C0. Introduction

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

Delta Air Lines serves more than 180 million customers each year. In 2017, Delta was named to Fortune’s top 50 Most Admired Companies in addition to being named the most admired airline for the sixth time in seven years. Additionally, Delta has ranked No.1 in the Business Travel News Annual Airline survey for an unprecedented six consecutive years. With an industry-leading global network, Delta and the Delta Connection carriers offer service to 335 destinations in 62 countries on six continents. Headquartered in Atlanta, Delta employs more than 80,000 employees worldwide and operates a mainline fleet of more than 800 aircraft. The airline is a founding member of the SkyTeam global alliance and participates in the industry’s leading transatlantic joint venture with Air France-KLM and Alitalia as well as a joint venture with Virgin Atlantic. Including its worldwide alliance partners, Delta offers customers more than 15,000 daily flights, with key hubs and markets including Amsterdam, Atlanta, Boston, Detroit, Los Angeles, Minneapolis/St. Paul, New York-JFK and LaGuardia, London-Heathrow, Paris-Charles de Gaulle, Salt Lake City, Seattle and Tokyo-Narita. Delta has invested billions of dollars in airport facilities, global products and services, and technology to enhance the customer experience in the air and on the ground. Additional information is available on the Delta News Hub, as well as delta.com, Twitter @DeltaNewsHub, Google.com/+Delta, and Facebook.com/delta.

(C0.2) State the start and end date of the year for which you are reporting data.

<table>
<thead>
<tr>
<th>Row</th>
<th>Start date</th>
<th>End date</th>
<th>Indicate if you are providing emissions data for past reporting years</th>
<th>Select the number of past reporting years you will be providing emissions data for</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>January 1, 2017</td>
<td>December 31, 2017</td>
<td>No</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
<tr>
<td>2</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
<tr>
<td>3</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
<tr>
<td>4</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
</tbody>
</table>

(C0.3) Select the countries/regions for which you will be supplying data.

Other, please specify (North America, Rest of World (per TCR))

(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 consolidation approach to your Scope 1 and Scope 2 greenhouse gas inventory.

Operational control

C-TO0.7/C-TO0.7

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

Aviation

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) of the individual(s) on the board with responsibility for climate-related issues.

Position of individual(s) | Please explain
---|---
Board/Executive board | As of 2017, sustainability and climate change matters ultimately are reported up to the Governance Committee of Delta’s Board. Management of environmental and climate change–related risks and opportunities is integrated into our companywide risk management process, and ultimate oversight of Delta’s environmental sustainability program falls to our Board of Directors’ Corporate Governance Committee. In April 2018, the Managing Director of Global Environment, Sustainability and Compliance presented on sustainability/climate change as part of this Board committee’s agenda. Delta also has an Executive Environmental Leadership Council (EELC) that provides direction on climate strategy and annual action plans. The EELC currently has 16 members, listed in 1.1c.

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 – some meetings | Reviewing and guiding strategy Monitoring and overseeing progress against goals and targets for addressing climate-related issues | In early 2017, sustainability and climate change was on the Governance Committee of the Board of Directors for the first time. In the future, the Governance Committee will help guide strategy and monitor progress against climate issues.

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

<table>
<thead>
<tr>
<th>Name of the position(s) and/or committee(s)</th>
<th>Responsibility</th>
<th>Frequency of reporting to the board on climate-related issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chief Operating Officer (COO)</td>
<td>Both assessing and managing climate-related risks and opportunities</td>
<td>Half-yearly</td>
</tr>
<tr>
<td>Corporate responsibility committee</td>
<td>Both assessing and managing climate-related risks and opportunities</td>
<td>Quarterly</td>
</tr>
</tbody>
</table>

(C1.2a) Describe where in the organizational structure this/these position(s) and/or committees lie, what their associated responsibilities are, and how climate-related issues are monitored.

Day-to-day management of climate change issues is the responsibility of the Managing Director of Global Environment, Sustainability and Compliance, who reports to the Senior Vice President of Corporate Safety, Security, and Compliance. The Senior Vice President is responsible for setting the direction and standards for environmental performance at Delta and chairs the Executive Environment Leadership Council (EELC).

The EELC is made up of senior-level executives (led by the COO) who are responsible for the approval of our emissions strategy and emissions-related annual goals. It provides advice and recommendations to the CEO and corporate leadership team on issues related to sustainable development, including climate change. The EELC typically meets two to three times per year, or more as necessary. In this instance we consider this our "Corporate Responsibility Committee."

EELC Leader Members Include:

- Senior Vice President—Corporate Real Estate
- Managing Director—Global Environment, Sustainability and Compliance
- Senior Vice President—Fuel Management
- Executive Vice President and Chief Legal Officer
- Vice President—Brand Management
- Senior Vice President—Flight Operations
- Vice President—Investor Relations
- Executive Vice President and Chief Financial Officer
- Senior Vice President—Safety, Security and Compliance
- Senior Vice President and Chief Marketing Officer
- Senior Vice President—Supply Chain Management & Fleet
• Senior Vice President—Technical Operations
• Vice President—Sales Operations and Development
• Vice President—Operations Customer Center
• Senior Vice President and Chief Communications Officer
• Executive Vice President and Chief Operating Officer

While day-to-day environmental events are addressed by the affected operational division, the EELC serves as the primary governance body responsible for addressing ESG policy risks. In 2017, the EELC received zero reports of critical ESG concerns or issues. However, we remain aware of concerns related to the impact of carbon emissions and climate change from the aviation industry. In recognition of these concerns, we are actively engaged with ICAO efforts to establish an efficiency standard and a carbon-neutral growth initiative.

In addition, as of 2018, sustainability and climate change matters ultimately are reported up to the Governance Committee of Delta's Board. This was an agenda item for this Board committee 1 time in early 2018.

C1.3

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

C1.3a

(C1.3a) Provide further details on the incentives provided for the management of climate-related issues.

Who is entitled to benefit from these incentives?
Chief Executive Officer (CEO)

Types of incentives
Monetary reward

Activity incentivized
Efficiency target

Comment
Delta's annual Flight Plan guides the strategy and action items for both short and long term activity. Certain metrics remain on the annual Flight Plan year over year, including a metric on fuel/fleet efficiency and emissions reduction. The climate change related goal on the current Flight Plan is: “contribute to 2% improvement in fuel efficiency,” which exceeds the IATA short-term goal of 1.5% improvement in fuel efficiency. Delta leadership compensation is tied to performance, which includes ESG sustainability efforts such as fuel savings initiatives. Because fuel accounts for a significant portion of Delta's costs, any efforts to save fuel directly impact Delta’s bottom line, which in turn affects bonus pools and profit sharing for all employees. Note: This same answer is applicable for all employees on the dropdown menu, from CEO down to all individual contributors at Delta.

C2. Risks and opportunities
C2.1

(C2.1) Describe what your organization considers to be short-, medium- and long-term horizons.

<table>
<thead>
<tr>
<th></th>
<th>From (years)</th>
<th>To (years)</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short-term</td>
<td>1</td>
<td>2</td>
<td>Also aligns with IATA industry short term goal, which ends in 2020.</td>
</tr>
<tr>
<td>Medium-term</td>
<td>2</td>
<td>17</td>
<td>Also aligns with IATA's medium term industry goal of carbon-neutral growth (CORSIA) - years 2021-2035</td>
</tr>
<tr>
<td>Long-term</td>
<td>17</td>
<td>32</td>
<td>Aligns with IATA industry long-term goal of 50% reduction compared to 2005 levels, by 2050 (after CNG until 2050)</td>
</tr>
</tbody>
</table>

C2.2

(C2.2) Select the option that best describes how your organization's processes for identifying, assessing, and managing climate-related issues are integrated into your overall risk management.

Integrated into multi-disciplinary company-wide risk identification, assessment, and management processes

C2.2a

(C2.2a) Select the options that best describe your organization’s frequency and time horizon for identifying and assessing climate-related risks.

<table>
<thead>
<tr>
<th>Frequency of monitoring</th>
<th>How far into the future are risks considered?</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Annually</td>
<td>&gt;6 years</td>
<td>Risks mostly related to potential climate change regulations are evaluated by the cross divisional Executive Environmental Leadership Council. Currently, these discussions look as far out as 15 years to best discuss risks and strategies associated with these regulations.</td>
</tr>
</tbody>
</table>

C2.2b
Climate-related risks are typically evaluated by cross-divisional groups, depending on the issue. For example, new potential regulations are evaluated by Corporate Environment, Tax, Government Affairs/Legal, Fuel, Corporate Strategy. The relevant members would identify the reach of the scope (which regions/stations does this impact? What is the potential monetary impact? What is the medium to long impact? Will there be changes over the years?) Action and evaluation depends on the scope: comply with the regulation/put the process in place, continue to evaluate, lobby policy makers, etc.

There have not been any risks that are identified at the asset level that would reach assessment at the Executive Environmental Leadership Council (EELC) level. Assessment at the EELC level would typically something with substantive financial impact: having a global impact (vs. a regulation in one country, where we only have 1 or 2 daily flights), of potential shareholder or customer concern/impact, or have the possibility to be widespread enough to have an impact on the majority of our operations. Examples of this include climate goals that are enterprise wide (all industry goals) and CORSIA. However, in the example of legislation, additional regulation could result in taxation or permitting requirements from multiple jurisdictions for the same operations and significant costs for us and the airline industry. In addition to direct costs, such regulation could result in increased fuel costs passed through from fuel suppliers affected by any such regulations. We are monitoring and evaluating the potential impact of such legislative and regulatory developments. In those scenarios, looking holistically at all environmental patchwork legislation may be the correct approach instead of assessing each risk individually.
(C2.2c) Which of the following risk types are considered in your organization’s climate-related risk assessments?

<table>
<thead>
<tr>
<th>Risk Type</th>
<th>Relevance &amp; Inclusion</th>
<th>Please Explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current regulation</td>
<td>Relevant, always included</td>
<td>We consider the risk (financial, scope, etc) of current regulations such as EU ETS, in addition to some environmental taxes that are put on Delta and/or our passengers. Examples are the Palau tax, Germany and UK taxes.</td>
</tr>
<tr>
<td>Emerging regulation</td>
<td>Relevant, always included</td>
<td>Emerging regulations such as CORSIA are a large part of our assessment, especially as the SARPs and negotiations were happening. We continue to evaluate the risks associated with this as should be the only global climate change scheme. In addition, evaluating other regional schemes continue to be part of our climate assessment, as it would mean Delta is paying multiple times for the same fuel if CORSIA + another regional scheme applied.</td>
</tr>
<tr>
<td>Technology</td>
<td>Relevant, sometimes included</td>
<td>Our evaluation of this is tied to emerging regulation, such as the ICAO new aircraft CO2 emissions standard which will reduce the impact of aviation greenhouse gas emissions on the global climate. This and other aircraft technology improvements will impact how airline operators can transition to a low-carbon economy.</td>
</tr>
<tr>
<td>Legal</td>
<td>Not relevant, explanation provided</td>
<td>Climate related litigation is not part of risks assessments as we provide a service, not a product. Current/emerging regulation as noted above is more relevant for us.</td>
</tr>
<tr>
<td>Market</td>
<td>Relevant, sometimes included</td>
<td>We look at risk of shifting from air travel (business travelers) for face-to-face meetings to using remote/telework options, in addition to possible change in consumer behavior because of the perceived environmental impact of flying.</td>
</tr>
<tr>
<td>Reputation</td>
<td>Relevant, always included</td>
<td>Public concern about climate change may lead to reputational benefits to airlines that are perceived as being proactive in addressing their greenhouse gas emissions. This is addressed by looking at how we communicate our actions on climate change and ensuring we educate and engage stakeholders.</td>
</tr>
<tr>
<td>Acute physical</td>
<td>Relevant, sometimes included</td>
<td>Risks associated with increased severity of extreme weather events, such as cyclones, hurricanes, or floods have a direct impact on Delta’s operations. The impact of this risk is regularly assessed by our Operations Customer Center in order prepare for disruptions from weather events. Our results of operations are impacted by severe weather, natural disasters and seasonality. Severe weather conditions and natural disasters (or other environmental events) can significantly disrupt service and create air traffic control problems. These events decrease revenue and can also increase costs. In addition, increases in the frequency, severity or duration of thunderstorms, hurricanes, typhoons or other severe weather events, including from changes in the global climate, could result in increases in delays and cancellations, turbulence-related injuries and fuel consumption to avoid such weather, any of which could result in loss of revenue and higher costs. In addition, demand for air travel is typically higher in the June and September quarters, particularly in international markets, because there is more vacation travel during these periods than during the remainder of the year. The seasonal shifting of demand causes our financial results to vary on a seasonal basis. Because of fluctuations in our results from weather, natural disasters and seasonality, operating results for a historical period are not necessarily indicative of operating results for a future period and operating results for an interim period are not necessarily indicative of operating results for an entire year.</td>
</tr>
<tr>
<td>Chronic physical</td>
<td>Relevant, sometimes included</td>
<td>One of the major constraints on an aircraft’s revenue-generating ability is the amount of payload it can carry at takeoff. This is influenced by air density. Increased mean temperatures result in lower air density and therefore lower takeoff performance, reducing the payload capability of an aircraft while increasing fuel costs. This effect is more pronounced at high-altitude airports, which have lower air density due to their elevation, such as Delta’s hub in Salt Lake City. Chronic physical risks also impact airports we serve that are coastal, at sea level and more prone to flooding. Similar to acute physical risks, these are assessed by our Operations Customer Center in order to accommodate.</td>
</tr>
<tr>
<td>Upstream</td>
<td>Relevant, sometimes included</td>
<td>Our fuel supply chain is likely our largest risk both from climate and operations perspective. From the climate change perspective, we have on occasion evaluated the risk and opportunities of low-carbon alternatives at our own refinery.</td>
</tr>
<tr>
<td>Downstream</td>
<td>Not relevant, explanation provided</td>
<td>Our downstream value chain can be considered limited since the product ends with providing a service (flights). While there may be some risks associated with downstream transportation (bags being delivered) or leased assets in the future, these are not considered material in the way risks that impact operations/jet fuel consumption are.</td>
</tr>
</tbody>
</table>
C2.2d Describe your process(es) for managing climate-related risks and opportunities.

Climate-related risks are typically evaluated by cross-divisional groups, depending on the issue. For example, new potential regulations are evaluated by Corporate Environment, Tax, Government Affairs/Legal, Fuel, Corporate Strategy. The relevant members would identify the reach of the scope (which regions/stations does this impact? What is the potential monetary impact? What is the medium to long impact? Will there be changes over the years?) Action and evaluation depends on the scope: comply with the regulation/put the process in place, continue to evaluate, lobby policy makers, etc.

The process for prioritizing climate related risks and opportunities align with our process for assessing the risks. If the risk or opportunity has an impact on the majority of our operations (or global operations) or shareholder and/or customer concern/impact, it may rise in priority. This is also true of decisions to mitigate, transfer, accept or control these risks. Once they become a priority to evaluate, we look at current cost, potential cost, potential investment options and whether there are innovative ways to address this.

Physical Risk example (more frequent weather events): Delta has hubs in seven U.S. airports and an additional three outside of the U.S., more than most of its competitors. This diversified route network provides Delta with additional service recovery options for its customers in the event of severe weather events disrupting one or more of its hubs. As a company and industry that is heavily dependent on the weather for optimal operations, we are likely better prepared than most to plan for and respond to day to day disruptions. Management methods prepare in advance for potential bad weather or having to stop service to a specific station for a short period of time: shutting down faster to avoid passengers stranded at airports, pulling planes out of the path of storm before it hits, having employees staying overnight in aircraft to prepare to restart the airline without worrying about employee transportation to the airport, utilizing in-house meteorologist to assure planners weather is clear, ferrying pilots and flight attendants to the storm city when they are ready to start again. As quoted in separate articles in the Wall Street Journal (Inside the Airlines’ Winter-Storm War Rooms, Feb 2015) regarding returning to regular operations after a storm: “Delta was even faster. By 9 a.m. Wednesday, Delta was back to almost 100% of its schedule, even in Boston.” We continue to refine this strategy. In 2018, a task force analyzed recovery process in case of irregular operations. Among the planned fixes are plans to develop more mobile capabilities for agents to check passengers in and board them. In addition, there are also plans to double the size of the crew tracking staff during irregular operations and add phone lines, put crew scheduling staff in crew lounges to help reroute them, improve the hotel accommodation process and develop more formal plans for irregular operations of varying severity.

Transition Risk: As CORSIA (ICAO Global-Market-Based-Measure) evolved, Corporate Environment, Corporate Strategy, Fleet Strategy, Government Affairs/Legal, Network and others all provided input to evaluate potential impact: Which regions/stations does this impact? What is the potential monetary impact? What is the medium to long impact? Will there be changes over the years?

Because there is a “fee” (unknown what scheme it would be at the time) that would ultimately apply to international flights and is a medium term risk (out to 2035), it has been a cross-divisional effort to address this and also report back to our Executive Environmental Leadership Council. As the process is still going, our actions to date have been: evaluate scope using internal cost of carbon/scenario analysis, lobby policy makers, stay engaged in ICAO policy and technical conversations and continue to create and execute strategy as decisions on the scheme are made.

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.
Where in the value chain does the risk driver occur?
Direct operations

Risk type
Transition risk

Primary climate-related risk driver
Policy and legal: Increased pricing of GHG emissions

Type of financial impact driver
Policy and legal: Increased operating costs (e.g., higher compliance costs, increased insurance premiums)

Company-specific description
In October 2016, ICAO formally adopted a global, market-based emissions offset program known as the Carbon Offsetting and Reduction Scheme for International Aviation. This program is designed to achieve a medium-term goal for the aviation industry of achieving carbon-neutral growth in international aviation beginning in 2020. A pilot phase of the offset program will begin in 2021, followed by a first phase of the program beginning in 2024 and a second phase beginning in 2027. Countries can voluntarily participate in the pilot and first phase, but participation in the second phase is mandatory. Complying with this market-based measure (or other emissions regulations worldwide) could require Delta to purchase CO2 allowances/carbon offsets or replace less efficient aircraft in its fleet earlier than is currently anticipated. Of particular concern, the purchase of CO2 allowances could divert capital away from new aircraft purchases and impact Delta's ability to reduce its emissions. Finally, the adverse effects of the above impacts could impact Delta's financial condition and market valuation. We may face additional regulation of aircraft emissions in the U.S. and abroad and become subject to further taxes, charges or additional requirements to obtain permits or purchase allowances or emission credits for greenhouse gas emissions in various jurisdictions. Additional regulation could result in taxation or permitting requirements from multiple jurisdictions for the same operations and significant costs for us and the airline industry. In addition to direct costs, such regulation could result in increased fuel costs passed through from fuel suppliers affected by any such regulations. We are monitoring and evaluating the potential impact of such legislative and regulatory developments.

Time horizon
Medium-term

Likelihood
Virtually certain

Magnitude of impact
Medium-high

Potential financial impact
400000000

Explanation of financial impact
The financial impact of potential future legislation is of course unknown, but the number outlined here is one scenario of the potential cost of these schemes in the medium term. We have done various sensitivity analyses that have included multiple ranges of price of carbon, multiple schemes included (EU ETS, CORSIA, possible additional ones) and various regulations on what the cost of the instrument will be.

Management method
To deal with upcoming regulations, Corporate Environment, Legal/Government Affairs, Operations Data Analysis, Fuel, and Tax team members work together to stay on top of these regulations. This includes working with IATA and regulators/policy makers in the relevant State. In addition, this group is responsible for managing the regulations through reporting, monitoring/verification and purchasing credits for compliance. With the EU ETS for example, Corporate Environment/Operations Data Analysis compiles data, and Corporate Environment works with Fuel to purchase credits required to remain in compliance. In addition, the largest impact to reducing emissions, improving fuel efficiency and ultimately reducing obligations is Delta’s fleet strategy. Delta has been replacing inefficient, older technology airplanes. The A350 aircraft are 33% more efficient than the aircraft they replaced. We have a continued to focus on fleet and operational efficiency by balancing aircraft age with long-term corporate financial sustainability with plans to replace approximately 30% of our mainline fleet by 2020 with newer, more fuel-efficient aircraft, continuing to contribute to fuel savings, efficiency improvements and ultimately a lower carbon obligation cost in various schemes.

Cost of management
0

Comment
While the management cost of future regulations is not exactly zero, the costs are minimal compared to the actual cost of compliance. Management costs would typically include the time/resources to gather data, report data, work with policy makers and manage the purchase of offsets, allowances, credits, etc. In the medium term, it would likely combined resources totaling 1 FTE that
covers the various aspects related to this.

**Identifier**
Risk 2

**Where in the value chain does the risk driver occur?**
Direct operations

**Risk type**
Physical risk

**Primary climate-related risk driver**
Acute: Increased severity of extreme weather events such as cyclones and floods

**Type of financial impact driver**
Reduced revenue from decreased production capacity (e.g., transport difficulties, supply chain interruptions)

**Company-specific description**
An increase in severe weather events such as hurricanes, floods, precipitation have a direct impact on Delta's operations and bottom line. These occurrences could result in increases in fuel consumption to avoid such weather, turbulence-related injuries, delays, and cancellations, any of which would increase the potential for greater loss of revenue and higher costs. In addition, these events are more likely to occur during the summer months, when demand for air travel is typically higher. Increases in frequency, severity, or duration of high winds could result in damages to airport facilities or increases in fuel consumption to avoid such weather, turbulence-related injuries, delays, and cancellations, any of which would increase the potential for greater loss of revenue and higher costs.

**Time horizon**
Current

**Likelihood**
Virtually certain

**Magnitude of impact**
Medium-high

**Potential financial impact**
300000000

**Explanation of financial impact**
The financial impact of these weather events result in additional costs (accommodations and rebooking of customers, additional wages for crew, etc) in addition to lost revenue as a result of not being able to operate flights and/or needing to rebook. The number included (300M) represents the range of impact from these types of weather events, as this is the total impact from the storms on the East Coast during Q1 of 2017, Hurricane Irma and Winter Storm Benji. • In Apr 2017, multiple storms on the East Coast cost Delta $125M in revenue. Q3: net income fell, with $120 million of the decline blamed on Hurricane Irma. Q4: $60 million impact from the combination of December's power outage at Atlanta’s Hartsfield-Jackson Airport and Winter Storm Benji. • In Q1 of 2018, negative impact from severe winter storms cost $44 million.

**Management method**
We are tracking closely the defined shift in focus by scientists, policy-makers, environmental NGOs, and business toward assessing and planning for climate change risks and identifying adaptive and mitigation responses to build resilience. As a company and industry that is heavily dependent on the weather for optimal operations, we are likely better prepared than most to plan for and respond to day to day disruptions. Management methods prepare in advance for potential bad weather or having to stop service to a specific station for a short period of time: shutting down faster to avoid passengers stranded at airports, pulling planes out of the path of a storm before it hits, having employees staying overnight in aircraft to prepare to restart the airline without worrying about employee transportation to the airport, utilizing in-house meteorologists to assure weather is clear, ferrying pilots and flight attendants to the storm city when they are ready to start again and utilizing the time the planes are parked to check for upcoming scheduled maintenance that could be done while they sat out during weather. We recognize there may be a need for a more concentrated focus on climate change that looks beyond the near- to the medium- and long-term.

**Cost of management**
250000000

**Comment**
While there are additional costs associated with manpower and labor costs to manage irregular operations, a large portion of the cost of management lies in the cancellation of the flights and impact to revenue, as outlined above: • In Apr 2017, multiple storms on the East Coast cost Delta $125M in revenue. Q3: net income fell, with $120 million of the decline blamed on Hurricane Irma. Q4: $60 million impact from the combination of December’s power outage at Atlanta’s Hartsfield-Jackson Airport and Winter Storm Benji. • In Q1 of 2018, negative impact from severe winter storms cost $44 million.
Identifer
Risk 3

Where in the value chain does the risk driver occur?
Customer

Risk type
Transition risk

Primary climate-related risk driver
Reputation: Stigmatization of sector

Type of financial impact driver
Reputation: Reduced revenue from decreased demand for goods/services

Company- specific description
Public concern about air travel and its impact on climate change may lead to reduced revenue as customers choose alternate forms of communication such as videoconferencing. Reputation that the sector is not doing enough may impact demand for business flying both at an industry and airline level.

Time horizon
Medium-term

Likelihood
About as likely as not

Magnitude of impact
Low

Potential financial impact
0

Explanation of financial impact
Delta has not estimated the potential financial implications of these risks at this time but could result in low to moderate reduced revenue as a result. However, current management methods described below (engaging in carbon offset partnerships and carbon footprint education) has actually resulted in a financial benefit through increased market share.

Management method
Current mitigation method is providing more transparent data to consumers: Delta’s fuel efficiency, climate change and environmental goals, and their carbon footprint (on an individual or corporate customer level). Because there is a higher risk with corporate customers vs. individual travelers, we have started to engage with the corporate travel managers and sustainability teams to educate them on efficiency improvements, impact of their travel, and also propose ways to reduce emissions through carbon offset partnerships that impact our Scope 1 emissions and our customers Scope 3 travel emissions. Case study: Duke University - joint program on carbon offsets+tree planting bundle against their business travel on Delta has resulted in an increase in revenue/volume compared to same time period last year.

Cost of management
0

Comment
Current cost of management is none to low and only through additional work to better communicate Delta’s climate change strategy and initiatives and to work on engaging a small set of corporate customers (also discussed in section 12). If this risk did become more pronounced in the future, then cost of management would increase but would depend on the actions Delta decided to take to mitigate impact.

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

Type of financial impact driver
Reduced exposure to GHG emissions and therefore less sensitivity to changes in cost of carbon

Company-specific description
Increases in fuel- and CO2-related costs as a result of international agreements, carbon taxes, cap and trade schemes, fuel taxes and regulations, and voluntary agreements provide Delta with additional incentives to implement additional fuel conservation initiatives, thereby lowering Delta’s fuel expense and mitigating Delta’s environmental impacts. Any reduction in fuel consumption results in reduced exposure to GHG emissions, and less sensitivity to changes in cost of carbon and also the price of fossil fuel. New, more efficient aircraft will make the biggest impact in our efficiency and reducing absolute greenhouse gas emissions. Over the past few years, we have reduced the number of regional aircraft and depended on larger aircraft, such as the Boeing 717-200, to achieve the same capacity using fewer takeoffs and landings, thereby improving overall efficiency. In addition, improvements to arrival and departure procedures, onboard weight reduction and other measures saved Delta an incremental 1.87 million gallons of fuel in 2017. Our commitment to addressing climate change informs the way we manage our fleet. We balance technological improvements available in new aircraft with a desire to build a fleet that is sustainable for the long term and maximizes planes’ useful life. We view airplanes as long-term investments. While the body of a plane may stay in our fleet for up to 30 years, we are continually improving aircraft from the inside out, increasing customer comfort and connectivity with new interiors and making fuel-efficiency improvements, such as adding winglets and routinely washing engine compressors to remove airborne particles. As narrowbody aircraft approach retirement age over the next five years, we will replace them with quieter, more fuel-efficient Airbus 321s, Airbus 220s and Boeing 737-900ERs. These upgrades will build upon our lightweighting and other efficiency measures, allowing us to steadily transform our fleet’s performance.

Time horizon
Current

Likelihood
Virtually certain

Magnitude of impact
High

Potential financial impact
4500000000

Explanation of financial impact
Over the last decade, fuel prices have increased substantially at times and have been highly volatile during the last several years. In 2017 avg. fuel price/gal. was $1.68, a 12% decrease from avg. fuel price in 2015, but a 11% increase from our 2016 price of $1.49. Fuel costs represented 19.2%, 18.3% and 23.0% of our operating expense in 2017, 2016, and 2015, respectively. The financial implications of change in price in jet fuel could be significant to Delta with the purchase of almost 4B gal/yr, as a 1¢ increase in price/gal could result in an additional $40M fuel cost/yr. Estimated financial implications of a global scheme could be significant, depending on cost of carbon, our obligation, and whether there is double-paying for the same fuel through regional scheme.

Strategy to realize opportunity
We have purchase commitments for 353 new aircraft by 2020. This will make the largest impact in helping reduce our emissions, improve efficiency and help reduce obligation in carbon schemes.

Cost to realize opportunity
4500000000

Comment
We expect that we will invest approximately $4.5 billion in 2018 primarily for (1) aircraft, including deliveries of B-737-900ERs, A321-200s and A350-900s, along with advance deposit payments for these and our new A330-900neo and CS100 orders as well as for (2) aircraft modifications, the majority of which relate to increasing the seat density and enhancing the cabins on our domestic fleet.
Where in the value chain does the opportunity occur?
Direct operations

Opportunity type
Energy source

Primary climate-related opportunity driver
Use of lower-emission sources of energy

Type of financial impact driver
Reduced exposure to GHG emissions and therefore less sensitivity to changes in cost of carbon

Company-specific description
We recognize that fuel efficiency and carbon-neutral growth alone are not sufficient to address the risks of climate change. In line with IATA’s long-term emissions-reduction goals, we must also dramatically decrease absolute emissions, which result mainly from burning of jet fuel by our mainline and regional aircraft. Because of the environmental and financial challenges posed by purchasing increasing amounts of jet fuel, many members of the aviation industry believe that the future lies with alternative, or nonpetroleum-based, sources of energy. As researchers explore the use of biofuels as alternative fuel sources, Delta has proactively developed a set of biofuel principles that will guide our decisionmaking and investments in this area. To be worthy of investment, we believe that any new biofuel project must: » Meet applicable technical and regulatory standards, including ASTM D1655 » Have lower environmental impacts (climate, water, air and biodiversity), including lower life-cycle carbon emissions than conventional, petroleum-based jet fuel » Ideally, come from feed stocks that will not displace or compete with food crops » Satisfy technical and functional criteria that allow biofuel to be commingled within existing national fuel transport, storage and logistics infrastructure, as well as within individual airport and airline systems » Have no adverse impact on aircraft engines » Be somewhat cost competitive with existing petroleum-based supply » Advance the future availability of jet biofuels » Meet Delta’s reputational and creditworthiness standards

Time horizon
Medium-term

Likelihood
Likely

Magnitude of impact
Likely

Potential financial impact
Medium

Explanation of financial impact
Financial impacts: While alternative fuels can provide a lower life-cycle emissions, a premium on the cost will have a medium to significant impact. Because Delta uses 4 billion gallons of fuel a year, even a 1c increase per gallon could result in $75 million increase in fuel spend (at $1.68 per gallon as per 2017 10K). Additional financial impacts could be a lower carbon tax/regulation cost, as the use of alternative fuels can help reduce that obligation.

Strategy to realize opportunity
In 2017, Delta launched a partnership with the University of Georgia to manage ongoing life-cycle analyses of new biofuels. An evaluation of camellia oil, including the entire life-cycle from cultivation and harvesting to biojet fuel production, transport and combustion, demonstrated that it could significantly reduce carbon emissions compared to petroleum-based fuels. In addition, Delta will continue to engage with producers to assess the technical, financial and regulatory challenges associated with bio-jet opportunities.

Cost to realize opportunity

Comment

Identifier
Opp3

Where in the value chain does the opportunity occur?
Direct operations

Opportunity type
Energy source
Resource efficiency

**Primary climate-related opportunity driver**
Use of more efficient modes of transport

**Type of financial impact driver**
Reduced operating costs (e.g., through efficiency gains and cost reductions)

**Company-specific description**
More efficient aircraft and fuel savings initiatives help to decrease fuel cost.

**Time horizon**
Short-term

**Likelihood**
Likely

**Magnitude of impact**
Medium-low

**Potential financial impact**
75000000

**Explanation of financial impact**
Because Delta uses 4 billion gallons of fuel a year, even a 1c increase per gallon could result in $75 million increase in fuel spend (at $1.68 per gallon as per 2017 10K). Any opportunity for reducing fuel consumption results in less exposure to volatility of fuel prices.

**Strategy to realize opportunity**
We have purchase commitments for 353 new aircraft by 2020. This will make the largest impact in helping reduce our emissions, improve efficiency and help reduce obligation in carbon schemes. In 2017, new aircraft helped to improve our fuel efficiency by 2.21% compared to 2016.

**Cost to realize opportunity**

**Comment**

C2.5
(C2.5) Describe where and how the identified risks and opportunities have impacted your business.

<table>
<thead>
<tr>
<th>Products and services</th>
<th>Impact</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Impacted</td>
<td>Reputation risk with customers can be a risk and opportunity. Currently, we engage with all customers through our website, social media and annual sustainability reports. Because of the additional questions we are receiving from corporate customers asking what we are doing around sustainability and climate change, we have started pilot programs on a more focused engagement program with specific corporate customers. While all corporate customers receive information on their carbon footprint, this allows us to engage on ways to reduce emissions. We don't lose revenue to things like teleconferencing. We have been able to partner with customers to offset their company travel emissions on Delta and invest in projects that are meaningful for both Delta and our corporate customer. This allows us both to achieve our goals: Scope 1 emissions and engaging our customers/addressing our reputational risk, and address many customers Scope 3 / travel emissions goals. In most cases, this engagement has resulted in better contract performance/additional revenue. For individual customers, we have tried targeted engagement during Earth Month, at specific Sky Club locations on the West Coast. In addition, we promote education on impact of travel as customers are able to check their emissions on delta.com/co2. During Earth Month, we match any customer that offsets their emissions through that website. The magnitude of this impact is low.</td>
</tr>
<tr>
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<td>Impacted</td>
<td>Reputation risk with customers can be a risk and opportunity. Currently, we engage with all customers through our website, social media and annual sustainability reports. Because of the additional questions we are receiving from corporate customers asking what we are doing around sustainability and climate change, we have started pilot programs on a more focused engagement program with specific corporate customers. While all corporate customers receive information on their carbon footprint, this allows us to engage on ways to reduce emissions. We don't lose revenue to things like teleconferencing. We have been able to partner with customers to offset their company travel emissions on Delta and invest in projects that are meaningful for both Delta and our corporate customer. This allows us both to achieve our goals: Scope 1 emissions and engaging our customers/addressing our reputational risk, and address many customers Scope 3 / travel emissions goals. In most cases, this engagement has resulted in better contract performance/additional revenue. For individual customers, we have tried targeted engagement during Earth Month, at specific Sky Club locations on the West Coast. In addition, we promote education on impact of travel as customers are able to check their emissions on delta.com/co2. During Earth Month, we match any customer that offsets their emissions through that website. The magnitude of this impact is low.</td>
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<td></td>
<td>Impacted</td>
<td>A large part of risks and opportunities are impacted by our fleet: more efficient aircraft is an opportunity for reducing emissions and risks associated with carbon costs/fossil fuel price increases. We address this through our fleet strategy and capital expenditure investing activities: We have committed to future aircraft purchases that will require significant capital investment and have obtained long-term financing commitments for a substantial portion of the purchase price of these aircraft. We expect that we will invest approximately $4.5 billion in 2018 primarily for (1) aircraft, including deliveries of B-737-900ERs, A321-200s and A350-900s, along with advance deposit payments for these and our new A330-900neo and CS100 orders as well as for (2) aircraft modifications, the majority of which relate to increasing the seat density and enhancing the cabins on our domestic fleet. We expect that the 2018 investments will be funded primarily through cash flows from operations. As reported in Delta10K 2017. This has been factored in on a medium-long term basis, aligned with our fleet strategy. The magnitude of this impact is high, given the cost of fleet and jet fuel.</td>
</tr>
<tr>
<td></td>
<td>Impacted</td>
<td>Because of the environmental and financial challenges posed by purchasing increasing amounts of jet fuel, many members of the aviation industry believe that the future lies with alternative, or nonpetroleum-based, sources of energy. As researchers explore the use of biofuels as alternative fuel sources, Delta has proactively developed a set of biofuel principles that will guide our decisionmaking and investments in this area. To be worthy of investment, we believe that any new biofuel project must: » Meet applicable technical and regulatory standards, including ASTM D1655 » Have lower environmental impacts (climate, water, air and biodiversity), including lower life cycle carbon emissions than conventional, petroleum-based jet fuel » Ideally, come from feed stocks that will not displace or compete with food crops » Satisfy technical and functional criteria that allow biofuel to be commingled within existing national fuel transport, storage and logistics infrastructure, as well as within individual airport and airline systems » Have no adverse impact on aircraft engines » Be somewhat cost competitive with existing petroleum-based supply » Advance the future availability of jet biofuels » Meet Delta's reputational and creditworthiness standards In 2017, Delta launched a partnership with the University of Georgia to manage ongoing life cycle analyses of new biofuels. An evaluation of camelina oil, including the entire life cycle from cultivation and harvesting to biojet fuel production, transport and combustion, demonstrated that it could significantly reduce carbon emissions compared to petroleum-based fuels. The project team is currently working with other partners to assess pathways for commercializing this fuel source. The impact of this is medium. While biofuel is not yet at scale, this has the potential to have a large impact given the large environmental impact of fuel.</td>
</tr>
<tr>
<td></td>
<td>Impacted</td>
<td>As a company and industry that is heavily dependent on the weather for optimal operations, we are likely better prepared than most to plan for and respond to day to day disruptions. Management methods prepare in advance for potential bad weather or having to stop service to a specific station for a short period of time: shutting down faster to avoid passengers stranded at airports, pulling planes out of the path of a storm before it hits, having employees staying overnight in aircraft to prepare to restart the airline without worrying about employee transportation to the airport, utilizing in-house meteorologists to assure planners weather is clear, ferrying pilots and flight attendants to the storm city when they are ready to start again and utilizing the time the planes are parked to check for upcoming scheduled maintenance that could be done while they sat out during weather. We recognize there may be a need for a more concentrated focus on climate change that looks beyond the near- to medium- and long-term. After an April 2018 series of thunderstorms caused irregular operations at its biggest hub, Delta CEO Ed Bastian and chief operating officer Gil West wrote that an internal task force has been analyzing why the recovery &quot;fell short.&quot; Among the planned fixes are plans to develop more mobile capabilities for agents to check passengers in and board them. Delta also plans to double the size of the crew tracking staff during irregular operations and add phone lines, put crew scheduling staff in crew lounges to help reroute them, improve the hotel accommodation process and develop more formal plans for irregular operations of varying severity. (AJC Article: <a href="https://www.ajc.com/business/delta-maps-out-fixes-after-meltdown-caused-mass-cancellations/pK32PzrRryk00yF8yaqKSkvK">https://www.ajc.com/business/delta-maps-out-fixes-after-meltdown-caused-mass-cancellations/pK32PzrRryk00yF8yaqKSkvK</a>) The impact of this is high as our operations is highly dependent on the weather impacts as described above.</td>
</tr>
</tbody>
</table>

C2.6
(C2.6) Describe where and how the identified risks and opportunities have factored into your financial planning process.

<table>
<thead>
<tr>
<th>Relevance</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revenues</td>
<td>Impacted                                                                                       As reported in 2017 10K: Our results can fluctuate due to the effects of weather, natural disasters and seasonality. Our results of operations are impacted by severe weather, natural disasters and seasonality. Severe weather conditions and natural disasters (or other environmental events) can significantly disrupt service and create air traffic control problems. These events decrease revenue and can also increase costs. In addition, increases in the frequency, severity or duration of thunderstorms, hurricanes, typhoons or other severe weather events, including from changes in the global climate, could result in increases in delays and cancellations, turbulence-related injuries and fuel consumption to avoid such weather, any of which could result in loss of revenue and higher costs. In addition, demand for air travel is typically higher in the June and September quarters, particularly in international markets, because there is more vacation travel during these periods than during the remainder of the year. The seasonal shifting of demand causes our financial results to vary on a seasonal basis. Because of fluctuations in our results from weather, natural disasters and seasonality, operating results for a historical period are not necessarily indicative of operating results for a future period and operating results for an interim period are not necessarily indicative of operating results for an entire year. This is evaluated on a short-medium term, with medium impact in case of more severe storms.</td>
</tr>
<tr>
<td>Operating costs</td>
<td>Impacted                                                                                       Total operating expense increased $2.4 billion and our consolidated operating cost per available seat mile (“CASM”) increased 6.4% compared to 2016 to 13.81 cents, primarily due to higher fuel costs, salaries and related costs and depreciation expense. Including our regional carriers, fuel expense increased $771 million compared to the prior year due to a 22.3% increase in the market price per gallon of fuel, partially offset by reduced fuel hedge losses compared to the prior year and profits generated within our refueling segment. Salaries and related costs were higher due to increases for eligible merit, ground and flight attendants implemented in the June 2017 quarter. (From Delta 10K). Current (EU ETS) and future (CORsia) are evaluated with our Fuels and Executive Environmental Leadership Council, these are evaluated and factored on a medium-long term basis. This would be considered low-medium impact, as we try to work towards a single scheme (CORsia).</td>
</tr>
<tr>
<td>Capital expenditures / capital allocation</td>
<td>Impacted                                                                                       A large part of risks and opportunities are impacted by our fleet: more efficient aircraft is an opportunity for reducing emissions and risks associated with carbon costs/fossil fuel price increases. We address this through our fleet strategy and capital expenditure investing activities: we have committed to future aircraft purchases that will require significant capital investment and have obtained long-term financing commitments for a substantial portion of the purchase price of these aircraft. We expect that we will invest approximately $4.5 billion in 2018 primarily for (1) aircraft, including deliveries of B-737-900ERs, A321-200s and A350-900s, along with advance deposit payments for these and our new A330-900neo and CS100 orders as well as for (2) aircraft modifications, the majority of which relate to increasing the seat density and enhancing the cabins on our domestic fleet. We expect that the 2018 investments will be funded primarily through cash flows from operations. (as reported in Delta10K 2017). This has been factored in on a medium-long term basis, aligned with our fleet strategy, with a medium impact given the cost of new fleet and the long-term impact it has on emissions.</td>
</tr>
<tr>
<td>Acquisitions and divestments</td>
<td>Not yet impacted                                                                             Equity Investments. During 2017, we completed a $622 million tender offer and settled derivative contracts for $173 million to obtain additional capital stock of Grupo Aeroméxico, increasing our ownership percentage to a non-controlling 49% equity stake in Grupo Aeroméxico. During the December 2017 quarter, we acquired shares of Air France-KLM for $450 million, which provides us with a 10% ownership interest. While there may be “dotted line” impact from our investment in other airlines, the risks, opportunities and strategies related to climate change still are under their operational control. At the time there are no acquisitions/divestments that would impact financial planning process.</td>
</tr>
<tr>
<td>Access to capital</td>
<td>Not yet impacted                                                                             At December 31, 2016, the principal amount of debt and capital leases was $7.4 billion. During 2017, we issued $2.5 billion of unsecured notes. As a result of the debt issuances, partially offset by scheduled principal payments, the amount of debt and capital leases was $8.9 billion at December 31, 2017. We expect to meet our cash needs for the next 12 months from cash flows from operations, cash and cash equivalents, short-term investments and financing arrangements. As of December 31, 2017, we had $5.1 billion in unrestricted liquidity, consisting of $2.6 billion in cash and cash equivalents and short-term investments and $2.5 billion in undrawn revolving credit facilities. During 2017, we used existing cash and cash generated from operations to fund capital expenditures of $3.9 billion, purchase shares of Grupo Aeroméxico and Air France-KLM for $1.2 billion and return $2.4 billion to shareholders. In addition, we used the proceeds from a debt offering and cash generated from operations to contribute $3.2 billion in cash to fund our pension obligation. Sources of Liquidity Operating Activities Cash flows from operating activities continue to provide our primary source of liquidity. We generated positive cash flows from operations of $5.1 billion in 2017, $7.2 billion in 2016 and $7.9 billion in 2015. We also expect to generate positive cash flows from operations in 2018. We had lower operating cash flows in 2017 compared to prior years primarily due to incremental pension plan contributions partially funded through $2.0 billion of debt issuance. In the short to medium term, access to capital is not yet impacted.</td>
</tr>
<tr>
<td>Assets</td>
<td>Impacted                                                                                       Currently, largest impact is to aircraft/fleet strategy for the medium to long term. A large part of risks and opportunities are impacted by our fleet: more efficient aircraft is an opportunity for reducing emissions and risks associated with carbon costs/fossil fuel price increases. We address this through our fleet strategy and capital expenditure investing activities: We have committed to future aircraft purchases that will require significant capital investment and have obtained long-term financing commitments for a substantial portion of the purchase price of these aircraft. We expect that we will invest approximately $4.5 billion in 2018 primarily for (1) aircraft, including deliveries of B-737-900ERs, A321-200s and A350-900s, along with advance deposit payments for these and our new A330-900neo and CS100 orders as well as for (2) aircraft modifications, the majority of which relate to increasing the seat density and enhancing the cabins on our domestic fleet. We expect that the 2018 investments will be funded primarily through cash flows from operations. (as reported in Delta10K 2017). This has been factored in on a medium-long term basis, aligned with our fleet strategy.</td>
</tr>
<tr>
<td>Liabilities</td>
<td>Not yet impacted                                                                             Currently not assessed.</td>
</tr>
<tr>
<td>Other</td>
<td>Please select</td>
</tr>
</tbody>
</table>
(C3.1) Are climate-related issues integrated into your business strategy?
Yes

(C3.1a) Does your organization use climate-related scenario analysis to inform your business strategy?
No, but we anticipate doing so in the next two years

(C3.1c) Explain how climate-related issues are integrated into your business objectives and strategy.

i. The opportunity to address climate change risks in the business strategy has driven the tracking of metrics addressed in (i) in order to make more informed decisions. Delta’s annual Flight Plan sets the overarching strategy and goals for the year with over 25 goals that impact our people, customers, partners/communities and our owners. At the core of this is taking care of employees and customers (safety first). In addition, the potential need for adaptation to physical and regulatory risks mean that business objectives are influenced by climate related issues:

- Passenger safety and employee safety: safety is our number one priority, and climate related issues such as more frequent instances of turbulence and turbulence related injuries help influence our focus on safety.

- Running a customer-focused and reliable operation: taking into account more irregular operation days due to weather events and weather risk at specific airports

- Cost focus/objectives: Because jet fuel is a large part of Delta's cost, our business strategy is always linked to emissions reductions – any fuel saved helps reduce our cost, while also reducing our emissions. Goals around profit sharing are also tied to fuel and emissions and monetary payouts, as any money saved on fuel means lower emissions and more money for profit sharing and bonus payouts

- Fleet renewal objectives: Delta’s annual Flight Plan sets the overarching strategy and goals for the year, and typically includes a metric on fuel efficiency/reducing environmental impact of the company. The 2018 goal is: Renew 7% of mainline fleet, contributing to 2% improvement in fuel efficiency. Fleet changes are the biggest driver in moving the needle on efficiency and reducing greenhouse gases.

- Regulatory risks have driven the need to report metrics currently and model future impact in order to influence strategy both in the short- and long-term. In preparation for CORSIA, we have invested in various carbon offset projects around the world while evaluating all investment options for future compliance.

ii. Because jet fuel is a large part of Delta’s cost, our business strategy is always linked to emissions reductions – any fuel saved helps reduce our cost, while also reducing our emissions. Our business strategy is linked to four emissions reductions targets and goals:

- Delta’s annual Flight Plan sets the overarching strategy and goals for the year, and typically includes a metric on fuel
efficiency/reducing environmental impact of the company. The 2018 goal is: Renew 7% of mainline fleet, contributing to 2% improvement in fuel efficiency. Fuel reduction initiatives (tracked on a monthly basis) and the acquisition of new, more efficient aircraft help to meet this goal.

- 1.5% fuel efficiency improvement (industry goal, tracked internally monthly and to IATA annually)

- Carbon-neutral growth from 2021 on international emissions: Delta’s strategy has been to lead on this by purchasing offsets against a 2012 baseline. This helps lay the foundation for a strategy for compliance with CORSIA in 2021.

- 50% reduction in absolute emissions compared to a 2005 baseline: all new aircraft and fuel savings initiatives explained in this response help to support this goal.

In addition, we track our progress against all three industry goals that were adopted in 2009: 1.5% fuel efficiency improvement, carbon-neutral growth from 2021 on international emissions and a 50% reduction in absolute emissions compared to a 2005 baseline.

Delta integrates climate change risks in internal/external communications, reporting and analytics processes. A Sustainability Strategy (highlights climate change) is approved by the EELC each year & progress is reported to senior leaders on the following issues:

-Fuel efficiency & absolute GHG emissions progress plus supporting analysis (monthly report on short and medium term) -Updates on climate change policy, legislative, regulatory and reputational risks (medium to long term) -Evaluate alternative fuels (medium to long term) -Impact of current & future fuel savings initiatives (short to medium term) -Customer & employee engagement on climate change: delta.com/co2 (short term)

These metrics & updates are provided to senior leaders and the appropriate groups to influence the business strategy as follows:

-Regular Reports to Senior Executive Leadership

-Monthly Reports to Various Operational Divisions

-As necessary: updates on progress of the Sustainability Strategy and Sustainability Action Plan and metrics are brought to the CEO, Board of Directors and the Corporate Leadership Team as appropriate to drive corporate strategy. This includes the Fleet Committee, where the Senior Vice President of Corporate Safety, Security and Compliance is a member for the purpose of integrating cost of CO2 into aircraft purchasing strategies (medium-long term considered)

iii. Integrating CO2 costs into aircraft planning & purchasing strategies: Beginning in 2012, Delta’s SVP of Corporate Safety, Security and Compliance became involved in the Fleet Committee to provide insight on integrating cost of CO2 into future aircraft purchasing strategies. Some of these fleet changes have already started to be incorporated in the fleet plan: upgauging by retiring 50-seat jets and replacing them with 91 B717-200s (allows for 1 takeoff to transport the same number of people instead of 2), and replacing older B757-200s with 69 B737-900s which are 19% more efficient. The new A350s are Delta’s most efficient aircraft, 33% more efficient on a fuel/revenue ton mile than the aircraft it replaced. Over the next 5 years, Delta’s fleet strategy will include replacing 20% of our narrowbody fleet with newer, more fuel efficient aircraft in an effort to help reduce our overall emissions and improve fuel efficiency. In addition, we have made the decision to begin carbon-neutral growth as of 2012, and purchase offsets for any growth in emissions while we also focus on new technology and fuel savings initiatives.

v and vi. Delta’s short & long term business strategies have been influenced by climate change considerations through the integration of climate change risks in internal/external communications, reporting and analytics processes. A Sustainability Strategy (highlights climate change) is approved by the EELC each year & progress is reported to senior leaders on the following issues:

-Fuel efficiency & absolute GHG emissions progress plus supporting analysis (monthly)

-Updates on climate change policy, legislative, regulatory and reputation risks
C3.1g

(C3.1g) Why does your organization not use climate-related scenario analysis to inform your business strategy?

We have not used climate-related scenarios that have assessed the materiality of reputational, policy, physical and market/technology risks with transition/physical risk scenarios. However, we have done various "stand alone" scenario analysis related to policy and physical risks such as "what is the impact of regulations (CORSIA, EU ETS) and more frequent weather events on our costs, revenues and business interruption."

Over the next few years, we anticipate pulling together a more cohesive strategy and climate-related scenario where all of these risks can be evaluated/inputted, and the impact on input costs, operating costs, revenues, supply chain and business interruption can be evaluated, and how to respond as a company to this analysis.

C4. Targets and performance

C4.1

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

Both absolute and intensity targets

C4.1a

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

- **Target reference number**
  - Abs 1

- **Scope**
  - Other, please specify (Scope 1+2+3)

- **% emissions in Scope**
  - 100

- **% reduction from base year**
  - 6.3

- **Base year**
  - 2012

- **Start year**
  - 2012

- **Base year emissions covered by target (metric tons CO2e)**
  - 37685497

- **Target year**
  - 2017
Is this a science-based target?
No, and we do not anticipate setting one in the next 2 years

% achieved (emissions)
63

Target status
Underway

Please explain
Same goal as reported in 2017 CDP. Carbon-neutral growth compared to a 2012 baseline. While we have grown the business 9.3% since 2012 in terms of revenue ton miles (RTM), we have capped our emissions at our 2012 levels by first implementing fuel savings initiatives and also receiving new aircraft, and then supplementing it by purchasing carbon offsets to remain at 2012 emissions levels. We have achieved this in 2017, and we also achieved this in 2016.

Target reference number
Abs 2

Scope
Other, please specify (Scope 1 + 3 (only jet fuel))

% emissions in Scope
98.8

% reduction from base year
14.2

Base year
2005

Start year
2005

Base year emissions covered by target (metric tons CO2e)
45550256

Target year
2050

Is this a science-based target?
No, and we do not anticipate setting one in the next 2 years

% achieved (emissions)
90

Target status
Underway

Please explain
This goal has not been reported in previous CDP, but Delta has been tracking this on an annual basis by getting our full emissions verified under The Climate Registry. This goal aligns with the industry long-term goal of 50% reduction by 2050. Our fleet strategy and fuel savings initiatives implemented every year have contributed to reducing our absolute emissions towards the 2050 goal.
(C4.1b) Provide details of your emissions intensity target(s) and progress made against those target(s).

Target reference number
Int 1

Scope
Other, please specify (Scope 1 + Scope 3, but only for jet fuel)

% emissions in Scope
98.8

% reduction from baseline year
10.5

Metric
Other, please specify (Metric ton / 100 Revenue Ton Mile)

Base year
2009

Start year
2009

Normalized baseline year emissions covered by target (metric tons CO2e)
0.1648

Target year
2020

Is this a science-based target?
No, and we do not anticipate setting one in the next 2 years

% achieved (emissions)
76

Target status
Underway

Please explain
Only 98% of emissions are covered because the intensity goal only applies to jet fuel (covered both in Scope 1 and 3). The other 2% is ground support equipment, electricity, chemicals, natural gas, etc. and is not part of this intensity goal. Delta's intensity target aligns with IATA's short-term climate change goal: improve fuel efficiency by 1.5% per year between 2009 and 2020. The metric to calculate this is how much fuel it takes (gallons) to transport passengers a certain distance (revenue ton miles). While we typically report in gallons per 100 RTM internally (100 just so it is not a decimal), it has been converted to metric tons per 100 RTM for reporting here. The IATA goal is expressed as an intensity efficiency goal to allow for growth of the airline while new technology aircraft and biofuel at commercial scale is still being developed. This means an airlines fuel consumption (emissions) can grow year over year (attributed to growing the business and flying more weight or miles), as long as the fuel growth is less than the business growth. Delta's efficiency has improved 8% since 2009, an average of 1% per year which is below the IATA goal. However, the 2017 compared to 2016 efficiency has improved 2.21%, well above the IATA goal of 1.5% per year. This is in large part due to new aircraft, which provides the most fuel savings by far. Delta grew in terms of revenue ton miles (weight of revenue times the distance it flew) by For the 2017 year, total fuel consumption (Scope 1 and Scope 3, Delta mainline and DCI) increased by 2.65%, while fuel consumption only increased by 0.75%, thus the fuel efficiency improvement of 2.21%. This goal aligns with Delta's 2017 reported intensity goal. - Last year's ongoing improvement since 2009 was 0.85% average annual improvement. This year: 1% (improvement) - Last year's 1-year fuel efficiency change was 0.1% worse than previous year. This year: 2.21% improvement vs. previous year.

% change anticipated in absolute Scope 1+2 emissions
6.7

% change anticipated in absolute Scope 3 emissions
-14.5
(C4.2) Provide details of other key climate-related targets not already reported in question C4.1/a/b.

Target
Energy productivity

KPI – Metric numerator
kWh

KPI – Metric denominator (intensity targets only)
Sq Ft.

Base year
2016

Start year
2017

Target year
2017

KPI in baseline year
2.89

KPI in target year
2.75

% achieved in reporting year
64

Target Status
Underway

Please explain
This metric tracks Delta’s electricity consumption at its four non-airport facilities in Atlanta: GO, TOC, Res and Mid-Field. Consumption efficiency reflects conservation efforts, including CRE-approved energy-reduction projects. Monthly and YTD goals represent a 5% improvement in efficiency over 2015, as recommended by CRE’s energy consultant. Increased energy efficiency equates to cost savings and a reduction in greenhouse gas emissions. Delta’s year end metric for 2017 was 2.80 kWh/sqft, 1.8% below goal.

Part of emissions target

Is this target part of an overarching initiative?
No, it’s not part of an overarching initiative

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 projects at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

<table>
<thead>
<tr>
<th>Number of projects</th>
<th>Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under investigation</td>
<td>0</td>
</tr>
<tr>
<td>To be implemented*</td>
<td>3</td>
</tr>
<tr>
<td>Implementation commenced*</td>
<td>3</td>
</tr>
<tr>
<td>Implemented*</td>
<td>6</td>
</tr>
<tr>
<td>Not to be implemented</td>
<td>0</td>
</tr>
</tbody>
</table>
C4.3b

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

<table>
<thead>
<tr>
<th>Activity type</th>
<th>Other, please specify (Super98 - reduce drag on MD88)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description of activity</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
<tr>
<td>Estimated annual CO2e savings (metric tonnes CO2e)</td>
<td>2131.6</td>
</tr>
<tr>
<td>Scope</td>
<td>Scope 1</td>
</tr>
<tr>
<td>Voluntary/Mandatory</td>
<td>Voluntary</td>
</tr>
<tr>
<td>Annual monetary savings (unit currency – as specified in CC0.4)</td>
<td>363695</td>
</tr>
<tr>
<td>Investment required (unit currency – as specified in CC0.4)</td>
<td>0</td>
</tr>
<tr>
<td>Payback period</td>
<td>Please select</td>
</tr>
<tr>
<td>Estimated lifetime of the initiative</td>
<td>3-5 years</td>
</tr>
<tr>
<td>Comment</td>
<td>The installation of the Super98 kit to reduce drag on the aircraft will see savings until we retire the MD88's. However, typically 1 year after we implement a fuel savings initiative it becomes business as usual, so we will no longer count it as “fuel savings.” However, in terms of the lifetime, it will continue to make an impact until the aircraft is retired.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Activity type</th>
<th>Other, please specify (Removing Weight - Carbon Brakes)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description of activity</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
<tr>
<td>Estimated annual CO2e savings (metric tonnes CO2e)</td>
<td>1916</td>
</tr>
<tr>
<td>Scope</td>
<td>Scope 1</td>
</tr>
<tr>
<td>Voluntary/Mandatory</td>
<td>Voluntary</td>
</tr>
<tr>
<td>Annual monetary savings (unit currency – as specified in CC0.4)</td>
<td>326987</td>
</tr>
<tr>
<td>Investment required (unit currency – as specified in CC0.4)</td>
<td>0</td>
</tr>
<tr>
<td>Payback period</td>
<td>Please select</td>
</tr>
<tr>
<td>Estimated lifetime of the initiative</td>
<td>3-5 years</td>
</tr>
<tr>
<td>Comment</td>
<td>The removal of the steel brakes and replacing them with carbon brakes will see benefit for the rest of the time we own the 738 aircraft because the weight of the airplane is now 600 pounds lighter. However, typically 1 year after we implement a fuel savings initiative it becomes business as usual, so we will no longer count it as “fuel savings.” However, in terms of the lifetime, it will...</td>
</tr>
</tbody>
</table>
continue to make an impact until the aircraft is retired.

<table>
<thead>
<tr>
<th>Activity type</th>
<th>Other, please specify (Split Scimitar Winglets on 739)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description of activity</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
<tr>
<td>Estimated annual CO2e savings (metric tonnes CO2e)</td>
<td>13958</td>
</tr>
<tr>
<td>Scope</td>
<td>Scope 1</td>
</tr>
<tr>
<td>Voluntary/Mandatory</td>
<td>Please select Voluntary</td>
</tr>
<tr>
<td>Annual monetary savings (unit currency – as specified in CC0.4)</td>
<td>2381565</td>
</tr>
<tr>
<td>Investment required (unit currency – as specified in CC0.4)</td>
<td>0</td>
</tr>
<tr>
<td>Payback period</td>
<td>Please select</td>
</tr>
<tr>
<td>Estimated lifetime of the initiative</td>
<td>11-15 years</td>
</tr>
<tr>
<td>Comment</td>
<td>Adding the split scimitar wingtips on the 737-900 will save fuel as long as we keep the aircraft. However, typically 1 year after we implement a fuel savings initiative it becomes business as usual, so we will no longer count it as “fuel savings.” However, in terms of the lifetime, it will continue to make an impact until the aircraft is retired.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Activity type</th>
<th>Process emissions reductions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Description of activity</td>
<td>Other, please specify (Compressor Washes to improve efficiency)</td>
</tr>
<tr>
<td>Estimated annual CO2e savings (metric tonnes CO2e)</td>
<td>1101</td>
</tr>
<tr>
<td>Scope</td>
<td>Scope 1</td>
</tr>
<tr>
<td>Voluntary/Mandatory</td>
<td>Voluntary</td>
</tr>
<tr>
<td>Annual monetary savings (unit currency – as specified in CC0.4)</td>
<td>187885</td>
</tr>
<tr>
<td>Investment required (unit currency – as specified in CC0.4)</td>
<td>0</td>
</tr>
<tr>
<td>Payback period</td>
<td>Please select</td>
</tr>
<tr>
<td>Estimated lifetime of the initiative</td>
<td>1-2 years</td>
</tr>
<tr>
<td>Comment</td>
<td>More frequent, or better timed compressor washes on the engine make the aircraft fly more efficiently. The engine wash program was expanded this year and those savings totaled 1,101 metric tons in CO2 emissions. The lifetime of this initiative is shorter than others as regular engine washes are required to ensure maximum efficiency. Investment identified is “0”, as it is using in-house maintenance time. Therefore payback period is also left blank.</td>
</tr>
</tbody>
</table>
**Description of activity**
Changes in operations

**Estimated annual CO2e savings (metric tonnes CO2e)**
44000

**Scope**
Scope 1

**Voluntary/Mandatory**
Voluntary

**Annual monetary savings (unit currency – as specified in CC0.4)**
7123200

**Investment required (unit currency – as specified in CC0.4)**
0

**Payback period**
Please select

**Estimated lifetime of the initiative**
3-5 years

**Comment**
This initiative is to reduce use of the APU (Auxiliary Power Unit) by hooking the aircraft up to ground power as quick as possible. This is more of a behavioral and educational initiative to remind all business units to work together to help reduce fuel burn: pilots to turn off APU, flight attendants to make announcement to close the shades/open vents (can make aircraft 10 degrees cooler), ground support to hook up air after chocking the aircraft. This will be a continuous initiative to remind employees to save fuel and has been adopted as a cross-company priority initiative for the 2018 year. Investment identified is “0”, as it is using in-house resources to engage on this issue, and no additional resources are really necessary to make this work. Therefore payback period is also left blank.

**Activity type**
Energy efficiency: Building services

**Description of activity**
Lighting

**Estimated annual CO2e savings (metric tonnes CO2e)**
10

**Scope**
Scope 2 (location-based)
Scope 2 (market-based)

**Voluntary/Mandatory**
Voluntary

**Annual monetary savings (unit currency – as specified in CC0.4)**
0

**Investment required (unit currency – as specified in CC0.4)**
0

**Payback period**
<1 year

**Estimated lifetime of the initiative**
3-5 years

**Comment**
Replaced 18 250W metal halide bulbs with 18 102W LED bulbs
Replaced 63 196W fixtures with 63 145W LED fixtures; added 42 new 145W LED fixtures; replaced 44 172W fixtures with 44 145W LED fixtures Replaced 20 400W MH fixtures with 20 27W LED fixtures; replaced 10 250W MH fixtures with 10W LED fixtures replaced 16 400W MH fixtures with 16 27W LED fixtures; replaced 26 400W MH fixtures with 26 27W LED fixtures Replaced 44 196W high bay lights with 145W LED Replaced 20 400W MH with 27W LED; Replaced 10 250W MH with 27W LED; Replaced 24 100W with 10W LED Replaced 17 175 W MH bulbs with 17 42 W LED bulbs.
(C4.3c) What methods do you use to drive investment in emissions reduction activities?

<table>
<thead>
<tr>
<th>Method</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial optimization</td>
<td>Delta continuously analyzes fuel conservation initiatives and evaluates their attractiveness in comparison to the cost of implementation and other uses of financial capital. To calculate annual cost savings for the aircraft fuel-related projects identified above, we used Delta’s 2017 average fuel cost per gallon of $1.68, including the impact of fuel hedges, as reported in our 10-K report.</td>
</tr>
<tr>
<td>Internal price on carbon</td>
<td>In addition to the cost of fuel, Delta has incorporated cost of CO2 emissions into decision making. Currently, this is used to run various sensitivity analyses to determine the cost of current/future regulation, such as EU ETS and CORSIA.</td>
</tr>
<tr>
<td>Employee engagement</td>
<td>Employees are encouraged to submit ideas for conserving fuel. Some of the initiatives listed above involve awareness and behavioral changes from different divisions: pilots, ground crew, dispatchers, technical operations. Reminders and continual engagement can drive better results in initiatives that are behavior based. Delta’s newest Business Resource Group (Green Up) is focused on engaging employees on how to reduce environmental impact in their job.</td>
</tr>
</tbody>
</table>

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products or do they enable a third party to avoid GHG emissions?

No
(C5.1) Provide your base year and base year emissions (Scopes 1 and 2).

Scope 1

Base year start
January 1 2005

Base year end
December 31 2005

Base year emissions (metric tons CO2e)
42365640

Comment
Scope 1 + 2 in 2005, based on what was verified to The Climate Registry. Verified report is available at cris4.org

Scope 2 (location-based)

Base year start
January 1 2005

Base year end
December 31 2005

Base year emissions (metric tons CO2e)
420417.92

Comment
Scope 2 in 2005, based on what was verified to The Climate Registry. Verified report is available at cris4.org

Scope 2 (market-based)

Base year start
January 1 2005

Base year end
December 31 2005

Base year emissions (metric tons CO2e)
420417.92

Comment
Scope 2 in 2005, based on what was verified to The Climate Registry. Verified report is available at cris4.org (same as location-based, but in 2005 only reported one).

(C5.2) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions.

The Climate Registry: General Reporting Protocol

C6. Emissions data

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

Row 1

Gross global Scope 1 emissions (metric tons CO2e)
35782446.15

End-year of reporting period
<Not Applicable>

Comment
Currently undergoing verification for 2017 data under The Climate Registry. Report will be available at cris4.org when completed.

(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
Per The Climate Registry updated protocol, we are reporting both (however, currently both numbers are the same right now).

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

Row 1

Scope 2, location-based
296269

Scope 2, market-based (if applicable)
296269

End-year of reporting period
<Not Applicable>

Comment
Per The Climate Registry updated protocol, we are reporting both (however, currently both numbers are the same right now).

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

No

(C6.5) Account for your organization’s Scope 3 emissions, disclosing and explaining any exclusions.
Purchased goods and services

**Evaluation status**
Relevant, not yet calculated

**Metric tonnes CO2e**

**Emissions calculation methodology**

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

**Explanation**
Goods and services purchased from suppliers have not yet been calculated as part of Delta's Scope 3 emissions. Relevant emissions here would largely be limited to aircraft purchases.

**Capital goods**

**Evaluation status**
Relevant, not yet calculated

**Metric tonnes CO2e**

**Emissions calculation methodology**

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

**Explanation**
Emissions from capital goods have not yet been calculated.

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

**Evaluation status**
Relevant, calculated

**Metric tonnes CO2e**
4129530

**Emissions calculation methodology**
This covers all emissions associated with jet fuel burn of our regional (Delta Connection) carriers. This is also verified as part of our full greenhouse gas emissions inventory under The Climate Registry.

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

**Explanation**

**Upstream transportation and distribution**

**Evaluation status**
Not relevant, calculated

**Metric tonnes CO2e**
7546910

**Emissions calculation methodology**

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

**Explanation**
Upstream transportation and distribution (e.g. emissions associated with production/transportation of jet fuel) have not yet been calculated and included in Delta's inventory. However, on delta.com/co2, customers are able to put in their itineraries to see the carbon footprint associated with the itinerary they travelled. A note is included on this that to include the upstream transportation and distribution emissions, they should add 19% to the emissions associated with their itinerary.
Waste generated in operations

**Evaluation status**
Relevant, not yet calculated

**Metric tonnes CO2e**

**Emissions calculation methodology**

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

**Explanation**
While waste metrics are reported (in our sustainability report), the emissions associated have not yet been calculated.

Business travel

**Evaluation status**
Not relevant, calculated

**Metric tonnes CO2e**
102097

**Emissions calculation methodology**
The method used here is the same as the segment emissions provided on delta.com/co2: it uses previous fuel and load data to come up with an emissions per passenger number by route. This number is updated annually. We are provided with an annual list of company travel segments and apply this emissions factor to come up with the total company business/employee commuting (flights) emissions. These emissions are already included as part of Scope 1/3 Jet fuel.

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

**Explanation**
The emissions calculated here are related to company business travel on Delta flights. While the emissions are actually included in our total Scope 1/3 jet fuel, this provides an indication of the scope of emissions associated with business travel. This number actually includes some element of employee commuting (thus the same number for the category below), as there are flight attendants and pilots who "deadhead" and are considered company business when they travel to/from their home base to the airport where their trip begins.

Employee commuting

**Evaluation status**
Not relevant, calculated

**Metric tonnes CO2e**
102097

**Emissions calculation methodology**
The method used here is the same as the segment emissions provided on delta.com/co2: it uses previous fuel and load data to come up with an emissions per passenger number by route. This number is updated annually. We are provided with an annual list of company travel segments and apply this emissions factor to come up with the total company business/employee commuting (flights) emissions. These emissions are already included as part of Scope 1/3 Jet fuel.

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

**Explanation**
The emissions calculated here are related to company business travel on Delta flights. While the emissions are actually included in our total Scope 1/3 jet fuel, this provides an indication of the scope of emissions associated with business travel. This number actually includes some element of employee commuting, as there are flight attendants and pilots who "deadhead" and are considered company business when they travel to/from their home base to the airport where their trip begins.
Upstream leased assets

**Evaluation status**
Not relevant, explanation provided

**Metric tonnes CO2e**

**Emissions calculation methodology**

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

**Explanation**
Leased facilities are already included in Scope 2. We report Scope 2 emissions based on billed facilities, and also estimated (airport spaces, leased office spaces, etc.). Any aircraft leased, but operated by Delta would already be accounted for through the jet fuel we purchase and report in Scope 1 and 3.

Downstream transportation and distribution

**Evaluation status**
Relevant, not yet calculated

**Metric tonnes CO2e**

**Emissions calculation methodology**

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

**Explanation**
On occasion Delta will need to deliver passenger bags to their home/hotel, typically using a contracted service. The emissions associated with this have not yet been calculated.

Processing of sold products

**Evaluation status**
Not relevant, explanation provided

**Metric tonnes CO2e**

**Emissions calculation methodology**

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

**Explanation**
Because Delta sells flights, the emissions associated are all related to jet fuel, already accounted for in Scope 1 and 3 (fuels). The product sold (flights) is not processed.

Use of sold products

**Evaluation status**
Not relevant, explanation provided

**Metric tonnes CO2e**

**Emissions calculation methodology**

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

**Explanation**
Because Delta sells flights, the “use” of the product and emissions associated ends when the flight completes. This means all the fuel/emissions associated with what we sell is covered in our Scope 1/3 (Fuel-and-energy-related activities (not included in Scope 1 or 2) emissions already.
End of life treatment of sold products

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation
Because Delta sells flights, the end of life can be defined as when the flight completes. This means all the fuel/emissions associated with what we sell is covered in our Scope 1/3 (Fuel-and-energy-related activities (not included in Scope 1 or 2) emissions already.

Downstream leased assets

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation
Delta does not have assets that are leased.

Franchises

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation
Delta does not have any franchises. Flights operated on behalf of Delta by a COnnection carrier are already included in Scope 3 emissions under Fuel/Energy use.

Investments

Evaluation status
Not relevant, explanation provided

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation
Investments such as DCI carriers are included already in jet fuel. Partner (codeshare) investments are not included as the main source of emissions are jet fuel. Since they operate their own flights, the emissions would count in their Scope 1. Delta's investment in the Trainer Refinery had been calculated previously, and verified under The Climate Registry. However, the decision was made to not include these emissions as the refinery is not under operational control of Delta (only financial). The refineries emissions for previous years are: 1.42m for 2013 and 1.54m for 2014.

Other (upstream)

Evaluation status

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation
Other (downstream)

Evaluation status

Metric tonnes CO2e

Emissions calculation methodology

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

Explanation

C6.7

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

No

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
0.87

Metric numerator (Gross global combined Scope 1 and 2 emissions)
36078714.97

Metric denominator
unit total revenue

Metric denominator: Unit total
41244000000

Scope 2 figure used
Location-based

% change from previous year
3

Direction of change
Decreased

Reason for change
Delta's Scope 1 and 2 emissions increased by 0.9% in 2017 vs 2016, due to increased business and flying, as seen by the 2.65 YoY Revenue Ton Miles increase. Emissions from flying in Scope 1 increased by 1% YoY, where all other sources actually decreased by 2%. However, scope 1 emissions would have increased by more than 1% in a "business as usual" scenario, given the 2.65% revenue ton mile increase. Emissions reductions actions helped keep increase in emissions lower, despite growing the business: - new aircraft such as upgauging to the 717-200 aircraft instead of using 2 regional flights - 737-900 as the most efficient narrow-body aircraft we have: at least 12% more efficient that the aircraft it replaced) - annual fuel savings/emissions reduction initiatives as outlined (ex: weight removal from aircraft) In addition, 2017 operating revenue as reported in the 10K filing increased by 4% YoY, resulting in a 3% improvement in emissions per unit revenue total compared to 2016.

Intensity figure
416.79

Metric numerator (Gross global combined Scope 1 and 2 emissions)
36078714.97

Metric denominator
full time equivalent (FTE) employee

Metric denominator: Unit total
86564

Scope 2 figure used
Location-based

% change from previous year
14

Direction of change
Decreased

Reason for change
Delta's Scope 1 and 2 emissions increased by 0.9% in 2017 vs 2016, due to increased business and flying, as seen by the 2.65 YoY Revenue Ton Miles increase. Emissions from flying in Scope 1 increased by 1% YoY, where all other sources actually decreased by 2%. However, scope 1 emissions would have increased by more than 1% in a "business as usual" scenario, given the 2.65% revenue ton mile increase. Emissions reductions actions helped keep increase in emissions lower, despite growing the business: - new aircraft such as upgauging to the 717-200 aircraft instead of using 2 regional flights - 737-900 as the most efficient narrow-body aircraft we have: at least 12% more efficient that the aircraft it replaced) - annual fuel savings/emissions reduction initiatives as outlined (ex: weight removal from aircraft) In addition, 2017 FTE as reported in the 10K filing increased by 17% YoY, resulting in a 14% improvement in emissions per unit revenue total compared to 2016.
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 Scope 1 + 2 + 3 (category 4)

**Intensity figure**
0.1515

**Metric numerator:** emissions in metric tons CO2e
39630387

**Metric denominator:** unit
t.mile

**Metric denominator:** unit total
26155482716

% change from previous year
-2.21

Please explain any exclusions in your coverage of transport emissions in selected category, and reasons for change in emissions intensity.
Scope 1+2+3 is the closest of the drop down options, however it really only includes most of Scope 1 and all of Scope 3. Only jet fuel is included in this intensity calculation, and Delta saw a 2.21% improvement vs. 2016. The “Metric numerator” does only reflect jet fuel emissions. Also, % change is of the intensity, so a 2.21% improvement, not % change of the denominator. The intensity figure is also emissions per 100 t.mile (just to simplify and align with the IATA metric of liters per 100 RTK, also so that it's not so far in the decimals)

**ALL**

**Scopes used for calculation of intensities**
Report Scope 1 + 2 + 3 (category 4)

**Intensity figure**
0.1515

**Metric numerator:** emissions in metric tons CO2e
39630387

**Metric denominator:** unit
t.mile

**Metric denominator:** unit total
26155482716

% change from previous year
-2.21

Please explain any exclusions in your coverage of transport emissions in selected category, and reasons for change in emissions intensity.
Scope 1+2+3 is the closest of the drop down options, however it really only includes most of Scope 1 and all of Scope 3. Only jet fuel is included in this intensity calculation, and Delta saw a 2.21% improvement vs. 2016. The “Metric numerator” does only reflect jet fuel emissions. Also, % change is of the intensity, so a 2.21% improvement, not % change of the denominator. The intensity figure is also emissions per 100 t.mile (just to simplify and align with the IATA metric of liters per 100 RTK, also so that it’s not so far in the decimals)

C7. Emissions breakdowns
C7.1

(C7.1) Does your organization have greenhouse gas emissions other than carbon dioxide?
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).

<table>
<thead>
<tr>
<th>Greenhouse gas</th>
<th>Scope 1 emissions (metric tons of CO2e)</th>
<th>GWP Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO2</td>
<td>35427482.1</td>
<td>IPCC Second Assessment Report (SAR - 100 year)</td>
</tr>
<tr>
<td>CH4</td>
<td>152.57</td>
<td>IPCC Second Assessment Report (SAR - 100 year)</td>
</tr>
<tr>
<td>N2O</td>
<td>348709.5</td>
<td>IPCC Second Assessment Report (SAR - 100 year)</td>
</tr>
<tr>
<td>HFCs</td>
<td>5436.35</td>
<td>IPCC Second Assessment Report (SAR - 100 year)</td>
</tr>
<tr>
<td>PFCs</td>
<td>665.63</td>
<td>IPCC Second Assessment Report (SAR - 50 year)</td>
</tr>
</tbody>
</table>

C7.2

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

<table>
<thead>
<tr>
<th>Country/Region</th>
<th>Scope 1 emissions (metric tons CO2e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>North America</td>
<td>21388694.54</td>
</tr>
<tr>
<td>Other, please specify (Rest of World as defined by TCR protocol)</td>
<td>14393751.61</td>
</tr>
</tbody>
</table>

C7.3

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

C7.3a

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

<table>
<thead>
<tr>
<th>Business division</th>
<th>Scope 1 emissions (metric ton CO2e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aircraft Emissions (Delta mainline, jet fuel only)</td>
<td>33779560.46</td>
</tr>
<tr>
<td>Aircraft Emissions (Wholly-owned subsidiaries jet fuel only, counted in Scope 1)</td>
<td>1811492.41</td>
</tr>
<tr>
<td>Delta Mainline ground and other operations (all other sources, not jet fuel/operation of aircraft related)</td>
<td>191393.28</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Activity</th>
<th>Scope 1 emissions (metric tons CO2e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mainline Jet Fuel</td>
<td>33779560.46</td>
</tr>
<tr>
<td>Wholly-Owned Subsidiary Jet Fuel</td>
<td>1811492.41</td>
</tr>
<tr>
<td>Ground Support Equipment</td>
<td>106286.13</td>
</tr>
<tr>
<td>Stationary Combustion Facilities</td>
<td>78632.29</td>
</tr>
<tr>
<td>Chemicals</td>
<td>1912.99</td>
</tr>
<tr>
<td>Refrigerants</td>
<td>4343.35</td>
</tr>
<tr>
<td>Emergency Generators and Firepumps</td>
<td>218.52</td>
</tr>
</tbody>
</table>

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.

<table>
<thead>
<tr>
<th>Comment</th>
<th>Cement production activities</th>
<th>&lt;Not Applicable&gt;</th>
<th>&lt;Not Applicable&gt;</th>
<th>&lt;Not Applicable&gt;</th>
</tr>
</thead>
<tbody>
<tr>
<td>Comment</td>
<td>Chemicals production activities</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
<tr>
<td>Comment</td>
<td>Coal production activities</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
<tr>
<td>Comment</td>
<td>Electric utility generation activities</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
<tr>
<td>Comment</td>
<td>Metals and mining production activities</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
<tr>
<td>Comment</td>
<td>Oil and gas production activities (upstream)</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
<tr>
<td>Comment</td>
<td>Oil and gas production activities (downstream)</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
<tr>
<td>Comment</td>
<td>Steel production activities</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
<tr>
<td>Comment</td>
<td>Transport OEM activities</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
<tr>
<td>Comment</td>
<td>Transport services activities</td>
<td>3551053</td>
<td>&lt;Not Applicable&gt;</td>
<td>This covers the emissions only associated with our flights, which in our case only deals with jet fuel emissions. This accounts for 98%+ of our total emissions as the core of our services. For this Scope 1 emissions number, this includes jet fuel from our mainline, plus the 2 carriers which we wholly own (Endeavor and Delta Private Jets).</td>
</tr>
</tbody>
</table>

C7.5

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

<table>
<thead>
<tr>
<th>Country/Region</th>
<th>Scope 2, location-based (metric tons CO2e)</th>
<th>Scope 2, market-based (metric tons CO2e)</th>
<th>Purchased and consumed electricity, heat, steam or cooling (MWh)</th>
<th>Purchased and consumed low-carbon electricity, heat, steam or cooling accounted in market-based approach (MWh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>North America</td>
<td>287076.08</td>
<td>287075.9</td>
<td>487640</td>
<td>0</td>
</tr>
<tr>
<td>Other, please specify (Rest of World as defined by TCR protocol)</td>
<td>9192.92</td>
<td>9192.92</td>
<td>15601</td>
<td>0</td>
</tr>
</tbody>
</table>

(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.

<table>
<thead>
<tr>
<th>Business division</th>
<th>Scope 2, location-based emissions</th>
<th>Scope 2, market-based emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Directly billed (operations where we receive bills - office space, etc)</td>
<td>146238.62</td>
<td>146238.62</td>
</tr>
<tr>
<td>Estimated Facilities - all airport spaces where emissions are estimated based on</td>
<td>117366.61</td>
<td>117366.61</td>
</tr>
<tr>
<td>square footage Delta operates on</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Estimated Facilities - Natural Gas</td>
<td>32663.77</td>
<td>32663.77</td>
</tr>
</tbody>
</table>

(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.

<table>
<thead>
<tr>
<th>Sector Production Activity</th>
<th>Scope 2, location-based, metric tons CO2e</th>
<th>Scope 2, market-based (if applicable), metric tons CO2e</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cement production activities</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
<tr>
<td>Chemicals production activities</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
<tr>
<td>Coal production activities</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
<tr>
<td>Metals and mining production activities</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
<tr>
<td>Oil and gas production activities (upstream)</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
<tr>
<td>Oil and gas production activities (downstream)</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
<tr>
<td>Steel production activities</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
<tr>
<td>Transport OEM activities</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
<tr>
<td>Transport services activities</td>
<td>296269</td>
<td>296269</td>
<td></td>
</tr>
</tbody>
</table>
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.

<table>
<thead>
<tr>
<th>Change in emissions (metric tons CO2e)</th>
<th>Direction of change</th>
<th>Emissions value (percentage)</th>
<th>Please explain calculation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change in renewable energy consumption</td>
<td>&lt;Not Applicable&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other emissions reduction activities</td>
<td>819963</td>
<td>Decreased 2.45</td>
<td>In 2016, our average aircraft emissions (for mainline flying) was 0.00145 per passenger+cargo revenue ton mile. If we had maintained this emissions factor, our aircraft emissions would be 819,963 higher than actual 2017 numbers. To calculate this we did: (2016 factor of .00145) x (actual 2017 total revenue ton miles) = 2017 emissions with no efficiency gains (mostly due to the new aircraft). 2017 emissions with no efficiency gains was subtracted from actual 2017 emissions to arrive at this emission value.</td>
</tr>
<tr>
<td>Divestment</td>
<td>&lt;Not Applicable&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acquisitions</td>
<td>&lt;Not Applicable&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mergers</td>
<td>&lt;Not Applicable&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Change in output</td>
<td>1067730</td>
<td>Increased 3.2</td>
<td>In 2017, we flew 3.2 more on mainline (Scope 1) aircraft when looking at passenger+cargo revenue ton miles. Our average a (for mainline flying) was 0.00142 per passenger+cargo revenue ton mile. We used this to calculate what increase in emissions were due to growth of our airline through additional passenger/cargo flown. To calculate this we did: (2017 factor of .00142) x (actual increase in 2017 total revenue ton miles vs. 2016) = 2017 increase in emissions due to an increase in output.</td>
</tr>
<tr>
<td>Change in methodology</td>
<td>&lt;Not Applicable&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Change in boundary</td>
<td>&lt;Not Applicable&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Change in physical operating conditions</td>
<td>&lt;Not Applicable&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unidentified</td>
<td>&lt;Not Applicable&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>18412</td>
<td>Decreased 0.05</td>
<td>These are attributed to the fuel savings initiatives tracked and listed under C4. Calculation for this is tracked monthly showing fuel saved because of these initiatives: Super98, APU, carbon brake replacement, compressor washes, Boeing 737-900 winglets. The savings are only counted for 1 year: If a winglet is installed in November 2016, in 2017 we would include track that savings for Jan-Oct 2018. After a year it becomes business as usual. The emissions savings from these initiatives totaled 18,412 metric tons of CO2. As a percentage of our total Scope 1+2 emissions, this is 0.05%.</td>
</tr>
</tbody>
</table>

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 15% but less than or equal to 20%

C8.2

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

<table>
<thead>
<tr>
<th>Activity</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumption of fuel (excluding feedstocks)</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Consumption of purchased or acquired electricity</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Consumption of purchased or acquired heat</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Consumption of purchased or acquired steam</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Consumption of purchased or acquired cooling</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Generation of electricity, heat, steam, or cooling</td>
<td>No</td>
<td></td>
</tr>
</tbody>
</table>

C8.2a

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

<table>
<thead>
<tr>
<th>Activity</th>
<th>Heating value</th>
<th>MWh from renewable sources</th>
<th>MWh from non-renewable sources</th>
<th>Total MWh</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumption of fuel (excluding feedstock)</td>
<td>HHV (higher heating value)</td>
<td>0</td>
<td>132769636</td>
<td>132769636</td>
</tr>
<tr>
<td>Consumption of purchased or acquired electricity</td>
<td>&lt;Not Applicable&gt;</td>
<td>0</td>
<td>503241</td>
<td>503241</td>
</tr>
<tr>
<td>Consumption of purchased or acquired heat</td>
<td>&lt;Not Applicable&gt;</td>
<td>0</td>
<td>366185</td>
<td>366185</td>
</tr>
<tr>
<td>Consumption of purchased or acquired steam</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
<tr>
<td>Consumption of purchased or acquired cooling</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
<tr>
<td>Consumption of self-generated non-fuel renewable energy</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
<tr>
<td>Total energy consumption</td>
<td>&lt;Not Applicable&gt;</td>
<td>0</td>
<td>133639062</td>
<td>133639062</td>
</tr>
</tbody>
</table>

C8.2b

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

<table>
<thead>
<tr>
<th>Application</th>
<th>Indicate whether your organization undertakes this fuel application</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumption of fuel for the generation of electricity</td>
<td>No</td>
</tr>
<tr>
<td>Consumption of fuel for the generation of steam</td>
<td>No</td>
</tr>
<tr>
<td>Consumption of fuel for the generation of cooling</td>
<td>No</td>
</tr>
<tr>
<td>Consumption of fuel for co-generation or tri-generation</td>
<td>No</td>
</tr>
</tbody>
</table>
(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.

<table>
<thead>
<tr>
<th>Fuels (excluding feedstocks)</th>
<th>Heating value</th>
<th>HHV (higher heating value)</th>
<th>Total fuel MWh consumed by the organization</th>
<th>MWh fuel consumed for the self-generation of electricity</th>
<th>MWh fuel consumed for self-generation of heat</th>
<th>MWh fuel consumed for self-generation of steam</th>
<th>MWh fuel consumed for self-generation of cooling</th>
<th>MWh fuel consumed for self- cogeneration or self-trigeneration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Jet Kerosene</td>
<td></td>
<td></td>
<td>132343655</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
<tr>
<td>Diesel</td>
<td></td>
<td></td>
<td>255263</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
<tr>
<td>Motor Gasoline</td>
<td></td>
<td></td>
<td>170717</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
<tr>
<td>Description</td>
<td>Value</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------------------------------------------------------------</td>
<td>----------------------------</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MWh fuel consumed for self-generation of steam</td>
<td>&lt;Not Applicable&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MWh fuel consumed for self-generation of cooling</td>
<td>&lt;Not Applicable&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MWh fuel consumed for self- cogeneration or self-trigeneration</td>
<td>&lt;Not Applicable&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fuels (excluding feedstocks)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Natural Gas</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Heating value</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HHV (higher heating value)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total fuel MWh consumed by the organization</td>
<td>366185</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MWh fuel consumed for the self-generation of electricity</td>
<td>&lt;Not Applicable&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MWh fuel consumed for self-generation of heat</td>
<td>&lt;Not Applicable&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MWh fuel consumed for self-generation of steam</td>
<td>&lt;Not Applicable&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MWh fuel consumed for self-generation of cooling</td>
<td>&lt;Not Applicable&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MWh fuel consumed for self- cogeneration or self-trigeneration</td>
<td>&lt;Not Applicable&gt;</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Description</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuels (excluding feedstocks)</td>
<td></td>
</tr>
<tr>
<td>Other, please specify (Fuels for Electricity consumption)</td>
<td></td>
</tr>
<tr>
<td>Heating value</td>
<td></td>
</tr>
<tr>
<td>HHV (higher heating value)</td>
<td></td>
</tr>
<tr>
<td>Total fuel MWh consumed by the organization</td>
<td>503242</td>
</tr>
<tr>
<td>MWh fuel consumed for the self-generation of electricity</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
<tr>
<td>MWh fuel consumed for self-generation of heat</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
<tr>
<td>MWh fuel consumed for self-generation of steam</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
<tr>
<td>MWh fuel consumed for self-generation of cooling</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
<tr>
<td>MWh fuel consumed for self- cogeneration or self-trigeneration</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
</tbody>
</table>
(C8.2d) List the average emission factors of the fuels reported in C8.2c.

**Diesel**

**Emission factor**
10.21

**Unit**
kg CO2e per barrel

**Emission factor source**
The Climate Registry 2012 Default Emissions Factors Released January 6, 2012 table 13.1 and 13.7 (small utility for gasoline and LP, large utility for diesel) 0.58 g/gallon and N2O is 0.26 g/gallon also from the same table. All of this is used to calculate diesel emissions in CO2e.

**Comment**

**Jet Kerosene**

**Emission factor**
9.75

**Unit**
kg CO2e per gallon

**Emission factor source**
The Climate Registry 2012 Default Emissions Factors Released January 6, 2012 table 13.1 and 13.7. 0.0g/gallon and N2O is 0.31 g/gallon also from the same table. All of this is used to calculate jet kerosene emissions in CO2e.

**Comment**

**Motor Gasoline**

**Emission factor**
878

**Unit**
kg CO2 per gallon

**Emission factor source**
The Climate Registry 2012 Default Emissions Factors Released January 6, 2012 table 13.1 and 13.7 (small utility for gasoline and LP, large utility for diesel) 0.5 g/gallon and N2O is 0.22 g/gallon also from the same table. All of this is used to calculate motor gasoline emissions in CO2e.

**Comment**

**Natural Gas**

**Emission factor**
53.06

**Unit**
kg CO2 per million Btu

**Emission factor source**
The Climate Registry 2016, table 12.1 and Table 12.8 (natural gas)

**Comment**

**Other**

**Emission factor**

**Unit**
Please select

**Emission factor source**

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

**Basis for applying a low-carbon emission factor**
No purchases or generation of low-carbon electricity, heat, steam or cooling accounted with a low-carbon emission factor

**Low-carbon technology type**
<Not Applicable>

**MWh consumed associated with low-carbon electricity, heat, steam or cooling**
<Not Applicable>

**Emission factor (in units of metric tons CO2e per MWh)**
<Not Applicable>

**Comment**
None at this time.

(C-TS8.4) Provide any efficiency metrics that are appropriate for your organization's transport products and/or services.

**Activity**
Aviation

**Metric figure**
15.39

**Metric numerator**
Other, please specify (gallons jet fuel)

**Metric denominator**
T.mile

**Metric numerator: Unit total**
4024983217

**Metric denominator: Unit total**
12659499949

**% change from last year**
-2.21

**Please explain**
The numbers here include Scope 1 and 3 jet fuel. Delta's intensity target aligns with IATA's short-term climate change goal: improve fuel efficiency by 1.5% per year between 2009 and 2020. The metric to calculate this is how much fuel it takes (gallons) to transport passengers a certain distance (revenue ton miles). While we typically report in gallons per 100 RTM internally (100 just so it is not a decimal), it has been converted to metric tons per 100 RTM for reporting here. The IATA goal is expressed as an intensity efficiency goal to allow for growth of the airline while new technology aircraft and biofuel at commercial scale is still being developed. This means an airlines fuel consumption (emissions) can grow year over year (attributed to growing the business and flying more weight or miles), as long as the fuel growth is less than the business growth. Delta's efficiency has improved 8% since 2009, an average of 1% per year which is below the IATA goal. However, the 2017 compared to 2016 efficiency has improved 2.21%, well above the IATA goal of 1.5% per year. This is in large part due to new aircraft, which provides the most fuel savings by far. Delta grew in terms of revenue ton miles (weight of revenue times the distance it flew) by For the 2017 year, total fuel consumption (Scope 1 and Scope 3, Delta mainline and DCI) increased by 2.65%, while fuel consumption only increased by 0.75%, thus the fuel efficiency improvement of 2.21%. This goal aligns with Delta's 2017 reported intensity goal. - Last year's ongoing improvement since 2009 was 0.85% average annual improvement. This year: 1% (improvement) - Last year's 1-year fuel efficiency change was 0.1% worse than previous year. This year: 2.21% improvement vs. previous year.
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.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Aviation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Metric</strong></td>
<td>Fleet adoption</td>
</tr>
<tr>
<td><strong>Technology</strong></td>
<td>Other, please specify (Renewing our fleet)</td>
</tr>
<tr>
<td><strong>Metric figure</strong></td>
<td>4200000</td>
</tr>
<tr>
<td><strong>Metric unit</strong></td>
<td>Other, please specify (metric tons)</td>
</tr>
</tbody>
</table>

**Explanation**
The estimated emissions reduction figure here applies to the reduction Delta will realize by swapping out our less efficient aircraft with more efficient aircraft in the coming years. In the next 5 years, 20% of our narrow-body fleet will be renewed. Our widebody acquisitions such as the A350 are currently about 30% more efficient than the aircraft they are replacing. The estimate is assuming a current emissions / revenue ton km of .156 on narrow body fleets (mainline fleet), 0.125 on widebody, and a 20% improvement in efficiency with renewed aircraft. It does not take into account growing the business (flying additional RTM), which may increase our emissions despite acquiring newer aircraft.

C-TO9.6/C-TS9.6
What is your investment in research and development (R&D), equipment, products and services and which part of it would you consider a direct investment in the low-carbon transition?

Activity
Aviation

Investment start date
January 1 2018

Investment end date
November 30 2018

Investment area
Services

Technology area
Alternative fuels

Investment maturity
Basic academic/theoretical research

Investment figure
0

Low-carbon investment percentage
0-20%

Please explain
In 2017, Delta launched a partnership with the University of Georgia to manage ongoing life-cycle analyses of new biofuels. An evaluation of camelina oil, including the entire life-cycle from cultivation and harvesting to biojet fuel production, transport and combustion, demonstrated that it could significantly reduce carbon emissions compared to petroleum-based fuels. In addition, Delta will continue to engage with producers to assess the technical, financial and regulatory challenges associated with bio-jet opportunities.

C10. Verification

C10.1

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

<table>
<thead>
<tr>
<th>Scope</th>
<th>Verification/assurance status</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scope 1</td>
<td>Third-party verification or assurance process in place</td>
</tr>
<tr>
<td>Scope 2 (location-based or market-based)</td>
<td>Third-party verification or assurance process in place</td>
</tr>
<tr>
<td>Scope 3</td>
<td>Third-party verification or assurance process in place</td>
</tr>
</tbody>
</table>

C10.1a

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

Scope
Scope 1

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Underway but not complete for reporting year—previous statement of process attached
Type of verification or assurance
Reasonable assurance

Attach the statement
Delta 2016 Verification Statement 6.5.18.pdf

Page/section reference
All Pages (full verification statement with emissions data)

Relevant standard
The Climate Registry's General Verification Protocol

Proportion of reported emissions verified (%)
100

Scope
Scope 2 location-based

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Underway but not complete for reporting year-previous statement of process attached

Type of verification or assurance
Reasonable assurance

Attach the statement
Delta 2016 Verification Statement 6.5.18.pdf

Page/section reference
All

Relevant standard
The Climate Registry's General Verification Protocol

Proportion of reported emissions verified (%)
100

Scope
Scope 2 market-based

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Underway but not complete for reporting year-previous statement of process attached

Type of verification or assurance
Reasonable assurance

Attach the statement
Delta 2016 Verification Statement 6.5.18.pdf

Page/section reference
All

Relevant standard
The Climate Registry's General Verification Protocol

Proportion of reported emissions verified (%)
100
(C10.1b) Provide further details of the verification/assurance undertaken for your Scope 3 emissions and attach the relevant statements.

**Scope**
Scope 3 - at least one applicable category

**Verification or assurance cycle in place**
Annual process

**Status in the current reporting year**
Underway but not complete for reporting year – previous statement of process attached

**Attach the statement**
Delta 2016 Verification Statement 6.5.18.pdf
Delta Air Lines 2016 Verification Report 6.5.18.pdf

**Page/section reference**
Page 5 of the Verification Report - shows that jet fuel burned by regional carriers (Scope 3) not wholly-owned has been verified.

**Relevant standard**
The Climate Registry's General Verification Protocol

---

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?
No, we are waiting for more mature verification standards and/or processes

---

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

---

C11.1b
(C11.1b) Complete the following table for each of the emissions trading systems in which you participate.

**EU ETS**

<table>
<thead>
<tr>
<th>% of Scope 1 emissions covered by the ETS</th>
<th>0.01</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Period start date</strong></td>
<td>January 1 2017</td>
</tr>
<tr>
<td><strong>Period end date</strong></td>
<td>December 31 2017</td>
</tr>
<tr>
<td><strong>Allowances allocated</strong></td>
<td>726</td>
</tr>
<tr>
<td><strong>Allowances purchased</strong></td>
<td>200</td>
</tr>
<tr>
<td><strong>Verified emissions in metric tons CO2e</strong></td>
<td>944</td>
</tr>
</tbody>
</table>

**Details of ownership**
Facilities we own and operate

**Comment**
For several years, the European Union has required its member states to implement regulations to include aviation in its Emissions Trading Scheme ("ETS"). Under these regulations, any airline with flights originating or landing in the European Union is subject to the ETS and, beginning in 2012, was required to purchase emissions allowances if the airline exceeds the number of free allowances allocated to it under the ETS. The ETS was amended to apply only to flights within the European Economic Area from 2013 through 2016. In 2017, the EU extended the exemption for foreign flights through 2023 given the International Civil Aviation Organization's ("ICAO") adoption of a global market-based program. Currently, the scope only covers a handful of Delta's intra-EU charters and diversions.

C11.1d
What is your strategy for complying with the systems in which you participate or anticipate participating?

**EU ETS**

We seek to minimize the impact of greenhouse gas emissions from our operations through reductions in our fuel consumption and other efforts and have realized reductions in our greenhouse gas emission levels since 2005. We have reduced the fuel needs of our aircraft fleet through the retirement of older, less fuel efficient aircraft and replacement with newer, more fuel efficient aircraft. In addition, we have implemented fuel saving procedures in our flight and ground support operations that further reduce carbon emissions. We are also supporting efforts to develop alternative fuels and efforts to modernize the air traffic control system in the U.S. as part of our efforts to reduce our emissions and minimize our impact on the environment.

Because the scope of EU ETS compliance is currently small for Delta, we submit data for the flights that fall under this regulation on an annual basis and purchase and surrender any credits required for compliance.

**ICAO’s (International Civil Aviation Organization) CORSIA (Carbon Offset Reduction Scheme for International Aviation) Compliance Strategy:**

In October 2016, ICAO formally adopted a global, market-based emissions offset program known as the Carbon Offsetting and Reduction Scheme for International Aviation. This program is designed to achieve a medium-term goal for the aviation industry of achieving carbon-neutral growth in international aviation beginning in 2020. A pilot phase of the offset program will begin in 2021, followed by a first phase of the program beginning in 2024 and a second phase beginning in 2027. Countries can voluntarily participate in the pilot and first phase, but participation in the second phase is mandatory. In 2016, ICAO also adopted new aircraft certification standards to reduce carbon dioxide (CO2) emissions from aircraft. The new aircraft certification standards apply to virtually all types of aircraft that make up the global commercial fleet and will be phased in between 2020 and 2028.

- Involvement with CORSIA technical working group: Delta has been involved by sitting on ICAO’s technical working group on CORSIA, GMTF (Global Market-based measures Task Force) since its inception as part of the IATA delegation to provide input and help shape the monitoring, reporting, verification and emissions units aspects of CORSIA.
- Engaging with government and industry: we have consistently engaged with the government (FAA, State Department), our industry group (IATA) and also ICAO during the process leading up to the ICAO 39th Assembly. We continue to engage with various stakeholders leading up to the start of CORSIA.
- Internal evaluation of potential cost of CORSIA: we have formed various working groups to look at all angles: carbon offsets, the price of conventional jet and the price of alternative jet fuel, impact of network changes, impact of more fuel efficient aircraft
- Purchase of carbon offsets to achieve carbon-neutral growth now: Delta has purchased carbon-offsets since 2013 in order to better understand the carbon market in preparation for CORSIA

---

**C11.2**

(C11.2) Has your organization originated or purchased any project-based carbon credits within the reporting period?

Yes

**C11.2a**

(C11.2a) Provide details of the project-based carbon credits originated or purchased by your organization in the reporting period.

- Credit origination or credit purchase
- Credit purchase

- Project type
  - Biomass energy
<table>
<thead>
<tr>
<th>Project identification</th>
<th>Chile Biomass Power Plant Phase 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Verified to which standard</td>
<td>CDM (Clean Development Mechanism)</td>
</tr>
<tr>
<td>Number of credits (metric tonnes CO2e)</td>
<td>60000</td>
</tr>
<tr>
<td>Number of credits (metric tonnes CO2e): Risk adjusted volume</td>
<td>60000</td>
</tr>
<tr>
<td>Credits cancelled</td>
<td>Yes</td>
</tr>
<tr>
<td>Purpose, e.g. compliance</td>
<td>Voluntary Offsetting</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Credit origination or credit purchase</th>
<th>Credit purchase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project type</td>
<td>Fossil fuel switch</td>
</tr>
<tr>
<td>Project identification</td>
<td></td>
</tr>
<tr>
<td>Ceramics Fuel Switching Project - Brazil Nanjing Connected Natural Gas Power Plant Project South Korea Steel Waste Cogen</td>
<td></td>
</tr>
<tr>
<td>Verified to which standard</td>
<td>VCS (Verified Carbon Standard)</td>
</tr>
<tr>
<td>Number of credits (metric tonnes CO2e)</td>
<td>1269582</td>
</tr>
<tr>
<td>Number of credits (metric tonnes CO2e): Risk adjusted volume</td>
<td>1269582</td>
</tr>
<tr>
<td>Credits cancelled</td>
<td>Yes</td>
</tr>
<tr>
<td>Purpose, e.g. compliance</td>
<td>Voluntary Offsetting</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Credit origination or credit purchase</th>
<th>Credit purchase</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project type</td>
<td>Forests</td>
</tr>
<tr>
<td>Project identification</td>
<td></td>
</tr>
<tr>
<td>Mixture of Forestry projects from the following: - Kasigau - Kariba - Cordillera Azul - Madre de Dios - TIST - Uchindile Mapanda - Florestal - Isangi - Guatemala Caribbean Forest All of these have been contracted through our provider and will be retired against our 2017 inventory.</td>
<td></td>
</tr>
<tr>
<td>Verified to which standard</td>
<td>VCS (Verified Carbon Standard)</td>
</tr>
<tr>
<td>Number of credits (metric tonnes CO2e)</td>
<td>577992</td>
</tr>
<tr>
<td>Number of credits (metric tonnes CO2e): Risk adjusted volume</td>
<td>577992</td>
</tr>
<tr>
<td>Credits cancelled</td>
<td>Yes</td>
</tr>
<tr>
<td>Purpose, e.g. compliance</td>
<td>Voluntary Offsetting</td>
</tr>
</tbody>
</table>

<p>| Credit origination or credit purchase | Credit purchase |</p>
<table>
<thead>
<tr>
<th>Credit purchase</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Project type</strong></td>
<td>Wind</td>
</tr>
<tr>
<td><strong>Project identification</strong></td>
<td>Mixture of Wind projects from the following: - Putian - India Wind Bundles - Zhangbei China Wind All of these have been contracted through our provider and will be retired against our 2017 inventory.</td>
</tr>
<tr>
<td><strong>Verified to which standard</strong></td>
<td>VCS (Verified Carbon Standard)</td>
</tr>
<tr>
<td><strong>Number of credits (metric tonnes CO2e)</strong></td>
<td>475000</td>
</tr>
<tr>
<td><strong>Number of credits (metric tonnes CO2e): Risk adjusted volume</strong></td>
<td>475000</td>
</tr>
<tr>
<td><strong>Credits cancelled</strong></td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Purpose, e.g. compliance</strong></td>
<td>Voluntary Offsetting</td>
</tr>
</tbody>
</table>

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Credit origination or credit purchase</strong></td>
<td>Credit purchase</td>
</tr>
<tr>
<td><strong>Project type</strong></td>
<td>Wind</td>
</tr>
<tr>
<td><strong>Project identification</strong></td>
<td>China Wind Project 727 All of these have been contracted through our provider and will be retired against our 2017 inventory.</td>
</tr>
<tr>
<td><strong>Verified to which standard</strong></td>
<td>CDM (Clean Development Mechanism)</td>
</tr>
<tr>
<td><strong>Number of credits (metric tonnes CO2e)</strong></td>
<td>135000</td>
</tr>
<tr>
<td><strong>Number of credits (metric tonnes CO2e): Risk adjusted volume</strong></td>
<td>135000</td>
</tr>
<tr>
<td><strong>Credits cancelled</strong></td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Purpose, e.g. compliance</strong></td>
<td>Voluntary Offsetting</td>
</tr>
</tbody>
</table>

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Credit origination or credit purchase</strong></td>
<td>Credit purchase</td>
</tr>
<tr>
<td><strong>Project type</strong></td>
<td>Energy efficiency: households</td>
</tr>
<tr>
<td><strong>Project identification</strong></td>
<td>Rwanda Cookstoves</td>
</tr>
<tr>
<td><strong>Verified to which standard</strong></td>
<td>Gold Standard</td>
</tr>
<tr>
<td><strong>Number of credits (metric tonnes CO2e)</strong></td>
<td>3203</td>
</tr>
<tr>
<td><strong>Number of credits (metric tonnes CO2e): Risk adjusted volume</strong></td>
<td>3203</td>
</tr>
<tr>
<td><strong>Credits cancelled</strong></td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Purpose, e.g. compliance</strong></td>
<td></td>
</tr>
</tbody>
</table>
Voluntary Offsetting

Credit origination or credit purchase
Credit purchase

Project type
Landfill gas

Project identification
Gaston County Landfill Gas

Verified to which standard
CAR (The Climate Action Reserve)

Number of credits (metric tonnes CO2e)
2500

Number of credits (metric tonnes CO2e): Risk adjusted volume
2500

Credits cancelled
Yes

Purpose, e.g. compliance
Voluntary Offsetting

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.

**Objective for implementing an internal carbon price**
- Navigate GHG regulations
- Stakeholder expectations
- Drive energy efficiency

**GHG Scope**
- Scope 1
- Scope 3

**Application**
The price of carbon is mainly used by the fuel, environmental and fleet teams, typically when considering costs of possible future regulations (CORSIA, other international or domestic schemes that do not currently exist). The price of carbon is more heavily weighed in the context of decisions related to CORSIA compliance, versus using it as a shadow price to compare costs of investments for other schemes that may be implemented in the future.

**Actual price(s) used (Currency /metric ton)**

**Variance of price(s) used**
Currently, Delta uses evolutionary pricing that assumes the cost of carbon increases with time. Various sources are used to do sensitivity analysis around this: published information on future cost of carbon (IEA), analysis on supply and demand of offsets or other instruments Delta may need for carbon compliance purposes in the future. Various assumptions are made on what the scope of regulation would cover (ex: CORSIA would only cover international aviation emissions, while other regulations such as EU ETS are regional). Cost of carbon is also used as shadow price for hypothetical costs when comparing carbon alternatives that may be more costly now, but may be a strategic investment if associated carbon costs were to become a reality.

**Type of internal carbon price**
- Shadow price
- Offsets

**Impact & implication**
Jet fuel is 98% of Delta's carbon footprint, making any fuel related costs very material to the company. To date, the main use of the cost of carbon has been related to future regulations, the main one being CORSIA beginning in 2021. The use of the price of carbon has helped to push the conversation on low-carbon investment. By using this range of costs and sensitivity analysis across various scenarios, we have opened the conversation internally to better evaluate the cost/ROI of investing in low-carbon initiatives/investments and energy efficiency measures. This has also allowed us to have a conversation at the Executive Environmental Leadership Council (EELC) level on various options to be innovative in the journey to low-carbon. While we have not made final decisions on what those investments might be, using an internal price of carbon for future regulations and also as a shadow price has helped raise awareness to material risks associated with jet fuel (98% of Delta's carbon footprint).

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**C12. Engagement**

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**C12.1**

(C12.1) Do you engage with your value chain on climate-related issues?
- Yes, our customers
- Yes, other partners in the value chain

**C12.1b**

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

**Type of engagement**
- Collaboration & innovation

**Details of engagement**
- Run a campaign to encourage innovation to reduce climate change impacts
Size of engagement
1

% Scope 3 emissions as reported in C6.5
1

Please explain the rationale for selecting this group of customers and scope of engagement
At a minimum, we provide all of our corporate customers with emissions data associated with their flying. This is on their Sky Partner report which they receive regularly from their account manager. As a pilot program, we engaged with select corporate customers/accounts with carbon-neutrality goals and/or other climate change goals on the impact of their emissions from flying on Delta. We limited the scope in the program to ensure we got the engagement and collaboration right, before expanding. Currently, we have actively engaged 10 accounts on this, with about 30 set to go for the next phase. The engagement includes a dialogue on what Delta has done to reduce its emissions and improve efficiency (new aircraft, other fuel savings initiatives), and how we can work together to achieve both of our goals: reduce Delta's scope one emissions, address the company's Scope 3 travel emissions on Delta. For companies such as the Seattle Seahawks charter travel, we offset their emissions as part of our partnership. For Duke University's business travel, we partnered on a “carbon bundle” Delta and Duke's combined purchase of 5,000 carbon credits, simultaneously offsets carbon from all Duke University business travel on Delta in 2017, while supporting urban forestry in the Raleigh-Durham area through funding the planting and care of 1,000 new trees. For other partner companies, we have offset partial/full emissions as part of both of our emissions goals.

Impact of engagement, including measures of success
Account managers met with corporate customers and explained Delta's initiatives on climate change, in addition to presenting the opportunity to offset all emissions from their travel on Delta as part of a 360-degree engagement to drive partnership beyond just discounts and contracts. All pilot programs were successful in offsets. We are working to refine the process and expand.

Type of engagement
Education/information sharing

Details of engagement
Run an engagement campaign to educate customers about the climate change impacts of (using) your products, goods, and/or services

Size of engagement
2

% Scope 3 emissions as reported in C6.5
2

Please explain the rationale for selecting this group of customers and scope of engagement
During Earth month we run a campaign to better educate employees and customers on the impact of travel. We offset all travelers for Earth Day (on select routes) and engage these flyers through Sky Club engagements and announcements and social media.

Impact of engagement, including measures of success
Impressions on Twitter/social posts (increase for this year). For in-person engagement we push towards West Coast activations for the time being as they are generally easier to implement and very well received in terms of engaging with customers going through the Sky Club.

Type of engagement
Education/information sharing

Details of engagement
Run an engagement campaign to educate customers about the climate change impacts of (using) your products, goods, and/or services

Size of engagement
100

% Scope 3 emissions as reported in C6.5
100

Please explain the rationale for selecting this group of customers and scope of engagement
All customers are provided the opportunity to learn more about the emissions associated with their flights. For customers booking on delta.com/co2; their confirmation page provides a link for them to offset their emissions and also see what the impact is. For corporate customers, this information is provided to their travel/procurement manager on a regular basis. All customers can also go to delta.com/co2 and enter their origin mate / destination to understand the emissions/climate impact of their travel on Delta. A link to delta.com/co2 is provided for employees to understand the impact of travel.
C12.1c

(C12.1c) Give details of your climate-related engagement strategy with other partners in the value chain.

We engage with airports occasionally on sustainability and climate related initiatives that are part of their goals and strategy. We have been engaged with Atlanta airport on various eco-district activities, including providing feedback on Delta’s emissions which would count as part of the airport's emissions inventory (some GSE emissions, landing/takeoff + taxi emissions). We have also worked with them on identifying initiatives to help reduce GHG emissions in the airport area, including sharing data on Delta’s GHG reduction initiatives (reducing APU use at the airport for example), and where we need more information on our current impact in order to further reduce our emissions (more visibility to our electricity consumption at the airport). Ideas around “shared initiatives” such as how to minimize the number of shuttles coming to the airport (perhaps various hotels sharing shuttles, some employee + customer shuttles) have also been discussed.

We have engaged with LAX on similar initiatives and most recently various members of Delta have sat in on sustainable alternative fuel roundtables at SEA and SFO.

C12.3

(C12.3) Do you engage in activities that could either directly or indirectly influence public policy on climate-related issues through any of the following?
- Direct engagement with policy makers
- Trade associations
- Funding research organizations
- Other

C12.3a

(C12.3a) On what issues have you been engaging directly with policy makers?

<table>
<thead>
<tr>
<th>Focus of legislation</th>
<th>Corporate position</th>
<th>Details of engagement</th>
<th>Proposed legislative solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mandatory carbon reporting</td>
<td>Undecided</td>
<td>We have engaged both at the ICAO level (two attendees to the Assembly, representation at various ICAO events) and the U.S. Government level to ensure that CORSIA will be implemented as a fair, global scheme to address international aviation emissions.</td>
<td>While ICAO has recently adopted the SARPs for CORSIA, legislation on a U.S. level is still pending. We continue to engage to ensure this is implemented as a fair, global scheme to address international aviation emissions.</td>
</tr>
</tbody>
</table>

C12.3b

(C12.3b) Are you on the board of any trade associations or do you provide funding beyond membership?
Yes
C12.3c

(C12.3c) Enter the details of those trade associations that are likely to take a position on climate change legislation.

**Trade association**

IATA - Delta's Managing Director, Global Environment, Sustainability and Compliance sits on the Environment Committee, focused on environmental and climate action for the aviation industry.

**Is your position on climate change consistent with theirs?**

Consistent

**Please explain the trade association's position**

IATA's ENCOM advises the Board of Governors, the IATA Director General and other IATA bodies on environmental matters, and is responsible for:
- Monitoring, assessing and responding to environmental developments, policies and regulations of concern to IATA member airlines
- Developing and recommending common industry positions on environmental issues
- Advising and implementing strategies to promote IATA positions, amongst regulatory bodies and stakeholders

Main policy areas:
- Climate change
- CORSIA
- Aircraft noise
- Local air quality
- Illegal Wildlife Trafficking

IATA recognizes the need to address the global challenge of climate change and adopted a set of ambitious targets in 2009 to mitigate CO2 emissions from air transport:
- An average improvement in fuel efficiency of 1.5% per year from 2009 to 2020
- A cap on net aviation CO2 emissions from 2020 (carbon-neutral growth)
- A reduction in net aviation CO2 emissions of 50% by 2050, relative to 2005 levels
- A multi-faceted approach: the four-pillar strategy to meet these three targets
  1. Improved technology, including the deployment of sustainable low-carbon fuels
  2. More efficient aircraft operations
  3. Infrastructure improvements, including modernized air traffic management systems
  4. A single global market-based measure, to fill the remaining emissions gap (CORSIA; carbon-neutral growth)

In 2016, the 39th ICAO Assembly concluded with the adoption of a global offsetting scheme to address CO2 emissions from international aviation. The agreement at ICAO demonstrates that aviation is determined to live up to its commitments and play its part in meeting international goals for emissions reduction. The scheme established by ICAO is a global offsetting mechanism, called CORSIA (Carbon Offsetting and Reduction Scheme for International Aviation). CORSIA aims to help address any annual increase in total CO2 emissions from international civil aviation above 2020 levels. The aviation sector is committed to technology, operational and infrastructure advances to continue to reduce the sector's carbon emissions. Offsetting is not intended to replace these efforts. Nor would the CORSIA make fuel efficiency any less of a day-to-day priority. Rather, CORSIA can help the sector achieve its climate targets in the short and medium term by complementing emissions reduction initiatives within the sector.

**How have you, or are you attempting to, influence the position?**

Our position on IATA's Environment Committee (ENCOM) allows us to:
- Influence industry position and provide recommendations on various environmental issues, including climate change regulations (CORSIA) and industry climate change goals
- Provide feedback on implementation strategies to regulatory bodies and other stakeholders (ex: how to most effectively implement upcoming regulations such as CORSIA, with airline operations/process experience in mind, while maintaining environmental integrity of the scheme)

C12.3d

(C12.3d) Do you publicly disclose a list of all research organizations that you fund?

Yes

C12.3e
(C12.3e) Provide details of the other engagement activities that you undertake.

In 2017, Delta launched a partnership with the University of Georgia to manage ongoing life cycle analyses of new biofuels. An evaluation of camelina oil, including the entire life cycle from cultivation and harvesting to biojet fuel production, transport and combustion, demonstrated that it could significantly reduce GHG emissions compared to petroleum-based fuels. The project team is currently working with other partners to assess pathways for commercializing this fuel source.

In addition, the Ray C. Anderson Center for Sustainable Business at Georgia Tech Scheller College of Business (“Center”) has announced that Delta Air Lines will be the first participant in the Center’s Corporate Sustainability Program (CSP) Executive Council. Through the CSP, the Center seeks to collaborate with leading companies that share a vision for developing sustainability leaders and shaping a new economy that offers a more sustainable future for all. CSP engagement will help to facilitate corporate/academic thought leadership across four strategic areas—Circular Economy, Carbon-Conscious Business, Social Performance, and Sustainability Innovation & ESG Leadership—through activities such as guest lectures, joint research, and workshops on sustainability topics and trends. Furthermore, dialogue between practitioners and 17 Center-affiliated faculty members (representing the full spectrum of business disciplines) on the most pressing business issues and challenges will open doors for cutting-edge research with the potential to make a real-world impact. Dr. Beril Toktay, Faculty Director of the Center, said, “Delta is thinking more and more strategically about how sustainability integration into business functions and sustainability-driven innovation can create value for its investors and customers. We’re delighted to partner with them at this exciting time.”

As this relationship progresses in 2018, topics we discussed to cover include sustainability in the supply chain, ROI on sustainability and climate change projects, international cost of carbon and scenario analysis.
Delta’s climate change strategy is part of our overall sustainability strategy and efforts, and all actions and strategies are approved through our Executive Environmental Leadership Council.

Corporate Environment also now reports up to the Board’s Governance Committee.

Delta’s SVP Government Affairs is represented on the Environmental Executive Leadership Council (EELC). The mandate of the EELC is to:

- review and recommend policies, strategies and programs that define and guide Delta’s environmental sustainability efforts, including those related to climate change
- recommend environmental sustainability performance metrics and review performance against those metrics
- provide advice and direction on the integration of environmental sustainability practices into the business functions at Delta

The EELC will meet 2-3x a year, but may meet more frequently as necessary. Topics of discussion generally include:
- Industry engagement on climate change policy at the International Civil Aviation Organization
- Performance against the International Air Transport Association’s (IATA) 1.5 percent fuel efficiency improvement goal
- Climate change and biofuel strategy and planning
- Customer and employee engagement on sustainability
- Environmental partnerships, specifically Delta’s carbon offset offering through The Nature Conservancy (TNC) partnership
- Sustainability reporting and disclosures through the Corporate Responsibility Report, the CDP, the Dow Jones Sustainability Index and various corporate customer questionnaires

Day to day activities related to climate change may fall to the responsibility of various individuals in many divisions: corporate environment, fuel, operations center, engineering, technical operations, legal and government affairs. Business cases and strategies are developed and vetted by groups that typically involve someone in all of these areas. Strategy and other initiatives are reported back to the EELC to ensure that our approach is consistent with what is laid out in our climate change strategy. This approach also ensures that we are taking into account all aspects of the company as various divisions are represented on the EELC.
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).

**Publication**
In mainstream reports

**Status**
Complete

**Attach the document**
Delta 2016 Verification Statement 6.5.18.pdf

**Content elements**
Governance
Strategy
Risks & opportunities

---

**Publication**
In voluntary sustainability report

**Status**
Complete

**Attach the document**
CRR_2017_FINAL DRAFT_08062018.pdf

**Content elements**
Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets

---

**Publication**
In voluntary communications

**Status**
Complete

**Attach the document**
Reuters article.docx

**Content elements**
Strategy
Emissions figures
Emission targets

---

**Publication**
In voluntary communications

**Status**
Complete

**Attach the document**
Duke Delta partnership.pdf

**Content elements**
Strategy

---

C14. 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.

C14.1

(C14.1) Provide details for the person that has signed off (approved) your CDP climate change response.

<table>
<thead>
<tr>
<th>Job title</th>
<th>Corresponding job category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managing Director, Global Environment, Sustainability and Compliance</td>
<td>Environmental, health and safety manager</td>
</tr>
</tbody>
</table>

SC. Supply chain module

SC0.0

(SC0.0) If you would like to do so, please provide a separate introduction to this module.

SC0.1

(SC0.1) What is your company's annual revenue for the stated reporting period?

<table>
<thead>
<tr>
<th>Annual Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>41244000000</td>
</tr>
</tbody>
</table>

SC0.2

(SC0.2) Do you have an ISIN for your company that you would be willing to share with CDP?

Yes

SC0.2a

(SC0.2a) Please use the table below to share your ISIN.

<table>
<thead>
<tr>
<th>ISIN country code (2 letters)</th>
<th>ISIN numeric identifier and single check digit (10 numbers overall)</th>
</tr>
</thead>
<tbody>
<tr>
<td>US</td>
<td>2473617023</td>
</tr>
</tbody>
</table>

SC1.1

(SC1.1) Allocate your emissions to your customers listed below according to the goods or services you have sold them in
this reporting period.

Requesting member
Accenture

Scope of emissions
Scope 1

Emissions in metric tonnes of CO2e
39214

Uncertainty (±%)

Major sources of emissions
2017 calendar year flights

Verified
No

Allocation method
Allocation based on the number of units purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
The calculation for GHG emissions here aligns with the methodology Delta uses for individual customers who wish to offset the emissions associated with their flight. Actual itineraries from 2017 are used and route-based emissions are applied to each segment. Emissions are calculated based on the following assumptions: • 12 month history fuel data for fuel: Total fuel used on that route (across all aircraft) • 12 month history weight/load data: Estimated weight per passenger (passenger + bags) + actual cargo weight on all flights on that route (across all aircraft) • An average “per passenger emissions” is determined for that route The “per passenger emissions” is applied to all itineraries in 2017.

Requesting member
Bank of America

Scope of emissions
Scope 1

Emissions in metric tonnes of CO2e
8576

Uncertainty (±%)

Major sources of emissions
2017 flights

Verified
No

Allocation method
Allocation based on the number of units purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
The calculation for GHG emissions here aligns with the methodology Delta uses for individual customers who wish to offset the emissions associated with their flight. Actual itineraries from 2017 are used and route-based emissions are applied to each segment. Emissions are calculated based on the following assumptions: • 12 month history fuel data for fuel: Total fuel used on that route (across all aircraft) • 12 month history weight/load data: Estimated weight per passenger (passenger + bags) + actual cargo weight on all flights on that route (across all aircraft) • An average “per passenger emissions” is determined for that route The “per passenger emissions” is applied to all itineraries in 2017.

Requesting member
HP Inc

Scope of emissions
Please select

Emissions in metric tonnes of CO2e
4667
Uncertainty (±%)

Major sources of emissions
2017 flights

Verified
Please select

Allocation method
Allocation based on the number of units purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

The calculation for GHG emissions here aligns with the methodology Delta uses for individual customers who wish to offset the emissions associated with their flight. Actual itineraries from 2017 are used and route-based emissions are applied to each segment. Emissions are calculated based on the following assumptions:

• 12 month history fuel data for fuel: Total fuel used on that route (across all aircraft)
• 12 month history weight/load data: Estimated weight per passenger (passenger + bags) + actual cargo weight on all flights on that route (across all aircraft)
• An average “per passenger emissions” is determined for that route

The “per passenger emissions” is applied to all itineraries in 2017.

Requesting member
Koninklijke Philips NV

Scope of emissions
Scope 1

Emissions in metric tonnes of CO2e
9931

Uncertainty (±%)

Major sources of emissions
2017 flights

Verified
No

Allocation method
Allocation based on the number of units purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

The calculation for GHG emissions here aligns with the methodology Delta uses for individual customers who wish to offset the emissions associated with their flight. Actual itineraries from 2017 are used and route-based emissions are applied to each segment. Emissions are calculated based on the following assumptions:

• 12 month history fuel data for fuel: Total fuel used on that route (across all aircraft)
• 12 month history weight/load data: Estimated weight per passenger (passenger + bags) + actual cargo weight on all flights on that route (across all aircraft)
• An average “per passenger emissions” is determined for that route

The “per passenger emissions” is applied to all itineraries in 2017.

Requesting member
L’Oréal

Scope of emissions
Scope 1

Emissions in metric tonnes of CO2e
4116

Uncertainty (±%)

Major sources of emissions
2017 flights

Verified
No

Allocation method
Allocation based on the number of units purchased
Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
The calculation for GHG emissions here aligns with the methodology Delta uses for individual customers who wish to offset the emissions associated with their flight. Actual itineraries from 2017 are used and route-based emissions are applied to each segment. Emissions are calculated based on the following assumptions:

- 12 month history fuel data for fuel: Total fuel used on that route (across all aircraft)
- 12 month history weight/load data: Estimated weight per passenger (passenger + bags) + actual cargo weight on all flights on that route (across all aircraft)
- An average “per passenger emissions” is determined for that route. The “per passenger emissions” is applied to all itineraries in 2017.

Requesting member
MetLife, Inc.

Scope of emissions
Scope 1

Emissions in metric tonnes of CO2e
1482

Uncertainty (±%)

Major sources of emissions
2017 flights

Verified
No

Allocation method
Allocation based on the number of units purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
The calculation for GHG emissions here aligns with the methodology Delta uses for individual customers who wish to offset the emissions associated with their flight. Actual itineraries from 2017 are used and route-based emissions are applied to each segment. Emissions are calculated based on the following assumptions:

- 12 month history fuel data for fuel: Total fuel used on that route (across all aircraft)
- 12 month history weight/load data: Estimated weight per passenger (passenger + bags) + actual cargo weight on all flights on that route (across all aircraft)
- An average “per passenger emissions” is determined for that route. The “per passenger emissions” is applied to all itineraries in 2017.

Requesting member
TD Bank Group

Scope of emissions
Scope 1

Emissions in metric tonnes of CO2e
746

Uncertainty (±%)

Major sources of emissions
2017 flights

Verified
No

Allocation method
Allocation based on the number of units purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made
The calculation for GHG emissions here aligns with the methodology Delta uses for individual customers who wish to offset the emissions associated with their flight. Actual itineraries from 2017 are used and route-based emissions are applied to each segment. Emissions are calculated based on the following assumptions:

- 12 month history fuel data for fuel: Total fuel used on that route (across all aircraft)
- 12 month history weight/load data: Estimated weight per passenger (passenger + bags) + actual cargo weight on all flights on that route (across all aircraft)
- An average “per passenger emissions” is determined for that route. The “per passenger emissions” is applied to all itineraries in 2017.
The Coca-Cola Company

Scope of emissions
Scope 1

Emissions in metric tonnes of CO2e
11754

Uncertainty (±%)

Major sources of emissions
2017 flights

Verified
No

Allocation method
Allocation based on the number of units purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

The calculation for GHG emissions here aligns with the methodology Delta uses for individual customers who wish to offset the emissions associated with their flight. Actual itineraries from 2017 are used and route-based emissions are applied to each segment. Emissions are calculated based on the following assumptions:

• 12 month history fuel data for fuel: Total fuel used on that route (across all aircraft)
• 12 month history weight/load data: Estimated weight per passenger (passenger + bags) + actual cargo weight on all flights on that route (across all aircraft)
• An average “per passenger emissions” is determined for that route

The “per passenger emissions” is applied to all itineraries in 2017.

Wells Fargo & Company

Scope of emissions
Scope 1

Emissions in metric tonnes of CO2e
17370

Uncertainty (±%)

Major sources of emissions
2017 flights

Verified
No

Allocation method
Allocation based on the number of units purchased

Please explain how you have identified the GHG source, including major limitations to this process and assumptions made

The calculation for GHG emissions here aligns with the methodology Delta uses for individual customers who wish to offset the emissions associated with their flight. Actual itineraries from 2017 are used and route-based emissions are applied to each segment. Emissions are calculated based on the following assumptions:

• 12 month history fuel data for fuel: Total fuel used on that route (across all aircraft)
• 12 month history weight/load data: Estimated weight per passenger (passenger + bags) + actual cargo weight on all flights on that route (across all aircraft)
• An average “per passenger emissions” is determined for that route

The “per passenger emissions” is applied to all itineraries in 2017.

SC1.2

(SC1.2) Where published information has been used in completing SC1.1, please provide a reference(s).

The per passenger emissions used to calculate total emissions here are the same that can be found at delta.com/co2.
SC1.3

(SC1.3) What are the challenges in allocating emissions to different customers, and what would help you to overcome these challenges?

<table>
<thead>
<tr>
<th>Allocation challenges</th>
<th>Please explain what would help you overcome these challenges</th>
</tr>
</thead>
<tbody>
<tr>
<td>We face no challenges</td>
<td></td>
</tr>
</tbody>
</table>

SC1.4

(SC1.4) Do you plan to develop your capabilities to allocate emissions to your customers in the future?

No

SC1.4b

(SC1.4b) Explain why you do not plan to develop capabilities to allocate emissions to your customers.

We refine the calculations each year based on updated fuel and load data, however we currently have no plans to change the way we allocate emissions. We currently provide corporate customer emissions on an aggregate level through the SkyPartner reports that may be improved in the near future. We can work with customers (on request) if they require additional information.

SC2.1

(SC2.1) Please propose any mutually beneficial climate-related projects you could collaborate on with specific CDP Supply Chain members.

**Requesting member**
Accenture

**Group type of project**
Relationship sustainability assessment

**Type of project**
Aligning goals to feed into customers targets and ambitions

**Emissions targeted**
Actions that would reduce our own supply chain emissions (our own scope 3)

**Estimated timeframe for carbon reductions to be realized**
0-1 year

**Estimated lifetime CO2e savings**

**Estimated payback**
0-1 year

**Details of proposal**
A partnership offset program could be created by: 1) engaging employees on climate change and the environmental impact of their flights 2) providing details of your carbon footprint on Delta flights on a regular basis and discussing how to market and communicate this information internally to employees 3) potentially setting up a carbon offset purchase process; offsets could be purchased for a subset of the flights or all flights 4) choosing offset projects in regions which are beneficial to both companies. Depending on the structure of this program, the purchase of carbon offsets could have the potential to benefit both parties' carbon footprints. For additional details or further discussion, please feel free to contact us at sustainability@delta.com.

**Requesting member**
CDP
Bank of America

**Group type of project**
Relationship sustainability assessment

**Type of project**
Aligning goals to feed into customers targets and ambitions

**Emissions targeted**
Actions that would reduce our own supply chain emissions (our own scope 3)

**Estimated timeframe for carbon reductions to be realized**
0-1 year

**Estimated lifetime CO2e savings**

**Estimated payback**
0-1 year

**Details of proposal**
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**Requesting member**
HP Inc

**Group type of project**
Relationship sustainability assessment

**Type of project**
Aligning goals to feed into customers targets and ambitions

**Emissions targeted**
Actions that would reduce our own supply chain emissions (our own scope 3)

**Estimated timeframe for carbon reductions to be realized**
0-1 year

**Estimated lifetime CO2e savings**

**Estimated payback**
0-1 year

**Details of proposal**
A partnership offset program could be created by: 1) engaging employees on climate change and the environmental impact of their flights 2) providing details of your carbon footprint on Delta flights on a regular basis and discussing how to market and communicate this information internally to employees 3) potentially setting up a carbon offset purchase process; offsets could be purchased for a subset of the flights or all flights 4) choosing offset projects in regions which are beneficial to both companies. Depending on the structure of this program, the purchase of carbon offsets could have the potential to benefit both parties’ carbon footprints. For additional details or further discussion, please feel free to contact us at sustainability@delta.com.

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**Requesting member**
Koninklijke Philips NV

**Group type of project**
Relationship sustainability assessment

**Type of project**
Aligning goals to feed into customers targets and ambitions

**Emissions targeted**
Actions that would reduce our own supply chain emissions (our own scope 3)

**Estimated timeframe for carbon reductions to be realized**
0-1 year
Estimated lifetime CO2e savings

Estimated payback
0-1 year

Details of proposal
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Requesting member
L’Oréal

Group type of project
Relationship sustainability assessment

Type of project
Aligning goals to feed into customers targets and ambitions

Emissions targeted
Actions that would reduce our own supply chain emissions (our own scope 3)

Estimated timeframe for carbon reductions to be realized
0-1 year

Estimated lifetime CO2e savings

Estimated payback
0-1 year

Details of proposal
A partnership offset program could be created by: 1) engaging employees on climate change and the environmental impact of their flights 2) providing details of your carbon footprint on Delta flights on a regular basis and discussing how to market and communicate this information internally to employees 3) potentially setting up a carbon offset purchase process; offsets could be purchased for a subset of the flights or all flights 4) choosing offset projects in regions which are beneficial to both companies. Depending on the structure of this program, the purchase of carbon offsets could have the potential to benefit both parties’ carbon footprints. For additional details or further discussion, please feel free to contact us at sustainability@delta.com.

Requesting member
MetLife, Inc.

Group type of project
Relationship sustainability assessment

Type of project
Aligning goals to feed into customers targets and ambitions

Emissions targeted
Actions that would reduce our own supply chain emissions (our own scope 3)

Estimated timeframe for carbon reductions to be realized
0-1 year

Estimated lifetime CO2e savings

Estimated payback
0-1 year

Details of proposal
A partnership offset program could be created by: 1) engaging employees on climate change and the environmental impact of their flights 2) providing details of your carbon footprint on Delta flights on a regular basis and discussing how to market and communicate this information internally to employees 3) potentially setting up a carbon offset purchase process; offsets could be purchased for a subset of the flights or all flights 4) choosing offset projects in regions which are beneficial to both companies. Depending on the structure of this program, the purchase of carbon offsets could have the potential to benefit both parties’ carbon footprints. For additional details or further discussion, please feel free to contact us at sustainability@delta.com.
Requesting member
TD Bank Group

Group type of project
Relationship sustainability assessment

Type of project
Aligning goals to feed into customers targets and ambitions

Emissions targeted
Actions that would reduce our own supply chain emissions (our own scope 3)

Estimated timeframe for carbon reductions to be realized
0-1 year

Estimated lifetime CO2e savings

Estimated payback
0-1 year

Details of proposal
A partnership offset program could be created by: 1) engaging employees on climate change and the environmental impact of their flights 2) providing details of your carbon footprint on Delta flights on a regular basis and discussing how to market and communicate this information internally to employees 3) potentially setting up a carbon offset purchase process; offsets could be purchased for a subset of the flights or all flights 4) choosing offset projects in regions which are beneficial to both companies. Depending on the structure of this program, the purchase of carbon offsets could have the potential to benefit both parties’ carbon footprints. For additional details or further discussion, please feel free to contact us at sustainability@delta.com.

Requesting member
The Coca-Cola Company

Group type of project
Relationship sustainability assessment

Type of project
Aligning goals to feed into customers targets and ambitions

Emissions targeted
Actions that would reduce our own supply chain emissions (our own scope 3)

Estimated timeframe for carbon reductions to be realized
0-1 year

Estimated lifetime CO2e savings

Estimated payback
0-1 year

Details of proposal
A partnership offset program could be created by: 1) engaging employees on climate change and the environmental impact of their flights 2) providing details of your carbon footprint on Delta flights on a regular basis and discussing how to market and communicate this information internally to employees 3) potentially setting up a carbon offset purchase process; offsets could be purchased for a subset of the flights or all flights 4) choosing offset projects in regions which are beneficial to both companies. Depending on the structure of this program, the purchase of carbon offsets could have the potential to benefit both parties’ carbon footprints. For additional details or further discussion, please feel free to contact us at sustainability@delta.com.

Requesting member
Wells Fargo & Company

Group type of project
Relationship sustainability assessment

Type of project
Aligning goals to feed into customers targets and ambitions

Emissions targeted
Actions that would reduce our own supply chain emissions (our own scope 3)
Estimated timeframe for carbon reductions to be realized
0-1 year

Estimated lifetime CO2e savings

Estimated payback
0-1 year

Details of proposal
A partnership offset program could be created by: 1) engaging employees on climate change and the environmental impact of their flights 2) providing details of your carbon footprint on Delta flights on a regular basis and discussing how to market and communicate this information internally to employees 3) potentially setting up a carbon offset purchase process; offsets could be purchased for a subset of the flights or all flights 4) choosing offset projects in regions which are beneficial to both companies. Depending on the structure of this program, the purchase of carbon offsets could have the potential to benefit both parties’ carbon footprints. For additional details or further discussion, please feel free to contact us at sustainability@delta.com.

SC2.2

(SC2.2) Have requests or initiatives by CDP Supply Chain members prompted your organization to take organizational-level emissions reduction initiatives?
No

SC3.1

(SC3.1) Do you want to enroll in the 2018-2019 CDP Action Exchange initiative?
No

SC3.2

(SC3.2) Is your company a participating supplier in CDP’s 2017-2018 Action Exchange initiative?
No

SC4.1

(SC4.1) Are you providing product level data for your organization’s goods or services, if so, what functionality will you be using?
Yes, I will provide data

SC4.1a

(SC4.1a) Give the overall percentage of total emissions, for all Scopes, that are covered by these products.
99

SC4.2a
(SC4.2a) Complete the following table for the goods/services for which you want to provide data.

<table>
<thead>
<tr>
<th>Name of good/ service</th>
<th>Flights</th>
</tr>
</thead>
</table>

**Description of good/ service**
Emissions data is provided on a per passenger flight level. Only jet fuel is taken into account when calculating this, other emissions [ ]

**Type of product**
Final

**SKU (Stock Keeping Unit)**

**Total emissions in kg CO2e per unit**
153.9

**±% change from previous figure supplied**
-2.2

**Date of previous figure supplied**
July 31 2017

**Explanation of change**
The number provided here is the average kg CO2 it took in 2017 to transport 100 revenue ton kilometers. This is averaged across our fleet for Delta mainline and connection carriers. The data that was used in SM1 Allocation A was broken down by route to arrive at an average emissions factor per passenger on that route (each passenger+bags assumed to weigh 100kg). The emissions only account for jet fuel burned. 157=3.9 is the average for flights that occurred in 2017, 2.2% better than flights that occurred in 2016. This also does not include emissions from ground operations, which account for approximately 1.4% of our total emissions (reason for 99% in response for SM4.1a).

**Methods used to estimate lifecycle emissions**
Other, please specify (TCR protocol for GHG reporting)

---

**SC4.2b**

(SC4.2b) Complete the following table with data for lifecycle stages of your goods and/or services.

<table>
<thead>
<tr>
<th>Name of good/ service</th>
<th>Please select the scope</th>
<th>Please select</th>
<th>Please select the lifecycle stage</th>
<th>Please select</th>
<th>Emissions at the lifecycle stage in kg CO2e per unit</th>
<th>Please select</th>
<th>Is this stage under your ownership or control?</th>
<th>Please select</th>
<th>Type of data used</th>
<th>Please select</th>
<th>Data quality</th>
<th>Please select</th>
<th>If you are verifying/assuring this product emission data, please tell us how</th>
</tr>
</thead>
</table>

---

**SC4.2c**

(SC4.2c) Please detail emissions reduction initiatives completed or planned for this product.

<table>
<thead>
<tr>
<th>Name of good/ service</th>
<th>Initiative ID</th>
<th>Description of initiative</th>
<th>Completed or planned</th>
<th>Emission reductions in kg CO2e per unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>CDP</td>
<td>Page 71 of 72</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SC4.2d

(SC4.2d) Have any of the initiatives described in SC4.2c been driven by requesting CDP Supply Chain members?

No

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

<table>
<thead>
<tr>
<th>I am submitting my response</th>
<th>Public or Non-Public Submission</th>
<th>I am submitting to</th>
<th>Are you ready to submit the additional Supply Chain Questions?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Public</td>
<td>Investors</td>
<td>Yes, submit Supply Chain Questions now</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Customers</td>
<td></td>
</tr>
</tbody>
</table>

Please confirm below

I have read and accept the applicable Terms