

FedEx Corporation - Climate Change 2019

C0. Introduction

C0.1

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

Headquartered in Memphis, Tennessee, FedEx Corporation (FedEx) provides its broad portfolio of services through its operating companies. These operating companies compete collectively, operate independently and are managed collaboratively, under the FedEx brand. Our network of more than 5,000 hubs and facilities help deliver more than 15 million shipments each day. In FY18, we reported \$65.5 billion in revenues and a record net income of \$4.6 billion. This financial milestone represented a \$5.1 billion increase and a 9 percent growth rate over FY17.

FedEx Express invented express transportation and remains the industry's global leader, providing rapid, reliable, time-definite delivery to more than 220 countries and territories, connecting markets that comprise more than 99 percent of the world's gross domestic product. Unmatched air route authorities and transportation infrastructure, combined with leading-edge information technologies, make FedEx Express the world's largest express transportation company, providing fast and reliable delivery of more than 6 million packages each business day. The FedEx Express business segment also includes TNT Express which operates road transportation networks and delivers documents, parcels and freight to over 200 countries. FedEx Express is comprised of more than 670 aircraft fleet, more than 85,000 motorized vehicles, and more than 2,150 facilities.

FedEx Ground is a leading North American provider of ground small-package delivery services, providing service to the U.S. and Canada. FedEx Home Delivery®, the industry's first ground service dedicated to residential delivery, is available from FedEx Ground and provides Saturday delivery for no additional charge. FedEx SmartPost® is a ground service that specializes in the consolidation and delivery of high volumes of low-weight, less time-sensitive business-to-consumer packages primarily using the U.S. Postal Service® for last mile delivery to residences. FedEx Ground is comprised of more than 65,000 motorized vehicles and more than 600 facilities.

FedEx Freight is a leading U.S. provider of less-than-truckload (LTL) freight services across all lengths of haul. FedEx freight handles more than 110,000 shipments each day. FedEx Freight is comprised of more than 25,000 motorized vehicles and approximately 370 service centers.

FedEx Logistics provides a full suite of supply chain solutions, specialty transportation, cross border e-commerce technology services, customs brokerage, and trade management tools and data.

FedEx Services provides sales, marketing, information technology, communications, customer service, technical support, billing and collections services for U.S. customers of our major business units and certain back-office functions that support our other companies. The FedEx Services business segment includes FedEx Office and Print Services, Inc., which provides document and business services and retail access to our package transportation businesses. FedEx Office is comprised of approximately 1,900 locations within the United States.

C0.2

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

	Start date	End date	Indicate if you are providing emissions data for past reporting years	Select the number of past reporting years you will be providing emissions data for
Row 1	June 1 2017	May 31 2018	No	<Not Applicable>

C0.3

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

Please select

C0.4

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

USD

C0.5

(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your consolidation approach to your Scope 1 and Scope 2 greenhouse gas inventory.

Financial control

C-TO0.7/C-TS0.7

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

Heavy Duty Vehicles (HDV)
Aviation

C1. Governance

C1.1

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

C1.1a

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

Position of individual(s)	Please explain
Board-level committee	The Nominating & Governance Committee of the FedEx Board of Directors (board level committee) assists the Board in overseeing our CSR initiatives, including those related to climate change. At least annually, the committee reviews and discusses CSR and sustainability strategies and programs with senior leadership, including our Chief Sustainability Officer. The board level committee has the opportunity to review the annual FedEx Global Citizenship Report and progress against sustainability goals.

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	The Nominating & Governance Committee of the FedEx Board of Directors assists the Board in overseeing our CSR initiatives, including those related to climate change. At least annually, the committee reviews and discusses CSR and sustainability strategies and programs with senior leadership, including our Chief Sustainability Officer (CSO). The CSO has the opportunity to review the annual FedEx Global Citizenship Report and progress against sustainability goals with the board.

C1.2

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

Name of the position(s) and/or committee(s)	Responsibility	Frequency of reporting to the board on climate-related issues
Chief Sustainability Officer (CSO)	Both assessing and managing climate-related risks and opportunities	Annually

C1.2a

(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 (do not include the names of individuals).

The Nominating & Governance Committee of the FedEx Board of Directors assists the Board in overseeing our CSR initiatives. At least annually, the committee reviews and discusses CSR, sustainability strategies, and programs with senior leadership, including our Chief Sustainability Officer. The CSO reviews with the board our progress against sustainability goals, such as our 39.6% FedEx Express vehicle fuel efficiency improvement achieved.

The FedEx Enterprise Sustainability Council (FESC), a senior officer council, is responsible for setting and implementing our company-wide sustainability strategy and administering our CSR materiality assessment. Our Chief Sustainability Officer chairs the FESC and also oversees the company-wide implementation of our environmental management system and reviews performance annually. This position and individual was approved by the FedEx Board of Directors.

Sustainability Impact Teams (SITs) have also been established under the FESC management structure to ensure that our various operating companies can discuss, plan and align with our sustainability strategy. These create opportunities to advance the FedEx sustainability strategy within specific areas such as Vehicles, Facilities, Air Operations and Sourcing, as well as advising on performance measurement. The SITs' primary roles and responsibilities include:

- Identifying opportunities to advance the FedEx sustainability strategy across the enterprise in specific functional areas (e.g., vehicles, facilities, sourcing, air operations, etc.),
- Incorporating sustainability into operational/functional areas and into the annual business planning process,
- Sharing knowledge and coordinating efforts in functional areas across the FedEx operating companies (i.e., "horizontal" communication channels),
- Identifying and developing possible goals and measuring functional area environmental impacts and performance, and
- Monitoring benefit to FedEx from sustainability initiatives.

In addition, each major FedEx operating company has its own internal environmental sustainability department that actively manages operating company-specific environmental sustainability programs and compliance with applicable environmental regulations and internal policies. Representatives from these departments share best practices and collaborate on sustainability initiatives with other operating companies and other internal departments (e.g., Vehicle Operations, Facilities, Corporate Communications, Sourcing, etc.) through the appropriate SITs.

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 (do not include the names of individuals).

Who is entitled to benefit from these incentives?

Chief Sustainability Officer (CSO)

Types of incentives

Monetary reward

Activity incentivized

Emissions reduction project

Comment

Achievement of targets related to fuel/energy savings (and associated emissions reductions, including greenhouse gases) are factored into performance appraisal of the CSO who oversees teams of those activities. In addition, these objectives ultimately roll up to our CEO and Chairman, Frederick W. Smith, and to the most senior executive in each major operating company, and are tied to the variable compensation levels of those executives. Activities incentivized include: Emissions reduction project Emissions reduction target Energy reduction project Energy reduction target Efficiency project Efficiency target Behavior change related indicator Environmental criteria included in purchases Supply chain engagement

Who is entitled to benefit from these incentives?

Corporate executive team

Types of incentives

Monetary reward

Activity incentivized

Emissions reduction project

Comment

Achievement of targets related to fuel/energy savings (and associated emissions reductions, including greenhouse gases) are factored into performance appraisals of the responsible managers who oversee those activities. In addition, these objectives ultimately roll up to our CEO and Chairman, Frederick W. Smith, and to the most senior executive in each major operating company, and are tied to the variable compensation levels of those executives. Activities incentivized include: Emissions reduction project Emissions reduction target Energy reduction project Energy reduction target Efficiency project Efficiency target Behavior change related indicator Environmental criteria included in purchases Supply chain engagement

Who is entitled to benefit from these incentives?

Management group

Types of incentives

Monetary reward

Activity incentivized

Emissions reduction project

Comment

Achievement of targets related to fuel/energy savings (and associated emissions reductions, including greenhouse gases) are factored into performance appraisals of the responsible managers who oversee those activities. In addition, these objectives roll up to those managers' respective management teams and are therefore tied to the variable compensation of those managers. Activities incentivized include: Emissions reduction project Emissions reduction target Energy reduction project Energy reduction target Efficiency project Efficiency target Behaviour change related indicator Environmental criteria included in purchases Supply chain engagement

Who is entitled to benefit from these incentives?

Energy manager

Types of incentives

Monetary reward

Activity incentivized

Emissions reduction project

Comment

Achievement of targets related to fuel/energy savings (and associated emissions reductions, including greenhouse gases) are factored into performance appraisals of the responsible managers who oversee those activities, and are therefore tied directly to the variable compensation levels of those managers. This includes the managers at our operating companies who directly manage our fuel/energy reduction initiatives such as our Fuel Sense program at FedEx Express or GREEN Site program at FedEx Freight. Activities incentivized include: Emissions reduction project Emissions reduction target Energy reduction project Energy reduction target Efficiency project Efficiency target Behavior change related indicator Environmental criteria included in purchases Supply chain engagement

Who is entitled to benefit from these incentives?

Environment/Sustainability manager

Types of incentives

Monetary reward

Activity incentivized

Emissions reduction project

Comment

Achievement of targets related to fuel/energy savings (and associated emissions reductions) are factored into performance appraisals of the responsible managers who actively manage those activities. Activities incentivized include: Emissions reduction project Emissions reduction target Energy reduction project Energy reduction target Efficiency project Efficiency target Behaviour change related indicator Environmental criteria included in purchases Supply chain engagement

Who is entitled to benefit from these incentives?

All employees

Types of incentives

Recognition (non-monetary)

Activity incentivized

Behavior change related indicator

Comment

Through our internal sustainability programs, such as “Fuel Sense” and “Eco Drive” at FedEx Express, “Energy Watch” at FedEx Freight, “Simplify Your Center” at FedEx Office, and “EarthSmart Champion” at FedEx Ground, FedEx team members are encouraged to actively contribute to our sustainability strategy through three key focus areas: fuel emissions, energy usage and recycling/waste minimization in the FedEx workplace. Various internal recognition opportunities, including featuring team member stories in enterprise communications, such as our “From the Chairman” newsletter, blog postings and the Global Citizenship Report, are utilized to further incentivize and reward team members who are the foundation for our continued success in making our business environmentally sustainable. Some of our operating companies also have sustainability award programs for team members who demonstrate particular passion for sustainability causes.

C2. Risks and opportunities

C2.1

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

	From (years)	To (years)	Comment
Short-term	1	3	
Medium-term	3	5	

	From (years)	To (years)	Comment
Long-term	5	10	We entered 10 in the "To (years)" field in order to satisfy the requirements of this question. In reality, our long-term risk horizon is typically anything longer than 5 years. In most cases that would typically be less than 10 years, but in some cases it might even be longer, depending on the type of risk being assessed.

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.

	Frequency of monitoring	How far into the future are risks considered?	Comment
Row 1	Six-monthly or more frequently	>6 years	Selected "Six-monthly..." option in the "Frequency of monitoring" column because in addition to the annual ERM process discussed earlier, there are other internal risk management processes at FedEx that are conducted on a more frequent basis than our annual ERM process. For instance, our Control Self-Monitoring ("CSM") process is a framework used by management to evaluate the effectiveness of internal controls within their area of responsibility. The CSM process is structured for location management to complete specific audit sections in designated months over the course of a cycle, and can cover climate-related risks such as severe weather event contingency planning. Selected ">6 years" option in second column because while our ERM process solicits input on risks for the following fiscal year's financial planning, most of the high-priority risks assessed through that process are longer-term in nature, and are used for longer-range strategic planning and mitigation purposes.

C2.2b

(C2.2b) Provide further details on your organization's process(es) for identifying and assessing climate-related risks.

Our enterprise risk management (ERM) process is embedded in our strategic financial planning process, and provides a platform to facilitate integration of risk information in business decision-making. This risk assessment includes review by senior level management with oversight from our Board of Directors. Depending on the type of business risks identified through this process, specific contingency plans and strategies are formulated either at the enterprise- or operating company-level to minimize potential adverse impacts to FedEx business operations. The ERM process, which follows the Committee of Sponsoring Organizations of the Treadway Commission (COSO) framework, has the flexibility to assess risks at both the company- and asset-level.

Our ERM process defines a substantive impact for climate-related risks in the same manner for all business risks assessed through the process; namely by prioritizing those risks based on likely financial impact, the probability of occurrence within the next fiscal year, and the level of current controls in place to manage those risks. In essence, the ERM process prioritizes those risks based on the residual risk that remains after management's response to those risks (following COSO guidelines). We cannot disclose any additional details about how we determine those impacts for competitive reasons.

“Company-level” business risks routinely identified through the ERM process that may be affected by climate change include regulations that could impact our ability to operate in certain markets, and brand reputational risks as public awareness grows around the environmental impacts of transportation logistics services. Our strategies for addressing those risks include proactive public policy and external stakeholder engagement, and implementing our “Reduce, Replace, Revolutionize” strategy to minimize the environmental impacts of our operations.

“Asset-level” risks identified and assessed through the ERM process include potential service disruptions arising from severe weather events (or other natural disasters). While we operate several integrated networks with assets distributed throughout the world, there are concentrations of key assets within our networks that are exposed to adverse weather conditions or localized risks from natural disasters such as hurricanes or floods. The loss of a key location such as our Memphis World Hub or one of our information technology centers could cause a significant disruption to our operations and cause us to incur significant costs to re-establish or relocate these functions. FedEx has over 40 years of experience in proactively addressing situations, such as severe weather events, that can occur at any given time anywhere in the world; we are adept at implementing contingency plans at a moment’s notice and we have the flexibility within our system to make the necessary adjustments to minimize the impact to our customers.

The ERM process uses a consultative approach that solicits input from the senior leadership teams at each major operating company to identify and prioritize the main business risks across the enterprise. These risks are classified into five categories (External, Strategic, Operational, Financial and Compliance), and are prioritized based on likely financial impact (across predefined monetary ranges), the probability of occurrence within the next fiscal year, and the level of current controls in place to manage those risks. A corporate-level team aggregates the data submitted by each operating company to develop an enterprise-wide inventory of prioritized business risks to be considered in the subsequent fiscal year’s strategic financial planning process. As stated above, climate-related risks, such as the potential for severe weather event disruptions or regulatory and reputational risks, are among those risks that are assessed through this process, in the same manner as the other business risks assessed. In addition, there are other risk management processes at FedEx that are conducted outside of the ERM process that also consider the potential impacts of such risks on the business.

C2.2c

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

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	The impact of existing and potential regulations, including transitional risk relating to climate change, is factored into our standard ERM process. For example, risk of increased or decreased operating costs due to regulations such as those regarding GHG emissions from our more than 670 aircraft and 180,000 vehicles, is included as it can impose substantial costs on our ability to ship our customers’ packages and freight. Potential costs include an increase in the price of the fuel and other energy we purchase and capital costs associated with updating or replacing our aircraft or vehicles. Regulations could also limit our ability to service our customers, especially in dense urban markets where congestion is an issue. The potential impacts of such risks are analyzed as part of our overall regulatory risk assessment, and are not specifically broken out for climate-related regulations. For example, in 2009, the European Commission approved the extension of the European Union Emissions Trading Scheme (“ETS”) for GHG emissions to the airline industry. Under this decision, all FedEx Express flights that are wholly within the European Union are now covered by the ETS requirements, and each year we are required to purchase emission allowances in an amount equal to the carbon dioxide emissions from such flights. Also in 2016, the International Civil Aviation Organization (ICAO), the United Nations body charged with setting standards for international aviation, passed a resolution adopting the Carbon Offsetting and Reduction Scheme for International Aviation (“CORSIA”), which is a global, market-based emissions offset program to encourage carbon-neutral growth beyond 2020. A pilot phase is scheduled to begin in 2021 in which countries may voluntarily participate, and full mandatory participation is scheduled to begin in 2027. ICAO continues to develop details regarding implementation, but compliance with CORSIA will increase FedEx operating costs.

	Relevance & inclusion	Please explain
Emerging regulation	Relevant, sometimes included	The impact of existing and potential regulations, including transitional risk relating to climate change, is factored into our standard ERM process. Risk of increased or decreased operating costs due to regulations such as those regarding GHG emissions from our 670+ aircraft and 180,000+ vehicles is included as it can impose and impact our ability to ship our customers' packages and freight. For example, in July 2016, the U.S. Environmental Protection Agency ("EPA") issued a finding that aircraft engine GHG emissions cause or contribute to air pollution that may reasonably be anticipated to endanger public health or welfare. This finding is a regulatory prerequisite to the EPA's adoption of a new certification standard for aircraft emissions. In the past, the U.S. Congress has also considered bills that would regulate GHG emissions, and some form of federal climate change legislation is possible in the future. However, the U.S. recently withdrew from the Paris climate accord, an agreement among 196 countries to reduce GHG emissions, and that withdrawal's effect on future U.S. policy regarding GHG emissions, on CORSIA and on other GHG regulation is uncertain.
Technology	Relevant, sometimes included	The transitional risk and impact of technological innovations/developments on our operations and on demand for our services is factored into our standard ERM process. However, those impacts are not typically directly correlated with climate change, although in some instances there may be an indirect correlation resulting from physical risks e.g. the potential disruption to our operations from the loss of one of our information technology centers due a severe weather event related to climate change. That being said, the potential impacts that other risk categories discussed here such as current and emerging regulations, have an indirect impact on potential technological improvements or innovations that support the transition to a lower-carbon, energy-efficient economic system. For instance, jurisdictions implementing regulations to encourage the use of low-emission alternative fuel vehicles could have a significant impact on our ability to operate in those markets.
Legal	Relevant, always included	The transitional risk and impact of legal and regulatory risks, including those related to climate change, is factored into our standard ERM process. These could include lawsuits by regulatory agencies or environmental activists related to the GHG emissions we generate from our more than 670 aircraft or more than 180,000 diesel and gasoline vehicles. The potential impacts of such risks are analyzed as part of our overall regulatory risk assessment, and not specifically broken out for climate-related legal actions.
Market	Relevant, always included	The transitional market-related risks are consistently assessed and prioritized through our ERM and other risk management processes. Our businesses depend on our strong reputation and the value of the FedEx brand. The FedEx brand name and our corporate reputation are powerful sales and marketing tools, and we devote significant resources to promoting and protecting them. These risks could include shifting customer preference for less carbon-intensive shipping services, which could reduce demand for our high-margin services like overnight express shipping that depends on our more than 670 aircraft. The potential impacts of such risks are analyzed as part of our overall market-related risk assessment, and not specifically broken out for climate-related market risks. The ERM process uses a consultative approach that solicits input from the senior leadership teams at each major operating company to identify and prioritize the main business risks across the enterprise. These risks are prioritized based on likely financial impact (across predefined monetary ranges), the probability of occurrence within the next fiscal year, and the level of current controls in place to manage those risks. A corporate-level team aggregates the data submitted by each operating company to develop an enterprise-wide inventory of prioritized business risks to be considered in the subsequent fiscal year's strategic financial planning process.
Reputation	Relevant, always included	Our businesses depend on our strong reputation and the value of the FedEx brand. The FedEx brand name and our corporate reputation are powerful sales and marketing tools, and we devote significant resources to promoting and protecting them. Damage to our reputation and loss of brand equity could reduce demand for our services and thus have an adverse effect on our financial condition, liquidity and results of operations, as well as require additional resources to rebuild our reputation and restore the value of our brand. As stated above, increased awareness and any adverse publicity in the global marketplace about the GHGs emitted by companies in the airline and transportation industries could harm our reputation and reduce customer demand for our carbon-intensive transportation logistics services, especially our air express services that rely on our 670+ aircraft, but also our ground and freight services that rely on our 180,000+ diesel and gasoline vehicle fleet. The potential impacts of such risks are analyzed as part of our overall reputational risk assessment, and not specifically broken out for climate-related reputational risks. The ERM process uses a consultative approach that solicits input from the senior leadership teams at each major operating company to identify and prioritize the main business risks across the enterprise. These risks are prioritized based on likely financial impact (across predefined monetary ranges), the probability of occurrence within the next fiscal year, and the level of current controls in place to manage those risks. A corporate-level team aggregates the data submitted by each operating company to develop an enterprise-wide inventory of prioritized business risks to be considered in the subsequent fiscal year's strategic financial planning process.
Acute physical	Relevant, always included	Given the broad and global scope of our operations and our susceptibility to global macro-economic trends, we are particularly vulnerable to acute physical risks of climate change that could affect all of humankind, such as shifts in weather patterns and world ecosystems. Acute physical risks are included in our risk assessment process as they can negatively impact our transportation logistics networks by restricting access to our main hub and distribution centers, as well as preventing our more than 670 aircraft and more than 180,000 vehicles from operating. The potential impacts of such risks are analyzed as part of our overall reputational risk assessment, and not specifically broken out for climate-related reputational risks. While we operate several integrated networks with assets distributed throughout the world, there are concentrations of key assets within our networks that are exposed to adverse weather conditions or localized risks from natural disasters such as tornadoes and floods. The loss of a key location such as our Memphis World Hub or one of our information technology centers could cause a significant disruption to our operations and cause us to incur significant costs to re-establish or relocate these functions. Moreover, resulting economic dislocations, including supply chain and fuel disruptions, could adversely impact demand for our services. The ERM process uses a consultative approach that solicits input from the senior leadership teams at each major operating company to identify and prioritize the main business risks across the enterprise. These risks are prioritized based on likely financial impact (across predefined monetary ranges), the probability of occurrence within the next fiscal year, and the level of current controls in place to manage those risks. A corporate-level team aggregates the data submitted by each operating company to develop an enterprise-wide inventory of prioritized business risks to be considered in the subsequent fiscal year's strategic financial planning process.

	Relevance & inclusion	Please explain
Chronic physical	Relevant, sometimes included	Given the broad and global scope of our operations and our susceptibility to global macroeconomic trends, we are particularly vulnerable to the chronic physical risks of climate change that could affect all of humankind, such as shifts in weather patterns and world ecosystems. Chronic physical risks are included in our overall risk assessment process as they can negatively impact our transportation logistics networks, restrict access to our main hub and distribution centers, as well as prevent our more than 670 aircraft and more than 180,000 vehicles from operating. While our ERM process solicits input on risks for the following fiscal year's financial planning, most of the high-priority risks assessed through that process are longer-term in nature, and are used for longer-range strategic planning and mitigation purposes. This includes the climate-related risks discussed in the "Acute Physical" category above which could increase in severity in the long-term as the impacts of climate change continue to grow. The ERM process uses a consultative approach that solicits input from the senior leadership teams at each major operating company to identify and prioritize the main business risks across the enterprise. These risks are prioritized based on likely financial impact (across predefined monetary ranges), the probability of occurrence within the next fiscal year, and the level of current controls in place to manage those risks. A corporate-level team aggregates the data submitted by each operating company to develop an enterprise-wide inventory of prioritized business risks to be considered in the subsequent fiscal year's strategic financial planning process.
Upstream	Relevant, always included	Many of the risk categories discussed here include our upstream suppliers, in particular the independent businesses we rely on for certain pickup-and-delivery and/or line-haul transportation services at FedEx Ground, FedEx Express, FedEx Freight and FedEx Custom Critical. The vast majority of our reported Scope 3 GHG emissions comes from these suppliers. For instance, the regulatory risks associated with climate change identified above could impact the costs we pay for those services, as well as the ability of those service providers to operate in those markets. Another example relates to the fuel we source for our transportation fleets. We must purchase large quantities of fuel to operate our aircraft and vehicles, and the price and availability of fuel can be unpredictable and beyond our control. Any climate change-related regulatory or physical risks affecting the availability and cost of that fuel supply would have a direct effect on our ability to operate.
Downstream	Not relevant, explanation provided	Our main services - delivering customers' packages and freight - do not result in any significant additional emissions in our downstream value chain, e.g. customers and intermediaries.

C2.2d

(C2.2d) Describe your process(es) for managing climate-related risks and opportunities.

Our ERM process is embedded in our strategic financial planning process, and provides a platform to facilitate integration of risk information in business decision-making. This risk assessment includes review by senior level management with oversight from our Board of Directors. Depending on the type of business risks (and related opportunities) identified through this process, specific contingency plans and strategies are formulated either at the enterprise- or operating company-level to minimize potential adverse impacts to FedEx business operations. While the ERM process is designed to prioritize risks that could impact our business, it also allows us to view managing those risks as a strategic business opportunity for FedEx. One example of this applying to "transitional" risk is how our public policy advocacy approach in the area of vehicle fuel efficiency regulations has the potential to improve our ability to source more fuel-efficient and alternative fuel vehicles, thereby reducing our future fuel costs and emissions. Another example of this applying to "physical" risk is how our proactive approach to contingency planning allows us to prepare for potential severe weather event disruptions and restore service in a timely manner following disruption, thereby minimizing potential revenue losses and enhancing our reputation with customers and other external stakeholders.

The ERM process uses a consultative approach that solicits input from the senior leadership teams at each major operating company to identify and prioritize the business risks across the enterprise, leveraging the expertise of those senior leaders in the process. These risks are classified into various business-related categories and prioritized based on criteria that includes potential financial impact and likelihood of occurrence, for leadership analysis. For instance, potential service disruptions due to severe weather events (or other natural disasters) are among the "physical" business risks identified and prioritized through the ERM process across the enterprise. FedEx has over 40 years of experience in proactively addressing situations that can occur at any given time anywhere in the world; we are adept at implementing contingency plans at a moment's notice and we have the flexibility within our system to make the necessary adjustments to minimize the impact to our customers. The effect of this proactive approach includes minimizing potential revenue loss from such events. For instance, around 1.4 million packages are processed through the Memphis World Hub every day (that volume is significantly higher during peak holiday seasons), representing approximately 33% of total global FedEx

Express package volumes. In FY18 our average revenue per FedEx Express domestic package was \$18.40. As a result, a prolonged severe weather disruption at such an important location could have significant impact on our revenues and on our reputation as a reliable logistics service provider.

Other “transitional” business risks routinely identified that may be affected by climate change include regulations that could impact our ability to operate in certain markets and brand reputational risks as public awareness grows around the environmental impacts of transportation logistics services. Our strategies for addressing those risks include proactive public policy and external stakeholder engagement, and implementing our “Reduce, Replace, Revolutionize” strategy to minimize the environmental impacts of our operations. The effect of this proactive approach includes maintaining our strong brand reputation with customers and investors who are looking to do business with companies that demonstrate strong sustainability performance. This interest has significant revenue implications for FedEx. For example, more than \$7.3 billion in FedEx FY18 revenue came from customers who wanted to know more about the emissions generated from shipping their goods.

As stated above, climate change-related risks (and related opportunities) are among those that are typically assessed through this process. In addition, there are other risk management processes at FedEx that are conducted outside of the ERM process that also consider the potential impact of such risks.

FedEx also conducts regular corporate social responsibility materiality assessments, which inform our citizenship approach, goals, targets and metrics, covering environmental, social and governance topics. We also seek wide-ranging input from external and internal stakeholders through workshops, interviews and surveys on our approach and programs. We conducted an updated materiality analysis in 2018 and plan to use the results to guide our CSR focus areas, risks, goals and approaches. We also plan to evaluate the relevance of the United Nations Sustainable Development Goals and their potential role in shaping our future CSR and business strategies.

C2.3

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

Yes

C2.3a

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

Identifier

Risk 1

Where in the value chain does the risk driver occur?

Direct operations

Risk type

Transition risk

Primary climate-related risk driver

Policy and legal: Mandates on and regulation of existing products and services

Type of financial impact

Increased operating costs (e.g., higher compliance costs, increased insurance premiums)

Company- specific description

FedEx operates a fleet of more than 670 aircraft and more than 180,000 owned and contracted vehicles around the world. The fuel used to power this fleet represents a significant operational cost, as well as our most material environmental impact, accounting for 6% of operating expenses and 92% of our emissions footprint. Increased US and international regulation regarding GHG emissions, especially aircraft or diesel engine emissions, could impose substantial costs on us, especially at FedEx Express. These costs include an increase in the cost of the fuel and other energy we purchase and capital costs associated with updating or replacing our aircraft or vehicles.

Time horizon

Long-term

Likelihood

Likely

Magnitude of impact

Medium

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

<Not Applicable>

Potential financial impact figure – maximum (currency)

<Not Applicable>

Explanation of financial impact figure

Regulations that result in increased fuel costs or restrictions on our ability to operate in certain markets could have significant financial implications for FedEx. While we cannot accurately predict the effect such regulation might have on our costs or operating results, it is reasonably possible that it could impose material costs on us. For instance, transportation fuel represents a significant operational cost, as well as our most material environmental impact, accounting for 6% of operating expenses and 92% of our reported emissions footprint. Given the uncertainties related to this risk driver, it is not feasible to estimate what that financial impact would be.

Management method

Our strategies for addressing this risk include proactive external stakeholder engagement (especially customer-facing), and implementing our “Reduce, Replace, Revolutionize” approach to sustainability. We reduce or eliminate impacts from activities and operations. We replace assets that can be improved, using the right solutions in the right applications. And, we revolutionize operations by discovering and applying new innovative technologies. For instance, our FedEx Fuel Sense and aircraft modernization programs helped us save more than 204 million gallons of jet fuel and avoid more than 1.97 million metric tons of CO₂e emissions in FY18. These types of sustainability initiatives would help to minimize any adverse impacts from increased fuel or carbon pricing that may result from potential future regulations. We entered 0 in the “Cost of management” column to satisfy CDP’s disclosure requirement, as FedEx does not disclose this information for competitive reasons. The costs associated with managing this risk driver are embedded in our general public policy engagement initiatives and our overall sustainability strategy, which we do not disclose for competitive reasons.

Cost of management

0

Comment

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

Reduced revenue from decreased production capacity (e.g., transport difficulties, supply chain interruptions)

Company- specific description

Given the broad and global scope of our operations and our susceptibility to global macro-economic trends, we are particularly vulnerable to the physical risks of climate change that could affect all of humankind, such as shifts in weather patterns and world ecosystems. While we operate several integrated networks with assets distributed throughout the world, there are concentrations of key assets within our networks that are exposed to adverse weather conditions or localized risks from natural disasters such as tornados and floods. The loss of a key location such as our Indianapolis Hub or one of our information technology centers could cause a significant disruption to our operations and cause us to incur significant costs to re-establish or relocate these functions. Moreover, resulting economic dislocations, including supply chain and fuel disruptions, could adversely impact demand for our services.

Time horizon

Short-term

Likelihood

Likely

Magnitude of impact

Medium-high

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

<Not Applicable>

Potential financial impact figure – maximum (currency)

<Not Applicable>

Explanation of financial impact figure

While we cannot predict the effect such risk might have on our cost structure or our operating results, it is reasonably possible, however, that it could impose material costs on us. For instance, around 1.4 million packages are processed through the Memphis World Hub every day (that volume is significantly higher during peak holiday seasons), representing approximately 33% of total global FedEx Express package volumes. In FY18 our average revenue per FedEx Express package shipped in the US was \$18.40. Obviously a prolonged severe weather disruption at such an important location could have significant impact on our revenues, and on our reputation as a reliable logistics service provider.

Management method

FedEx has more than 40 years of experience proactively addressing situations such as severe weather events. We are adept at implementing contingency plans at a moment's notice and can make the necessary network adjustments to minimize impacts to our customers. FedEx employs a staff of 15 meteorologists who help manage risks associated with global weather patterns. They note weather anomalies which could impact operations, and notify leadership at impacted operating companies, who can then activate contingency operating plans. For example, the FedEx meteorology team began monitoring Superstorm Sandy 13 days prior to landfall. The operations teams were notified that the models indicated a possible impact along the north-eastern U.S and our contingency plan was activated to ensure all adequate preparations. As a result, we were able to resume operations at Newark and JFK airports on October 31 (two days after landfall). Furthermore, FedEx carried disaster relief materials into the region as we resumed operations, and FedEx had nearly restored full operations by the end of that week. We entered 0 in the "Cost of management" column to satisfy CDP's disclosure requirement, as FedEx does not disclose this information for competitive reasons. The costs associated with managing this risk driver are embedded in our general public policy engagement initiatives and our overall sustainability strategy, which we do not disclose for competitive reasons.

Cost of management

0

Comment**Identifier**

Risk 3

Where in the value chain does the risk driver occur?

Customer

Risk type

Transition risk

Primary climate-related risk driver

Reputation: Increased stakeholder concern or negative stakeholder feedback

Type of financial impact

Reduced revenue from decreased demand for goods/services

Company- specific description

Increased awareness and any adverse publicity in the global marketplace about the GHGs emitted by companies in the airline and transportation industries could harm our company's reputation and reduce customer demand for our services, especially our air express services. More than \$7.3 billion of revenue in FY18 were from customers that requested emissions data.

Time horizon

Long-term

Likelihood

Unlikely

Magnitude of impact

Medium-low

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

<Not Applicable>

Potential financial impact figure – maximum (currency)

<Not Applicable>

Explanation of financial impact figure

While we can't predict the effect such risk might have on our future revenues, it's reasonably possible that it could be significant. More than ever, customers, shareowners and other stakeholders are looking to do business with companies that demonstrate strong sustainability performance and are requesting information on our citizenship programs. This interest has significant revenue implications, e.g., more than \$7.3 billion in FY18 revenue came from customers, who requested an estimate of the emissions we generated on their behalf via the FedEx Customer Emissions Calculator, a tool that can be used to supply FedEx Express, FedEx Ground and FedEx Freight customers with the amount of carbon dioxide emitted from the transport of their packages and freight. However we anticipate that this risk would have a relatively low impact on demand for our services, based on customer research that indicates CSR/sustainability ranks relatively low on the list of purchase decision factors.

Management method

Our strategies for addressing this risk include proactive external stakeholder engagement (especially customer-facing), and implementing our "Reduce, Replace, Revolutionize" strategy. We reduce or eliminate impacts from activities and operations. We replace assets that can be improved. And, we revolutionize operations by applying new innovative technologies. An example of a customer offering is our Customer Emissions Calculator, which creates a report with the customer's total shipping emissions and weight. The report offers emissions data broken out by operating company, transportation mode and scope classification, and which provides ton-miles or kg-kilometers by operating company. The methodology for our calculator is consistent with the World Resources Institute Greenhouse Gas Protocol. Emissions are calculated based on the weight, distance, service type and routing associated with the shipment. This information helps customers better address their sustainability concerns, improve reporting, and optimize their shipping habits. We also have resources for customers to reduce their environmental footprints through service selection, packaging, etc. We entered 0 in the "Cost of management" column to satisfy CDP's disclosure requirement. The costs associated with managing this risk driver are embedded in our general public policy engagement initiatives and our overall sustainability strategy, which we do not disclose for competitive reasons.

Cost of management

0

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

Resource efficiency

Primary climate-related opportunity driver

Use of more efficient modes of transport

Type of financial impact

Reduced operating costs (e.g., through efficiency gains and cost reductions)

Company-specific description

FedEx operates a fleet of more than 180,000 owned and contracted vehicles around the world, most of which are in the USA. These vehicles consume a significant amount of fuel each year, e.g. more than \$810M in FY18 alone. This fuel cost was calculated using the total amount of diesel and gasoline consumed by our vehicles in FY18 multiplied by the average cost of vehicle fuel reported in our 2018 Annual Report. It doesn't include other vehicle fuel sources such as propane, CNG or LNG, which comprise a very small percentage of our overall vehicle fuel use at this time. FedEx therefore envisioned and first called for fuel efficiency/greenhouse gas legislation and regulation which help it accomplish two endeavors: (1) improve the fuel economy of FedEx fleet vehicles while also reducing the GHGs emitted; and, (2) create an environment in which manufacturers would be encouraged to produce new, clean technology vehicles for FedEx, including hybrid-electric, all-electric, alternative fuel, fuel cells, etc. In addition, it would improve and benefit all commercial vehicle operators in the U.S. This legislation passed with FedEx support. Subsequently, the U.S. Environmental Protection Agency and the Department of Transportation's National Highway Traffic Safety Administration jointly finalized standards for medium- and heavy-duty vehicles that would improve fuel efficiency and cut carbon pollution to reduce the impacts of climate change, while bolstering energy security and spurring manufacturing innovation. The final phase two program promotes a new generation of cleaner, more fuel efficient trucks by encouraging the development and deployment of new and advanced cost-effective technologies. The product of four years of extensive testing and research, the vehicle and engine performance standards would cover model years 2018-2027 for certain trailers and model years 2021-2027 for semi-trucks, large pickup trucks, vans, and all types and sizes of buses and work trucks. The final standards are expected to lower CO2 emissions by approximately 1.1 billion metric tons, save vehicle owners fuel costs of about \$170 billion, and reduce oil consumption by up to two billion barrels over the lifetime of the vehicles sold under the program.

Time horizon

Long-term

Likelihood

Likely

Magnitude of impact

Medium-low

Are you able to provide a potential financial impact figure?

Yes, an estimated range

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

48000000

Potential financial impact figure – maximum (currency)

65000000

Explanation of financial impact figure

While we can't accurately predict the effect this opportunity might have on future cost savings, given the significant variables, it's possible that it could be significant. The potential financial impact figures provided above are based on estimated fuel savings (in gallons) that we have realized through the FedEx Express "Reduce, Replace, Revolutionize" approach to vehicle fuel efficiency over the last three fiscal years. These savings are primarily driven by the "Replace" component of that strategy, and estimated using the average vehicle fuel cost per gallon as reported in the respective Annual Reports. The minimum figure was based on the estimated fuel savings from FY16 (2017 Global Citizenship Report) and the maximum figure was based on the estimate for FY18 (2019 Global Citizenship Report). In lieu of any reliable way to estimate the future financial impacts related to this opportunity, we believe this is the best proxy to satisfy CDP's disclosure requirement.

Strategy to realize opportunity

FedEx actively participates in the political process to promote and protect the economic future of the company, our stockholders, and employees. We ethically promote legislative and regulatory actions that further business objectives and attempt to protect FedEx from unreasonable, unnecessary or burdensome legislative or regulatory actions. FedEx was actively involved in the EPA's stakeholder engagement process, providing comments to the proposed GHG Emissions and Fuel Efficiency Standards for Medium and Heavy Duty Engines and Vehicles. The legislation passed with FedEx support and finalized standards were introduced to improve fuel efficiency. The most recent phase two program promotes a new generation of cleaner fuel efficient trucks and presents an opportunity to improve the national fleet. FedEx was the first transportation logistics company to call upon the development of these standards. We are also advocating with U.S. regulators to allow larger 33-foot trailers in a twin-configuration which will increase freight capacity by 18%, and reduce truck traffic by 1.3 billion miles per year. We entered 0 in the "Cost to realize opportunity" column to satisfy CDP's disclosure requirement, as FedEx do not disclose this information for competitive reasons. The costs associated with advocating for this opportunity are embedded in our general public policy engagement initiatives and our overall sustainability strategy, which we do not disclose for competitive reasons.

Cost to realize opportunity

0

Comment

We entered 0 in the "Cost to realize opportunity" column to satisfy CDP's disclosure requirement, as FedEx do not disclose this information for competitive reasons. The costs associated with advocating for this opportunity are embedded in our general public policy engagement initiatives and our overall sustainability strategy, which we do not disclose for competitive reasons.

Identifier

Opp2

Where in the value chain does the opportunity occur?

Direct operations

Opportunity type

Resilience

Primary climate-related opportunity driver

Other

Type of financial impact

Increased reliability of supply chain and ability to operate under various conditions

Company-specific description

Given the broad and global scope of our operations across more than 220 countries and territories and our susceptibility to global macro-economic trends, we are particularly vulnerable to the physical risks of climate change that could affect all of humankind, such as shifts in weather patterns and world ecosystems. While we operate several

integrated networks with assets distributed throughout the world, there are concentrations of key assets within our networks that are exposed to adverse weather conditions or localized risks from natural disasters such as tornadoes and floods. The loss of a key location such as our Indianapolis Hub or one of our information technology centers could cause a significant disruption to our operations and cause us to incur significant costs to re-establish or relocate these functions. Moreover, resulting economic dislocations, including supply chain and fuel disruptions, could adversely impact demand for our services. Consequently, FedEx has over 40 years of experience in proactively addressing situations, such as severe weather events, that can occur at any given time anywhere in the world; we are adept at implementing contingency plans at a moment's notice and we have the flexibility within our system to make the necessary adjustments to minimize the impact to our customers. The outcome of this contingency planning capability means that FedEx is in the position to restore operations and resume services promptly following natural disaster situations like severe weather events. This in turn allows us to serve our customers as quickly as possible while ensuring the security for their shipments, thereby enhancing our brand reputation. Furthermore, our skill in responding quickly, efficiently and on a global scale makes FedEx one of the companies called upon to deliver disaster or emergency relief and medical supplies during times of crisis. This in turn enhances our brand reputation among other key stakeholders like NGOs and government agencies. During the FY18 hurricane season, FedEx Cares, our community giving and volunteering platform provided 13 dedicated relief flights.

Time horizon

Short-term

Likelihood

Likely

Magnitude of impact

Medium-high

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

<Not Applicable>

Potential financial impact figure – maximum (currency)

<Not Applicable>

Explanation of financial impact figure

While we cannot quantify the effect this opportunity might have on our revenues, it is reasonably possible, however, that it could be material, in particular as it relates to protecting our revenues from a severe weather event disruption. For instance, around 1.4 million packages are processed through the Memphis World Hub every day (that volume is significantly higher during peak holiday seasons), representing approximately 33% of total global FedEx Express package volumes. In FY18 our average revenue per FedEx Express package shipped in the US was \$18.40.

Strategy to realize opportunity

FedEx employs a staff of 15 meteorologists who help manage risks associated with global weather patterns. They note weather anomalies which could impact operations, and notify leadership at impacted operating companies, who can then activate contingency operating plans. This forward posture helps us sustain safe and reliable operations through weather events and quickly resume operations. For example, the FedEx meteorology team began monitoring Superstorm Sandy 13 days prior to landfall. The operations teams were notified that the models indicated a possible impact along the north-eastern U.S and our contingency plan was activated to ensure all adequate preparations. As a result, we were able to resume operations at Newark and JFK airports on October 31 (two days after landfall). Furthermore, FedEx carried disaster relief materials into the region as we resumed operations, and FedEx had nearly restored full operations by the end of that week. We entered 0 in the "Cost to realize opportunity" column to satisfy CDP's disclosure requirement, as FedEx do not disclose this information for competitive reasons. The costs associated with advocating for this opportunity are embedded in our general public policy engagement initiatives and our overall sustainability strategy, which we do not disclose for competitive reasons.

Cost to realize opportunity

0

Comment

Identifier

Opp3

Where in the value chain does the opportunity occur?

Customer

Opportunity type

Products and services

Primary climate-related opportunity driver

Shift in consumer preferences

Type of financial impact

Better competitive position to reflect shifting consumer preferences, resulting in increased revenues

Company-specific description

More than ever, customers and investors are looking to do business with companies that demonstrate strong sustainability performance. Increasingly, customers, shareowners and other stakeholders are requesting information and data on our citizenship programs. This interest has significant revenue implications for FedEx. For example, more than \$7.3 billion in FedEx FY18 revenue came from customers who wanted to know more about the emissions generated from shipping their goods.

Time horizon

Long-term

Likelihood

Unlikely

Magnitude of impact

Medium-low

Are you able to provide a potential financial impact figure?

No, we do not have this figure

Potential financial impact figure (currency)

<Not Applicable>

Potential financial impact figure – minimum (currency)

<Not Applicable>

Potential financial impact figure – maximum (currency)

<Not Applicable>

Explanation of financial impact figure

While we cannot predict the effect opportunity might have on our future revenues, it is reasonably possible, however, that it could be material. While it is difficult to quantify the financial impact of such an intangible opportunity, we would anticipate that it would have a relatively low impact on demand for our services, based on customer research that indicates CSR/sustainability ranks relatively low on the list of purchase decision factors for shipping services.

Strategy to realize opportunity

Our strategies for addressing this risk include proactive external stakeholder engagement (especially customer-facing), and implementing our “Reduce, Replace, Revolutionize” strategy. We reduce or eliminate impacts from activities and operations. We replace assets that can be improved. And, we revolutionize operations by applying new innovative technologies. An example of a customer offering is our Customer Emissions Calculator, which creates a report with the customer’s total shipping emissions and weight. The report offers emissions data broken out by operating company, transportation mode and scope classification, and which provides ton-miles or kg-kilometers by operating company. The methodology for our calculator is consistent with the World Resources Institute Greenhouse Gas Protocol. Emissions are calculated based on the weight, distance, service type and routing associated with the shipment. This information helps customers better address their sustainability concerns, improve reporting, and optimize their shipping habits. We also have resources for customers to reduce their environmental footprints through service selection, packaging, etc. We entered 0 in the “Cost of management” column to satisfy CDP’s disclosure requirement. The costs associated with managing this risk driver are embedded in our general public policy engagement initiatives and our overall sustainability strategy, which we do not disclose for competitive reasons.

Cost to realize opportunity

0

Comment

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

	Impact	Description
Products and services	Not yet impacted	To date, we have not experienced any positive or negative effects on our products and services emanating from the climate-related risks identified through our ERM process or other strategic business planning processes. However, it is possible that the “Reputation: Increased stakeholder concern or negative stakeholder feedback” and “Reduced revenue from decreased demand for goods/services” transition risk could result in reduced customer demand for our services, especially our air express services, over the long term. Our strategies for addressing such risks include proactive external stakeholder engagement (especially customer-facing), and implementing our “Reduce, Replace, Revolutionize” approach to sustainability. An example of a customer offering we provide to help address increased customer concern is our Customer Emissions Calculator which produces a report showing the customer’s total emissions. The methodology for our calculator is consistent with the World Resources Institute Greenhouse Gas Protocol, and emissions associated with shipments are calculated based on the weight, distance, service type and routing associated with the shipment. Providing this emissions information helps customers better address their sustainability concerns, improve reporting, and the ability to analyse and optimize their shipping habits. We also have resources available that provide tips on how customers can further reduce their environmental footprints through service selection, packaging, etc. More than ever, customers and investors are looking to do business with companies that demonstrate strong sustainability performance. For example, more than \$7.3 billion in FedEx FY18 revenue came from customers who wanted to know more about the emissions generated from shipping their goods. While it is difficult to quantify the financial impact of such an intangible risk/opportunity, we would anticipate that it would have a relatively low impact on demand for our services, based on customer research that indicates CSR/sustainability ranks relatively low on the list of purchase decision factors for shipping services. While we cannot predict if/when those risks might impact our services, we would consider them to have more of a long-term (5+ years) impact. We consider the magnitude of impact for this risk to be low-medium.
Supply chain and/or value chain	Not yet impacted	To date, we have not experienced any positive or negative effects on our supply/value chain emanating from the climate-related risks identified through our ERM process or other strategic business planning processes. However, it is possible that the “Acute: Increased severity of extreme weather events such as cyclones and floods” and “Reduced revenue from decreased production capacity (e.g., transport difficulties, supply chain interruptions)” physical risk, could cause a significant disruption to our operations and incur significant costs to re-establish or relocate these functions. Across our global business, we work to identify and manage critical supply chain risks through robust, enterprise-wide policies and procedures. FedEx suppliers work closely with us to mitigate risks, especially those inherent in extended supply chains. We mitigate the most significant risks by focusing on those suppliers critically dependent to our business success. Our Sourcing organization’s Supplier Relationship Management team leads efforts to improve those suppliers’ sustainability practices. For instance, our Sourcing team conducts regular supplier screenings to evaluate sustainability performance and work with suppliers on any necessary improvements. Another area that could be impacted is the ability of our aircraft and vehicle suppliers to help us comply with future climate-related regulations. We work with those suppliers through our “Reduce, Replace, Revolutionize” approach to sustainability to develop and implement aircraft and vehicle innovations to address those risks. While we cannot predict if/when those risks might impact our supply chain we would consider them to have more of a long-term (5+ years) impact.
Adaptation and mitigation activities	Impacted for some suppliers, facilities, or product lines	Given the broad and global scope of our operations and our susceptibility to global macro-economic trends, we are particularly vulnerable to the physical risks of climate change that could affect all of humankind, such as shifts in weather patterns and world ecosystems, in particular the “Acute: Increased severity of extreme weather events such as cyclones and floods / Reduced revenue from decreased production capacity (e.g., transport difficulties, supply chain interruptions)” physical risk. The loss of a key location such as our Memphis World Hub or one of our information technology centers could cause a significant disruption to our operations and cause us to incur significant costs to re-establish or relocate these functions. We consider the magnitude of impact for this risk to be medium-high, and the potential time frame to be short term (1-3 years). As a leading global logistics company, we encounter challenging situations, ranging from natural disasters to social unrest, in the course of doing business. Preparing for these events is critical to sustaining our global operations and minimizing impact on customers. We proactively establish contingency plans that focus on restoring service to customers with the least impact as possible, while ensuring team member safety — our top priority. For instance, FedEx has over 40 years of experience in proactively addressing situations, such as severe weather events, that can occur at any given time anywhere in the world; we are adept at implementing contingency plans at a moment’s notice and we have the flexibility within our system to make the necessary adjustments to minimize the impact to our customers. The outcome of this contingency planning capability means that FedEx is in the position to restore operations and resume services promptly following natural disaster situations like severe weather events. This in turn allows us to serve our customers as quickly as possible while ensuring the security for their shipments, thereby enhancing our brand reputation. Furthermore, our skill in responding quickly, efficiently and on a global scale makes FedEx one of the companies called upon to deliver disaster or emergency relief and medical supplies during times of crisis. This in turn enhances our brand reputation among other key stakeholders like NGOs and government agencies.
Investment in R&D	Impacted for some suppliers, facilities, or product lines	We consider the collaboration we undertake with our aircraft and vehicle suppliers through the “Revolutionize” component of our sustainability strategy as our “Investments in R&D”, even though the R&D investments are undertaken by those suppliers. Examples here include the development, field-testing and adoption of alternative-fuel and advanced technologies in both our aviation and vehicle fleets, which we believe will play a critical part in reducing global GHG emissions in the transportation sector. The impact of our investment in alternative jet fuels is in support of our goal to obtain 30 percent of jet fuel from alternative fuels by 2030. These have been spurred on by the risks/opportunities identified related to regulations and reputation identified through ERM, and we would consider those to have more of a long-term (5+ years) impact.

	Impact	Description
Operations	Impacted for some suppliers, facilities, or product lines	Given the broad and global scope of our operations and our susceptibility to global macro-economic trends, we are particularly vulnerable to the physical risks of climate change that could affect all of humankind, such as shifts in weather patterns and world ecosystems, in particular the "Acute: Increased severity of extreme weather events such as cyclones and floods / Reduced revenue from decreased production capacity (e.g., transport difficulties, supply chain interruptions)" physical risk, which could cause a significant disruption to our operations and cause us to incur significant costs to re-establish or relocate these functions. The loss of a key location such as our Indianapolis World Hub or one of our information technology centers could cause a significant disruption to our operations and cause us to incur significant costs to re-establish or relocate these functions. We consider the magnitude of impact for this risk to be medium-high, and the potential time frame to be short term (1-3 years).
Other, please specify	Please select	

C2.6

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

	Relevance	Description
Revenues	Not yet impacted	Increased awareness and any adverse publicity in the global marketplace about the GHGs emitted by companies in the airline and transportation industries could harm our company's reputation and reduce customer demand for our services, especially our air express services. While we cannot predict the effect such risk might have on our future revenues and if/when those risks might impact our services, we would consider them to be more of a long-term (5+ years) impact and to have low-medium magnitude of impact. That being said, we would anticipate that it would have a relatively low impact on demand for our services, based on customer research that indicates CSR/sustainability ranks relatively low on the list of purchase decision factors for shipping services. More than ever, customers and investors are looking to do business with companies that demonstrate strong sustainability performance. For example, more than \$7.3 billion in FedEx FY18 revenue came from customers who wanted to know more about the emissions generated from shipping their goods. While it is difficult to quantify the financial impact of such an intangible risk/opportunity, we would anticipate that it would have a relatively low impact on demand for our services, based on customer research that indicates CSR/sustainability ranks relatively low on the list of purchase decision factors for shipping services.
Operating costs	Impacted for some suppliers, facilities, or product lines	Given the broad and global scope of our operations and our susceptibility to global macro-economic trends, we are particularly vulnerable to the physical risks of climate change that could affect all of humankind, such as shifts in weather patterns and world ecosystems. While we operate several integrated networks with assets distributed throughout the world, there are concentrations of key assets within our networks, such as our Memphis World Hub, that are exposed to adverse weather conditions or localized risks from natural disasters such as tornadoes and floods. While we cannot predict the effect such risk might have on our cost structure or our operating results, it is reasonably possible, however, that it could impose material costs on us. We consider the magnitude of impact for this risk to be medium, and the potential timeframe to be long term (5+ years). FedEx has over 40 years of experience in proactively addressing situations, such as severe weather events, that can occur at any given time anywhere in the world; we are adept at implementing contingency plans at a moment's notice and we have the flexibility within our system to make the necessary adjustments to minimize the impact to our customers. The financial planning process for our operating costs are affected by the regulatory risks identified through ERM. FedEx operates a fleet of more than 670 aircraft and more than 180,000 owned and contracted vehicles around the world. The fuel used to power this fleet represents a significant operational cost, as well as our most material environmental impact, accounting for 6% of operating expenses and 92% of our emissions footprint. Increased US and international regulation regarding GHG emissions, especially aircraft or diesel engine emissions, could impose substantial costs on us, especially at FedEx Express. These costs include an increase in the cost of the fuel and other energy we purchase and capital costs associated with updating or replacing our aircraft or vehicles.
Capital expenditures / capital allocation	Impacted for some suppliers, facilities, or product lines	We consider the magnitude of impact for this risk to be medium, and the potential timeframe to be long term (5+ years). We maintain a comprehensive capital authorization process that includes reviewing capital requests from our operating companies and allocating available capital across the enterprise based on needs and acceptable investment returns. Capital authorizations are typically provided to and discussed with the Board in connection with Board meetings. Climate-related risks prioritized through our ERM process influence the degree to which those capital expenditures are allocated for specific items, e.g. aircraft and vehicle fleet modernization. For instance, our most impactful capital expenditure and capital allocation opportunity was the acceleration of our aircraft fleet modernization program in 2013, which has enabled us to avoid significant GHG emissions by replacing less fuel-efficient aircraft with more efficient models. In FY18 alone, the aircraft fleet modernization program saved almost than 110 million gallons of fuel and avoided more than 1 million metric tons of CO2e emissions.

	Relevance	Description
Acquisitions and divestments	Not yet impacted	Our acquisitions and divestment strategy has not been impacted by any climate-related risks, in particular the “Policy and legal mandates on and regulation of existing products and services / Increased operating costs (e.g., higher compliance costs, increased insurance premiums)” transition risk, identified through our ERM or other strategic business planning processes. We consider the impact of environmental regulations (including those related to climate change) as part of our due diligence process for new acquisitions. The potential impact of regulations such as carbon taxes (which could increase the cost fuel or energy required for aircraft, vehicles or facilities), or restrictions on diesel or gasoline vehicles in certain markets (which could increase our capital costs associated with upgrading to alternative fuel vehicles), could negatively affect the business case for such acquisitions. However, given the long-term time horizon around this risk, we don’t anticipate it to have an effect within the next 5-10 years.
Access to capital	Not impacted	Our access to capital has not been impacted by any climate-related risks through our ERM or other strategic business planning processes. While there is growing interest in ESG criteria among some of our investors, it still represents a very small portion of our investor base – and therefore has an immaterial impact on our ability to raise capital. We have an active investor engagement program in which we meet regularly with our largest investors to discuss our business strategy, operations, sustainability and social responsibility programs, and corporate governance, as well as other topics of interest to them. Our investor engagement efforts enable the company to effectively address issues that matter most to our investors and allow us to better understand their priorities, perspectives and concerns.
Assets	Impacted for some suppliers, facilities, or product lines	We consider the magnitude of impact for the “Acute: Increased severity of extreme weather events such as cyclones and floods / Reduced revenue from decreased production capacity (e.g., transport difficulties, supply chain interruptions)” physical risk to be medium, and the potential timeframe to be long term (5+ years). Given the broad and global scope of our operations and our susceptibility to global macro-economic trends, we are particularly vulnerable to the physical risks of climate change that could affect all of humankind, such as shifts in weather patterns and world ecosystems. While we operate several integrated networks with assets distributed throughout the world, there are concentrations of key assets within our networks, such as our Memphis World Hub, that are exposed to adverse weather conditions or localized risks from natural disasters such as tornadoes and floods. While we cannot predict the effect such risk might have on our cost structure or our operating results, it is reasonably possible, however, that it could impose material costs on us.
Liabilities	Not impacted	Our liabilities have not been impacted by any climate-related risks identified through our ERM or other strategic business planning processes.
Other	Please select	

C3. Business Strategy

C3.1

(C3.1) Are climate-related issues integrated into your business strategy?

Yes

C3.1a

(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

C-AC3.1b/C-CE3.1b/C-CH3.1b/C-CO3.1b/C-EU3.1b/C-FB3.1b/C-MM3.1b/C-OG3.1b/C-PF3.1b/C-ST3.1b/C-TO3.1b/C-TS3.1b

(C-AC3.1b/C-CE3.1b/C-CH3.1b/C-CO3.1b/C-EU3.1b/C-FB3.1b/C-MM3.1b/C-OG3.1b/C-PF3.1b/C-ST3.1b/C-TO3.1b/C-TS3.1b) Indicate whether your organization has developed a low-carbon transition plan to support the long-term business strategy.

Yes

C3.1c

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

(i) FedEx connects people and possibilities around the world and we seek to do so by connecting the world responsibly and resourcefully. The philosophy we follow in this regard is called Practical Sustainability - strategic and transformational stewardship that adds tangible value in the efforts to be more responsible. In doing so, we use the building blocks of performance, transparency, innovation and leadership to help us determine what sustainability initiatives we should be undertaking. Our “Reduce, Replace, Revolutionize” sustainability strategy permeates our approach to Practical Sustainability, and encompasses all of these areas of focus.

Our most impactful business decision that relates to this strategy was the acceleration of our aircraft fleet modernization program in 2013, which has enabled us to avoid significant GHG emissions by replacing less fuel-efficient aircraft with more efficient models. In FY18 alone, the aircraft fleet modernization program saved almost than 110 million gallons of fuel, avoiding more than 1 million metric tons of CO₂e emissions, which is a 23% savings increase over FY17 and almost 9% of the emissions generated by our aircraft in FY18. Our on-going aircraft fleet modernization strategy has been driven, in part, by our goal to reduce aircraft emissions intensity 30% from a 2005 baseline by 2020.

In addition to our aircraft emissions reduction goal, we also have a publicly-stated vehicle fuel efficiency improvement goal to help support the relevant elements of our business strategies, in particular those related to improving the efficiency and profitability of our operations.

(ii) Beyond the climate change-related risks identified through our ERM process, we conduct regular CSR materiality assessments, which inform our citizenship approach covering environmental, social and governance topics. Our first CSR materiality assessment was completed in 2014. In FY16, we sought additional input from our external stakeholders through a survey and roundtable engagement session with industry groups, customers, investors, sustainability experts, NGOs and government agencies. This feedback process confirmed that emissions from our transportation fleet and operations are still among our greatest areas of impact. We conducted another materiality analysis in 2018 and plan to use the results to guide our CSR focus areas, risks, goals and approaches.

(iii) Concern over climate change has led to significant U.S. and international legislative and regulatory efforts to limit GHG emissions, including our aircraft and vehicle emissions. In addition, increased awareness and any adverse publicity in the global marketplace about the GHGs emitted by companies in the transportation industries could harm our reputation and reduce customer demand for our services, especially our air express services. Finally, given the broad and global scope of our operations and our susceptibility to global macro-economic trends, we are particularly vulnerable to the physical risks of climate change that could affect all of humankind, such as shifts in weather patterns and world ecosystems.

(iv) The “Reduce” and “Replace” components of our strategy are heavily influenced by short-term considerations. The former refers to operational programs that help reduce fuel and energy use such as more efficient aircraft and vehicle routing. In particular, our FedEx Fuel Sense program identifies efficiencies across our aviation operations. Front-line team members, experts from various departments all contribute to a companywide culture of fuel-saving behavior, saving an estimated 94 million gallons of jet fuel in FY18, avoiding more than 912,000 metric tons of CO₂e, an increase of 7.4% over FY17 savings.

The latter refers to our ongoing efforts to upgrade our aircraft and vehicle fleets, as well as retrofit our facilities to be more energy efficient. In particular, by upgrading our aircraft fleet to more efficient models - such as the Boeing 767 Freighters, which are about 30% more fuel efficient than the MD10s they replace - we add flexibility to our operations, improve our margins and reduce emissions, saving almost 110 million gallons of jet fuel in FY18, and avoiding more than 1 million metric tons of CO₂e.

(v) The “Revolutionize” aspect of our strategy is heavily influenced by long-term considerations. Included here is our goal to obtain 30% of our jet fuel from alternative fuels by the year 2030, which we established in 2009. We’ve collaborated with our industry, government agencies, academia and alternative fuel suppliers in search of viable alternatives that can be produced at scale and at a competitive price. In FY15, we entered into an agreement with Colorado-based Red Rock Biofuels, which will ultimately produce at least 48 million gallons of alternative jet fuel over an eight-year period. Red Rock Biofuels broke ground on a biodiesel refinery near the end of FY18. In 2020, we expect to utilize the first 6 million gallons of this jet fuel on-site.

This component of our strategy also includes adoption of alternative-fuel and advanced vehicle technology. We believe that wider adoption of alternative-fuel and advanced technology vehicles will play a critical part in reducing global GHG emissions. Specifically, we are exploring greater use of electric and fuel cell powered vehicles, among other advanced technologies, along with alternative-fueled vehicles. In FY18, we added 445 electric vehicles to our fleet, resulting in more than 2,554 electric vehicles in service by the end of the fiscal year. And in 2019, we expect to acquire 1,000 Chanje V8100 electric vehicles for FedEx Express in California, a significant step in our efforts to scale up the electrification of our fleet, especially for urban delivery. Outside the U.S., FedEx Express is testing electric vehicles in China and Europe, with a view to strategically scale the adoption of commercially viable models in those markets soon.

(vi) More than ever, customers and investors are looking to do business with companies that demonstrate strong sustainability performance. Increasingly, customers, shareowners and other stakeholders are requesting information and data on our citizenship programs. This interest has significant revenue implications. For example, more than \$7.3 billion in FY18 revenue came from customers who wanted to know more about the emissions generated from shipping their goods. Moreover, we feel that our ability to invest in sustainability initiatives such as alternative-fuel and advanced technology vehicles give us an advantage over smaller competitors, especially in the less-than-truckload (LTL) sector.

[C-AC3.1e/C-CE3.1e/C-CH3.1e/C-CO3.1e/C-EU3.1e/C-FB3.1e/C-MM3.1e/C-OG3.1e/C-PF3.1e/C-ST3.1e/C-TO3.1e/C-TS3.1e](#)

[\(C-AC3.1e/C-CE3.1e/C-CH3.1e/C-CO3.1e/C-EU3.1e/C-FB3.1e/C-MM3.1e/C-OG3.1e/C-PF3.1e/C-ST3.1e/C-TO3.1e/C-TS3.1e\)](#) Disclose details of your organization’s low-carbon transition plan.

At FedEx, our sustainability effort and our long-term vision of a low carbon transition is guided by our Reduce, Replace, Revolutionize strategy. In the short term, we take tangible efforts to reduce the impacts from our activities. In the intermediate term, we replace assets to ensure the right solutions are utilized in the right applications. In the long term, we revolutionize existing processes by adopting cutting-edge technologies and solutions.

Our efforts focus on four key areas:

- Aircraft
- Vehicles
- Facilities
- Materials and recycling

Our low carbon transition implementation strategy is supported by several goals including:

- Aircraft Emissions- Reduce aircraft emissions intensity 30 percent from a 2005 baseline by 2020
- Vehicle Fuel Efficiency- Increase FedEx Express vehicle fuel efficiency 50 percent from a 2005 baseline by 2025
- LEED-Certified Facilities- Seek LEED (Leadership in Energy and Environmental Design) certification on all new US FedEx Express buildings
- Alternative Fuels- Obtain 30 percent of jet fuel from alternative fuels by 2030
- Renewable Energy- Expand on-site energy generation and continue to procure renewable energy for facilities

In FY18, we have taken numerous steps to further these goals. For example, in support of our aircraft emissions goal, we:

- Reduce fuel use in flight operations through our global FedEx Fuel Sense Program. The Fuel Sense Program includes a suite of fuel optimization initiatives for our air operations such as the Payload Protection Fuel Reduction and Cost Index Zero Initiative mentioned in question 4.3b.
- Replace and modernize our planes with more efficient aircraft. An example of this includes our recent order of 12 Boeing 767 Freighters and 12 Boeing 777 Freighters. The inclusion of these aircraft will improve our fleet efficiency, operating costs, and operational flexibility.
- Revolutionize our operations by exploring and employing alternative fuels and technologies. An example of this includes our collaboration with Reed Rock Biofuels, which will supply low carbon renewable jet fuel to FedEx Express. The first delivery of commercially viable alternative jet fuel is anticipated in 2020.

In support of our vehicle fuel efficiency goal, we:

- Reduce the miles driven and fuel used through efficiencies such as optimizing route structures, using innovative tracking that correlates driver behaviours with fuel efficiency, and innovative practices such as platooning, which is when two or three trucks drive closely behind one another to reduce drag and was demonstrated with Volvo Trucks North America in FY18.
- Replace older equipment such as tractors at FedEx Freight with newer models and increase the number of miles transported with intermodal rail transport at FedEx Freight by 10%. The use of intermodal rail transport helped avoid 296,510 metric tons of CO₂e emissions in FY18.
- Revolutionize our approach to vehicle technologies with greater adoption of electric vehicles, which now total more than 2,554 electric vehicles in service by the end of FY18. We also continue exploring fuel cell-powered vehicles and alternative fuels including biodiesel, LNG, CNG, and propane when possible.

In support of our facilities goal, FedEx Express completed 5 new LEED-certified US facilities in FY18 to a total of 19 LEED-certified facilities in the US and 3 internationally. This is in addition to the 7 LEED-certified buildings for FedEx Ground and Office. We also continued lighting retrofits at 27 facilities across the enterprise saving over 171,000 metric tons of CO₂e. Since our lighting retrofit efforts began in 2007, we have retrofitted over 1,000 facilities and saved more than 1.2 billion kWh of electricity.

Beyond energy efficiency, we also continue to expand our on-site energy generation and continue to procure renewable energy for our facilities. In FY18, we completed 3 new solar installations. We now have renewable and alternative energy systems (including on-site, off-site solar, as well as fuel cell technologies) at 24 FedEx facilities and generated almost 33 million kWh of clean energy in FY18.

C3.1g

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

There are multiple network planning teams at our operating companies that utilize sophisticated computational business analytical tools to model potential future scenarios that could affect our business operations, in order to develop robust strategies to ensure the resilience of our networks. These tools incorporate a variety of factors including potential population growth/declines, congestion, and demand for our shipping and retail service offerings, among others. While climate-related factors have not been considered in these models to date, we acknowledge that there is a need to start modeling the potential impacts of climate change on future planning decisions related to optimizing our transportation logistics networks. Such impacts could influence future shipping volume flows and the geographic location of transportation hubs and distribution centers, to name a few. We are currently investigating the potential to expand our scenario analysis planning tools to incorporate such climate-related factors in the near future. In addition, we have started evaluating an enterprise-wide on-demand scenario generation system that would provide real-time predictive capabilities for determining and mitigating the impact of interruptions to our operations, team members and supply chains, from a variety of potential hazards including severe weather events that may be related to climate change. This system could be used for future business planning decision-making related to our transportation fleet and major facilities around the world.

FedEx has an in-house 15-staff meteorology division located in its Global Operations Control Center in Memphis, Tennessee, that utilizes state-of-the-art weather monitoring tools including real-time and historical data from the National Oceanic and Atmospheric Administration (NOAA) in the U.S. All FedEx employees with a climate or weather inquiry can take advantage of the team's expertise. For example, in the winter months the meteorology team often receives inquiries from the trucking units regarding snowfall forecasts to transit routes in the northeast or through the mountainous areas of the western United States. The meteorology division staff also helps manage risks associated with global weather patterns. When they note a weather anomaly which could impact or pose a threat to FedEx operations, that information is relayed to the operational leadership at each impacted FedEx operating company, who in turn use this information to activate contingency operating plans. We anticipate leveraging the expertise of this division as we explore incorporating climate-related factors into our future scenario analysis planning tools.

C4. Targets and performance

C4.1

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

Intensity target

C4.1b

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

Target reference number

Int 1

Scope

Scope 1

% emissions in Scope

82

Targeted % reduction from base year

22.6

Metric

Other, please specify (Pounds of CO2 per available-ton-mile)

Base year

2005

Start year

2011

Normalized base year emissions covered by target (metric tons CO2e)

1.51

Target year

2020

Is this a science-based target?

No, but we anticipate setting one in the next 2 years

% of target achieved

75.3

Target status

Underway

Please explain

This target was reported to CDP in 2017 and its progress is being reported again against the same target in 2019. Since 2005, our aircraft emissions intensity has decreased by more than 22.6 percent, although our aircraft emissions intensity improvements effectively remained unchanged in FY18 due to higher shipping volumes. A key challenge has been the need to maintain some older aircraft that have been earmarked for retirement while we await production of more efficient replacements.

% change anticipated in absolute Scope 1+2 emissions

27

% change anticipated in absolute Scope 3 emissions

0

C4.2

(C4.2) Provide details of other key climate-related targets not already reported in question C4.1/a/b.

C4.3

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

Yes

C4.3a

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

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	0	0
To be implemented*	2	278400
Implementation commenced*	4	415
Implemented*	7	15208
Not to be implemented	0	0

C4.3b

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

Initiative type

Low-carbon energy installation

Description of initiative

Solar PV

Estimated annual CO2e savings (metric tonnes CO2e)

48

Scope

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

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

5377

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

0

Payback period

No payback

Estimated lifetime of the initiative

6-10 years

Comment

This is a 0.059 MW DC rooftop solar installation. The project is contracted with the building landlord through a Power Purchase Agreement. FedEx Ground does not pay any capital upfront but pays for electricity produced by the panels on a per kWh basis throughout the life of the PPA, therefore there is no payback period. The PPA is for 7 years however panels should last more than 25 years.

Initiative type

Low-carbon energy installation

Description of initiative

Solar PV

Estimated annual CO2e savings (metric tonnes CO2e)

1160

Scope

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

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

117400

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

0

Payback period

No payback

Estimated lifetime of the initiative

11-15 years

Comment

This is a 1.43 MW DC rooftop solar installation. The project is contracted with a third party through a Power Purchase Agreement. FedEx Ground does not pay any capital upfront but pays for electricity produced by the panels on a per kWh basis throughout the life of the PPA, therefore there is no payback period. The PPA is for 13 years however panels should last more than 25 years.

Initiative type

Energy efficiency: Processes

Description of initiative

Process optimization

Estimated annual CO2e savings (metric tonnes CO2e)

5924

Scope

Scope 1

Voluntary/Mandatory

Voluntary

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

1370000

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

0

Payback period

<1 year

Estimated lifetime of the initiative

Ongoing

Comment

Payload Protection Fuel Reduction will reduce 10 minutes of extra fuel added to the planned fuel load. This was added in case if the payload was over the original plan. On average only a small amount of the extra fuel was being burned. This allowed us to reduce it by 5 minutes. This is a "Cost to Carry" savings.

Initiative type

Energy efficiency: Processes

Description of initiative

Process optimization

Estimated annual CO2e savings (metric tonnes CO2e)

5258

Scope

Scope 1

Voluntary/Mandatory

Voluntary

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

1820000

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

0

Payback period

<1 year

Estimated lifetime of the initiative

Ongoing

Comment

The Cost Index Zero Initiative will fly limited number of flights at a lower cost index to reduce fuel burn while not impacting arrival times into destination. This is a fuel efficiency improvement.

Initiative type

Low-carbon energy installation

Description of initiative

Solar PV

Estimated annual CO2e savings (metric tonnes CO2e)

1179

Scope

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

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

105080

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

0

Payback period

No payback

Estimated lifetime of the initiative

16-20 years

Comment

This is a 1.027 MW DC rooftop solar installation. The project is contracted with a third party through a Power Purchase Agreement. FedEx Ground does not pay any capital upfront but pays for electricity produced by the panels on a per kWh basis throughout the life of the PPA.

Initiative type

Low-carbon energy installation

Description of initiative

Solar PV

Estimated annual CO2e savings (metric tonnes CO2e)

469

Scope

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

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

5377

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

0

Payback period

No payback

Estimated lifetime of the initiative

11-15 years

Comment

This is a 0.424 MW DC rooftop solar installation that expanded an existing rooftop solar installation. The project is contracted with a third party through a Power Purchase Agreement. FedEx Ground does not pay any capital upfront but pays for electricity produced by the panels on a per kWh basis throughout the life of the PPA.

Initiative type

Low-carbon energy installation

Description of initiative

Fuel Cells

Estimated annual CO2e savings (metric tonnes CO2e)

1170

Scope

Scope 2 (location-based)

Voluntary/Mandatory

Voluntary

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

143771

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

0

Payback period

No payback

Estimated lifetime of the initiative

11-15 years

Comment

This is a 250 kW DC fuel cell installation. The project is contracted with a third party through a Power Purchase Agreement. FedEx Ground does not pay any capital upfront but pays for electricity produced by the fuel cells on a per kWh basis and the natural gas that is used to produce the electricity throughout the life of the PPA.

C4.3c

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

Method	Comment
Financial optimization calculations	As part of our standard financial investment decision making processes, we factor in the cost savings and other financial benefits (e.g. tax incentives) associated with investing in more fuel/energy efficient technologies in our aircraft and vehicle fleet and operations.

Method	Comment
Compliance with regulatory requirements/standards	Active and potential regulations such as the EU ETS and pending regulations such as the U.S. EPA / Department of Transportation's action to promulgate greenhouse gas emission / fuel economy regulations for commercial vehicles by 2014 could help drive our investments in more fuel-efficient aircraft and vehicles in order to comply with regulatory obligations and take advantage of the associated fuel cost savings from operating more efficient transportation assets.
Other	Occasionally we explore opportunities to invest in emissions reduction initiatives if a significant customer service enhancement, reputational or brand recognition benefit can be gained.

C4.5

(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. Emissions methodology

C5.1

(C5.1) Provide your base year and base year emissions (Scopes 1 and 2).

Scope 1

Base year start

June 1 2008

Base year end

May 31 2009

Base year emissions (metric tons CO2e)

14101552

Comment

Scope 2 (location-based)

Base year start

June 1 2008

Base year end

May 31 2009

Base year emissions (metric tons CO2e)

1065689

Comment

Scope 2 (market-based)

Base year start

June 1 2016

Base year end

May 31 2017

Base year emissions (metric tons CO2e)

Comment**C5.2**

(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 Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)

C6. Emissions data

C6.1

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

15152383

Start date

June 1 2017

End date

May 31 2018

Comment

Gross global Scope 1 emissions previously reported for FY17, was revised in 2019 FedEx Global Citizenship Report due to a CO2e calculation error for FedEx Freight biodiesel. The previously reported 14,028,692 metric tons of CO2e for our gross global scope 1 emissions was revised to be 14,053,599 metric tons of CO2e.

C6.2

(C6.2) Describe your organization's approach to reporting Scope 2 emissions.**Row 1****Scope 2, location-based**

We are reporting a Scope 2, location-based figure

Scope 2, market-based

We are reporting a Scope 2, market-based figure

Comment

Our approach to calculating our Scope 2, location-based figure involves coordinating with our teams in all of the operating companies to aggregate purchased facility electricity use across the enterprise. Based on comprehensive assessment performed for FY17, we determined the difference between Location- and Market-based Scope 2 emissions is de minimis at the present time. Therefore, we are reporting the same value for both metrics in FY18.

C6.3

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

Reporting year

Scope 2, location-based

1049987

Scope 2, market-based (if applicable)

1049987

Start date

June 1 2017

End date

May 31 2018

Comment

Based on comprehensive assessment performed for FY17, we determined the difference between Location- and Market-based Scope 2 emissions is de minimis at the present time. Therefore, we are reporting the same value for both metrics in FY18.

C6.4

(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?

Yes

C6.4a

(C6.4a) Provide details of the sources of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure.

Source

Fuel use from emergency back-up generators and a few forklifts at non-hub locations.

Relevance of Scope 1 emissions from this source

Emissions are not relevant

Relevance of location-based Scope 2 emissions from this source

No emissions from this source

Relevance of market-based Scope 2 emissions from this source (if applicable)

No emissions from this source

Explain why this source is excluded

The emissions from these sources have not been reported as they contribute to less 1% of our overall Scope 1 emissions.

Source

FedEx Office stores where electricity usage is bundled with the facility leases, and at some international subsidiaries that have been recently acquired.

Relevance of Scope 1 emissions from this source

No emissions from this source

Relevance of location-based Scope 2 emissions from this source

Emissions are not relevant

Relevance of market-based Scope 2 emissions from this source (if applicable)

Emissions are not relevant

Explain why this source is excluded

The emissions from these sources have not been reported as they contributed to less than 1% of our overall Scope 2 emissions.

C6.5

(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

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

Explanation

Given the variety of goods and services that we purchase for our business and the complexity associated with estimating the embedded carbon for those items, we have not had the opportunity to estimate these emissions yet.

Capital goods

Evaluation status

Relevant, not yet calculated

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

Explanation

Given the variety of capital goods that we purchase for our business and the complexity associated with estimating the embedded carbon for those items, we have not had the opportunity to estimate these emissions yet.

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

Evaluation status

Relevant, not yet calculated

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

Explanation

Given the variety of fuel and energy-related inputs that we purchase for our business and the complexity associated with estimating the embedded carbon for those items, we have not had the opportunity to estimate these emissions yet.

Upstream transportation and distribution

Evaluation status

Relevant, calculated

Metric tonnes CO2e

2541496

Emissions calculation methodology

Our Scope 3 contracted transportation emissions include those from (1) fuel used by FedEx Ground independent contractors, (2) fuel used by FedEx Freight contractors in Canada, (3) allocated portion of fuel burned by commercial interline aircraft carriers in support of FedEx Express international shipping, and (4) contracted intermodal rail. For (1) and (2), the emissions calculations are based on fuel we provide directly to those suppliers or which we track through the use of fuel purchase credit cards, and apply the same emissions calculation methodology we described for Scope 1 above. The emissions data for (3) is provided to us by our commercial interline aircraft carriers using an allocation methodology developed by the International Air Transport Association (IATA). For (4), the emissions calculations are based on information provided by our suppliers. Our Scope 3 upstream transportation and distribution emissions include those from fuel used by contracted interline, intermodal rail, and vehicles. It does not include emissions from business travel or fuel used by our feeder planes in Canada.

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

100

Explanation

Waste generated in operations

Evaluation status

Relevant, not yet calculated

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

Explanation

Given the variety of waste materials generated and the complexity associated with estimating the associated carbon for those materials, we have not had the opportunity to estimate these emissions yet.

Business travel

Evaluation status

Relevant, calculated

Metric tonnes CO2e

80434

Emissions calculation methodology

Our third-party business travel service provider estimated Scope 3 emissions associated with commercial air travel undertaken by our team members in FY18.

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

100

Explanation

Employee commuting

Evaluation status

Relevant, not yet calculated

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

Explanation

Given the scale and geographic diversity of our workforce and the complexity associated with estimating the carbon associated with their commuting, we have not had the opportunity to estimate these emissions yet.

Upstream leased assets**Evaluation status**

Relevant, not yet calculated

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

Explanation

Given the scale and variety of upstream leased assets we use for our business and the complexity associated with estimating the embedded carbon for those items, we have not had the opportunity to estimate these emissions yet.

Downstream transportation and distribution**Evaluation status**

Not relevant, explanation provided

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

Explanation

Our main services - delivering customers' packages and freight - do not result in any significant emissions by our customers. However, we aim to inform customers of the carbon footprint resulting from our transportation logistics services through the FedEx Carbon Calculator tool, which can estimate our enterprise customers' Scope 3 carbon emissions by taking FedEx-specific package routing, facilities, aircraft fleet, and surface vehicles and applying industry standard CO2 fuel burn factors. As a result, customers are empowered with the knowledge necessary to decrease their shipping-related emissions and to pay for associated carbon offsets through their preferred organizations.

Processing of sold products**Evaluation status**

Not relevant, explanation provided

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

Explanation

Our main services - delivering customers' packages and freight - do not result in any significant emissions by our customers. However, we aim to inform customers of the carbon footprint resulting from our transportation logistics services through the FedEx Carbon Calculator tool, which can estimate our enterprise customers' Scope 3 carbon emissions by taking FedEx-specific package routing, facilities, aircraft fleet, and surface vehicles and applying industry standard CO2 fuel burn factors. As a result, customers are empowered with the knowledge necessary to decrease their shipping-related emissions and to pay for associated carbon offsets through their preferred organizations.

Use of sold products

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

Explanation

Our main services - delivering customers' packages and freight - do not result in any significant emissions by our customers. However, we aim to inform customers of the carbon footprint resulting from our transportation logistics services through the FedEx Carbon Calculator tool, which can estimate our enterprise customers' Scope 3 carbon emissions by taking FedEx-specific package routing, facilities, aircraft fleet, and surface vehicles and applying industry standard CO2 fuel burn factors. As a result, customers are empowered with the knowledge necessary to decrease their shipping-related emissions and to pay for associated carbon offsets through their preferred organizations.

End of life treatment of sold products

Evaluation status

Not relevant, explanation provided

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

Explanation

Our main services - delivering customers' packages and freight - do not result in any significant emissions by our customers. However, we aim to inform customers of the carbon footprint resulting from our transportation logistics services through the FedEx Carbon Calculator tool, which can estimate our enterprise customers' Scope 3 carbon emissions by taking FedEx-specific package routing, facilities, aircraft fleet, and surface vehicles and applying industry standard CO2 fuel burn factors. As a result, customers are empowered with the knowledge necessary to decrease their shipping-related emissions and to pay for associated carbon offsets through their preferred organizations.

Downstream leased assets

Evaluation status

Relevant, calculated

Metric tonnes CO2e

199035

Emissions calculation methodology

This includes the emissions from the FedEx Express feeder aircraft contract operators who lease aircraft from FedEx Express. The emissions calculations are based on the fuel we provide directly to those operators, and apply the same emissions calculation methodology we described for Scope 1 above.

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

Explanation**Franchises****Evaluation status**

Not relevant, explanation provided

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

Explanation

FedEx does not operate a franchised business model.

Investments**Evaluation status**

Not relevant, explanation provided

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

Explanation

FedEx is not a financial institution and therefore does not have any relevant emissions related to investments in the reporting year that are not already included in Scope 1 or 2.

Other (upstream)**Evaluation status**

Please select

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

Explanation**Other (downstream)****Evaluation status**

Please select

Metric tonnes CO2e

<Not Applicable>

Emissions calculation methodology

<Not Applicable>

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

<Not Applicable>

C6.7

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

Yes

C6.7a

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

Row 1

Emissions from biologically sequestered carbon (metric tons CO2)

262906

Comment

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

0.000247553

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

16202370

Metric denominator

unit total revenue

Metric denominator: Unit total

65450000000

Scope 2 figure used

Location-based

% change from previous year

1.4

Direction of change

Decreased

Reason for change

Our reported absolute Scope 1 & 2 emissions increased by 6.96% in FY18, while our consolidated revenues, expressed in USD, increased by more than 8.5% during that same period. Our reported absolute Scope 1 & 2 emissions percentage change is based on a revised intensity metric for FY17. The FY17 intensity metric was revised due to an error in CO2e calculation for FedEx Freight biodiesel last year and resulting revision to our gross global scope 1 emissions (as stated in C6.1). The FY17 intensity metric was previously reported as .000250714 and was revised to be .000251127. Our intensity metric for FY18 decreased by 1.4% compared to the previous year. This figure was also calculated using the revised intensity metric of FY17. We have been very successful this past year in emission reduction activities even though revenue continued to grow. Our emission reduction activities include: i)

Aircraft Efficiency Initiatives: Implemented efficiencies in flight operations through our global FedEx® Fuel Sense program and replaced many of our older airplanes with more fuel-efficient models. These initiatives alone saved more than 204 million gallons of fuel and avoided more than 1.97 million metric tons of CO2e emissions in FY18. This is a 15% increase in jet fuel savings and CO2e emissions avoided compared to FY17. ii) Vehicle Efficiency Initiatives: Through the FedEx Express Reduce, Replace, Revolutionize vehicle strategy has avoided more than 240,171 metric tons CO2e. This is a 9% increase in emissions avoided as compared to FY17. iii) Intermodal Rail Shipping: Use of intermodal rail transport at FedEx Freight is 70% more efficient than transport by road. In FY18, we have increased rail miles for FedEx Freight intermodal shipping by 10%. This has avoided 296,510 metric tons CO2e. This is a 12% increase in emissions avoided as compared to FY17. This percentage increase was calculated using revised CO2e emissions avoided figures for FY17. The previously reported 237,760 metric tons of CO2e emissions saved through Intermodal Rail Shipping in FY17 was under reported due to an error in CO2e calculation for FedEx Freight biodiesel (as stated in C6.1) and has been revised to be 264,296 metric tons in the 2019 FedEx Global Citizenship Report.

C-TS6.15

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

HDV

Scopes used for calculation of intensities

Report just Scope 1

Intensity figure

0.000337

Metric numerator: emissions in metric tons CO2e

844808.13

Metric denominator: unit

t.mile

Metric denominator: unit total

2506849045.87

% change from previous year

0

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

This intensity figure is based on 2018 U.S. EPA Smart Way data for FedEx Express in US and Canada and only includes CO2 information due to data availability. FedEx Express represents the majority of our total enterprise CO2 emissions. Emissions from other operating companies such as FedEx Ground was excluded due to the use of contractor fleets and data availability. Zero was provided as response to "% Change from Previous Year" since this is the first year that responses have been provided for Transport Sector Specific questions.

Aviation

Scopes used for calculation of intensities

Report just Scope 1

Intensity figure

0.00053

Metric numerator: emissions in metric tons CO2e

11288588.6

Metric denominator: unit

t.mile

Metric denominator: unit total

21288319239

% change from previous year

0

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

The intensity figure reported only included FedEx Express as it is the only operating company with aircraft. FedEx Ground, Freight, and Office do not operate aircraft. Metric denominator is available ton mile however that is not a selection. Zero was provided as response to "% Change from Previous Year" since this is the first year that responses have been provided for Transport Sector Specific questions.

ALL

Scopes used for calculation of intensities

Report just Scope 1

Intensity figure

0

Metric numerator: emissions in metric tons CO2e

0

Metric denominator: unit

t.mile

Metric denominator: unit total

0

% change from previous year

0

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

Zero was provided in response to intensity figure, metric numerator: emissions in metric tons CO2e, metric denominator: unit total, and in % change from previous year in order to meet CDP disclosure requirements. An overall intensity metric is not feasible at this time due to the various intensity metrics used internally across the enterprise.

C7. Emissions breakdowns

C7.1

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

Yes

C7.1a

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

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	14988549	IPCC Fourth Assessment Report (AR4 - 100 year)
CH4	7287	IPCC Fourth Assessment Report (AR4 - 100 year)
N2O	156547	IPCC Fourth Assessment Report (AR4 - 100 year)

C7.2

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

Country/Region	Scope 1 emissions (metric tons CO2e)
United States of America	9984029.03
Other, please specify (Rest of World)	5098744.19

C7.3

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

By activity

C7.3c

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

Activity	Scope 1 emissions (metric tons CO2e)
Air	11467497
Road	3348277
Facilities (nat gas and heating oil)	336609

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

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

	Gross Scope 1 emissions, metric tons CO2e	Net Scope 1 emissions, metric tons CO2e	Comment
Cement production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Chemicals production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Coal production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Electric utility generation activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Metals and mining production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>

	Gross Scope 1 emissions, metric tons CO2e	Net Scope 1 emissions, metric tons CO2e	Comment
Oil and gas production activities (upstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (downstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Steel production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport OEM activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport services activities	15152383	<Not Applicable>	FedEx is purely a transportation company and all of our activities are in support of transportation services and related activities. Therefore our gross global scope 1 emissions by transport services are the same as our overall scope 1 emissions.

C7.5

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

Country/Region	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low-carbon electricity, heat, steam or cooling accounted in market-based approach (MWh)
United States of America	916392	916392	1975111	0
Canada	4107	4107	32112	0
Asia Pacific (or JAPA)	48555	48555	76546	0
Europe, Middle East and Africa (EMEA)	69518.19	69518.19	228098.45	0
Latin America and Caribbean (LAC)	11416.32	11416.32	38922.72	0

C7.6

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

By activity

C7.6c

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

Activity	Scope 2, location-based emissions (metric tons CO2e)	Scope 2, market-based emissions (metric tons CO2e)
Total Facility Energy Use	1049987	1049987

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

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

	Scope 2, location-based, metric tons CO2e	Scope 2, market-based (if applicable), metric tons CO2e	Comment
Cement production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Chemicals production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Coal production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Metals and mining production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (upstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (downstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Steel production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport OEM activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport services activities	1049987	1049987	As a transport service provider, all of our gross global scope 2 emissions are in support of transport services and related activities.

C7.9

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

Increased

C7.9a

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

	Change in emissions (metric tons CO2e)	Direction of change	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	12504	Decreased	0.08	Our on-site solar electricity generation (see our 2019 Global Citizenship Report and Appendix) helped us avoid 12,504 metric tons CO2e. This is equivalent to a 0.08% decrease in emissions from FY17’s Scope 1 and 2 emissions which was 15,147,708 metric tons CO2e. Scope 1 and 2 emissions for FY17 was revised as noted in question 6.10. The emissions value percentage calculation for this is $(-12,504/15,147,708)*100 = -0.08\%$.

	Change in emissions (metric tons CO2e)	Direction of change	Emissions value (percentage)	Please explain calculation
Other emissions reduction activities	2678324	Decreased	17.7	Collectively, our most impactful sustainability initiatives (see our 2019 Global Citizenship Report and Appendix), not including renewable energy or fuel cell energy, helped us avoid more than 2.6 million metric tons of greenhouse gas emissions in FY18. This represents approximately 17.7% of our FY17 Scope 1 & 2 emissions. The calculation for this is $(2,678,324 / 15,147,708) * 100 = 17.7\%$. For example, our long-standing FedEx Fuel Sense program identifies efficiencies across aviation operations by drawing on the insights and ideas of front-line team members and experts who contribute to a culture of fuel-saving behavior. A total of 59 projects have been identified since the program began in 2006, and 655 million gallons of jet fuel have been saved since then as well. Collectively, FedEx Fuel Sense programs saved almost 94 million gallons of jet fuel in FY18, and avoided more than 912,000 metric tons of CO2e emissions.
Divestment		<Not Applicable >		
Acquisitions		<Not Applicable >		
Mergers		<Not Applicable >		
Change in output		<Not Applicable >		
Change in methodology		<Not Applicable >		
Change in boundary		<Not Applicable >		
Change in physical operating conditions		<Not Applicable >		
Unidentified		<Not Applicable >		
Other		<Not Applicable >		

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 5% but less than or equal to 10%

C8.2

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

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

C8.2a

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

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total MWh
Consumption of fuel (excluding feedstock)	HHV (higher heating value)	62484.6	61978659.83	62041144.43
Consumption of purchased or acquired electricity	<Not Applicable>	0	2350277.78	2350277.78
Consumption of purchased or acquired heat	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired steam	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired cooling	<Not Applicable>	0	556	556
Consumption of self-generated non-fuel renewable energy	<Not Applicable>	21111.11	<Not Applicable>	21111.11
Total energy consumption	<Not Applicable>	83595.71	64329493.17	64413088.87

C8.2b

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

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

C8.2c

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

Fuels (excluding feedstocks)

Jet Kerosene

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

46889883

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

<Not Applicable>

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration

<Not Applicable>

Comment

Fuels (excluding feedstocks)

Diesel

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

11941477.6

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

<Not Applicable>

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration

<Not Applicable>

Comment

Fuels (excluding feedstocks)

Motor Gasoline

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

940346.49

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

<Not Applicable>

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration

<Not Applicable>

Comment

Fuels (excluding feedstocks)

Propane Gas

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

265061.74

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

<Not Applicable>

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration

<Not Applicable>

Comment

Fuels (excluding feedstocks)

Compressed Natural Gas (CNG)

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

42570.43

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

<Not Applicable>

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration

<Not Applicable>

Comment

Fuels (excluding feedstocks)

Liquefied Natural Gas (LNG)

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

655.65

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

<Not Applicable>

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration

<Not Applicable>

Comment

Fuels (excluding feedstocks)

Natural Gas

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

1888132.28

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

<Not Applicable>

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration

<Not Applicable>

Comment

Fuels (excluding feedstocks)

Heavy Gas Oil

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

10533.14

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

<Not Applicable>

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration

<Not Applicable>

Comment

Fuels (excluding feedstocks)

Biodiesel

Heating value

HHV (higher heating value)

Total fuel MWh consumed by the organization

62484.6

MWh fuel consumed for self-generation of electricity

0

MWh fuel consumed for self-generation of heat

0

MWh fuel consumed for self-generation of steam

<Not Applicable>

MWh fuel consumed for self-generation of cooling

<Not Applicable>

MWh fuel consumed for self-cogeneration or self-trigeneration

<Not Applicable>

Comment

C8.2d

(C8.2d) List the average emission factors of the fuels reported in C8.2c.

Biodiesel

Emission factor

9.64

Unit

kg CO2 per gallon

Emission factor source

US Energy Information Administration Carbon Dioxide Emissions Coefficients

Comment

Compressed Natural Gas (CNG)

Emission factor

6.89

Unit

kg CO2 per gallon

Emission factor source

EPA Climate Leadership GHG Emission Factors Hub

Comment**Diesel****Emission factor**

10.16

Unit

kg CO2 per gallon

Emission factor source

US Energy Information Administration Carbon Dioxide Emissions Coefficients

Comment**Heavy Gas Oil****Emission factor**

11.09

Unit

kg CO2 per gallon

Emission factor source

EPA Climate Leadership GHG Emission Factors Hub

Comment**Jet Kerosene****Emission factor**

9.57

Unit

kg CO2 per gallon

Emission factor source

US Energy Information Administration Carbon Dioxide Emissions Coefficients

Comment**Liquefied Natural Gas (LNG)****Emission factor**

7.49

Unit

kg CO2 per gallon

Emission factor source

EPA Climate Leadership GHG Emission Factors Hub

Comment**Motor Gasoline****Emission factor**

8.89

Unit

kg CO2 per gallon

Emission factor source

US Energy Information Administration Carbon Dioxide Emissions Coefficients

Comment

Natural Gas

Emission factor

117.1

Unit

lb CO2 per 1000 cubic ft3

Emission factor source

EPA Climate Leadership GHG Emission Factors Hub

Comment

Propane Gas

Emission factor

5.76

Unit

kg CO2 per gallon

Emission factor source

US Energy Information Administration Carbon Dioxide Emissions Coefficients

Comment

C8.2e

(C8.2e) Provide details on the electricity, heat, steam, and cooling your organization has generated and consumed in the reporting year.

	Total Gross generation (MWh)	Generation that is consumed by the organization (MWh)	Gross generation from renewable sources (MWh)	Generation from renewable sources that is consumed by the organization (MWh)
Electricity	32628	32628	21111	21111
Heat				
Steam				
Cooling				

C8.2f

(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

Other, please specify (We utilize a mix of on-site/off-site solar facilities, Guarantees of Origin, Renewable Energy Certificates, and Power Purchase Agreements with/without energy attribute certificates. However, our scope 2 emissions are based on average grid emissions.)

Low-carbon technology type

Other low-carbon technology, please specify (We utilize a mixture of low carbon electricity including but not limited to solar.)

Region of consumption of low-carbon electricity, heat, steam or cooling

Other, please specify (North American and Europe)

MWh consumed associated with low-carbon electricity, heat, steam or cooling

0

Emission factor (in units of metric tons CO2e per MWh)

0

Comment

Our North American FedEx operations and our European TNT Express locations utilize a mixture of low carbon electricity from a range of sources including on-site/off-site solar (both with and without energy attribute certificates, Guarantees of Origin, and Renewable Energy Certificates). In FY18, 21,111 MWh of solar electricity was obtained through Power Purchase Agreements, however, these initiatives have not impacted our reported scope 2 emissions which are based on average grid emissions. As noted previously, we determined the difference between Location- and Market-based Scope 2 emissions is de minimis at the present time and therefore are reporting the same value for both metrics in FY18. Therefore, we reported 0 under "MWh consumed associated with low-carbon electricity, heat, steam, and cooling".

C-TS8.4

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

Activity

Heavy Duty Vehicles (HDV)

Metric figure

0.299986

Metric numerator

Liters of fuel

Metric denominator

Other, please specify (Miles driven)

Metric numerator: Unit total

280240190

Metric denominator: Unit total

934177630

% change from last year

-0.01

Please explain

HDV energy efficiency metric reported in this question is based on vehicle data from FedEx Express operating company. The percentage change from last year was calculated using the following FY17 figures: 281,288,638.74 liters of fuel and 925,846,435 miles driven. Dividing 281,288,638.74 liters of fuel by 925,846,435 miles driven is 0.3038 liters per mile driven.

Activity

Aviation

Metric figure

0.209744

Metric numerator

Liters of fuel

Metric denominator

Other, please specify (Available ton mile)

Metric numerator: Unit total

4465116077

Metric denominator: Unit total

21288319239

% change from last year

0

Please explain

Aviation energy efficiency metric is based on data from FedEx Express which is the operating company responsible for our aviation fleet and air operations. The percentage change metric -0.00476511% is calculated using the following FY17 figures: 4,272,829,601 liters of fuel used and 20,274,482,866 available ton miles. Dividing 4,272,829,601 liters of fuel by 20,274,482,866 available ton miles is 0.2107 liters of fuel per available ton mile.

C9. Additional metrics

C9.1

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

C-TO9.3/C-TS9.3

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

Activity

Heavy Duty Vehicles (HDV)

Metric

Fleet adoption

Technology

Battery electric vehicle (BEV)

Metric figure

445

Metric unit

Units

Explanation

Across FedEx, 445 electric vehicles were added to the global fleet in FY18 when including forklifts, airport ground service equipment, and delivery trucks for a total global fleet of more than 2,554 electric vehicles. FedEx Express will also be introducing 1000 Chanje v8100 battery electric vehicles into its fleet through the spring of 2020. Each vehicle is expected to provide estimated annual fuel savings of 2000 gallons per year and can travel more than 150 miles when fully charged. Outside the US, FedEx Express is testing electric vehicles in China and Europe.

C-TO9.6/C-TS9.6

(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?

C10. Verification

C10.1

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

	Verification/assurance status
Scope 1	Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	Third-party verification or assurance process in place
Scope 3	No third-party verification or assurance

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
Complete

Type of verification or assurance
Limited assurance

Attach the statement
[FedEx_FY2018_Cventure Final Verification Statement_071819.pdf](#)

Page/ section reference
1

Relevant standard
Corporate GHG verification guidelines from ERT

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
Complete

Type of verification or assurance
Limited assurance

Attach the statement
[FedEx_FY2018_Cventure Final Verification Statement_071819.pdf](#)

Relevant standard

Corporate GHG verification guidelines from ERT

Proportion of reported emissions verified (%)

100

C10.2

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

Yes

C10.2a

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

Disclosure module verification relates to	Data verified	Verification standard	Please explain
C11. Carbon pricing	Other, please specify (Carbon Credit Purchase)	VCS (Verified Carbon Standard) and Gold Standard	We have established an internal process to monitor our annual ETS emissions and participate in voluntary offsetting. We purchase carbon offset credits that are verified through Verified Carbon Standard (VCS) and Gold Standard.

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	
% of Scope 1 emissions covered by the ETS	1.31
Period start date	January 1 2018
Period end date	December 31 2018
Allowances allocated	81244
Allowances purchased	111576
Verified emissions in metric tons CO₂e	198261
Details of ownership	Other, please specify (The CO ₂ emissions data discussed here refers only to FedEx-operated aircraft within the EU (i.e. intra-EU).)
Comment	

C11.1d

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

FedEx formulated internal processes that include a multi-tiered strategy to reduce the impact of aviation emissions from our operations. The processes include a global, comprehensive fuel use tracking system, a multi-year aircraft fleet upgrade plan, operational controls to employ the most efficient practices, collaboration with agencies to improve flight procedures and participation in initiatives to bring additional bio-jet to market. These voluntary efforts are in addition to fully complying with systems that apply to FedEx. For example, in accordance with the inclusion of aviation in the obligations of the intra-EU/European Economic Area (EEA) scope of the EU ETS, FedEx performs fuel and emissions monitoring for applicable flights and submits requisite reporting. Each year, relevant data and reports have been successfully 3rd party verified and continue to demonstrate our compliance. As required, our compliance efforts include purchasing and surrendering allowances, when necessary.

We also implemented an emissions monitoring plan to meet the requirements of the Carbon Offsetting and Reduction Scheme for International Aviation (CORSA) program developed by the International Civil Aviation Organization (ICAO), a specialized agency of the United Nations. Like a number of U.S. airlines, we actively supported our industry association in helping ICAO develop the CORSA program for international flights, which aims to assist airlines in meeting the goal of carbon-neutral growth after 2020 by complementing industry efforts in technology, operations, infrastructure and sustainable aviation fuels. FedEx is preparing for the carbon offsetting obligations of CORSA and continues to pursue opportunities to advance our use of alternative fuel.

FedEx recognizes the EU ETS and CORSA as both opportunities and liabilities given our global growth plans. We have plans to continually improve our fleet efficiencies, make advances in our operations and use of technology as well as

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

Hydro

Project identification

Grouped Hydropower Plants in Chongqing, Yunnan Sichuan & Guizhou Provinces

Verified to which standard

VCS (Verified Carbon Standard)

Number of credits (metric tonnes CO₂e)

19677

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

19677

Credits cancelled

Yes

Purpose, e.g. compliance

Voluntary Offsetting

Credit origination or credit purchase

Credit purchase

Project type

Forests

Project identification

Lower Zambei REDD+ Project

Verified to which standard

VCS (Verified Carbon Standard)

Number of credits (metric tonnes CO₂e)

12352

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

12352

Credits cancelled

Yes

Purpose, e.g. compliance
Voluntary Offsetting

Credit origination or credit purchase

Credit purchase

Project type

Biomass energy

Project identification

Biomass CDM Project of Bagapalli Coolie Sangha

Verified to which standard

Gold Standard

Number of credits (metric tonnes CO2e)

1773

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

1773

Credits cancelled

Yes

Purpose, e.g. compliance

Voluntary Offsetting

Credit origination or credit purchase

Credit purchase

Project type

Biomass energy

Project identification

Sichuan Rural Poor-Household Biogas Development Program

Verified to which standard

Gold Standard

Number of credits (metric tonnes CO2e)

4634

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

4634

Credits cancelled

Yes

Purpose, e.g. compliance

Voluntary Offsetting

Credit origination or credit purchase

Credit purchase

Project type

PFCs and SF6

Project identification

Conversion of SF6 to an Alternative Cover Gas in Eaton Rapids, MI and Strathroy, ON

Verified to which standard

VCS (Verified Carbon Standard)

Number of credits (metric tonnes CO2e)

17962

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

17962

Credits cancelled

Yes

Purpose, e.g. compliance

Voluntary Offsetting

Credit origination or credit purchase

Credit purchase

Project type

Energy efficiency: households

Project identification

Qori Q'Oncha, Cookstoves Project

Verified to which standard

Gold Standard

Number of credits (metric tonnes CO2e)

10975

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

10975

Credits cancelled

Yes

Purpose, e.g. compliance

Voluntary Offsetting

Credit origination or credit purchase

Credit purchase

Project type

Other, please specify (Solar and Hydro)

Project identification

Campus Clean Energy & Energy efficiency, Muncie, IN; Urbana-Champaign, IL; Ashland, OR

Verified to which standard

VCS (Verified Carbon Standard)

Number of credits (metric tonnes CO2e)

5893

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

5893

Credits cancelled

Yes

Purpose, e.g. compliance

Voluntary Offsetting

Credit origination or credit purchase

Credit purchase

Project type

Energy efficiency: households

Project identification

Mexico Onil Cookstoves

Verified to which standard

VCS (Verified Carbon Standard)

Number of credits (metric tonnes CO2e)

3612

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

3612

Credits cancelled

Yes

Purpose, e.g. compliance

Voluntary Offsetting

C11.3

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

No, and we do not currently anticipate doing so in the next two years

C12. Engagement

C12.1

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

Yes, our suppliers

Yes, our customers

Yes, other partners in the value chain

C12.1a

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

Information collection (understanding supplier behavior)

Details of engagement

Collect climate change and carbon information at least annually from suppliers

% of suppliers by number

100

% total procurement spend (direct and indirect)

50

% Scope 3 emissions as reported in C6.5

0

Rationale for the coverage of your engagement

All of our key suppliers are asked questions involving environmental sustainability using our supplier scorecard. Our supplier scorecard metrics contain environmental sustainability questions (which cover a variety of sustainability issues including climate change) that evaluate our suppliers' performance.

Impact of engagement, including measures of success

Measures of success includes increased engagement and conversations between product managers and key suppliers and the growing coverage of our engagement. We have increased our percentage of suppliers engaged year over year to reach all of our key suppliers in FY18. This is an increase from 98% in FY17. As a result of our engagement, we have an increased of understanding how our suppliers impact our value chain.

Comment

We entered 0 in the "% Scope 3 emissions as reported in C6.5" column to satisfy CDP's disclosure requirement. We did not report any Scope 3 emissions data in the "Purchased goods and services" row in C6.5. Given the variety of goods and services that we purchase for our business and the complexity associated with estimating the embedded carbon for those items, we have not had the opportunity to estimate these emissions yet.

C12.1b

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

Type of engagement

Education/information sharing

Details of engagement

Run an engagement campaign to education customers about your climate change performance and strategy

% of customers by number

11.2

% Scope 3 emissions as reported in C6.5

0

Please explain the rationale for selecting this group of customers and scope of engagement

We entered 0 in the "% Scope 3 emissions as reported in C6.5" column to satisfy CDP's disclosure requirement. Our main services - delivering customers' packages and freight - do not result in any significant emissions by our customers, and therefore we did not report any Scope 3 emissions related to our customers' use of our products/services in that question. This group of customers were selected as they use our Customer Emission Calculator tool (CEC). The scope is customers of FedEx Express, FedEx Ground and FedEx Freight who use the tool. We inform customers of the carbon footprint resulting from our logistics services through the FedEx CEC tool, which can estimate our enterprise customers' Scope 3 carbon emissions by taking FedEx-specific package routing, facilities, aircraft fleet, and surface vehicles and applying industry standard CO2 fuel burn factors. As a result, customers are empowered with the knowledge necessary to decrease their shipping-related emissions and to pay for associated carbon offsets through their preferred organizations. As we have thousands of customers, we are not able to track specific numbers of the # of customers who use our CEC tool vs total. Therefore, the "Size of engagement" is the percent value that came from dividing the FY18 revenue from customers using our CEC tool over FedEx total revenue for FY18.

Impact of engagement, including measures of success

We can see that our efforts with our customers have been paying off as our reputation with large enterprise customers is increasingly impacted by our corporate citizenship performance. In FY18, we responded to numerous requests from customers for information about corporate citizenship and provided carbon emissions data to customers. We estimate that the FY18 revenue from such customers was \$7.3 billion. This is an increase from FY17 when estimated revenue from such customers was \$6.4 billion. They wish to do business with companies that share their values and demonstrate good practice in managing environmental and social impacts. FedEx measures success based on the revenue generated from customers who want their carbon emissions data. We see this as a success of engagement.

C12.1c

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

An example of climate-related engagement strategy is FedEx’s global retail service network with key partners such as Kroger, Walgreens, Walmart in the US, and 7-Eleven in Asia. We work with these partners to provide additional access to our services while reducing the emissions from the “last mile driven”. Streamlining our last-mile delivery capabilities improves environmental efficiency. Just eliminating the “last mile driven” - the difference between delivering packages to multiple addresses compared to a central location- could help us avoid emissions by an estimated 18,000 metric tons of CO2e emissions each year. This is equivalent to the emissions generated by more than 3,800 passenger cars driven for a year.

These alliances have enabled FedEx to expand our network, soon to provide more than 62,000 convenient, secure retail locations for customers to pick up and ship packages. The FedEx partnership in Asia with 7-Eleven includes more than 5,000 stores and 70 self-service locker locations across Hong Kong and Taiwan.

Our global retail service network continues to expand, strengthening our customer connections, and leveraging our collaborations. These partnerships also ensure FedEx and its partners maintain strong channels for engagement and have led to additional opportunities for collaboration around sustainability, last mile, and e-commerce solutions.

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?

Focus of legislation	Corporate position	Details of engagement	Proposed legislative solution
Other, please specify (Reduced GHG emissions and increased fuel efficiency) <i>Reduced GHG emissions and increased fuel efficiency</i>	Support	From 2007 through 2018, we successfully advocated for legislation and regulation on the US EPA's Phase 2 fuel efficiency and greenhouse gas standards. The standards incentivize the production of clean technology vehicles such as hybrid- electric, all-electric, alternative fuel, fuel cell, and other advanced technology vehicles needed by FedEx. FedEx has been actively involved through the EPA's stakeholder engagement process and provided comments to the proposed GHG Emissions and Fuel Efficiency Standards for Medium and Heavy Duty Engines and Vehicles —Phase 2 regulation. We believe this presents an opportunity to further improve fuel efficiencies and lower GHG emissions from the national fleet using a comprehensive and harmonized approach.	EPA finalized the Phase 2 Heavy-duty vehicle fuel efficiency and greenhouse gas standards, which will reduce GHGs from commercial vehicles through 2027.

Focus of legislation	Corporate position	Details of engagement	Proposed legislative solution
Other, please specify (Reduced GHG emissions and increased fuel efficiency) <i>Reduced GHG emissions and increased fuel efficiency</i>	Support	FedEx Freight, FedEx Express, FedEx Ground and FedEx Custom Critical are longstanding members of the EPA SmartWay Transport Partnership, which incentivizes carriers and shippers to improve environmental performance, operational efficiency and supply-chain sustainability. Other members include alternative fuel manufacturers and suppliers whose resources we can use to inform ourselves and our independent contractors about vehicle, fuel and grant options.	There has not been a legislative outcome from this engagement. However, the program continues.
Other, please specify (Reduced GHG emissions and increased fuel efficiency) <i>Reduced GHG emissions and increased fuel efficiency</i>	Support	In collaboration with the American Trucking Associations, we are also advocating with U.S. legislators to allow larger 33-foot trailers in a twin-configuration to reduce the number of trucks on the road. We estimate that extending twin 28-foot trailers to 33 feet would increase freight capacity by 18 percent while reducing truck trips by 6.6 million a year and truck traffic by 1.3 billion miles per year. This in turn would prevent an estimated 900 accidents a year while reducing annual carbon emissions by 4.4 billion pounds.	There has not been a legislative outcome from this engagement to date. However, we are actively working to bring this legislation to fruition.

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

Airlines for America

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

FedEx Express is an active member of Airlines for America (A4A), the principal U.S. airline trade association. A4A advocates for a "global sectoral approach" for aviation GHG emissions and sets aggressive measures and emissions targets. Under this approach, the framework for both international and domestic aviation emissions would be established internationally. All airline emissions would be subject to emissions targets requiring industry and governments to:

- Annual average fuel-efficiency improvement of 1.5% through 2020
- Carbon-neutral growth from 2020 (CNG2020), subject to critical government infrastructure and technology investments such as air traffic control modernization
- Goal of 50% reduction in CO2 by 2050 relative to 2005 levels

The International Civil Aviation Organization (ICAO), the United Nations body charged with setting standards for international aviation, has adopted much of the U.S. airline industry's framework. In FY16, the ICAO began the approval process for new global aircraft CO2 emissions standards focused on large aircraft weighing over 60MT, which account for >90% of international

aviation emissions. In 2016, ICAO passed a resolution adopting the Carbon Offsetting and Reduction Scheme for International Aviation (“CORSIA”), which is a global, market-based measure intended to aid in meeting the ICAO goal of carbon-neutral growth beyond 2020 by complementing industry efforts in technology, operations, infrastructure and sustainable aviation fuels. CORSIA was supported by IATA (International Air Transport Association) and the board of A4A with active efforts by FedEx and other airlines. In June 2018, ICAO adopted country-by-country implementation standards including the reporting of information on international aviation emissions beginning in 2019. In March 2019, the FAA issued a notice of a CORSIA program permitting U.S. carriers to submit emissions data on a voluntary basis. After receiving approval from FAA, FedEx began monitoring emissions for this program. CORSIA is expected to be implemented in phases by ICAO member States in lieu of other similar measures to avoid a patchwork of country or region based regulatory measures with costly, inconsistent application to international aviation.

How have you influenced, or are you attempting to influence their position?

FedEx actively participates in the relevant committees of A4A. We are proactively working on the efforts to reduce GHGs from aviation at both the national A4A and International Air Transport Association. Through our participation in A4A, FedEx supported the development of a CO2 emissions standard, the ICAO Committee on Aviation Environmental Protection’s recommended standard, and its anticipated adoption by the U.S. EPA into national law.

Trade association

American Trucking Associations

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association’s position

FedEx is an also active member of the American Trucking Associations (ATA), whose mission is to serve and represent the U.S. trucking industry with a single, united voice to influence policies beneficial to the industry; promote safety on America’s highways; improve the industry’s image, efficiency, and competitiveness; educate the public about the critical role trucking plays in the economy; research significant industry issues all while striving for a healthy business environment. ATA advocates for science-based laws and regulations to maintain and protect the environment, and to the greatest extent possible, ensure uniformity across all levels of government. In particular, the ATA is committed to a series of measures designed to further reduce the carbon emissions of trucks in the United States, and outlined in a 2008 report named “Strategies for Further Reduction of the Trucking Industry’s Carbon Footprint”:

- Enacting a national 65 mph speed limit and governing truck speeds to 65 mph for trucks manufactured after 1992.
- Decreasing idling.
- Increasing fuel efficiency.
- Reducing congestion through highway improvements, if necessary by raising the fuels tax.
- Promoting the use of more productive truck combinations.
- Supporting national fuel economy standards for medium- and heavy-duty trucks.

How have you influenced, or are you attempting to influence their position?

We actively advocated for the ATA to support our push for commercial-vehicle fuel-economy legislation, which was enacted in the Energy Independence & Security Act of 2007. We also actively advocated for the ATA to support both Phase 1 and Phase 2 of the Heavy Duty fuel efficiencies and greenhouse gas standards that have been approved by EPA. In collaboration with the American Trucking Associations, we are also advocating with U.S. legislators to allow larger 33-foot trailers in a twin-configuration to reduce the number of trucks on the road. We estimate that extending twin 28-foot trailers to 33 feet would increase freight capacity by 18 percent while reducing truck trips by 6.6 million a year and truck traffic by 1.3 billion miles per year. This in turn would prevent an estimated 900 accidents a year while reducing annual carbon emissions by 4.4 billion pounds. We also actively participate in ATA’s Environment and Energy Policy Committee, and on its Board of Directors.

Trade association

Securing America’s Future Energy (SAFE)

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association’s position

Our Chairman and CEO, Frederick W. Smith, serves as co-chair of Securing America’s Future Energy (SAFE) Energy Security Leadership Council, Through SAFE’s Energy Security Leadership Council (ESLC), we’ve worked with business and military leaders to support a comprehensive, long-term policy to reduce U.S. oil dependence and improve energy security.

How have you influenced, or are you attempting to influence their position?

Through his role as co-chair of SAFE’s ESLC, Mr. Smith has actively called for reduced energy consumption and increased efficiency, increasing alternative fuel vehicles, and increasing energy security by diversifying the U.S. transportation network away from an over-reliance on imported oil.

Trade association

Electrification Coalition

Is your position on climate change consistent with theirs?

Consistent

Please explain the trade association's position

Our Chairman and CEO, Frederick W. Smith, also serves on the Electrification Coalition, a nonpartisan, not-for-profit group of business leaders committed to promoting policies and actions that facilitate the deployment of electric vehicles on a mass scale. The Coalition's position is that oil dependence threatens the nation's economic, environmental, and national security, and that the only long-term solution is electrification of transportation. Advances in battery technology for the first time truly make possible an electrified transportation sector that is powered by a wide variety of domestic sources: natural gas, nuclear, coal, hydroelectric, wind, solar, and geothermal. The electrical generation system in the U.S. uses virtually no oil. Moreover, because an electrified transportation system is one that has the benefits of relying on a diverse set of fuels, no one fuel source—or producer—would be able to hold our transportation system and our economy hostage the way a single nation can disrupt the flow of petroleum today. Electricity prices are far more stable than oil prices, there is substantial spare generation capacity, and the backbone of the infrastructure already largely exists. No other alternative has all of these advantages.

How have you influenced, or are you attempting to influence their position?

Mr. Smith has actively advocated for transportation electrification through the Electrification Coalition by championing the development of the Coalition's Fleet Electrification Roadmap, a comprehensive analysis of the business case for electric-drive technology adoption among the more than 16 million commercial, corporate, and government fleet vehicles in the United States, in November 2009. Mr. Smith has also represented the Coalition's position on Capitol Hill and during a CNBC TV interview in June 2010.

C12.3d

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

No

C12.3e

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

Around the world, FedEx is working with communities to help them grow responsibly by drawing on our expertise in transportation and logistics, as well as forging long-term alliances with organizations that design cities for a better future. Working with the World Resources Institute's Ross Center for Sustainable Cities (WRI Ross Center) through grant funding, knowledge sharing, research and assessment, pilot projects and skills-based volunteering, FedEx is supporting sustainable, safe and innovative transportation solutions for 36 cities in four countries – Brazil, India, China, and Mexico. Since 2010, more than 4.9 million people have benefited from FedEx support of EMBARQ programs focused on sustainable transportation.

Brazil: Belo Horizonte, a state capital with 2.5 million residents, has set ambitious targets for adopting electric buses, thanks to the Vehicles and Fuels Fleet Selection Tool, which was developed with support from FedEx. The city will transition 40 percent of its fleet from diesel to electric by 2030.

India: Using FedEx routing expertise, Bangalore has reduced daily passenger wait and travel times by two hours in the largest bus network in India, which serves 150,000 passengers a day. Research and assistance helped the city set emissions targets and secure funding for 150 electric buses.

China: In Zhuzhou, a planned 23 km bus rapid transit (BRT) system will reduce travel time by 50 percent and serve more than 70 percent of the city's transit users. In a broader initiative, FedEx is supporting guidelines to help Chinese cities maintain electric fleets throughout their life cycle.

Mexico: Building on previous contributions by FedEx safety experts toward training for Mexico City's bus drivers, efforts have begun to establish a baseline for bus traffic incidents and measure the impact of safety training. WRI Ross Center is also adapting the FedEx Vehicles and Fuels Bus Selection Tool to support improved vehicle technology in Mexican cities.

C12.3f

(C12.3f) What processes do you have in place to ensure that all of your direct and indirect activities that influence policy are consistent with your overall climate change strategy?

FedEx actively participates in the political process with the ultimate goal of promoting and protecting the economic future of the company and our stockholders and employees. Through our participation and that of our employees, we ethically and constructively promote legislative and regulatory actions that further the business objectives of FedEx, including our sustainability objectives, and are related to issues with which we have involvement, possible impact and expertise.

We use an Environmental Management System (EMS) that is based on key elements of the international standard ISO 14001. Each FedEx operating company identifies and works to reduce relevant environmental impacts, under the direction of a senior sustainability leader accountable for performance. Additionally, enterprise-wide Sustainability Impact Teams (SITs) covering global Vehicles, Facilities, Air Operations, Customer Solutions, IT, EarthSmart, Data/Reporting and Sourcing allow our operating companies to share synergies, ideas and innovations. The SITs and operating companies' senior sustainability leaders report to our chief sustainability officer, the Vice President of Environmental Affairs and Sustainability.

In addition, when potential environmental regulations are being considered, our Government Affairs department consults with the relevant internal departments at FedEx and through the chief sustainability officer and Sustainability Impact Teams (SITs) governance structure described above, to ensure that our public policy efforts are consistent with our relevant policies and strategies.

For example, discussions concerning any possible impacts to the Phase 2 Fuel Efficiency and Greenhouse Gas regulation for all U.S. commercial vehicles were recently vetted with the chief sustainability officer to ensure consistency with our past advocacy and support of said greenhouse gas regulation.

C12.4

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

Publication

In mainstream reports

Status

Complete

Attach the document
[FedEx 2018 10-K.pdf](#)

Page/Section reference

19- 20: Environmental 21: Risk Factors 50: Discussion and Analysis of Results of Operations and Financial Conditions
90

Content elements

Governance
Strategy
Risks & opportunities

Comment

Publication

In voluntary sustainability report

Status

Complete

Attach the document

[FedEx_Global_Citizenship_Report.pdf](#)

Page/Section reference

14: CSR Overview 16: Global CSR Governance 17: Material Issues 25: CSR Goals and Progress 39: Environment –
Multiplying Efficiencies 53: Data Appendix

Content elements

Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics

Comment

Publication

In voluntary communications

Status

Complete

Attach the document

[FedEx_Promo_Brochure_2019_WF_150419.pdf](#)

Page/Section reference

Multiplying Opportunities Multiplying Good Multiplying Potential Multiplying Efficiencies CSR Goals and progress

Content elements

Strategy
Other metrics

Comment

Publication

In voluntary communications

Status

Complete

Attach the document

[EarthSmart_Archives.pdf](#)

Page/Section reference

Content elements

Strategy
Risks & opportunities
Other metrics

Comment**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.

For C0.3- We are reporting data on 220 countries and regions in which we operate. This includes the US and effectively, the rest of the world. No countries were selected for this question as the "Other, please specify" option was removed as a response.

For C7.5- As noted in C6.2, we determined the difference between Location- and Market-based Scope 2 emissions is de minimis at the present time. We are reporting the same value for both metrics in FY18. Therefore, for C7.5 column, 0 was entered for "Purchased and consumed low-carbon electricity, heat, steam or cooling accounted in market-based approach (MWh)". However this does not reflect our total purchased and consumed low-carbon electricity, heat, steam, and cooling.

For C12.1a -- We entered 0 in the "% Scope 3 emissions as reported in C6.5" column to satisfy CDP's disclosure requirement. We did not report any Scope 3 emissions data in the "Purchased goods and services" row in C6.5. Given the variety of goods and services that we purchase for our business and the complexity associated with estimating the embedded carbon for those items, we have not had the opportunity to estimate these emissions yet.

C14.1

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

	Job title	Corresponding job category
Row 1	Chief Sustainability Officer	Chief Sustainability Officer (CSO)