to climate change, changes to climate-related regulations could have a financial and/or operational impact on American. For example, carbon taxes or SAF mandates could increase the price of jet fuel, which would raise

		our operating costs and potentially reduce demand for travel. We continue to seek efficiency gains in our operations, pursue opportunities to employ SAF and seek to employ lower-emission or zero-emission technologies as they become available on a commercially-reasonable basis. We use a shadow price on carbon to evaluate the return on investment for fuel conservation and emissions reduction initiatives.
Emerging regulation	Relevant, always included	American continuously monitors emerging domestic and international regulations related to climate change through our Government Affairs department. We are also members of Airlines for America (A4A) and the International Air Transport Association (IATA), which keep us abreast of emerging regulations. Given American's large carbon footprint and potential exposure to climate change, emerging climate related regulations could have a financial and/or operational impact on American. For example, American is subject to CORSIA carbon offsetting requirements related to the emissions from certain international flights, and we expect to incur compliance obligations over the period 2024–2035. We may also face higher compliance risk and/or costs as other regional or country-specific aviation emissions reduction policies emerge. We monitor emerging regulations around the world to understand the risks and opportunities for our business. We also work with policymakers to identify policy solutions that could help the aviation industry reduce its emissions. We continue to advocate for CORSIA as the single global approach to addressing emissions from international aviation. As policy changes shift throughout the world, with regions adopting a mixture sustainable aviation fuel (SAF) mandates, tax incentives and other policies, we monitor emerging developments. Our Climate Change Steering Committee — which is led by an Executive Vice President and includes representatives from Airport Operations, Flight Operations, Technical Operations, Cargo, Finance, Safety, People, Communications, Legal, Government Affairs and Investor Relations — monitors emerging regulations and assesses related risk.
Technology	Relevant, always included	The airline industry is very competitive and historically has had below-average profit margins. To remain profitable, it is critical that American’s products and services be price-competitive with other airlines. There is a risk that insufficient investment in technologies from private and public sectors, or lack of supportive policies, could hinder technology advancement and, therefore, our ability to meet our climate goals. New technology spurred by efforts to reduce jet fuel consumption and its associated GHG emissions could give an airline a competitive advantage by reducing its costs. For example, the U.S. aviation industry and the U.S. government have announced ambitious goals to expand SAF production and use; however, insufficient investment and policy support could limit the growth in SAF production and potentially increase the risk of mandates.

		In addition, American has SAF offtake agreements related to production from facilities that are planned but not yet operational, and that may utilize technology that has not been proven at commercial scale. There is no assurance that these facilities will be built or that they will meet contracted production timelines and volumes. In the event that the SAF is not delivered on schedule or in sufficient volumes, we may not be able to source a supply of SAF sufficient to meet our stated goals and on favorable economic terms.
Legal	Relevant, always included	As a large company with extensive global operations, potential legal issues are always a consideration in our risk assessments, including climate-change related risk assessments. We may face specific risks such as litigation or regulatory proceedings in the event a stakeholder files a lawsuit against our company on the basis of climate change impacts. For example, expectations from our stakeholders regarding sustainability continue to evolve, and our sustainability commitments and risk assessments are long-term in nature. Despite our efforts to communicate in a clear and transparent manner, litigation related to "greenwashing" or similar claims could arise, given the forward-looking and long-term nature of our climate strategy. American recognizes the importance of communicating our sustainability strategy, commitments and progress with transparency and accuracy to our stakeholders. Our sustainability communications are reviewed in order to provide appropriate context and information regarding our sustainability strategy and initiatives, and we maintain comprehensive information on these matters on the sustainability section of our website. Members of our Climate Change Steering Committee provide oversight of American's climate disclosures.
Market	Relevant, always included	Our customers have a choice in travel, so it is important that we understand their decision-making process in selecting transportation modes and airlines. Changes in travel patterns due to passenger concerns about air travel's carbon footprint could have a significant impact on our revenue. For example, business customers may continue to choose to use alternatives to travel, such as virtual meetings and workspaces, as their companies work to reduce their Scope 3 emissions. We have introduced new tools to help our business customers manage their emissions from air travel, including GHG footprint reports, carbon offsetting opportunities and SAF emissions reductions. We intend to further integrate other sustainability practices into the products, services and experiences we offer. Greater development of high-speed rail in markets now served by short-haul flights could also provide passengers with lower-carbon alternatives to flying. American is testing new ways to expand our network and reduce emissions. In 2022, we introduced premium motor coach service to connect our customers in three Pennsylvania markets to Philadelphia

		International Airport — increasing convenience for our passengers while helping take individual cars off the road.
Reputation	Relevant, always included	American is aware of its position as an emitter of GHGs and the reputational risks to the company and the aviation industry related to the threat of climate change. Growing recognition among consumers that climate change is a serious danger may mean some customers choose to fly less frequently or fly on an airline they perceive as more sustainable. In addition, investors, customers and other stakeholders may demand more aggressive sustainability goals and practices from our industry. We are positioning our company to be a leader on sustainability by implementing a robust and multifaceted climate change strategy aimed at driving progress toward our ambitious climate goals, including our 2035 SBTi target and long-term net zero 2050 goal. We intend to continue our efforts to reduce carbon emissions using the various levers available to us at this time — including consideration of how to include modern aircraft, efficient technology, sound operational practices and sustainable fuels — in our climate mitigation strategy. We are looking to embrace new low-carbon levers as they become available. We continue to have transparent sustainability disclosures that educate customers, team members, suppliers, investors and the general public on the steps the company has taken and continues to take to reduce our impact on the climate and minimize our overall environmental footprint. We also regularly solicit feedback from these stakeholders to inform our processes and operations.
Acute physical	Relevant, always included	Acute physical events, such as hurricanes, typhoons or severe storms, have the potential to disrupt fuel deliveries to airports where American has major operations and could potentially disrupt the production of fuel by our key jet fuel suppliers. A lack of sufficient fuel supply could result in our need to cancel flights and disrupt the travel plans of our customers, which would increase higher costs and/or reduce revenues. For example, a recent storm in 2022 caused the interruption of jet fuel delivery at our Dallas/Fort Worth International Airport hub. To avoid any operational interruptions, American had to source jet fuel on short notice and at additional cost. In addition, extremely high temperatures may exceed the maximum allowable temperature at which our aircraft are certified by the FAA to operate. Increases in hot days can interrupt our operations by causing heat buckling on runways and taxiways and other infrastructure damage. Such damage in turn can increase operational and repair costs for airports — costs that would be passed through to us. We continue to monitor temperatures at airports exposed to acute temperature risk and work with aircraft manufacturers to ensure that our aircraft are able to operate safely under a range of operational conditions. Over the next five years, we intend to incorporate the projected impacts of climate change into design standards for physical assets, capital improvement plans, disaster

		management, emergency response and scheduling. To mitigate projected impacts from higher temperatures, we are investing in additional ground cooling and upgrades to gate-based cooling systems.
Chronic physical	Relevant, always included	Chronic physical events, such as extreme heat, can affect the safety of our employees, especially those who work outside. As such, this risk is often included in any safety risk assessments related to employees who work outdoors during summer months, particularly in hot and/or humid locations, such as our hub operations in Phoenix, Dallas/Fort Worth, and Miami. American conducts job safety analyses on a routine basis. We have a number of context and site-specific mitigation plans in place to mitigate the risks of extreme heat on our operations and employees. For instance, we have a comprehensive heat prevention policy designed to protect workers in instances of extreme temperatures and regularly train staff on warning signs of heat stroke and similar conditions. In affected locations, we have hydration programs that deliver water and juice to employees at outdoor work locations throughout the day. We also provide shade and cooling stations. In addition, sea-level rise in Miami, Los Angeles, Philadelphia and New York may require hardening of the airports in these locations, or even relocation. Given the vulnerability of these key airports to flooding from sea-level rise, and the resulting impact to business continuity, we intend to investigate options to mitigate the impacts of sea-level rise, which may include fortifying the shoreline around those facilities and, as a last resort, considering options for relocation to areas further inland. The cost/benefit of available options may lead to adjustments to our network. We also plan to engage with policymakers and airport authorities to explore paths to greater resiliency.

C2.3

(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.3a

(C2.3a) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Risk 1

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Chronic physical

Changing temperature (air, freshwater, marine water)

Primary potential financial impact

Other, please specify

Decreased revenues due to reduced service capacity

Company-specific description

High and rising temperatures reduce the performance capability of aircraft. Hotter air is less dense, which means there is less air beneath the wings for lifting the aircraft and less air to flow through the jet engines. To compensate for the impacts caused by warmer temperatures, aircraft must be lighter at take-off, which could mean that a given flight operating under very high temperatures is not able to take all the planned passengers and/or cargo. Hotter temperatures impact American's operations most frequently in Arizona, Nevada, Colorado, Utah and certain parts of Texas during the summer months. For example, in summer 2023, Phoenix airport (PHX) temperatures reached 120 degrees. At that temperature EMB-175 aircraft operated by American's regional affiliates are not able to operate. We expect summer temperatures to increase over time, and that the scope of this risk will increase as more locations and times of each year are affected. We estimated a potential loss of $7.1 million in revenue based on the average revenue per segment and load factors, or 0.0158% of total passenger revenue in the event of flight cancelations due to 30 days of temperatures at or above 120 degrees in PHX.

Time horizon

Medium-term

Likelihood

Very likely

Magnitude of impact

Medium-low

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

7,100,000

Potential financial impact figure – maximum (currency)

11,300,000

Explanation of financial impact figure

In an average month, approximately 250 EMB-175 aircraft depart Phoenix airport (PHX). These aircraft carry an estimated $14,112 in revenue assuming 63 of the 76 seats are

occupied by passengers paying $224, which was American's average passenger revenue per segment in 2022. Assuming 250 to 400 cancelled departures from PHX due to extreme heat, American would have to cancel an additional 250 to 400 cancelled departures from downline airports. As a result, extended periods of extreme heat could result in $7.1 million ($14,112 x 250 x 2) to $11.3 million ($14,112 x 400 x 2) in lost revenue to American. We are working to expand this analysis to further markets that are affected by temperature-related restrictions.

Cost of response to risk

250,000

Description of response and explanation of cost calculation

Rising temperatures pose a threat to our operations, especially in the Southwest United States during the summer. When air is too hot, it is not dense enough for some planes to take off at full capacity, which decreases American's revenue for these flights and risks upsetting our customers through delays, diversions, and rescheduling. During these situations, an alternative to cancelling a flight is to schedule a technical stop at a near-by airport where the aircraft can refuel. Assuming it costs an extra $1,000 in fuel and labor expense for a EMB-175 technical stop, it would cost American an estimated $250,000 to avoid cancelling 250 flights due to extreme temperatures at PHX

Comment

C2.4

(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.4a

(C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Opp1

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Energy source

Primary climate-related opportunity driver

Use of new technologies

Primary potential financial impact

Other, please specify

Reduced indirect (operating) costs

Company-specific description

American is in the midst of the most extensive fleet renewal program in commercial aviation history. As of December 31, 2022, the average age of American's mainline fleet was 12.2 years, the lowest of any U.S. network carrier. Aircraft such as the Boeing 737 MAX and Airbus 321neo improve fuel efficiency by up to 20 percent over similarly sized aircraft, which reduces the fuel purchases required and therefore reduces operating costs.

Time horizon

Medium-term

Likelihood

Virtually certain

Magnitude of impact

High

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

Potential financial impact figure – minimum (currency)

145,306,000

Potential financial impact figure – maximum (currency)

291,200,000

Explanation of financial impact figure

More efficient aircraft help American reduce fuel expenses. In a typical year, American spends about $8 million per mainline aircraft in fuel expense assuming historical fuel prices. Over the next five years (2023 to 2027), American has delivery orders for 182 new aircraft that are up to 20% more efficient than the previous generation of aircraft. Assuming this range of fuel efficiency gains and similar fuel expense per aircraft, these new aircraft deliveries could reduce American's fuel expense by $145.6 million ($8 million x 182 x 10%) to $291.2 million annually ($8 million x 182 x 20%). Fuel savings from these new aircraft will also help American reduce its carbon emissions by 675,000 to 1.3 million tonnes of CO2e by 2027.

Cost to realize opportunity

7,100,000,000

Strategy to realize opportunity and explanation of cost calculation

As part of American's fleet renewal strategy, we take delivery of new aircraft to retire older aircraft and to prepare for any increase in projected service. The rate at which

older aircraft are replaced depends on the fuel efficiency benefit from new aircraft, as well as performance, maintenance expense, dependability and crew training requirements, among other factors. Since 2013, American has invested $25 billion to introduce more than 600 aircraft into our fleet. At the same time, we retired a similar number of older, less fuel-efficient aircraft. The result of this investment was to give us the youngest mainline fleet among U.S. network carriers. At the beginning of 2023, American had 182 aircraft on order, with deliveries scheduled within the next five years. Assuming a similar cost per aircraft, American would need to invest approximately $7.1 billion (average cost of $38.9 million, which is $25 billion divided by 645 aircraft) for the 182 aircraft that are scheduled to be delivered.

Comment

C3. Business Strategy

C3.1

(C3.1) Does your organization's strategy include a climate transition plan that aligns with a 1.5°C world?

Row 1

Climate transition plan

C3.2

(C3.2) Does your organization use climate-related scenario analysis to inform its strategy?

	Use of climate-related scenario analysis to inform strategy
Row 1	Yes, qualitative and quantitative

C3.2a

(C3.2a) Provide details of your organization's use of climate-related scenario analysis.

Climate-related scenario	Scenario analysis coverage	Temperature alignment of scenario	Parameters, assumptions, analytical choices
			Please see the "Identifying and Assessing Climate-Related Risks and Opportunities" section of our 2022 Sustainability Report, available at https://news.aa.com/esg/.

C3.2b

(C3.2b) Provide details of the focal questions your organization seeks to address by using climate-related scenario analysis, and summarize the results with respect to these questions.

Row 1

Focal questions

Please see the “Identifying and Assessing Climate-Related Risks and Opportunities” section of our 2022 Sustainability Report, available at https://news.aa.com/esg/.

Results of the climate-related scenario analysis with respect to the focal questions

Please see the “Identifying and Assessing Climate-Related Risks and Opportunities” section of our 2022 Sustainability Report, available at https://news.aa.com/esg/.

C3.5

(C3.5) In your organization’s financial accounting, do you identify spending/revenue that is aligned with your organization’s climate transition?

	Identification of spending/revenue that is aligned with your organization’s climate transition
Row 1	

C4. Targets and performance

C4.1

(C4.1) Did you have an emissions target that was active in the reporting year?

Absolute target

Intensity target

C4.1a

(C4.1a) Provide details of your absolute emissions target(s) and progress made against those targets.

Target reference number

Is this a science-based target?

Target ambition

Year target was set

Target coverage

Scope(s)

- Scope 1
- Scope 2
- Scope 3

Scope 2 accounting method

Scope 3 category(ies)

Base year

Base year Scope 1 emissions covered by target (metric tons CO2e)

Base year Scope 2 emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e)

Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)

Base year Scope 3, Other (upstream) emissions covered by target (metric tons CO2e)

Base year Scope 3, Other (downstream) emissions covered by target (metric tons CO2e)

Base year total Scope 3 emissions covered by target (metric tons CO2e)

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target as % of total base year emissions in Scope 3, Category 1: Purchased goods and services (metric tons CO2e)

Base year Scope 3, Category 2: Capital goods emissions covered by target as % of total base year emissions in Scope 3, Category 2: Capital goods (metric tons CO2e)

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target as % of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)

Base year Scope 3, Category 4: Upstream transportation and distribution covered by target as % of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e)

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target as % of total base year emissions in Scope 3, Category 5: Waste generated in operations (metric tons CO2e)

Base year Scope 3, Category 6: Business travel emissions covered by target as % of total base year emissions in Scope 3, Category 6: Business travel (metric tons CO2e)

Base year Scope 3, Category 7: Employee commuting covered by target as % of total base year emissions in Scope 3, Category 7: Employee commuting (metric tons CO2e)

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 8: Upstream leased assets (metric tons CO2e)

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target as % of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e)

Base year Scope 3, Category 10: Processing of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 10: Processing of sold products (metric tons CO2e)

Base year Scope 3, Category 11: Use of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 11: Use of sold products (metric tons CO2e)

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e)

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 13: Downstream leased assets (metric tons CO2e)

Base year Scope 3, Category 14: Franchises emissions covered by target as % of total base year emissions in Scope 3, Category 14: Franchises (metric tons CO2e)

Base year Scope 3, Category 15: Investments emissions covered by target as % of total base year emissions in Scope 3, Category 15: Investments (metric tons CO2e)

Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e)

Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e)

Base year total Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes

Target year

Targeted reduction from base year (%)

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]

Scope 1 emissions in reporting year covered by target (metric tons CO2e)

Scope 2 emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Other (upstream) emissions in reporting year covered by target (metric tons CO2e)

Scope 3, Other (downstream) emissions in reporting year covered by target (metric tons CO2e)

Total Scope 3 emissions in reporting year covered by target (metric tons CO2e)

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)

Does this target cover any land-related emissions?

% of target achieved relative to base year [auto-calculated]

Target status in reporting year

Please explain target coverage and identify any exclusions

Please see the “Addressing Climate Change” and “Indexes & Data” sections of our 2022 Sustainability Report, available at https://news.aa.com/esg/.

Plan for achieving target, and progress made to the end of the reporting year

List the emissions reduction initiatives which contributed most to achieving this target

C4.1b

(C4.1b) Provide details of your emissions intensity target(s) and progress made against those target(s).

Target reference number

Is this a science-based target?

Target ambition

Year target was set

Target coverage

Scope(s)

Scope 2 accounting method

Scope 3 category(ies)

Intensity metric

Base year

Intensity figure in base year for Scope 1 (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 2 (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 1: Purchased goods and services (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 2: Capital goods (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 5: Waste generated in operations (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 6: Business travel (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 7: Employee commuting (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 8: Upstream leased assets (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 10: Processing of sold products (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 11: Use of sold products (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 13: Downstream leased assets (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 14: Franchises (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Category 15: Investments (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Other (upstream) (metric tons CO2e per unit of activity)

Intensity figure in base year for Scope 3, Other (downstream) (metric tons CO2e per unit of activity)

Intensity figure in base year for total Scope 3 (metric tons CO2e per unit of activity)

Intensity figure in base year for all selected Scopes (metric tons CO2e per unit of activity)

% of total base year emissions in Scope 1 covered by this Scope 1 intensity figure

% of total base year emissions in Scope 2 covered by this Scope 2 intensity figure

% of total base year emissions in Scope 3, Category 1: Purchased goods and services covered by this Scope 3, Category 1: Purchased goods and services intensity figure

% of total base year emissions in Scope 3, Category 2: Capital goods covered by this Scope 3, Category 2: Capital goods intensity figure

% of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) covered by this Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) intensity figure

% of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution covered by this Scope 3, Category 4: Upstream transportation and distribution intensity figure

% of total base year emissions in Scope 3, Category 5: Waste generated in operations covered by this Scope 3, Category 5: Waste generated in operations intensity figure

% of total base year emissions in Scope 3, Category 6: Business travel covered by this Scope 3, Category 6: Business travel intensity figure

% of total base year emissions in Scope 3, Category 7: Employee commuting covered by this Scope 3, Category 7: Employee commuting intensity figure

% of total base year emissions in Scope 3, Category 8: Upstream leased assets covered by this Scope 3, Category 8: Upstream leased assets intensity figure

% of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution covered by this Scope 3, Category 9: Downstream transportation and distribution intensity figure

% of total base year emissions in Scope 3, Category 10: Processing of sold products covered by this Scope 3, Category 10: Processing of sold products intensity figure

% of total base year emissions in Scope 3, Category 11: Use of sold products covered by this Scope 3, Category 11: Use of sold products intensity figure

% of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products covered by this Scope 3, Category 12: End-of-life treatment of sold products intensity figure

% of total base year emissions in Scope 3, Category 13: Downstream leased assets covered by this Scope 3, Category 13: Downstream leased assets intensity figure

% of total base year emissions in Scope 3, Category 14: Franchises covered by this Scope 3, Category 14: Franchises intensity figure

% of total base year emissions in Scope 3, Category 15: Investments covered by this Scope 3, Category 15: Investments intensity figure

% of total base year emissions in Scope 3, Other (upstream) covered by this Scope 3, Other (upstream) intensity figure

% of total base year emissions in Scope 3, Other (downstream) covered by this Scope 3, Other (downstream) intensity figure

% of total base year emissions in Scope 3 (in all Scope 3 categories) covered by this total Scope 3 intensity figure

% of total base year emissions in all selected Scopes covered by this intensity figure

Target year

Targeted reduction from base year (%)

Intensity figure in target year for all selected Scopes (metric tons CO2e per unit of activity) [auto-calculated]

% change anticipated in absolute Scope 1+2 emissions

% change anticipated in absolute Scope 3 emissions

Intensity figure in reporting year for Scope 1 (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 2 (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 1: Purchased goods and services (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 2: Capital goods (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 5: Waste generated in operations (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 6: Business travel (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 7: Employee commuting (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 8: Upstream leased assets (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 10: Processing of sold products (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 11: Use of sold products (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 13: Downstream leased assets (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 14: Franchises (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Category 15: Investments (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Other (upstream) (metric tons CO2e per unit of activity)

Intensity figure in reporting year for Scope 3, Other (downstream) (metric tons CO2e per unit of activity)

Intensity figure in reporting year for total Scope 3 (metric tons CO2e per unit of activity)

Intensity figure in reporting year for all selected Scopes (metric tons CO2e per unit of activity)

Does this target cover any land-related emissions?

% of target achieved relative to base year [auto-calculated]

Target status in reporting year

Please explain target coverage and identify any exclusions

Please see the “Addressing Climate Change” and “Indexes & Data” sections of our 2022 Sustainability Report, available at https://news.aa.com/esg/.

Plan for achieving target, and progress made to the end of the reporting year

List the emissions reduction initiatives which contributed most to achieving this target

C4.2

(C4.2) Did you have any other climate-related targets that were active in the reporting year?

Target(s) to increase low-carbon energy consumption or production

Net-zero target(s)

C4.2a

(C4.2a) Provide details of your target(s) to increase low-carbon energy consumption or production.

Target reference number

Year target was set

Target coverage

Target type: energy carrier

Target type: activity

Target type: energy source

Base year

Consumption or production of selected energy carrier in base year (MWh)

% share of low-carbon or renewable energy in base year

Target year

% share of low-carbon or renewable energy in target year

% share of low-carbon or renewable energy in reporting year

% of target achieved relative to base year [auto-calculated]

Target status in reporting year

Is this target part of an emissions target?

Is this target part of an overarching initiative?

Please explain target coverage and identify any exclusions

Please see the “Addressing Climate Change” and “Indexes & Data” sections of our 2022 Sustainability Report, at https://news.aa.com/esg/.

Plan for achieving target, and progress made to the end of the reporting year

List the actions which contributed most to achieving this target

C4.2c

(C4.2c) Provide details of your net-zero target(s).

Target reference number

Target coverage

Absolute/intensity emission target(s) linked to this net-zero target

Target year for achieving net zero

Is this a science-based target?

Please explain target coverage and identify any exclusions

Do you intend to neutralize any unabated emissions with permanent carbon removals at the target year?

Planned milestones and/or near-term investments for neutralization at target year

Planned actions to mitigate emissions beyond your value chain (optional)

Please see the “Addressing Climate Change” and “Indexes & Data” sections of our 2022 Sustainability Report https://news.aa.com/esg/

C4.3

(C4.3) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.

Yes

C4.3a

(C4.3a) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation		
To be implemented*		
Implementation commenced*		
Implemented*		
Not to be implemented		

C4.3b

(C4.3b) Provide details on the initiatives implemented in the reporting year in the table below.

Initiative category & Initiative type

Estimated annual CO2e savings (metric tonnes CO2e)

Scope(s) or Scope 3 category(ies) where emissions savings occur

Voluntary/Mandatory

Annual monetary savings (unit currency – as specified in C0.4)

Investment required (unit currency – as specified in C0.4)

Payback period

Estimated lifetime of the initiative

Comment

Please see the “Addressing Climate Change” and “Indexes & Data” sections of our 2022 Sustainability Report, at https://news.aa.com/esg/.

C4.3c

(C4.3c) What methods do you use to drive investment in emissions reduction activities?

Method	Comment
	Please see the “Addressing Climate Change” and “Indexes & Data” sections of our 2022 Sustainability Report, at https://news.aa.com/esg/.

C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products?

Yes

C4.5a

(C4.5a) Provide details of your products and/or services that you classify as low-carbon products.

Level of aggregation

Taxonomy used to classify product(s) or service(s) as low-carbon

Type of product(s) or service(s)

Description of product(s) or service(s)

Please see the “Addressing Climate Change” and “Indexes & Data” sections of our 2022 Sustainability Report, at https://news.aa.com/esg/.

Have you estimated the avoided emissions of this low-carbon product(s) or service(s)

Methodology used to calculate avoided emissions

Life cycle stage(s) covered for the low-carbon product(s) or services(s)

Functional unit used

Reference product/service or baseline scenario used

Life cycle stage(s) covered for the reference product/service or baseline scenario

Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario

Explain your calculation of avoided emissions, including any assumptions

Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year

C5. Emissions methodology

C5.1

(C5.1) Is this your first year of reporting emissions data to CDP?

No

C5.1a

(C5.1a) Has your organization undergone any structural changes in the reporting year, or are any previous structural changes being accounted for in this disclosure of emissions data?

Row 1

Has there been a structural change?

No

C5.1b

(C5.1b) Has your emissions accounting methodology, boundary, and/or reporting year definition changed in the reporting year?

	Change(s) in methodology, boundary, and/or reporting year definition?
Row 1	No

C5.2

(C5.2) Provide your base year and base year emissions.

Scope 1

Base year start

January 1, 2016

Base year end

December 31, 2016

Base year emissions (metric tons CO2e)

38,912,664

Comment

Scope 2 (location-based)

Base year start

January 1, 2016

Base year end

December 31, 2016

Base year emissions (metric tons CO2e)

341,000

Comment

Scope 2 (market-based)

Base year start

January 1, 2016

Base year end

December 31, 2016

Base year emissions (metric tons CO2e)

341,000

Comment

Scope 3 category 1: Purchased goods and services

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO2e)

2,640,302

Comment

Scope 3 category 2: Capital goods

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO2e)

271,014

Comment

Scope 3 category 3: Fuel-and-energy-related activities (not included in Scope 1 or 2)

Base year start
January 1, 2019

Base year end
December 31, 2019

Base year emissions (metric tons CO2e)
8,427,569

Comment

Scope 3 category 4: Upstream transportation and distribution

Base year start
January 1, 2019

Base year end
December 31, 2019

Base year emissions (metric tons CO2e)
4,362,681

Comment

Scope 3 category 5: Waste generated in operations

Base year start
January 1, 2019

Base year end
December 31, 2019

Base year emissions (metric tons CO2e)
1,850

Comment

Scope 3 category 6: Business travel

Base year start
January 1, 2019

Base year end
December 31, 2019

Base year emissions (metric tons CO2e)

121,714

Comment

Scope 3 category 7: Employee commuting

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO2e)

227,290

Comment

Scope 3 category 8: Upstream leased assets

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO2e)

3,176

Comment

Scope 3 category 9: Downstream transportation and distribution

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO2e)

22,717

Comment

Scope 3 category 10: Processing of sold products

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 11: Use of sold products

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 12: End of life treatment of sold products

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 13: Downstream leased assets

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 14: Franchises

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 15: Investments

Base year start

January 1, 2019

Base year end

December 31, 2019

Base year emissions (metric tons CO2e)

332,361

Comment

Scope 3: Other (upstream)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3: Other (downstream)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

C5.3

(C5.3) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.

The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)
The Greenhouse Gas Protocol: Scope 2 Guidance
The Greenhouse Gas Protocol: Corporate Value Chain (Scope 3) Standard

C6. Emissions data

C6.1

(C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO2e?

Reporting year

Gross global Scope 1 emissions (metric tons CO2e)

34,628,819

Comment

Scope 1 amounts exclude biogenic CO2 emissions from SAF.

C6.2

(C6.2) Describe your organization's approach to reporting Scope 2 emissions.

Row 1

Scope 2, location-based

We are reporting a Scope 2, location-based figure

Scope 2, market-based

We are reporting a Scope 2, market-based figure

Comment

C6.3

(C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO2e?

Reporting year

Scope 2, location-based

205,818

Scope 2, market-based (if applicable)

125,781

Comment

C6.4

(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1, Scope 2 or Scope 3 emissions that are within your selected reporting boundary which are not included in your disclosure?

No

C6.5

(C6.5) Account for your organization's gross global Scope 3 emissions, disclosing and explaining any exclusions.

Purchased goods and services

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

1,856,329

Emissions calculation methodology

Average spend-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

Capital goods

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

302,977

Emissions calculation methodology

Average spend-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

Fuel-and-energy-related activities (not included in Scope 1 or 2)

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

7,350,276

Emissions calculation methodology

Fuel-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

Upstream transportation and distribution

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

3,477,988

Emissions calculation methodology

Fuel-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

Waste generated in operations

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

1,845

Emissions calculation methodology

Spend-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

Business travel

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

94,128

Emissions calculation methodology

Spend-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

Employee commuting

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

232,349

Emissions calculation methodology

Average data method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

Upstream leased assets

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

22,323

Emissions calculation methodology

Site-specific method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

Downstream transportation and distribution

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

17,779

Emissions calculation methodology

Distance-based method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

0

Please explain

Processing of sold products

Evaluation status

Not relevant, explanation provided

Please explain

American is a service provider and does not process sold products.

Use of sold products

Evaluation status

Not relevant, explanation provided

Please explain

American is a service provider and does not sell products.

End of life treatment of sold products

Evaluation status

Not relevant, explanation provided

Please explain

American is a service provider and does not sell products.

Downstream leased assets

Evaluation status

Not relevant, explanation provided

Please explain

American does not lease downstream assets.

Franchises

Evaluation status

Not relevant, explanation provided

Please explain

American does not have any franchises.

Investments

Evaluation status

Relevant, calculated

Emissions in reporting year (metric tons CO2e)

411,742

Emissions calculation methodology

Investment-specific method

Percentage of emissions calculated using data obtained from suppliers or value chain partners

100

Please explain

Other (upstream)

Evaluation status

Not evaluated

Please explain

We believe our inventory captures all upstream emissions.

Other (downstream)

Evaluation status

Not evaluated

Please explain

We believe our inventory captures all downstream emissions.

C6.7

(C6.7) Are carbon dioxide emissions from biogenic carbon relevant to your organization?

Yes

C6.7a

(C6.7a) Provide the emissions from biogenic carbon relevant to your organization in metric tons CO2.

	CO2 emissions from biogenic carbon (metric tons CO2)	Comment
Row 1	27,184	Emissions associated with our use of sustainable aviation fuel, renewable diesel and ethanol.

C6.10

(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO2e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.

Intensity figure

0.000711

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)

34,834,637

Metric denominator

unit total revenue

Metric denominator: Unit total

48,971,000,000

Scope 2 figure used

Location-based

% change from previous year

26

Direction of change

Decreased

Reason(s) for change

Change in revenue

Please explain

American's 2022 emissions intensity per dollar of revenue improved 26% from 2021, which was due primarily to an improvement in revenue. Load factor increased by 7.6 points and yield increased 28.1%, resulting in a 35.1% improvement in revenue per available seat mile. In addition, approximately 70% of our total capital expenditures were allocated to efforts that provided decarbonization benefits such as new, more efficient aircraft. See our 2022 Sustainability Report for a thorough discussion of this topic.

C-TS6.15

(C-TS6.15) What are your primary intensity (activity-based) metrics that are appropriate to your emissions from transport activities in Scope 1, 2, and 3?

Aviation

Scopes used for calculation of intensities

Report just Scope 1

Intensity figure

0.0015

Metric numerator: emissions in metric tons CO2e

34,628,819

Metric denominator: unit

t.mile

Metric denominator: unit total

22,509,981,448

% change from previous year

9

Please explain any exclusions in your coverage of transport emissions in selected category, and reasons for change in emissions intensity.

American's 2022 emissions intensity per ton mile improved 9% from 2021, which was primarily due to an 7.6 point increase in load factor. The increased load factor contributed to a 32% increase in ton miles and outpaced the 17.4% increase in jet fuel use, which is the primary driver of Scope 1 emissions.

ALL

Scopes used for calculation of intensities

Report Scope 1 + 2

Intensity figure

0.0015

Metric numerator: emissions in metric tons CO2e

34,834,637

Metric denominator: unit

t.mile

Metric denominator: unit total

22,509,981,448

% change from previous year

9

Please explain any exclusions in your coverage of transport emissions in selected category, and reasons for change in emissions intensity.

American's 2022 emissions intensity per ton mile improved 9% from 2021, which was due primarily to an 7.6 point increase in load factor. The increased load factor contributed to a 32% increase in ton miles and outpaced the 17.4% increase in jet fuel use, which is the primary driver of Scope 1 emissions. Scope 2 emissions also decreased almost 16% but make up a tiny portion of total emissions.

C7. Emissions breakdowns

C7.1

(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?

Yes

C7.1a

(C7.1a) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used greenhouse warming potential (GWP).

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	34,352,043	IPCC Sixth Assessment Report (AR6 - 100 year)
CH4	142,864	IPCC Sixth Assessment Report (AR6 - 100 year)
N2O	80,263	IPCC Sixth Assessment Report (AR6 - 100 year)
HFCs	53,649	IPCC Sixth Assessment Report (AR6 - 100 year)

C7.2

(C7.2) Break down your total gross global Scope 1 emissions by country/area/region.

Country/area/region	Scope 1 emissions (metric tons CO2e)
Latin America and Caribbean (LAC)	5,497,503
Europe	5,395,558
Asia Pacific (or JAPA)	539,598
North America	22,630,560
Asia Middle East (AME)	565,600

C7.3

(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.

By business division

C7.3a

(C7.3a) Break down your total gross global Scope 1 emissions by business division.

Business division	Scope 1 emissions (metric ton CO2e)
American Airlines mainline operations based in Ft Worth, TX	30,667,883
Envoy Airlines, American's regional carrier based in Irving, TX	2,025,099
PSA Airlines, American's regional carrier based in Vandalia, OH	1,543,111
Piedmont Airlines, American's regional carrier based in Salisbury, MD	392,726

C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4

(C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4) Break down your organization's total gross global Scope 1 emissions by sector production activity in metric tons CO2e.

	Gross Scope 1 emissions, metric tons CO2e	Comment
Transport services activities	34,628,819	

C7.5

(C7.5) Break down your total gross global Scope 2 emissions by country/area/region.

Country/area/region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
United States of America	205,149	125,098
Latin America (LATAM)	137	137
Asia Pacific (or JAPA)		
Europe		
Caribbean	531	545
Canada	1	1

C7.6

(C7.6) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.

By business division

C7.6a

(C7.6a) Break down your total gross global Scope 2 emissions by business division.

Business division	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
American Airlines mainline operations based in Ft Worth, TX	195,717	117,369
Envoy Airlines, American's regional carrier based in Irving, TX	3,599	2,074
PSA Airlines, American's regional carrier based in Vandalia, OH	6,274	6,113
Piedmont Airlines, American's regional carrier based in Salisbury, MD	228	225

C7.7

(C7.7) Is your organization able to break down your emissions data for any of the subsidiaries included in your CDP response?

Not relevant as we do not have any subsidiaries

C-CE7.7/C-CH7.7/C-CO7.7/C-MM7.7/C-OG7.7/C-ST7.7/C-TO7.7/C-TS7.7

(C-CE7.7/C-CH7.7/C-CO7.7/C-MM7.7/C-OG7.7/C-ST7.7/C-TO7.7/C-TS7.7) Break down your organization’s total gross global Scope 2 emissions by sector production activity in metric tons CO2e.

	Scope 2, location-based, metric tons CO2e	Scope 2, market-based (if applicable), metric tons CO2e	Comment
Transport services activities	205,818	125,781	

C7.9

(C7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?

Increased

C7.9a

(C7.9a) Identify the reasons for any change in your gross global emissions (Scope 1 and 2 combined), and for each of them specify how your emissions compare to the previous year.

	Change in emissions (metric tons CO2e)	Direction of change in emissions	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	9,766	Decreased	0.05	American reduced emissions due to its increased use of SAF, which increased by more than 1 million gallons in 2022.
Other emissions reduction activities	396,379	Decreased	1.4	American reduced its energy consumption through fuel savings initiatives, such as using lighter paint and reducing items on the aircraft. As a result, emissions were reduced by 104,400 tons.
Divestment				
Acquisitions				
Mergers				
Change in output	6,187,647	Increased	21.3	American's available seat miles (ASMs), which we use to measure output, increased 21.3%, while total Scope 1 and 2 emissions increased by only 19.9%. As a result, emissions increased 21.3%(6187647/29053135) as a result of change in output.
Change in methodology				

Change in boundary				
Change in physical operating conditions				
Unidentified				
Other				

C7.9b

(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Location-based

C8. Energy

C8.1

(C8.1) What percentage of your total operational spend in the reporting year was on energy?

More than 25% but less than or equal to 30%

C8.2

(C8.2) Select which energy-related activities your organization has undertaken.

	Indicate whether your organization undertook this energy-related activity in the reporting year
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	No
Consumption of purchased or acquired steam	No
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	No

C8.2a

(C8.2a) Report your organization's energy consumption totals (excluding feedstocks) in MWh.

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total (renewable and non-renewable) MWh
Consumption of fuel (excluding feedstock)	Unable to confirm heating value	106,092	129,521,828	129,627,920
Consumption of purchased or acquired electricity		178,918	345,493	524,411
Total energy consumption		285,010	129,867,321	130,152,331

C8.2b

(C8.2b) Select the applications of your organization's consumption of fuel.

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	No
Consumption of fuel for the generation of heat	Yes
Consumption of fuel for the generation of steam	No
Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	No

C8.2c

(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.

Sustainable biomass

Heating value

Total fuel MWh consumed by the organization

0

Comment

Other biomass

Heating value

Total fuel MWh consumed by the organization

0

Comment

Other renewable fuels (e.g. renewable hydrogen)

Heating value

Unable to confirm heating value

Total fuel MWh consumed by the organization

106,092

Comment

Coal

Heating value

Total fuel MWh consumed by the organization

0

Comment

Oil

Heating value

Total fuel MWh consumed by the organization

0

Comment

Gas

Heating value

Unable to confirm heating value

Total fuel MWh consumed by the organization
440,494

Comment

Other non-renewable fuels (e.g. non-renewable hydrogen)

Heating value
Unable to confirm heating value

Total fuel MWh consumed by the organization
129,081,334

Comment

Total fuel

Heating value
Unable to confirm heating value

Total fuel MWh consumed by the organization
129,627,920

Comment

C8.2e

(C8.2e) Provide details on the electricity, heat, steam, and/or cooling amounts that were accounted for at a zero or near-zero emission factor in the market-based Scope 2 figure reported in C6.3.

Country/area of low-carbon energy consumption
United States of America

Sourcing method
Retail supply contract with an electricity supplier (retail green electricity)

Energy carrier
Electricity

Low-carbon technology type
Wind

Low-carbon energy consumed via selected sourcing method in the reporting year (MWh)
178,918

Tracking instrument used

US-REC

Country/area of origin (generation) of the low-carbon energy or energy attribute

United States of America

Are you able to report the commissioning or re-powering year of the energy generation facility?

No

Commissioning year of the energy generation facility (e.g. date of first commercial operation or repowering)

Comment

C8.2g

(C8.2g) Provide a breakdown by country/area of your non-fuel energy consumption in the reporting year.

Country/area

Other, please specify

Latin America

Consumption of purchased electricity (MWh)

120

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

120

Country/area

Other, please specify

Caribbean

Consumption of purchased electricity (MWh)

36

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

36

Country/area

Other, please specify

North America

Consumption of purchased electricity (MWh)

524,256

Consumption of self-generated electricity (MWh)

0

Consumption of purchased heat, steam, and cooling (MWh)

0

Consumption of self-generated heat, steam, and cooling (MWh)

0

Total non-fuel energy consumption (MWh) [Auto-calculated]

524,256

C-TS8.5

(C-TS8.5) Provide any efficiency metrics that are appropriate for your organization's transport products and/or services.

Activity

Aviation

Metric figure

0.55

Metric numerator
Liters of fuel

Metric denominator
Revenue-ton.mile

Metric numerator: Unit total
13,631,687,760

Metric denominator: Unit total
24,604,863,219

% change from last year
-8.9

Please explain
In 2022, American's efficiency improved 8.9%, due in large part to a 7.6 point, or 10%, increase in load factor.

C9. Additional metrics

C9.1

(C9.1) Provide any additional climate-related metrics relevant to your business.

C-TO9.3/C-TS9.3

(C-TO9.3/C-TS9.3) Provide tracking metrics for the implementation of low-carbon transport technology over the reporting year.

Activity
Aviation

Metric
Fleet adoption

Technology
Other, please specify
Latest generation and airframe and engine technology

Metric figure
22

Metric unit
Other, please specify

Percent of available seat miles flown by the latest generation of aircraft, which includes Airbus 321neo, Boeing 737MAX, 787-8 and 787-9 aircraft types.

Explanation

Emissions associated with jet fuel are American's primary source of GHG emissions. This metric tracks the performance of American's fleet renewal program in which it is acquiring new aircraft with the latest generation of technology and improved fuel efficiency, while retiring its oldest and least efficient aircraft. This effort will have the greatest near-term impact on emissions since these new aircraft are up to 20% more fuel efficient than the previous generation of aircraft.

Activity

Aviation

Metric

Fleet adoption

Technology

Other, please specify

Electric powered ground support equipment (GSE)

Metric figure

23

Metric unit

Other, please specify

Percent of ground support equipment (GSE) that is electric powered

Explanation

American's second largest source of direct GHG emissions comes from the numerous pieces of ground support equipment (GSE) we need to support our operations, such as baggage carts, cargo loaders, pushout tractors, etc. In the past, most of our GSE was either diesel or gasoline powered, but now there are electric versions available for many categories of GSE. Electric GSE produce significantly fewer GHG emissions than either the diesel or gasoline powered versions. This metric measures the percent of our GSE fleet that has transitioned to lower-carbon electric power.

C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6

(C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6) Does your organization invest in research and development (R&D) of low-carbon products or services related to your sector activities?

	Investment in low-carbon R&D	Comment
Row 1	Yes	In 2021, American became an anchor partner of Breakthrough Energy Catalyst, a ground-breaking program within the larger Breakthrough Energy network that is working to accelerate the development and commercialization of critical technologies for decarbonization, including SAF. In 2022, Breakthrough Energy Catalyst announced its first project funding of a SAF plant in the form of a $50 million grant to Lanza Jet's Freedom Pines plant in Soperton, GA.

C-TO9.6a/C-TS9.6a

(C-TO9.6a/C-TS9.6a) Provide details of your organization's investments in low-carbon R&D for transport-related activities over the last three years.

Activity

Aviation

Technology area

Alternative fuels

Stage of development in the reporting year

Pilot demonstration

Average % of total R&D investment over the last 3 years

100

R&D investment figure in the reporting year (unit currency as selected in C0.4) (optional)

Average % of total R&D investment planned over the next 5 years

100

Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan

In 2021, American became an anchor partner of Breakthrough Energy Catalyst, a ground-breaking program within the larger Breakthrough Energy network that is working to accelerate the development and commercialization of critical technologies for decarbonization, including SAF.

C10. Verification

C10.1

(C10.1) Indicate the verification/assurance status that applies to your reported emissions.

	Verification/assurance status
Scope 1	Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	Third-party verification or assurance process in place
Scope 3	Third-party verification or assurance process in place

C10.1a

(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements.

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Reasonable assurance

Attach the statement

AA_2022_Sustainability_Report_230818.pdf

Page/ section reference

Examined by independent accountant KPMG LLP, as described in its report starting on page 68.

Relevant standard

Attestation standards established by AICPA (AT105)

Proportion of reported emissions verified (%)

100

C10.1b

(C10.1b) Provide further details of the verification/assurance undertaken for your Scope 2 emissions and attach the relevant statements.

Scope 2 approach

Scope 2 location-based

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

AA_2022_Sustainability_Report_230818.pdf

Page/ section reference

Reviewed by independent accountant KPMG LLP, as described in its report starting on page 68.

Relevant standard

Other, please specify

Attestation standards established by AICPA (AT-C210)

Proportion of reported emissions verified (%)

100

Scope 2 approach

Scope 2 market-based

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

AA_2022_Sustainability_Report_230818.pdf

Page/ section reference

Reviewed by independent accountant KPMG LLP, as described in its report starting on page 68.

Relevant standard

Other, please specify

Attestation standards established by AICPA (AT-C210)

Proportion of reported emissions verified (%)

100

C10.1c

(C10.1c) Provide further details of the verification/assurance undertaken for your Scope 3 emissions and attach the relevant statements.

Scope 3 category

Scope 3: Fuel and energy-related activities (not included in Scopes 1 or 2)
Scope 3: Upstream transportation and distribution

Verification or assurance cycle in place

Annual process

Status in the current reporting year

Complete

Type of verification or assurance

Limited assurance

Attach the statement

AA_2022_Sustainability_Report_230818.pdf

Page/section reference

Reviewed by independent accountant KPMG LLP, as described in its report starting on page 68.

Relevant standard

Other, please specify

Attestation standards established by AICPA (AT-C210)

Proportion of reported emissions verified (%)

79

C10.2

(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?

Yes

C10.2a

(C10.2a) Which data points within your CDP disclosure have been verified, and which verification standards were used?

Disclosure module verification relates to	Data verified	Verification standard	Please explain
C6. Emissions data	Other, please specify Biogenic Emissions	AICPA AT-C105	Biogenic emissions were examined by independent accountant KPMG LLP, as described in its report starting on page 68. 1

1 AA_2022_Sustainability_Report_230818.pdf

C11. Carbon pricing

C11.1

(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?

Yes

C11.1a

(C11.1a) Select the carbon pricing regulation(s) which impacts your operations.

EU ETS

Switzerland ETS

UK ETS

C11.1b

(C11.1b) Complete the following table for each of the emissions trading schemes you are regulated by.

EU ETS

% of Scope 1 emissions covered by the ETS

1

% of Scope 2 emissions covered by the ETS

0

Period start date

January 1, 2022

Period end date

December 31, 2022

Allowances allocated

197

Allowances purchased

0

Verified Scope 1 emissions in metric tons CO2e

237

Verified Scope 2 emissions in metric tons CO2e

0

Details of ownership

Other, please specify

Flights covered by the EU ETS

Comment

Switzerland ETS

% of Scope 1 emissions covered by the ETS

1

% of Scope 2 emissions covered by the ETS

0

Period start date

January 1, 2022

Period end date

December 31, 2022

Allowances allocated

0

Allowances purchased

0

Verified Scope 1 emissions in metric tons CO2e

59

Verified Scope 2 emissions in metric tons CO2e

0

Details of ownership

Other, please specify

Flights departing Switzerland that are covered by the Swiss ETS

Comment

UK ETS

% of Scope 1 emissions covered by the ETS

1

% of Scope 2 emissions covered by the ETS

0

Period start date

January 1, 2022

Period end date

December 31, 2022

Allowances allocated

186

Allowances purchased

0

Verified Scope 1 emissions in metric tons CO2e

59

Verified Scope 2 emissions in metric tons CO2e

0

Details of ownership

Other, please specify

Flights covered by the UK ETS

Comment

C11.1d

(C11.1d) What is your strategy for complying with the systems you are regulated by or anticipate being regulated by?

The Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA) was put in place to reduce emissions from international aviation from 2021 through 2035, though the COVID pandemic reduced international flight emissions and consequently delayed airlines' compliance obligations. We anticipate we will have compliance obligations under CORSIA's First Phase (2024-2026), though that remains uncertain, as the commercial aviation recovers and the industry's emissions from international flights exceed the baseline of 85% of 2019 emissions. We intend to meet our CORSIA obligations by purchasing carbon offsets in the voluntary market and/or by purchasing sustainable aviation fuel, both of which would need to meet CORSIA's sustainability and other requirements. American's CORSIA compliance is coordinated by our Finance and Sustainability teams. The Finance team is responsible for estimating our future obligations and reviewing that estimation at least annually with senior

management. The Sustainability team prepares our annual CORSIA emissions report, submits that report to an independent third-party agency for verification, and submits the verified report to the U.S. Federal Aviation Administration. We continue to evaluate and update our CORSIA strategy and integrate it in our overall financial and sustainability planning.

C11.2

(C11.2) Has your organization canceled any project-based carbon credits within the reporting year?

No

C11.3

(C11.3) Does your organization use an internal price on carbon?

Yes

C11.3a

(C11.3a) Provide details of how your organization uses an internal price on carbon.

Type of internal carbon price

Shadow price

How the price is determined

Objective(s) for implementing this internal carbon price

Drive low-carbon investment

Navigate GHG regulations

Scope(s) covered

Scope 1

Pricing approach used – spatial variance

Uniform

Pricing approach used – temporal variance

Evolutionary

Indicate how you expect the price to change over time

We anticipate that CORSIA will drive increasing demand for eligible offsets over the next 10+ years, which in turn will drive higher offset prices over time.

Actual price(s) used – minimum (currency as specified in C0.4 per metric ton CO2e)

4

Actual price(s) used – maximum (currency as specified in C0.4 per metric ton CO2e)

25

Business decision-making processes this internal carbon price is applied to

Capital expenditure
Procurement

Mandatory enforcement of this internal carbon price within these business decision-making processes

Yes, for some decision-making processes, please specify

Explain how this internal carbon price has contributed to the implementation of your organization's climate commitments and/or climate transition plan

American's use of a shadow price on carbon has informed and continues to inform our assessment of our obligations under CORSIA. It has also aided our decisionmaking process with regard to investments in new aircraft and fuel savings initiatives, many of which require an upfront cost to purchase equipment or change our processes. The shadow price on carbon helps us to identify the most promising new technologies. For example, in 2020 and based on analysis that included the shadow price, we began deploying specialized software that uses real-time weather conditions to provide our flight crews with better data about optimal flight altitudes and speeds. This new technology has helped us save fuel and reduce emissions, particularly on long-haul flights.

C12. Engagement

C12.1

(C12.1) Do you engage with your value chain on climate-related issues?

Yes, our suppliers
Yes, our customers/clients

C12.1a

(C12.1a) Provide details of your climate-related supplier engagement strategy.

C12.1b

(C12.1b) Give details of your climate-related engagement strategy with your customers.

C12.2

(C12.2) Do your suppliers have to meet climate-related requirements as part of your organization's purchasing process?

No, but we plan to introduce climate-related requirements within the next two years

C12.3

(C12.3) Does your organization engage in activities that could either directly or indirectly influence policy, law, or regulation that may impact the climate?

Row 1

External engagement activities that could directly or indirectly influence policy, law, or regulation that may impact the climate

Does your organization have a public commitment or position statement to conduct your engagement activities in line with the goals of the Paris Agreement?

Describe the process(es) your organization has in place to ensure that your external engagement activities are consistent with your climate commitments and/or climate transition plan

C12.4

(C12.4) Have you published information about your organization's response to climate change and GHG emissions performance for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

C12.5

(C12.5) Indicate the collaborative frameworks, initiatives and/or commitments related to environmental issues for which you are a signatory/member.

	Environmental collaborative framework, initiative and/or commitment	Describe your organization's role within each framework, initiative and/or commitment
Row 1		

C15. Biodiversity

C15.1

(C15.1) Is there board-level oversight and/or executive management-level responsibility for biodiversity-related issues within your organization?

	Board-level oversight and/or executive management-level responsibility for biodiversity-related issues
Row 1	No, but we plan to have both within the next two years

C15.2

(C15.2) Has your organization made a public commitment and/or endorsed any initiatives related to biodiversity?

	Indicate whether your organization made a public commitment or endorsed any initiatives related to biodiversity	Biodiversity-related public commitments	Initiatives endorsed
Row 1	Yes, we have made public commitments and publicly endorsed initiatives related to biodiversity	Other, please specify Conserve biodiversity	

C15.3

(C15.3) Does your organization assess the impacts and dependencies of its value chain on biodiversity?

Impacts on biodiversity

Indicate whether your organization undertakes this type of assessment

Dependencies on biodiversity

Indicate whether your organization undertakes this type of assessment

C15.4

(C15.4) Does your organization have activities located in or near to biodiversity-sensitive areas in the reporting year?

C15.5

(C15.5) What actions has your organization taken in the reporting year to progress your biodiversity-related commitments?

	Have you taken any actions in the reporting period to progress your biodiversity-related commitments?
Row 1	

C15.6

(C15.6) Does your organization use biodiversity indicators to monitor performance across its activities?

	Does your organization use indicators to monitor biodiversity performance?	Indicators used to monitor biodiversity performance
Row 1	No, we do not use indicators, but plan to within the next two years	

C15.7

(C15.7) Have you published information about your organization's response to biodiversity-related issues for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Report type	Content elements	Attach the document and indicate where in the document the relevant biodiversity information is located

C16. Signoff

C-FI

(C-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

American's 2022 Sustainability Report, available at https://news.aa.com/esg/, contains a complete discussion of our company's strategy to address the impact of our operations on the environment and the climate.

C16.1

(C16.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category

Row 1	VP, Sustainability and Chief Sustainability Officer	Chief Sustainability Officer (CSO)