Walmart, Inc. - Climate Change 2019

C0. Introduction

C0.1

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

Walmart Inc. (NYSE: WMT) helps people around the world save money and live better - anytime and anywhere - in retail stores, online, and through their mobile devices. Each week, over 275 million customers and members visit our more than 11,300 stores under 58 banners in 27 countries and eCommerce websites. With fiscal year 2019 (Feb. 1, 2018 – Jan. 31, 2019) revenue of $514.4 billion, Walmart employs over 2.2 million associates worldwide. Walmart continues to be a leader in sustainability, corporate philanthropy and employment opportunity. Additional information about Walmart can be found by visiting http://corporate.walmart.com, on Facebook at http://facebook.com/walmart and on Twitter at http://twitter.com/walmart and our 2019 Environmental, Social and Governance (ESG) Report at https://corporate.walmart.com/esgreport/

C0.2

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

<table>
<thead>
<tr>
<th></th>
<th>Start date</th>
<th>End date</th>
<th>Indicate if you are providing emissions data for past reporting years</th>
<th>Select the number of past reporting years you will be providing emissions data for</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>January 1 2018</td>
<td>December 31 2018</td>
<td>No</td>
<td>&lt;Not Applicable&gt;</td>
</tr>
</tbody>
</table>

C0.3

(C0.3) Select the countries/regions for which you will be supplying data.
Costa Rica
El Salvador
Guatemala
Honduras
India
Japan
Mexico
Nicaragua
Puerto Rico
South Africa
United Kingdom of Great Britain and Northern Ireland
United States of America

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.
Operational control

C1. Governance

C1.1

(C1.1) Is there board-level oversight of climate-related issues within your organization?
Yes
(C1.1a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.

<table>
<thead>
<tr>
<th>Position of individual(s)</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Director on board</td>
<td>The Walmart board of directors is comprised of individuals whom we believe collectively provide an appropriate balance of distinguished leadership, diverse perspectives, strategic skill sets and professional experience relevant to our business and strategic objectives. Our board has five primary standing committees, including the Nominating and Governance Committee (NGC), which reviews and advises management on Walmart's social, community and sustainability initiatives as covered in our 2019 ESG Report (<a href="https://corporate.walmart.com/esgreport/">https://corporate.walmart.com/esgreport/</a>). The NGC is made up of members of the board of directors and chaired by a director on the board. In FY2019, the NGC met five times. The NGC charter is available on our corporate website. (<a href="http://stock.walmart.com/investors/corporate-governance/board-of-directors-committee-information/nominating-governance-committee/">http://stock.walmart.com/investors/corporate-governance/board-of-directors-committee-information/nominating-governance-committee/</a>).</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Frequency with which climate-related issues are a scheduled agenda item</th>
<th>Governance mechanisms into which climate-related issues are integrated</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scheduled – some meetings</td>
<td>Reviewing and guiding strategy</td>
<td>The Nominating and Governance Committee of the board of directors (NGC) meets at least bi-annually in conjunction with regularly scheduled board meetings. Among other things, the NGC reviews and advises management on Walmart's social, community and sustainability initiatives including monitoring progress against goals and targets and reviewing annual budgets for addressing climate-related issues at least once a year as part of a discussion of our Environmental, Social and Governance (ESG) initiatives covered in our 2019 ESG Report (<a href="https://corporate.walmart.com/esgreport/">https://corporate.walmart.com/esgreport/</a>).</td>
</tr>
</tbody>
</table>
C1.2

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

<table>
<thead>
<tr>
<th>Name of the position(s) and/or committee(s)</th>
<th>Responsibility</th>
<th>Frequency of reporting to the board on climate-related issues</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other C-Suite Officer, please specify (Executive Vice President of Corporate Affairs)</td>
<td>Both assessing and managing climate-related risks and opportunities</td>
<td>Annually</td>
</tr>
<tr>
<td>Chief Sustainability Officer (CSO)</td>
<td>Both assessing and managing climate-related risks and opportunities</td>
<td>Annually</td>
</tr>
<tr>
<td>Other committee, please specify (Board Committee)</td>
<td>Both assessing and managing climate-related risks and opportunities</td>
<td>Annually</td>
</tr>
</tbody>
</table>

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).

Carbon-related initiatives continue to be managed at the executive (C-suite) leadership level. Walmart’s Chief Sustainability Officer (CSO) and Executive Vice President of Corporate Affairs (who reports directly to the company CEO) provides oversight of Walmart’s ESG initiatives, which includes climate-related issues, strategies, goals and targets. The CSO also assesses the risks and opportunities that climate-related issues pose for the company. The CSO engages the business units to identify the potential impacts to their areas of the business and to develop management strategies in response. The CSO position was selected because of their access to executive leadership and business unit leaders who can act on the opportunities and risks identified. Climate-related issues are monitored in a number of ways from measuring and reporting greenhouse gas (GHG) emissions in our own operations and value chain, to tracking the frequency and magnitude of severe weather-related events and the effects they have on our operations and the communities in which our associates and customers live.

In addition to our CSO and Executive Vice President of Corporate Affairs, oversight of how the...
and sustainability initiatives including climate-related initiatives as covered in our 2019 ESG Report (https://corporate.walmart.com/esgreport/). The NGC is comprised of members of the board. In FY2019, the NGC met five times. The CSO meets with the NGC at least annually to review the company’s progress and performance on ESG initiatives. The committee charter is available on our corporate website. (http://stock.walmart.com/investors/corporate-governance/board-of-directors-committee-information/nominating-governance-committee/).

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?
Corporate executive team

Types of incentives
Monetary reward

Activity incentivized
Emissions reduction target

Comment
Overall compensation for Walmart’s Corporate Executive team is based on a number of business objectives. Among their objectives may be management of the company’s Environmental, Social, Governance (ESG) initiatives which includes performance on climate-related issues. However, Walmart does not have specific bonus or compensation related solely to achieving emission or other climate-related targets. Walmart’s ESG initiatives, covered in our 2019 ESG Report (https://corporate.walmart.com/esgreport/), include targets for emission reduction in our own operations and supply chain, renewable energy use and increasing transparency and trust by integrating environmental criteria into the purchasing decisions of our buyers and customers. Progress across the company (by market and by division) is reported to the members of the Corporate Executive team at least once a year. Individuals are held accountable for supporting progress on these climate-related initiatives.
indirectly affect energy and emissions performance, for example). These include the President and CEO of Walmart U.S., President and CEO of Sam’s Club, President and CEO of Walmart International, CEO of Global eCommerce, the EVP and Chief Financial Officer, EVP of Global Governance and Secretary and EVP of Corporate Affairs.

Who is entitled to benefit from these incentives?
Chief Sustainability Officer (CSO)

Types of incentives
Monetary reward

Activity incentivized
Other, please specify (Emissions reduction target. Environmental criteria included in purchases. Supply chain engagement. Renewable energy target.)

Comment
Walmart’s Chief Sustainability Officer (CSO) is responsible for developing and driving the company’s global responsibility agenda, which includes many time-bound targets and public commitments (including emissions reduction, sustainably sourcing food commodities and increasing trust and transparency with customers; see 2019 ESG Report for full set of commitments. The CSO’s performance evaluation and compensation depend in part on the performance of her team and that of the company in delivering on this agenda each year.

Who is entitled to benefit from these incentives?
Chief Procurement Officer (CPO)

Types of incentives
Monetary reward

Activity incentivized
Supply chain engagement

Comment
Walmart’s Chief Merchandising Officer along with the SVP of Global Sourcing have sustainability objectives on their annual evaluations which include targets for emission reduction in our supply chain (i.e. Project Gigaton) and increasing transparency and trust by integrating environmental criteria into the purchasing decisions of our buyers and customers. They are held accountable for supporting progress on these targets and initiatives within their areas of the business as part of their annual evaluation and compensation.

Who is entitled to benefit from these incentives?
Business unit manager
Other, please specify (Multiple sustainability objectives, including energy efficiency and renewable energy targets.)

**Comment**
Leaders of our real estate and operations divisions in each of our global markets are responsible for managing energy efficiency, renewable energy initiatives, waste diversion and associated greenhouse gas emissions performance through their influence on the design, construction, maintenance, monitoring, and operations related teams.

**Who is entitled to benefit from these incentives?**
Buyers/purchasers

**Types of incentives**
Monetary reward

**Activity incentivized**
Environmental criteria included in purchases

**Comment**
Buyers in the U.S. and leaders within our global sourcing network have sustainability objectives on their evaluations to encourage them to work with our suppliers to drive improvements in the supply chains of the products that we purchase. Merchants and other supporting teams are also recognized for their achievements through office displays and during sustainability and business meetings.

**Who is entitled to benefit from these incentives?**
Energy manager

**Types of incentives**
Monetary reward

**Activity incentivized**
Energy reduction target

**Comment**
Designated associates in each of our global markets have responsibility for measurement, management, and reduction of energy consumption and associated greenhouse gas emissions through design, construction, maintenance, monitoring, and operations. The individuals that bear direct responsibility for accomplishment of these functions are held accountable for progress on our greenhouse gas goals.

**Who is entitled to benefit from these incentives?**
Environment/Sustainability manager

**Types of incentives**

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Other, please specify (Emissions reduction target, efficiency target, supply chain engagement.)

Comment
Designated associates in each of our global markets have responsibility for measurement, management, and reduction of energy consumption and associated greenhouse gas emissions through design, construction, maintenance, monitoring, and operations. The individuals that bear direct responsibility for accomplishment of these functions are held accountable for progress on our greenhouse gas goals.

Who is entitled to benefit from these incentives?
Management group

Types of incentives
Monetary reward

Activity incentivized
Energy reduction target

Comment
Walmart provides indirect financial incentives and direct motivation for energy management at the store level. Store managers in every global market are responsible for their individual P&Ls, which often include utility costs. Because their incentives are based on P&L performance, they have a monetary incentive to reduce energy use, and therefore, associated greenhouse gases. A prime example of the focus on energy use is in Walmart’s United Kingdom subsidiary, ASDA. The energy management team has deployed a dashboard to all retail locations and established an energy champion at each site to monitor energy consumption. As a result, the local store managers have the tools needed, as well as the incentive, to reduce energy use. Those savings directly affect the company’s financial performance, and therefore, the incentives paid to our management teams.

Who is entitled to benefit from these incentives?
Other, please specify

Types of incentives
Recognition (non-monetary)

Activity incentivized
Environmental criteria included in purchases

Comment
We engage our direct suppliers on GHG emissions and climate change in a number of ways, including meetings, written correspondence and questionnaires, collaboration projects, participation in industry association working groups and supplier summit meetings. In 2012, Walmart began asking suppliers to use the Sustainability Index. Walmart analyzes the Index
Recognition takes many forms including highlighting leading suppliers with sustainability awards during summits, offering speaking opportunities during Walmart sustainability meetings and featuring supplier stories on our website and in other communications. A recent example of our work with suppliers was the launch of Project Gigaton in 2017. Project Gigaton is a new supplier engagement platform designed to catalyze and recognize emissions reductions across global value chains. Since its launch two years ago, over 1,000 Walmart suppliers from 40 countries have signed up to participate in Project Gigaton and reported cumulative avoided emissions of over 93 million metric tons of GHG emissions (calculated in accordance with Walmart’s Project Gigaton Methodology). For suppliers who are participating in Project Gigaton and setting SMART goals, we recognize their leadership on our Project Gigaton website publicly. In addition, we provide supplier awards, access to leadership and recognition through our ‘Giga Guru’ program. This year we introduced financial incentives for Giga Guru suppliers through reduced trade financing provided by HSBC as a part of their sustainable supply chain finance program.

### C2. Risks and opportunities

#### C2.1

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

<table>
<thead>
<tr>
<th></th>
<th>From (years)</th>
<th>To (years)</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Short-term</td>
<td>0</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Medium-term</td>
<td>3</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Long-term</td>
<td>10</td>
<td>30</td>
<td></td>
</tr>
</tbody>
</table>

#### C2.2

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

Integrated into multi-disciplinary company-wide risk identification, assessment, and management processes.
C2.2a

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

<table>
<thead>
<tr>
<th>Frequency of monitoring</th>
<th>How far into the future are risks considered?</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Row 1</td>
<td>Six-monthly or more frequently</td>
<td>&gt;6 years</td>
</tr>
</tbody>
</table>

C2.2b

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

Climate issues are addressed within the company's risk management processes at several levels.

First, at an enterprise level, on an annual basis, the company’s Ethics and Compliance and Corporate Strategy teams conducts an enterprise risk assessment that considers strategic, reputational, financial and regulatory and compliance risks. The assessment receives input from various Segment and Functional teams in the business (e.g., Sourcing, Corporate Affairs and Technology).

As part of these assessments, we consider climate and other environmental issues. The results of these assessment are shared with the senior management’s Ethics, Compliance and Risk Committee (ECRC) and with the Walmart board, and issues are prioritized for management action (see below).

Second, individual business segments and functions also assess climate-related issues as part of developing their annual strategic and operating plans. For example, the Real Estate team considers implications of storm intensity and temperature changes on strategies to enhance the resilience and energy efficiency of facilities. The Produce team considers the impact of drought on sourcing strategies and technology innovation. These and other functions (for example, Walmart’s Emergency Operations Center) also continuously monitor near-term
field associates, industry contacts, consulting firms, government and non-government organizations, news agencies, trade organizations, legislators and the investment and financial community.

Third, the Sustainability team conducts a periodic sustainability stakeholder materiality review which helps Walmart prioritize opportunities as well as risks for the company to pursue at both the enterprise and segment and function level. Our first formal materiality review was completed in 2014. This review included discussions with our major institutional investors, listening tours and engagement surveys of thousands of Walmart associates from frontline to the C-suite, surveys of over 2,000 customers and interviews with 50 leaders of grassroots organizations and international NGOs, sustainability reviews with our top 20 suppliers and a literature review. It confirmed a broadening of priorities that Walmart had already begun to more strongly emphasize issues affecting people – including climate change. We validated and further refined our sustainability agenda in 2016, including an ambitious emissions reduction plan that was approved by the Science-based Target initiative making Walmart the first North American and global retailer to achieve such recognition. This target was a direct result of our ongoing climate-related risk assessments and how our processes have influenced our business strategy.

Over the past decade Walmart has periodically engaged outside experts to analyze physical and transitional risks over long-term horizons; in 2017 we conducted our first formal climate risk assessment. This assessment was conducted by an independent third-party consultant and aimed to align with the scenario guidance set forth by the Task Force on Climate-related Financial Disclosures (TCFD). This assessment included analysis of climate-related physical hazards and transition risk sensitivity analysis (e.g., IEA 450) under multiple climate change scenarios (e.g., RSP 8.5 and 2.6) over multiple time horizons (2030 and 2050). The objective was to understand the order of magnitude of potential impacts and resulting financial exposure that these climate-related issues could have over the long-term. The assessment and conclusions were developed and discussed with the company executive management and divisional management responsible for relevant aspects of Walmart’s business strategy and team, by our Chief Sustainability Officer. We shared the findings and recommendations with management’s Ethics, Compliance and Risk Committee (ECRC) and with the Walmart board of director’s Nominating and Governance Committee.

Definition of material and substantive impact: For the purposes of evaluating our mitigation plans associated with climate risk for the CDP survey, what constitutes material impact, also referred to as substantive impact, can depend on several factors. In the context of climate-related financial risk, we consider a risk material if it poses immediate or near-term financial impact to Walmart or to Walmart’s stakeholders. Determination of materiality requires a thorough and continuous assessment of a variety of factors in the business environment and in the company’s financial, operational, legal, and reputational objectives. The level of materiality is determined based on the size of the reported impact, the frequencies of occurrence, and the nature of the risk (e.g., liquidity, solvency, earnings, strategic).
expected time horizon it will likely occur, the range of uncertainty in its magnitude, the likelihood of occurrence and our ability to mitigate the risk.

**C2.2c**

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

<table>
<thead>
<tr>
<th>Risk Type</th>
<th>Relevance &amp; Inclusion</th>
<th>Please Explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current regulation</td>
<td>Relevant, always included</td>
<td>Current regulation often affects costs in our operations and value chain. For example, reviewing current carbon pricing mechanisms (e.g. carbon taxes, tariffs and cap-and-trade schemes) in the markets where we operate is important to understand our current exposure and plan strategies in the near-term to reduce risk or capitalize on opportunities. These regulatory risks are monetized and included in the company's climate-related transition risks assessments.</td>
</tr>
<tr>
<td>Emerging regulation</td>
<td>Relevant, always included</td>
<td>We follow emerging regulations at the international, federal, state and even city level to understand the possible future implications for our costs and ability to operate. For example, we incorporate the expected future price of carbon in future regulatory scenarios, each with different implications for costs and return on investment. These emerging regulatory risks are monetized included in the company's climate-related transition risks assessments using a best to worst case range of regulation scenarios.</td>
</tr>
<tr>
<td>Technology</td>
<td>Relevant, sometimes included</td>
<td>Technology risks are an important consideration in how we determine our ability to manage costs and emissions in our operations and value chain. One example of how we incorporate technology into assessments is by modeling the emissions emitted and or avoided by choosing different new assets and retrofits of current assets (e.g., evaluation and testing of electric vehicles and electric charging infrastructure within our transport fleet).</td>
</tr>
<tr>
<td>Legal</td>
<td>Relevant, always included</td>
<td>Legal risk can often affect costs in our operations and value chain. Walmart monitors and assesses regulations and legal risks on an ongoing basis. As a global company, legal teams within and across markets follow emerging issues, addressing implications for Walmart and in some cases for our supply chains. These legal risks, when possible, are included in the company's climate-related risks assessments.</td>
</tr>
<tr>
<td>Market</td>
<td>Relevant, always included</td>
<td>Understanding market trends (for example, the potential evolution of the China energy market) helps us assess markets cost exposure and make more informed decisions for long-term renewable energy contracts and capital investments. We work with consulting and market analysts to understand relevant trends and add data into scenario analysis. These market risks are monetized and included in the company's climate-related transition risks assessments.</td>
</tr>
<tr>
<td>Relevance &amp; inclusion</td>
<td>Please explain</td>
<td></td>
</tr>
<tr>
<td>----------------------</td>
<td>----------------</td>
<td></td>
</tr>
<tr>
<td>Reputation</td>
<td>Reputation is an important consideration for any consumer-facing company. Our corporate affairs teams continuously monitor reputational risks and opportunities. We take stakeholder perspectives (e.g., views of our customers, investors, associates) into account when developing our approach to climate issues. In general, we find most stakeholders support climate action, while they have mixed feelings about specific proposals related to carbon pricing.</td>
<td></td>
</tr>
<tr>
<td>Acute physical</td>
<td>We consider acute physical risks, such as those caused by severe weather events (e.g., hurricanes, tornadoes, and floods) in our assessments as they can pose a threat to our assets and supply chain. Potential impact of physical risks can include costs of maintenance and repair of damaged buildings, loss of sales from store closures, inventory loss from damage and spoiled food during power outages, and increased transportation costs to meet store needs during storms. To the extent possible we track the damages caused by such events each year and incorporate findings into future scenario planning. Acute physical risks and their financial impact are included in the company's climate-related risks assessments.</td>
<td></td>
</tr>
<tr>
<td>Chronic physical</td>
<td>Our climate effects assessment includes chronic physical risks such as temperature changes due to climate change. For example, the gradual increase or decrease in temperature could affect our energy costs by requiring our air conditioning and refrigeration systems to work harder or longer – using more energy to maintain comfortable temperatures in our facilities. Chronic physical risks and their estimated financial impact are included in the company's climate-related risks assessments.</td>
<td></td>
</tr>
<tr>
<td>Upstream</td>
<td>The upstream surety of supply is critical for any retailer and so we do assess the potential impact climate-related issues could have on our suppliers and distribution routes. For example, severe weather events can devastate agricultural production and stop manufacturing or delay transportation of products. Transition risks from regulations and carbon pricing mechanisms are also things that are considered upstream risks. These supply risks are included in the company's climate-related physical and transition risks assessments.</td>
<td></td>
</tr>
<tr>
<td>Downstream</td>
<td>Downstream risks are sometimes included in our assessments. These could include our ability to transact with our customers due to either our inability to deliver to their homes or for them to come to us. This could also include the changing economic situation of our customers following acute or chronic physical or transition risks impacting them. For instance, customers being left without power or income after severe storms or longer-term threats of sea level rising and forcing our customers to relocate or suffer property loss.</td>
<td></td>
</tr>
</tbody>
</table>

**C2.2d**

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

**Enterprise level:**

At the enterprise level, the company conducts an annual enterprise risk assessment that considers strategic and operational risks to date. On a more continual basis, other types of risks including reputational, regulatory and compliance risks are assessed within the

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Ethics, Compliance and Risk Committee (ECRC) and/or the Walmart board. Enterprise-level climate-related risks to date have not arisen from this process; however, the company does have enterprise-level goals, approved by the Executive Committee and overseen by the board, related to emissions and energy. These include Walmart’s aspirational goal to be supplied 100% by renewable energy and our science-based target to reduce absolute Scope 1 and 2 emissions by 18% by 2025 and 1 billion metric tons from global value chains by 2030. Walmart business teams, within Real Estate for example, have been tasked with carrying out these directives related to our own operational footprint. We also have established enterprise-level policy councils that monitor and address emerging policy and regulatory issues and transition risks related to climate as described in detail in the case study below.

Segment and function level:

At the segment and function level, segments and functions pursue initiatives to manage risks and capture opportunities, including climate-related, in their three-year and annual operating plans. These initiatives are cascaded down through the organization through team goals and individual performance goals and evaluations and day-to-day operations management processes. For instance, Walmart’s Emergency Operations Center (EOC) monitors minute-by-minute and seasonal weather forecasts and other natural phenomena that could impact operations and supply lines. The EOC helps our store managers, distribution centers and Logistics Division minimize the effects on operations in the face of these unexpected near-term physical hazards (e.g., hurricanes, floods). Similarly, our apparel merchants use predictive weather data to manage and adjust product assortment, replenishment rates in response to climate-related phenomena and our Food Sourcing teams manage commodity supply continuity risks (e.g., droughts and changes in temperatures) using a combination of technology innovation and sourcing diversification.

Asset level:

At the asset level, a variety of specialists focus on managing specific impact areas, such as facility energy consumption, transportation routing of commodities and products and local regulatory and physical risks for selected asset types or regions. Assets are generally managed centrally in each market, which allows specialists to prioritize risk areas.

Criteria for prioritizing:

Risks are generally prioritized based on the immediacy of the risk and the potential impact to business, including financial, reputational and social impacts. The company does this through a combination

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years into the future, but that does not currently impact our facilities, is monitored but does not necessarily drive short-term actions.

Case study for transition risk:

While climate-related policies such as carbon taxes, cap-and-trade carbon markets and incentives for renewable energy policy can generally speed the transition to a low-carbon economy, such policies can raise transition risks. Walmart has established policy councils to assess potential new legislation/regulations and commitments within and across key markets. The policy councils include internal stakeholders from various parts of the organization (e.g., Government Affairs, Legal, Real Estate, Communications, Compliance). For example, the Energy and Environment Policy Council (EEPC) is tasked with evaluating climate-related market policies. Individual policies can impact different areas of the business or value chain differently (e.g., carbon tax). Over the past couple of years, this approach was used to evaluate the Clean Power Plan, the Paris Agreement and a number of proposed state and federal carbon pricing policies in the U.S.

Case study for physical risk at the asset level:

The droughts across South Africa’s East and Western Cape have highlighted the need in some regions for us to strengthen water resilience. We are independently tracking water resources in these catchments and have taken the decision to initiate added water saving measures, including discontinuing all non-critical water use; investing in atmospheric water generating units and transitioning to waterless cleaning and sanitation alternatives where appropriate.

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?

No

C2.3b

(C2.3b) Why do you not consider your organization to be exposed to climate-related risks with
<table>
<thead>
<tr>
<th>Primary reason</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risks exist, but none with potential to have a substantive financial or strategic impact on business</td>
<td>In 2017 we conducted our first formal climate risk assessment and aimed to align with the scenario guidance set forth by the Task Force on Climate-related Financial Disclosures (TCFD). The objective was to understand the order of magnitude of potential impacts and resulting financial exposure that these climate-related issues could have over the long-term. Walmart’s climate-risk assessment suggested that in the long term (2030, 2050), the company faces multiple physical and transition risks such as increased days requiring heating and cooling of facilities, commodity shortages due to drought, facilities damage due to more intense weather events and rising carbon taxes. These risks are not unique to Walmart but would affect most food and general merchandise retailers around the world. While these risks are relevant to the business and substantive for individual teams (e.g., the risk of drought is relevant for the Produce Sourcing team), none of the risks is financially material at the aggregate level for Walmart because of our scale and scope (in the range of $500 billion in revenue across 27 countries and hundreds of product categories). It is also difficult to project the ultimate consequences of specific climate risks (such as impact of drought on availability of lettuce or corn) considering potential second- and third-order effects (e.g., drought may affect commodity pricing as well as shortages, and/or it could result in demand substitution that reduces impact of shortages), preventive and mitigating measures taken by Walmart and many other stakeholders in the system (e.g., shifting production to other regions; implementing water-saving technology), and offsets from positive impacts elsewhere in the system (e.g., increased production of crops in regions with more water). One example of how specific risks can be relevant to business teams but not &quot;substantive&quot; or financially material at the total company level is the cost of damage from intense storms. During the period from 2004-2012 Walmart U.S. filed insurance claims averaging $20 million per year due to severe weather. Even if this doubled due to increased storm intensity under climate scenarios the cost is likely immaterial to a company the size of Walmart. The same can be said about transition risks. In contrast, companies with only a handful of facilities, could find these to be material impacts.</td>
</tr>
</tbody>
</table>

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?

No

C2.4b

(C2.4b) Why do you not consider your organization to have climate-related opportunities?
<table>
<thead>
<tr>
<th>Primary reason</th>
<th>Please explain</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opportunities exist, but none with potential to have a substantive financial or strategic impact on business</td>
<td>While climate effects may create opportunities for individual business teams in particular regions, we do not anticipate opportunities that could be considered financially material at the aggregate level for Walmart overall. For example, changes in average temperature and precipitation could increase crop yields in particular regions that previously had short growing seasons or limited water resources. These opportunities are not unique to Walmart but would affect most food and general merchandise retailers around the world. While these opportunities are relevant to the business and substantive for individual teams (e.g., the Produce Sourcing team), none of the opportunities is financially material at the aggregate level for Walmart because of our scale and scope (in the range of $500 billion in revenue across dozens of countries and hundreds of product categories). It is also difficult to project the ultimate benefits of specific climate opportunities (such as sales of climate-friendly products) considering potential second- and third-order effects (e.g., customer preferences, supply and demand, competitor actions). Our approach to capturing opportunities resulting from climate effects mirrors our approach to managing risk. We aim to innovate our approaches to sourcing in particular to strengthen the resilience of supply chains with respect to temperature, drought, storm intensity and other factors. Through our sourcing initiatives and our philanthropy, we aim to support farmers in adopting more sustainable farming practices, helping them to increase crop yields, lower costs and improve livelihoods. We also aim through such efforts to improve food security for customers and communities.</td>
</tr>
</tbody>
</table>

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?
Yes, qualitative and quantitative

C3.1c
Walmart serves millions of customers globally by providing convenient access to safe, affordable quality food and consumer products through over 11,300 retail locations under 58 banners in 27 countries through our stores, clubs and ecommerce operations. Our purpose as a company is to save our customers money so that they can live better, and our business strategy focuses on four key priorities: making life easier for busy families; operating with discipline; changing the way we work and being the most trusted retailer. We serve our customers, associates and shareholders in a way that creates value for our business and society. This includes helping customers save money on every day essentials, as well as creating job opportunities for our associates, helping our suppliers grow their business and supporting local communities where we operate. Delivering on our purpose in a way that creates economic opportunity, sustains the environment and strengthens local community not only mitigates risk—it can generate significant, lasting value for our business and for society.

Our journey in Sustainability began over 13 years ago when we recognized that we could leverage our scale, and strengths to help others and drive impact beyond our own operations. At that time, we set out three ambitious goals – to be powered by 100% renewable energy, to create zero waste and to sell products that are good for people and the environment. We have made significant progress against these goals and have learned over the past decade that investing in sustainable practices can strengthen our business, and at the same time create positive environmental outcomes. We have also learned that our customers and stakeholders expect Walmart to use our strengths and assets to make a difference on environmental and social challenges and that these actions in turn help us to build trust.

One of the key elements of our Sustainability strategy since we announced our vision in 2005 has been our efforts to address climate change and we have worked to reduce emissions throughout our operations and global value chains. We have found that our work to reduce emissions in our operations has resulted in cost savings and efficiencies for our business, as well as reducing GHG emissions. In addition, working with our suppliers to reduce emissions in their supply chains has resulted in cost savings for our suppliers, and strengthened surety of supply. Beyond our climate strategy within our sustainability agenda, we are also focused on strengthening communities when they are affected by climate related events such as hurricanes, fires and floods and work globally to enhance disaster response in time of need and improve preparedness.

Building on our focus on climate and long-term goal of 100% renewable energy, in 2016 Walmart became the first retailer to set a science-based emissions target. This includes our

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operations, we have incorporated emissions targets into our strategy in our operating segments and we are measuring our progress to report and drive accountability annually. Programs that we are implementing to ensure we achieve our emissions targets in our operations include investments in energy and fuel efficiency initiatives in our facilities and trucking fleet, improving refrigeration systems, installing onsite solar PV and procuring renewable energy from new offsite projects.

In addition to incorporating climate goals in our operations, Walmart is working across our entire value chain with our suppliers to measure, and to reduce emissions. Walmart launched Project Gigaton in April of 2017 to engage suppliers to commit to emissions reductions across pillars including energy, waste, packaging, deforestation and product use. Collectively, these actions can help us to achieve our science-based emissions target and to reduce or avoid emissions throughout our value chain by 1 billion metric tons by 2030. Since its launch two years ago, over 1,000 Walmart suppliers from 40 countries have signed up to participate in Project Gigaton and reported cumulative avoided emissions of over 93 million metric tons of GHG emissions (calculated in accordance with Walmart’s Project Gigaton Methodology). Additionally, Walmart has been a leader in measurement of supply chain GHG emissions with our suppliers for many years. Walmart implemented the Sustainability Index with our suppliers in 2012 and has also supported CDP supply chain with our top suppliers for more than five years. The annual Sustainability Index supplier survey measures progress by participating suppliers across product categories on relevant environmental KPI’s, including GHG. Walmart analyzes the index reports to help engage suppliers in continuous improvement, targeted sustainability projects and helping drive a more sustainable product portfolio. In FY19 (Feb. 1 – Jan. 31, 2019) we bought 80% of our U.S. goods from suppliers that participate in the Sustainability Index, in categories where the index is available.

Within our business day-to-day, and over the longer term, we monitor impacts related to weather and the changing climate in our operations and supply chains. For example, Walmart is constantly monitoring weather conditions and taking action to ensure that we are prepared for weather related events and risks. These actions include investing in back-up power generation in hurricane and flood prone facilities, working with suppliers to procure consistent product supply for customers in time of disaster, and monitoring transportation routes that may be affected by weather risks. We are also incorporating drought risk and weather conditions into our sourcing and procurement decisions for weather sensitive categories such as produce. In 2017, we also conducted our first long term climate effects risk analysis to better understand the impacts of the changing climate on our operations and supply chains in 2030 and 2050.
In our own operations we have rolled out glass doors for multideck refrigerated cases in several markets including the U.S. which will help mitigate physical and transition risks in our markets. These medium temperature cases used to be open; the doors help maintain cooling in the cases by reducing heat gain by 50-80% (according to the U.S. Department of Energy) causing the cases to run less and using less energy as a result. These investments will be increasingly important as average temperatures and the cost of electricity increases due to climate-related issues.

C3.1d

(C3.1d) Provide details of your organization’s use of climate-related scenario analysis.

<table>
<thead>
<tr>
<th>Climate-related scenarios</th>
<th>Details</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Climate-related scenarios</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>RCP 8.5</td>
<td>In 2017 we conducted our first formal climate risk assessment. As part of the assessment we chose to use Scenario 6 (RCP8.5) from the IPCC Representative Concentration Pathway (RCP) because it is referenced by the TCFD. This scenario is widely accepted as the business-as-usual scenario and it is consistent with a future where no policy changes have been implemented to reduce emissions. This scenario is characterized by increasing GHG emissions leading to high atmospheric concentrations of greenhouse gases and resulting in a global temperature increase of less than 4oC by 2100 according to the IPCC. Inputs: Revenue, category mix, location of assets, energy consumption, commodity sourcing regions and direct import regions and volumes. Assumptions: The analysis was limited to four primary physical hazards based on which hazards could potentially have the greatest impact to our operations and value chains – temperature change, extreme weather events, drought and water stress and sea level rise. The areas of the company considered for this scenario include: Walmart retail operations, direct imports and food (five commodities – bananas, corn, lettuce, tomatoes and wheat) and non-food categories (cotton). Analytical Methods: Temperature – For temperature impacts on energy expenses we used historical annual energy costs per format by state and non-U.S. countries, and applied the percentage increase in energy cost as determined by the heating and cooling days analysis, assuming a 1 to 1 relationship between change heating and cooling days and energy expenses. Extreme Weather Events – For extreme weather impacts on operations we assessed the projections of the annual probability of occurrence for Cat 1 to 5 hurricanes and extreme gale force winds for 32 extreme weather regions covering the seven major global hurricane basins and tornado valley in the U.S. Drought and water stress – Similar approaches were used to evaluate drought and water stress impacts on direct imports, food and non-food categories and pre-tax earnings were completed. An overlay of WRI’s Aqueduct Water Stress projections and crop production areas and yields from EarthStat was performed. Sea Level Rise – Projections of sea level rise for the 2030s and 2050s were extracted from the NOAA sea level rise viewer. A proximity search of assets within a 2 mile radius was performed to identify potential vulnerable assets. Descriptions of the time horizons: The scenario analysis was run for two time horizons 2030 and 2050. These time horizons were chosen to be consistent with the climate model data sets and to make results comparable with other analysis. Summary of Results and Outcomes: This analysis helped to confirm what we already knew from previous investigations and validated our current business strategies and initiatives around energy demand, commodity sourcing, value chain innovation, water management and resilience. This analysis was based on the latest climate model datasets and was intended to provide directional insights regarding future long-term climate conditions and implications for business operations. Based on these data sets, the physical hazards analysis concluded that none of the individual impacts were material for Walmart in aggregate in 2030 and 2050. Case examples: Two examples help highlight how initiatives Walmart already has underway are positively influencing this analysis and are reflected in Walmart’s execution and business strategy. First, in our own operations we have rolled out glass doors for multi-deck refrigerated cases in several markets including the U.S. These medium temperature cases used to be open; the doors help maintain cooling in the cases by reducing heat gain. Second, in the value chain we established a process to track and report continuous improvement across environmental KPIs for 20 key agricultural commodities (e.g. tomatoes, corn, bananas, coffee, grapes etc.) by 2025.</td>
</tr>
<tr>
<td>Climate-related scenarios</td>
<td>Details</td>
</tr>
<tr>
<td>--------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>RCP 2.6</td>
<td>In 2017 we conducted our first formal climate risk assessment. This assessment included the IPCC Representative Concentration Pathway Scenarios 2.6 (RCP 2.6) which is in line with the Paris Agreement’s stated 2°C limit/1.5°C aim. This RCP is consistent with ambitious reduction of GHG emissions, which would peak around 2020, then decline on a linear path and become net negative before 2100. The scenario refers to for TCFD analysis and aligns with the IEA 450 Transition Scenario described below. Of the two climate change scenarios that we employed, physical hazard analysis represented the “best-case” scenario as the physical risks were less than RCP 8.5. Inputs: Revenue, category mix, location of assets, energy consumption, commodity sourcing regions and direct import regions and volumes. Assumptions: The analysis was limited to four primary physical hazards based on which hazards could potentially have the greatest impact to our operations and value chains – temperature change, extreme weather events, drought and water stress and sea level rise. The areas of the company considered for this scenario include: Walmart Retail Operations, Direct Imports and Food (five commodities – bananas, corn, lettuce, tomatoes and wheat) and non-food categories (cotton). Analytical Methods: Temperature – For temperature impacts on energy expenses we used historical annual energy costs per format by state and non-U.S. countries, and applied the percentage increase in energy cost as determined by the heating and cooling days analysis, assuming a 1 to 1 relationship between change heating and cooling days and energy expenses. Extreme Weather Events – For extreme weather impacts on operations we assessed the projections of the annual probability of occurrence for Cat 1 to 5 hurricanes and extreme gale force winds for 32 extreme weather regions covering the seven major global hurricane basins and tornado valley in the U.S. Drought and water stress – Similar approaches were used to evaluate drought and water stress impacts on direct imports, food and non-food categories and pre-tax earnings were completed. An overlay of WRI’s Aqueduct Water Stress projections and crop production areas and yields from EarthStat was performed. Sea Level Rise – Projections of sea level rise for the 2030s and 2050s were extracted from the NOAA sea level rise viewer. A proximity search of assets within a 2 mile radius was performed to identify potential vulnerable assets. Descriptions of the time horizons: The scenario analysis was run for two time horizons 2030 and 2050. These time horizons were chosen to be consistent with the climate model data sets and to make results comparable with other analysis. Summary of Results and Outcomes – This analysis helped to confirm what we already knew from previous investigations and validated our current business strategies and initiatives around energy demand, commodity sourcing, value chain innovation, water management and resilience. This analysis was based on the latest climate model datasets and was intended to provide directional insights regarding future long-term climate conditions and implications for business operations. Based on these data sets, the physical hazards analysis concluded that none of the individual impacts were material for Walmart in aggregate 2030 and 2050. Case examples: Two examples help highlight how initiatives Walmart already has underway are positively influencing this analysis and are reflected in Walmart’s execution and business strategy. First, in our own operations we have rolled out glass doors for multi-deck refrigerated cases in several markets including the U.S. These medium temperature cases used to be open; the doors help maintain cooling in the cases by reducing heat gain. Second, in the value chain we established a process to track and report continuous improvement across environmental KPI’s for 20 key agricultural commodities (e.g. tomatoes, corn, bananas, coffee, grapes etc.) by 2025.</td>
</tr>
<tr>
<td>Climate-related scenarios</td>
<td>Details</td>
</tr>
<tr>
<td>---------------------------</td>
<td>---------</td>
</tr>
<tr>
<td>IEA 450</td>
<td>In 2017 we conducted our first formal climate risk assessment. This assessment was conducted by an independent third-party consultant and aimed to align with the scenario guidance set forth by the TCFD. This assessment included the IEA WEO 450ppm Scenario (projected to limit warming to 2°C). We used the International Energy Agency (IEA)'s World Energy Outlook (WE0) 450ppm Scenario (IEA450) as a scenario to understand transition risk. This scenario was identified and selected to be used to identify transition risks because it represented the most aggressive global response to climate action. The WEO IEA 450 Scenario has become a widely-recognized benchmark for climate action and referred to for scenario analysis for TCFD. Inputs: Revenue, category mix, commodity sourcing regions, location of assets, direct import volumes, annual GHG emissions (Scopes 1, 2 and 3), energy consumption by type and corporate emission reduction targets. Assumptions: The transition impact analysis was limited to regulatory carbon pricing schemes and did not include energy price impacts out to the time horizons. Carbon price impacts related to Scope 3 emissions from purchased goods and services reflected the top-10 import countries by volume and on available CDP data for selected suppliers. Scope 3 emissions data collected from CDP supply chain questionnaire represents suppliers with 40 percent of Walmart’s total sales. CDP total emissions and revenue data for Walmart suppliers (17% of total sales) were used to estimate Walmart Scope 3 emissions based on relevant sales data. Analytical methods: The carbon price analysis evaluated a combination of scenarios considering the change in Walmart’s emissions profile, projection in regulatory carbon price and regulatory constraint of the electricity markets in emerging markets, such as China. The carbon price beyond 2017 considers the new policies scenario and 450 scenarios outlined in the International Energy Agency (IEA) World Energy Outlook 2016. The Impacts of a Global Carbon Price on Consumption and Value Creation report by the Carbon Pricing Unlocked partnership studied how carbon pricing affects global value chains by consumption categories. This was used to evaluate the likelihood of carbon price pass through from Walmart’s suppliers based on the supplier’s business activity group and relevant consumption categories. Descriptions of the time horizons: The scenario analysis was run for two time horizons 2030 and 2050. These time horizons were chosen to be consistent with the climate model data sets and to make results comparable with other analysis. Summary of Results: While this analysis was based on the latest publicly available carbon pricing datasets, there is enough uncertainty that we have assumed the results provide broad directional insights rather than point-estimate predictions of the future. The analysis suggests that increased global regulations related to carbon tax, cap-and-trade regimes and GHG emissions limits could impact Walmart’s operating expenses (however, not likely to be material at the aggregate level). Implications for Business Strategy: This outcome further validates the company’s business strategy to manage its own emissions and work with suppliers to manage and reduce their emissions. These strategies are not only good for mitigating climate change but are important to avoiding costs in the future. Case example: For example, in 2012, Walmart set out to reduce energy use intensity per square foot by 20 percent for its stores, clubs and distributions centers. This was in anticipation of likely increases in energy costs, in part due to carbon price increases in many markets. Five years after setting this target and through the investment in energy-efficient technologies and practices, Walmart has reduced its energy intensity by 13% as of 2017 (compared to 2010). This reduction represents hundreds of millions of dollars a year in avoided costs to the bottom line.</td>
</tr>
</tbody>
</table>
In 2017 we conducted our first formal climate risk assessment. This assessment was conducted by an independent third-party consultant and aimed to align with the scenario guidance of the TCFD. This assessment included the EA WEO New Policies Scenario (projected to generate warming of 4°C). The New Policies scenario accounts for policy commitments and plans announced by countries under the Paris Agreement. It considers national commitments related to GHG emissions reductions and plans related to fossil fuel policies scheduled to be implemented. This is considered as the baseline scenario for the International Energy Agency (IEA) World Energy Outlook (WEO) and referred to for scenario analysis for TCFD.

Inputs:
- Revenue, category mix, commodity sourcing regions, location of assets, direct import volumes, annual GHG emissions (Scopes 1, 2 and 3), energy consumption by type and corporate emission reduction targets.
- Assumptions: The transition impact analysis was limited to regulatory carbon pricing schemes and did not include energy price impacts out to the time horizons. Carbon price impacts related to Scope 3 emissions from purchased goods and services reflected the top-10 import countries by volume and on available CDP data for selected suppliers. Scope 3 emissions data collected from CDP supply chain questionnaire represents suppliers with 40 percent of Walmart’s total sales. CDP total emissions and revenue data for Walmart suppliers (17% of total sales) were used to estimate Walmart Scope 3 emissions based on relevant sales data.
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Summary of Results: While this analysis was based on the latest publicly available carbon pricing datasets, there is enough uncertainty that we have assumed the results provide broad directional insights rather than point-estimate predictions of the future. The analysis suggests that increased global regulations related to carbon tax, cap-and-trade regimes and GHG emissions limits could impact Walmart’s operating expenses (however, not likely to be material at the aggregate level).

Implications for Business Strategy: This outcome further validates the company’s business strategy to manage its own emissions and work with suppliers to manage and reduce their emissions. These strategies are not only good for mitigating climate change but are important to avoiding costs in the future. Case example: For example, in 2012, Walmart set out to reduce energy use intensity per square foot by 20 percent for its stores, clubs and distribution centers. This was in anticipation of likely increases in energy costs, in part due to carbon price increases in many markets. Five years after setting this target and through the investment in energy-efficient technologies and practices, Walmart has reduced its energy intensity by 13% as of 2017 (compared to 2010). This reduction represents hundreds of millions of dollars a year in avoided costs to the bottom line.

C4. Targets and performance

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

Target reference number
Abs 1

Scope
Scope 1 +2 (market-based)

% emissions in Scope
100

Targeted % reduction from base year
18

Base year
2015

Start year
2016

Base year emissions covered by target (metric tons CC2e)
19629573

Target year
2025

Is this a science-based target?
Yes, this target has been approved as science-based by the Science-Based Targets initiative

% of target achieved
43

Target status
Underway

Please explain
Approved by the Science Based Targets initiative in October and announced publicly in November 2016. Approved goal language is as follows: Walmart commits to reduce its absolute scope 1 and 2 emissions 18% by 2025, from 2015 levels. Walmart will also work to reduce CO2e emissions from upstream and downstream scope 3 sources by one billion metric tons between 2015 and 2030. On an adjusted basis, between 2015 calendar year
reduction would be approximately 8.7% compared to 2015. Several factors contributed to this reduction. These include, but are not limited to, reductions in electricity, refrigerants and transport fuel related emissions as a result of investments in energy efficiency projects, refrigerant management and product distribution strategies.

<table>
<thead>
<tr>
<th>Target reference number</th>
<th>Abs 2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Scope</strong></td>
<td>Scope 3 (upstream &amp; downstream)</td>
</tr>
<tr>
<td><strong>% emissions in Scope</strong></td>
<td>100</td>
</tr>
<tr>
<td><strong>Targeted % reduction from base year</strong></td>
<td>100</td>
</tr>
<tr>
<td><strong>Base year</strong></td>
<td>2015</td>
</tr>
<tr>
<td><strong>Start year</strong></td>
<td>2016</td>
</tr>
<tr>
<td><strong>Base year emissions covered by target (metric tons CO2e)</strong></td>
<td>1000000000</td>
</tr>
<tr>
<td><strong>Target year</strong></td>
<td>2030</td>
</tr>
<tr>
<td><strong>Is this a science-based target?</strong></td>
<td>Yes, this target has been approved as science-based by the Science-Based Targets initiative</td>
</tr>
<tr>
<td><strong>% of target achieved</strong></td>
<td>9.3</td>
</tr>
<tr>
<td><strong>Target status</strong></td>
<td>Underway</td>
</tr>
<tr>
<td><strong>Please explain</strong></td>
<td>Approved by the Science Based Targets initiative in October and announced publicly in November 2016. Approved goal language is as follows: Walmart commits to reduce its absolute scope 1 and 2 emissions 18% by 2025, from 2015 levels. Walmart will also work to reduce CO2e emissions from upstream and downstream scope 3 sources by one billion metric tons between 2015 and 2030. This target is often referred to our Walmart’s Gigaton Goal. Walmart launched Project Gigaton in April of 2017 to engage suppliers to commit to emissions reductions across pillars including energy, waste, packaging, deforestation and product use. Collectively, these actions can help us to achieve our science-based emissions reduction goal.</td>
</tr>
</tbody>
</table>

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have signed up to participate in Project Gigaton and reported cumulative avoided emissions of over 93 million metric tons of GHG emissions (calculated in accordance with Walmart’s Project Gigaton Methodology).

C4.2

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

Target
Renewable electricity consumption

KPI – Metric numerator
kWh of electricity consumed that was generated from renewable sources.

KPI – Metric denominator (intensity targets only)
kWh of electricity consumed annually.

Base year
2015

Start year
2016

Target year
2025

KPI in baseline year
0.25

KPI in target year
0.5

% achieved in reporting year
12

Target Status
Underway

Please explain
This target was announced in November 2016. The target is officially stated as follows: To power half of our operations worldwide with renewable energy by 2025.

Part of emissions target
Is this target part of an overarching initiative?
Other, please specify (Our 100% renewable supply aspiration)

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.

<table>
<thead>
<tr>
<th></th>
<th>Number of initiatives</th>
<th>Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under investigation</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>To be implemented*</td>
<td>11000</td>
<td>3000000</td>
</tr>
<tr>
<td>Implementation commenced*</td>
<td>1000</td>
<td>200000</td>
</tr>
<tr>
<td>Implemented*</td>
<td>2900</td>
<td>573700</td>
</tr>
<tr>
<td>Not to be implemented</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

C4.3b

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

Initiative type
Energy efficiency: Building services

Description of initiative
Lighting

Estimated annual CO2e savings (metric tonnes CO2e)
369500
Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
46000000

Investment required (unit currency – as specified in C0.4)
14000000

Payback period
1-3 years

Estimated lifetime of the initiative
6-10 years

Comment
We completed and commenced implementation of numerous energy efficiency initiatives in the US and internationally as we continue to work to reduce the energy intensity (kWh/sqft) of our facilities worldwide. With over 11,000 stores, clubs and distribution centers operating in 28 countries the amount of diversity of our facilities and level of technology saturation can vary greatly. In 2018 for example we completed Interior LED Lighting (TLED & RLED) upgrades at 1,111 stores.

Initiative type
Energy efficiency: Building services

Description of initiative
Lighting

Estimated annual CO2e savings (metric tonnes CC2e)
94300

Scope
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
9300000

Investment required (unit currency – as specified in C0.4)
28000000

Payback period
1-3 years
Comment
Exterior LED Lighting upgrades completed at 982 stores.

Initiative type
Energy efficiency: Building services

Description of initiative
Lighting

Estimated annual CO2e savings (metric tonnes CO2e)
17900

Scope
Scope 2 (location-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
2600000

Investment required (unit currency – as specified in C0.4)
7800000

Payback period
1-3 years

Estimated lifetime of the initiative
6-10 years

Comment
Refrigerated door case lighting upgrades at 812 stores.

Initiative type
Low-carbon energy installation

Description of initiative
Solar PV

Estimated annual CO2e savings (metric tonnes CO2e)
500

Scope
Scope 2 (market-based)

Voluntary/Mandatory
Voluntary

Comment
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Investment required (unit currency – as specified in C0.4)
1

Payback period
<1 year

Estimated lifetime of the initiative
11-15 years

Comment
At Walmart, we have over 500 renewable energy systems installed in our stores, clubs and distribution centers worldwide. By the end of 2018, Walmart U.S. had 359 onsite solar installations, across 16 States and Puerto Rico, including more than 8 installations completed in 2018. Additionally, in 2018, Walmart Chile completed installation of 12 solar photovoltaic plants across their Express, SBA and Ekono stores in Chile. The majority of these installations are enabled by Walmart engaging with systems developers through Power Purchase Agreements (PPAs). Under this arrangement Walmart does not own the system and therefore there is no direct investment but instead an obligation to purchase the power at an agreed upon rate over the term of the contract. This fits our strategy of procuring renewable energy for prices at or below utility rates and, ultimately, believe our PPAs will make clean, renewable energy more affordable for everyone.

Initiative type
Low-carbon energy purchase

Description of initiative
Wind

Estimated annual CO2e savings (metric tonnes CO2e)
91500

Scope
Scope 2 (market-based)

Voluntary/Mandatory
Voluntary

Annual monetary savings (unit currency – as specified in C0.4)
1

Investment required (unit currency – as specified in C0.4)
1

Payback period
<1 year

Estimated lifetime of the initiative
11-15 years
We purchased 223 GWh of renewable energy and associated green attributes to cover 60% of our Walmart Chile electricity needs in 2018.

C4.3c

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

<table>
<thead>
<tr>
<th>Method</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compliance with regulatory requirements/standards</td>
<td>Regulatory requirements drive investment in emission reduction activities across our operations because we design our business activities to be in compliance with state, local, federal, and international requirements. Various regulations affect fleet services, building design and retrofits, refrigerant management, and other activities in our own operations.</td>
</tr>
<tr>
<td>Dedicated budget for other emissions reduction activities</td>
<td>Our fleet services division also has a dedicated budget to pursue low-emission R&amp;D with OEMs. Walmart invests in the research, development and testing of technologies and equipment that will help improve the fuel economy of our equipment and/or the efficiency of our network that results in fewer loads or less miles. Walmart also regularly provides expertise, guidance and operational test environments to technology and system suppliers to support their development efforts.</td>
</tr>
<tr>
<td>Employee engagement</td>
<td>Employee engagement is critical to engage employees in continued emission reduction activities. For example, in our Mexico, Chile and U.K. operations, we have implemented a program to encourage employee identification of energy-saving opportunities in our stores aimed to ultimately reduce emissions.</td>
</tr>
<tr>
<td>Financial optimization calculations</td>
<td>Financial optimization is a critical part of our efforts to reduce emissions. Within each area of operations, we establish priority of emission-reducing projects based on their financial performance, along with their contribution toward greenhouse gas-related goals. All projects must meet internal rate of return thresholds, and typically we pursue projects that perform best according to internal financial guidelines to achieve optimum performance.</td>
</tr>
<tr>
<td>Internal finance mechanisms</td>
<td>Capital and operating budgets are required for many of our initiatives to reduce energy and greenhouse gas emissions. Financial resources are dedicated to priority initiatives each year based on a review of each project's anticipated financial performance.</td>
</tr>
<tr>
<td>Partnering with governments on technology development</td>
<td>Previous Walmart partnerships and collaborative research investigations with the U.S. Department of Energy (DOE) and U.S. Department of Transportation (DOT) have led to technological developments in the buildings and transportation sector.</td>
</tr>
<tr>
<td>Internal incentives/recognition programs</td>
<td>For suppliers who are participating in Project Gigaton and setting SMART goals, we recognize their leadership on our Project Gigaton website publicly. In addition, we provide supplier awards, access to leadership and recognition through our “Giga Guru” program. This year we introduced financial incentives for Giga Guru suppliers through reduced trade financing provided by HSBC as a part of their sustainable supply chain finance program.</td>
</tr>
</tbody>
</table>

C4.5

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C4.5a

(C4.5a) Provide details of your products and/or services that you classify as low-carbon products or that enable a third party to avoid GHG emissions.

Level of aggregation
Group of products

Description of product/Group of products
LED light bulbs: In 2013, we introduced Great Value™- and GE-brand LED light bulbs, starting at less than $10 for a 60-watt equivalent Great Value™ bulb. These bulbs reduce energy consumption by up to 80 percent over traditional incandescent bulbs, produce great light and last for 22 years. We are not considering generating CERs or ERUs for these avoided emission

Are these low-carbon product(s) or do they enable avoided emissions?
Avoided emissions

Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions
Other, please specify (2012 US DOE LCA of LED Lighting Products)

% revenue from low carbon product(s) in the reporting year
0.01

Comment
Select products sold in our stores globally have allowed our retail customers to reduce their energy use and the resulting greenhouse gases. We have been able to quantify results from a few of these products. We sold over 15 million LED light bulbs in 2018 which equates to more than 12 million MT CO2e of avoided life cycle GHG emissions over the lifetime of the bulbs. Key Assumptions: LED bulbs sold and wattage of each bulb (1-40 Watts), average life cycle lumen hours (20 million lumen hours), GHG savings factor for LEDs against baseline incandescent bulbs (0.78 MTCO2e/20 million lumen hours).

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

Scope 1

Base year start
January 1 2005

Base year end
December 31 2005

Base year emissions (metric tons CO2e)
5584171

Comment

Scope 2 (location-based)

Base year start
January 1 2005

Base year end
December 31 2005

Base year emissions (metric tons CO2e)
14194178

Comment

Scope 2 (market-based)

Base year start
January 1 2005

Base year end
December 31 2005

Base year emissions (metric tons CO2e)
14194178

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}
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)
6101641

Start date
January 1 2018

End date
December 31 2018

Comment

C6.2

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

Row 1

Scope 2, location-based
We are reporting a Scope 2, location-based figure

Scope 2, market-based
We are reporting a Scope 2, market-based figure

Comment

C6.3

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

Reporting year

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Scope 2, market-based (if applicable)
12022083

Start date
January 1 2018

End date
December 31 2018

Comment

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
Various eCommerce initiatives.

Relevance of Scope 1 emissions from this source
Emissions excluded due to recent acquisition

Relevance of location-based Scope 2 emissions from this source
Emissions excluded due to recent acquisition

Relevance of market-based Scope 2 emissions from this source (if applicable)
Emissions excluded due to recent acquisition

Explain why this source is excluded
In recent years, Walmart Inc. has expanded its eCommerce capabilities through various eCommerce acquisitions, strategic alliances and marketplaces (e.g., Jet.com, Moosejaw, ModCloth, Flipkart, etc.). These initiatives will fall into our reporting boundary but are being excluded from emissions numbers until we have complete information to report.
C6.5

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

Purchased goods and services

Evaluation status
Relevant, calculated

Metric tonnes CO2e
143267842

Emissions calculation methodology
Walmart estimated a portion of its scope 3 emissions from purchased goods and services using the carbon emissions allocated to it through the CDP Supply Chain program. In 2018, Walmart invited over 1,100 suppliers to participate in the program. Of these companies, 587 completed some portion of the supply chain survey and 262 companies allocated emissions to Walmart in their response. These 262 suppliers collectively allocated 81.8 million metric tons of their Scope 1 emissions, 9.9 million metric tons of their Scope 2 emissions and 51.6 million metric tons of their Scope 3 emissions to Walmart through the CDP Supply Chain program in 2018. Combined these emissions total 143,267,842 in 2018. Walmart understands this is supplier self-reported data and there is high degree of uncertainty when allocating emissions to other companies. We also recognize that these 262 companies and their allocated emissions only represent a fraction of Walmart's total scope 3 emissions from purchased goods and services.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
100

Explanation

Capital goods

Evaluation status
Not relevant, calculated

Metric tonnes CO2e
645328

Emissions calculation methodology
Walmart calculated the emission from all newly constructed buildings in 2016 globally and from vehicles sourced for use in the US in 2016 for this category. Specific data on the new buildings and vehicles are shown below.
then multiplied times the total square footage to get emissions in 2016. Specific data for the number of vehicles purchased was obtained from Walmart’s fleet management team. This includes number of tractors, trucks, vans and trailers (refrigerated and dry). Each transportation equipment was calculated using Ecoinvent which includes specific life cycle emission factors for each equipment type. This was then multiplied by the number of equipment purchases per type.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Explanation

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

Evaluation status
Relevant, calculated

Metric tonnes CO2e
3327874

Emissions calculation methodology
We estimated the upstream emissions associated with Walmart’s total fuel and energy related activities in 2018. We calculated these by multiplying the total electricity and fuel consumption totals by the relevant emission factors for well-to-tank (WTT) and transmission and distribution (T&D) for each fuel type and country in which the electricity was consumed. We used DEFRA’s 2018 GHG Conversion Factors for Company Reporting which can be found on their public website. (https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2018).

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Explanation
Walmart’s energy spend is less than 5% of our total operating costs. While we are focused on sourcing our energy from renewable energy, we do not have any control over transmission and distribution losses from energy or the energy production itself. Our strategy is to reduce our demand on energy and on fossil fuels.

Upstream transportation and distribution

Evaluation status
Not relevant, calculated

Metric tonnes CO2e
342577
Walmart was able to estimate the emissions from our third party logistics coordinators in some of our markets using EPA emission factors for fuels in 2015. We were able to collect gallons of fuel used and fuel type to calculate the total emissions from fuels. Data was disaggregated into Road Freight, Air Freight and Sea Freight. For all sea freight consignments, the average container vessel size was 4000 TEU, and so the emission factor for container vessel between 3000 - 4999 TEU was used. For all local land (road) freight it was stated that all transportation used articulated trucks between 7.5 - 30 tonnes in size and so the emission factor for a 3.5 - 33 tonne articulated truck was used for all emissions. The tonne.km method of emissions estimation was used for all three freight modes of travel.

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

100

**Explaination**

**Waste generated in operations**

**Evaluation status**

Not relevant, calculated

**Metric tonnes CO2e**

968265

**Emissions calculation methodology**

To estimate the emissions from waste generated in our U.S.-based operations Walmart used the waste-type-specific method described in WRI’s Technical Guidance for Calculating Scope 3 Emissions (p77). Walmart currently inventories data on all of its waste streams from its operations in the U.S. In 2018, Walmart’s comprehensive waste diversion programs it was able to divert 81.7% of the millions of tons of waste that was generated in its operations in the U.S. This means that majority of this material is donated or recycled. We used the U.S. EPA’s Waste Reduction Model (WARM) emission factors and proxy materials methodology to estimate emissions for both the waste that ended up in landfills (968,265 mtCO2e – on 0.1% increase since last year) and the diverted waste that was recycled/repurposed (net storage of 11,168,445 mtCO2e, a 6.5% increase from previous year). These combined provide the total emissions from waste generated in all facilities in the US to be a net storage of 10,323,704 mt CO2e, a 7.0 percent increase from 2017. The WARM emission factors are based on material specific life-cycle studies and assume national average landfill operational characteristics (i.e. no gas capture, gas flaring, or waste to energy). The emission factors also account for the emissions from transportation vehicles and equipment to move the waste to landfills or recycling processing centers. The emission factors, provided in terms of MtCO2e per short ton, are as follows: Aluminum Cans = 0.04, Steel Cans = 0.04, Glass = 0.04, Corrugated Box = -0.05, Dimensional Lumber = -0.73, Fiberboard = -0.73, Food Waste = 0.69, Mixed Paper Board = -0.07, Mixed Paper – Office = 0.06, Mixed Metals = 0.04, Mixed Plastics = 0.04, Mixed Recyclables = -0.13 Mixed Organics = 0.28, Mixed MSW = 0.98, PCs = 0.04, Post-consumer Paper = 0.10, Pre-consumer Paper = -0.22, Recycled Paper = 0.25, Retail = 0.15, Spent/Well Drilling Fluids = -0.07, Stereotypes = 0.60. We use cookies to improve your experience on our site. By continuing to use our site you accept our use of cookies. Please see our [Cookie Policy](#) and [Privacy Policy](#) for details.
Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Explanation

Business travel

Evaluation status
Not relevant, calculated

Metric tonnes CO2e
76296

Emissions calculation methodology
We calculated corporate business travel emissions from airline and rail travel data. All flight and rail miles data are provided by Walmart’s corporate travel agent. These data represent global trips booked through the travel agency and are pre-aggregated by the travel agent based on flight lengths. The short, medium and long haul emissions factors— from the U.K.’s DEFRA reference source—are applied respectively to each data point to calculate emissions from Walmart employee business travel.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
100

Explanation

Employee commuting

Evaluation status
Not relevant, calculated

Metric tonnes CO2e
3500000

Emissions calculation methodology
We calculated employee commuting emissions for US and international employees using the average-data method guidance from the GHG Protocol. Specific company data was unavailable for this calculation, and so secondary data was obtained for the average daily commuting distances of employees, average modes of transport, and average number of commuting days per week and average number of weeks worked per year. Assumptions were required to simplify this data and make it most applicable to the entity, which does add some uncertainty to the emissions estimates. The general calculation applied was the following, for each mode of transport: (total number of employees × % of employees using mode of transport × one way commuting distance (vehicle-mi or passenger-mi) × 2 × working days per year × emission factor of transport mode (kg CO2e/vehicle-mi or kg CO2e/passenger-mi)).
notable it is not relevant considering the estimated emissions from other categories of Scope 3.

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

0

**Explanation**

**Upstream leased assets**

**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**

Walmart includes all assets that are leased under our Scope 1 and 2 boundaries and therefore there are no additional significant emission sources to consider for this category.

**Downstream transportation and distribution**

**Evaluation status**

Not relevant, calculated

**Metric tonnes CO2e**

5099

**Emissions calculation methodology**

Massmart was able to calculate the impacts of downstream transport and distribution in the South African market. Where data was provided in kilometers driven the tone.km method was used (tonnes of freight multiplied by distance covered in kilometers) for a medium sized rigid truck. Distance-based emission factor from DEFRA, assuming 50% load, were used. Where data was provided in liters of diesel consumed the volume method was used to calculate emissions. Where liters of diesel were provided, the volume method was used to calculate emissions. We recognize that this preliminary investigation only estimates a small percentage of our global emissions from downstream distribution activity.

**Percentage of emissions calculated using data obtained from suppliers or value chain partners**
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
Walmart sells goods for resale rather than for further production. While some of our goods may be used to continue to create new goods such as restaurant meals and other products, we consider ourselves a retailer of final goods and therefore this category does not apply.

Use of sold products

Evaluation status
Relevant, calculated

Metric tonnes CO2e
32211000

Emissions calculation methodology
CO2e emissions associated with the Use of Sold Products were calculated according to the Greenhouse Gas Protocol’s “Technical Guidance for Calculating Scope 3 Emissions.” Emissions calculated include the total expected lifetime emissions from relevant products sold in the CY 2018 reporting year across Walmart US’s portfolio of sold products. In addition to focusing on Walmart US, the calculation scope includes products that directly use energy and thus have direct use-phase emissions. Total emissions from Use of Sold Products was calculated as the following = primary quantity sold data * total lifespan (in years) use phase of representative products (identified via secondary research) * estimated annual energy consumption per representative (identified via secondary research) OR primary refrigerant or fuel use data * appropriate emission factors or GWPs (via publicly available factors from U.S. EPA, WRI Emission Factors Compilation from Cross-Sector Tools, Ecoinvent v2.2, and IPCC AR5). Any maintenance required during a sold product’s lifetime was not included for this analysis, as were any potential aerosol releasing products.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0
Evaluation status
Not relevant, calculated

Metric tonnes CO2e
130

Emissions calculation methodology
Massmart was able to calculate the impact of E-waste (Electronic Waste) generated as a result of e-consumer waste collection. From Massmart’s assessment they determined the environmental impact from 18 stores by Desco Electronic Recyclers (DER). The metric tonnes of CO2e were provided by DER. Compared to the emissions related to the production and use of products the end of life treatment of products is not relevant.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Explanation

Downstream leased assets

Evaluation status
Not relevant, calculated

Metric tonnes CO2e
130000

Emissions calculation methodology
Walmart leases less than a hundred vacant facilities (e.g. closed stores and clubs) to commercial tenants in any given year. Since these facilities were once operating Walmart stores or Sam’s Clubs and the new tenants do not have energy intensive operations (e.g. manufacturing) we assumed that their annual emissions would be similar (if not less) to the average retail store. By multiplying our average annual energy use per store by the number of leased buildings to arrive at the total estimated energy demand of these properties. Next, we used the Walmart weighted emission factor (0.6 mTCO2e/MWh) to convert this energy into emissions.

Percentage of emissions calculated using data obtained from suppliers or value chain partners
0

Explanation

Franchises

Evaluation status
Not relevant, explanation provided
Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Explanation
Walmart does not have any franchise arrangements making this category not relevant to our operations.

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
Walmart does not have enough investments that would make this a relevant category.

Other (upstream)

Evaluation status

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
Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Explanation

C6.7

(C6.7) Are carbon dioxide emissions from biologically sequestered carbon relevant to your organization?
No

C6.10

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

Intensity figure
0.0000356255

Metric numerator (Gross global combined Scope 1 and 2 emissions)
18325929

Metric denominator
unit total revenue

Metric denominator: Unit total
514405000000

Scope 2 figure used
Market-based

% change from previous year
7.1

Direction of change
Decreased
year. In August of 2018, Walmart divested its Walmart Brazil retail business. For the 2018/FY19 calculation, we estimated emissions for Walmart Brazil operations (using 2017 data as a proxy) for the period between January 2018 and August 2018 as Walmart Brazil revenues for the same period are included in the FY19 annual revenue number. Walmart’s unadjusted absolute Scope 1 and 2 emissions decreased by 4.5% while the company’s total revenues increased by 2.8% from the previous reporting year. This resulted in a 7.1% year-over-year decrease in its carbon emissions intensity per revenue. Several factors contributed to this reduction. These include, but are not limited to, reductions in electricity, refrigerants and transport fuel related emissions as a result of investments in energy efficiency projects, refrigerant management and product distribution strategies.

### Intensity figure
0.01605

**Metric numerator (Gross global combined Scope 1 and 2 emissions)**
18123724

**Metric denominator**
square foot

**Metric denominator: Unit total**
1129169000

**Scope 2 figure used**
Market-based

**% change from previous year**
3.2

**Direction of change**
Decreased

**Reason for change**
Carbon emissions intensity (Scopes 1 and 2 per retail area) calculation is based on emissions for calendar year and normalized by total fiscal year end retail square footage as reported in Walmart’s corresponding 10-K. In August of 2018, Walmart divested its Walmart Brazil retail business. As such, Walmart Brazil’s square footage and related emissions were included in the 2017/FY18 calculation but not in the 2018/FY19 calculation. Walmart’s carbon emissions intensity per retail area decreased 3.2% from the previous reporting year. Several factors contributed to this reduction. These include, but are not limited to, reductions in electricity, refrigerants and transport fuel use related emissions as a result of investments in energy efficiency projects, refrigerant management and product distribution strategies.
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).

<table>
<thead>
<tr>
<th>Greenhouse gas</th>
<th>Scope 1 emissions (metric tons of CO2e)</th>
<th>GWP Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>CO2</td>
<td>3225551</td>
<td>IPCC Fifth Assessment Report (AR5 – 100 year)</td>
</tr>
<tr>
<td>CH4</td>
<td>1838</td>
<td>IPCC Fifth Assessment Report (AR5 – 100 year)</td>
</tr>
<tr>
<td>N2O</td>
<td>14469</td>
<td>IPCC Fifth Assessment Report (AR5 – 100 year)</td>
</tr>
<tr>
<td>HFCs</td>
<td>2661801</td>
<td>IPCC Fifth Assessment Report (AR5 – 100 year)</td>
</tr>
<tr>
<td>PFCs</td>
<td>0</td>
<td>IPCC Fifth Assessment Report (AR5 – 100 year)</td>
</tr>
</tbody>
</table>

C7.2

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

<table>
<thead>
<tr>
<th>Country/Region</th>
<th>Scope 1 emissions (metric tons CO2e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>54704</td>
</tr>
<tr>
<td>China</td>
<td>302288</td>
</tr>
<tr>
<td>India</td>
<td>5092</td>
</tr>
<tr>
<td>Japan</td>
<td>61306</td>
</tr>
<tr>
<td>United Kingdom of Great Britain and Northern Ireland</td>
<td>329002</td>
</tr>
<tr>
<td>Canada</td>
<td>240393</td>
</tr>
<tr>
<td>Mexico</td>
<td>641740</td>
</tr>
<tr>
<td>Argentina</td>
<td>38620</td>
</tr>
<tr>
<td>Chile</td>
<td>185459</td>
</tr>
<tr>
<td>Central America</td>
<td>55396</td>
</tr>
<tr>
<td>Other, please specify (United States and Puerto Rico)</td>
<td>4192215</td>
</tr>
</tbody>
</table>
C7.3

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

C7.3a

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

<table>
<thead>
<tr>
<th>Business division</th>
<th>Scope 1 emissions (metric ton CO2e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Walmart U.S.</td>
<td>3805721</td>
</tr>
<tr>
<td>Walmart International</td>
<td>1909426</td>
</tr>
<tr>
<td>Sam's Club</td>
<td>373529</td>
</tr>
<tr>
<td>Other</td>
<td>12965</td>
</tr>
</tbody>
</table>

C7.3c

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

<table>
<thead>
<tr>
<th>Activity</th>
<th>Scope 1 emissions (metric tons CO2e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retail Formats</td>
<td>5190018</td>
</tr>
<tr>
<td>Wholesale &amp; Membership Formats</td>
<td>475932</td>
</tr>
<tr>
<td>Discount Formats</td>
<td>321368</td>
</tr>
<tr>
<td>Convenience Formats</td>
<td>241</td>
</tr>
<tr>
<td>Non Store Formats</td>
<td>114081</td>
</tr>
</tbody>
</table>

C7.5

(C7.5) Break down your total gross global Scope 2 emissions by country/region.
<table>
<thead>
<tr>
<th>Country/Region</th>
<th>Scope 2, location-based (metric tons CO2e)</th>
<th>Scope 2, market-based (metric tons CO2e)</th>
<th>Purchased and consumed electricity, heat, steam or cooling (MWh)</th>
<th>Purchased and consumed low-carbon electricity, heat, steam or cooling accounted in market-based approach (MWh)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>456895</td>
<td>456895</td>
<td>480942</td>
<td>0</td>
</tr>
<tr>
<td>China</td>
<td>835616</td>
<td>835616</td>
<td>1264934</td>
<td>0</td>
</tr>
<tr>
<td>India</td>
<td>7654</td>
<td>7654</td>
<td>16292</td>
<td>6427</td>
</tr>
<tr>
<td>Japan</td>
<td>303443</td>
<td>303443</td>
<td>563895</td>
<td>0</td>
</tr>
<tr>
<td>United Kingdom of Great Britain and Northern Ireland</td>
<td>408005</td>
<td>408005</td>
<td>1166883</td>
<td>4476</td>
</tr>
<tr>
<td>Canada</td>
<td>152791</td>
<td>152791</td>
<td>1004544</td>
<td>0</td>
</tr>
<tr>
<td>Mexico</td>
<td>996350</td>
<td>381408</td>
<td>2161659</td>
<td>1334490</td>
</tr>
<tr>
<td>Argentina</td>
<td>82208</td>
<td>82208</td>
<td>213362</td>
<td>0</td>
</tr>
<tr>
<td>Chile</td>
<td>209596</td>
<td>118035</td>
<td>476139</td>
<td>208000</td>
</tr>
<tr>
<td>Central America</td>
<td>70029</td>
<td>70029</td>
<td>275354</td>
<td>0</td>
</tr>
<tr>
<td>Other, please specify (United States and Puerto Rico)</td>
<td>9540726</td>
<td>9209850</td>
<td>20117661</td>
<td>966773</td>
</tr>
</tbody>
</table>

**C7.6**

*(C7.6) Indicate which gross global Scope 2 emissions breakdowns you are able to provide.*
By business division
By activity

**C7.6a**

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

<table>
<thead>
<tr>
<th>Business division</th>
<th>Scope 2, location-based emissions (metric tons CO2e)</th>
<th>Scope 2, market-based emissions (metric tons CO2e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Walmart U.S.</td>
<td>8284023</td>
<td>7953319</td>
</tr>
<tr>
<td>Walmart International</td>
<td>3516625</td>
<td>2810121</td>
</tr>
<tr>
<td>Sam's Club</td>
<td>1026738</td>
<td>1026566</td>
</tr>
</tbody>
</table>
C7.6c

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

<table>
<thead>
<tr>
<th>Activity</th>
<th>Scope 2, location-based emissions (metric tons CO2e)</th>
<th>Scope 2, market-based emissions (metric tons CO2e)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Retail Formats</td>
<td>10383453</td>
<td>9348357</td>
</tr>
<tr>
<td>Wholesale &amp; Membership Formats</td>
<td>1263155</td>
<td>1262982</td>
</tr>
<tr>
<td>Discount Formats</td>
<td>491690</td>
<td>491690</td>
</tr>
<tr>
<td>Convenience Formats</td>
<td>678</td>
<td>678</td>
</tr>
<tr>
<td>Non Store Formats</td>
<td>918377</td>
<td>918377</td>
</tr>
</tbody>
</table>

C7.9

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

Decreased

C7.9a

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

<table>
<thead>
<tr>
<th>Change in emissions (metric tons CO2e)</th>
<th>Direction of change</th>
<th>Emissions value (percentage)</th>
<th>Please explain calculation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Change in renewable energy consumption</td>
<td>&lt;Not Applicable &gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Change in emissions (metric tons CO2e)</td>
<td>Direction of change</td>
<td>Emissions value (percentage)</td>
<td>Please explain calculation</td>
</tr>
<tr>
<td>---------------------------------------</td>
<td>---------------------</td>
<td>-----------------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>Other emissions reduction activities</td>
<td>482000</td>
<td>Please select</td>
<td>2.56</td>
</tr>
<tr>
<td>Divestment</td>
<td>144432</td>
<td>Decreased</td>
<td>0.75</td>
</tr>
<tr>
<td>Acquisitions</td>
<td>&lt;Not Applicable&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mergers</td>
<td>&lt;Not Applicable&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Change in output</td>
<td>&lt;Not Applicable&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Change in methodology</td>
<td>&lt;Not Applicable&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Change in boundary</td>
<td>&lt;Not Applicable&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Change in physical operating conditions</td>
<td>&lt;Not Applicable&gt;</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Change in emissions (metric tons CO2e)</td>
<td>Direction of change</td>
<td>Emissions value (percentage)</td>
<td>Please explain calculation</td>
</tr>
<tr>
<td>---------------------------------------</td>
<td>---------------------</td>
<td>----------------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>Other</td>
<td>&lt;Not Applicable&gt;</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**C7.9b**

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

Market-based

**C8. Energy**

**C8.1**

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

More than 0% but less than or equal to 5%

**C8.2**

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

<table>
<thead>
<tr>
<th>Consumption of fuel (excluding feedstocks)</th>
<th>Indicate whether your organization undertakes this energy-related activity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumption of purchased or acquired electricity</td>
<td>Yes</td>
</tr>
<tr>
<td>Consumption of purchased or acquired heat</td>
<td>Yes</td>
</tr>
<tr>
<td>Consumption of purchased or acquired steam</td>
<td>No</td>
</tr>
</tbody>
</table>
### C8.2a

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

<table>
<thead>
<tr>
<th>Consumption of fuel (excluding feedstock)</th>
<th>Heating value</th>
<th>MWh from renewable sources</th>
<th>MWh from non-renewable sources</th>
<th>Total MWh</th>
</tr>
</thead>
<tbody>
<tr>
<td>LHV (lower heating value)</td>
<td>0</td>
<td>15262853</td>
<td></td>
<td>15262853</td>
</tr>
<tr>
<td>&lt;Not Applicable&gt;</td>
<td>2520166</td>
<td>25359372</td>
<td></td>
<td>27879537</td>
</tr>
<tr>
<td>&lt;Not Applicable&gt;</td>
<td>0</td>
<td>8139</td>
<td></td>
<td>8139</td>
</tr>
<tr>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td></td>
</tr>
<tr>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td>&lt;Not Applicable&gt;</td>
<td></td>
</tr>
<tr>
<td>&lt;Not Applicable&gt;</td>
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<td></td>
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<tr>
<td>&lt;Not Applicable&gt;</td>
<td>2520166</td>
<td>40630363</td>
<td></td>
<td>43150528</td>
</tr>
</tbody>
</table>

### C8.2b

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

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

**Fuels (excluding feedstocks)**

- Diesel

**Heating value**

- LHV (lower heating value)

**Total fuel MWh consumed by the organization**

- 5375905

**MWh fuel consumed for self-generation of electricity**

- 76661

**MWh fuel consumed for self-generation of heat**

- 5299244

**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)**

- Petrol

**Heating value**

- LHV (lower heating value)

**Total fuel MWh consumed by the organization**

- 150563

**MWh fuel consumed for self-generation of electricity**

- 2174

**MWh fuel consumed for self-generation of heat**

- 14001
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
LHV (lower heating value)

Total fuel MWh consumed by the organization
331566

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
331566

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 Petroleum Gas (LPG)

Heating value
LHV (lower heating value)

Total fuel MWh consumed by the organization
1109733

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
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)
Jet Gasoline

Heating value
LHV (lower heating value)

Total fuel MWh consumed by the organization
66279

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
66279

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)
Crude Oil Heavy

Heating value
Please select

Total fuel MWh consumed by the organization
1809

MWh fuel consumed for self-generation of electricity
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)
Other, please specify (Heating Oil)

Heating value
Please select

Total fuel MWh consumed by the organization
4306

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
4306

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)
Kerosene

Heating value
LHV (lower heating value)

Total fuel MWh consumed by the organization
408

MWh fuel consumed for self-generation of electricity
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
LHV (lower heating value)

Total fuel MWh consumed by the organization
56098

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
56098

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
LHV (lower heating value)

Total fuel MWh consumed by the organization
7813754
MWh fuel consumed for self-generation of heat
7813754

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
LHV (lower heating value)

Total fuel MWh consumed by the organization
352430

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
352430

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.
229

**Unit**
kg CO2e per MWh

**Emission factor source**

**Comment**

**Crude Oil Heavy**

**Emission factor**
255

**Unit**
kg CO2e per MWh

**Emission factor source**

**Comment**

**Diesel**

**Emission factor**
253

**Unit**
kg CO2e per MWh

**Emission factor source**

**Comment**

**Jet Gasoline**

**Emission factor**
21.69

**Unit**
lb CO2e per gallon

**Emission factor source**
Climate Leaders 2015 Guidance updates:
http://www.epa.gov/climateleadership/inventory/ghg-emissions.html

**Comment**
Unit
kg CO2e per MWh

Emission factor source

Comment

Liquefied Natural Gas (LNG)

Emission factor
233

Unit
kg CO2 per MWh

Emission factor source

Comment

Liquefied Petroleum Gas (LPG)

Emission factor
222

Unit
kg CO2e per MWh

Emission factor source

Comment

Natural Gas

Emission factor
121

Unit
kg CO2e per MWh

Emission factor source

Comment

Petrol

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Unit
kg CO2e per MWh

Emission factor source

Comment

Propane Gas

Emission factor
215

Unit
kg CO2e per MWh

Emission factor source

Comment

Other

Emission factor
22.36

Unit
lb CO2e per gallon

Emission factor source

Comment

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
Power Purchase Agreement (PPA) with energy attribute certificates

Low-carbon technology type
Wind

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

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Emission factor (in units of metric tons CO2e per MWh)
0

Comment

Basis for applying a low-carbon emission factor
Power Purchase Agreement (PPA) with energy attribute certificates

Low-carbon technology type
Solar PV

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

MWh consumed associated with low-carbon electricity, heat, steam or cooling
261169

Emission factor (in units of metric tons CO2e per MWh)
0

Comment

Basis for applying a low-carbon emission factor
Power Purchase Agreement (PPA) with energy attribute certificates

Low-carbon technology type
Wind

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

MWh consumed associated with low-carbon electricity, heat, steam or cooling
1342703

Emission factor (in units of metric tons CO2e per MWh)
0

Comment

Basis for applying a low-carbon emission factor
Power Purchase Agreement (PPA) with energy attribute certificates

Low-carbon technology type
Hydropower
MWh consumed associated with low-carbon electricity, heat, steam or cooling
198939

Emission factor (in units of metric tons CO2e per MWh)
0

Comment

Basis for applying a low-carbon emission factor
Contract with suppliers or utilities (e.g. green tariff), supported by energy attribute certificates

Low-carbon technology type
Solar PV

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

MWh consumed associated with low-carbon electricity, heat, steam or cooling
136946

Emission factor (in units of metric tons CO2e per MWh)
0

Comment

Basis for applying a low-carbon emission factor
Power Purchase Agreement (PPA) with energy attribute certificates

Low-carbon technology type
Solar PV

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

MWh consumed associated with low-carbon electricity, heat, steam or cooling
6427

Emission factor (in units of metric tons CO2e per MWh)
0

Comment
C9.1

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

C10. Verification

C10.1

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

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

C10.1a

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

Scope
Scope 1

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Limited assurance

Attach the statement

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p1

Relevant standard
ISO14064-3

Proportion of reported emissions verified (%)
100

Scope
Scope 2 market-based

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Limited assurance

Attach the statement
Wal-Mart CY2018 CDP Letter Final 20190815 Issued 20190820.pdf

Page/section reference
p1

Relevant standard
ISO14064-3

Proportion of reported emissions verified (%)
100

C10.1b

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

Scope
Scope 3- at least one applicable category

Verification or assurance cycle in place
Annual process

Status in the current reporting year
C10.2

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

No, but we are actively considering verifying within the next two years

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.

Other carbon tax, please specify (Zero Emission Credit (ZEC) in New York)

C11.1c

(C11.1c) Complete the following table for each of the tax systems in which you participate.
January 4 2017

Period end date
March 31 2029

% of emissions covered by tax
1.5

Total cost of tax paid
756755

Comment
The electric utility Texas Retail Energy, LLC a subsidiary of Walmart began being charged a Zero Emission Credit (ZEC) in New York in April 2017. The ZEC price is based on the social cost of carbon as determined by the NY Public Service Commission and is collected from all load serving entities in New York with the proceeds given to New York nuclear generators.

C11.1d

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

The Zero Emissions Credit (ZEC) Program is administered by NYSERDA and we are invoiced monthly based on New York electricity sales. Our strategy includes mitigating costs by reducing our electricity demand through energy efficiency and/or onsite generation.

C11.2

(C11.2) Has your organization originated or purchased any project-based carbon credits within the reporting period?
No

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, other partners in the value chain

C12.1a

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

Type of engagement
Engagement & incentivization (changing supplier behavior)

Details of engagement
Run an engagement campaign to educate suppliers about climate change
Climate change performance is featured in supplier awards scheme
Offer financial incentives for suppliers who reduce your downstream emissions (Scopes 3)
Offer financial incentives for suppliers who reduce your upstream emissions (Scopes 3)

% of suppliers by number
100

% total procurement spend (direct and indirect)
100

% Scope 3 emissions as reported in C6.5
100

Rationale for the coverage of your engagement
Walmart has a large, geographically diverse supply chain that includes more than 100,000 suppliers around the world. We understand that over 90% of our total impact lies outside of our own operations. That's why we have set up programs that allow all direct suppliers to join us in create a more sustainable value chain. To ensure that these programs affect real and sizable change we often focus on engaging our largest suppliers.

Impact of engagement, including measures of success
Since launching the Sustainability Index we have realized index score improvements (year
to buy 70% of our U.S. goods from suppliers that participate in the Index (in categories covered by the Index). We met that goal in 2017, and in 2018, more than 80% of such goods came from participating suppliers. In service of our goal to prevent 1 billion tons of CO2e by 2030, in April 2017 we launched a new supplier engagement program called Project Gigaton to challenge our suppliers to reduce emissions by focusing on 6 key areas including energy, waste, packaging, food waste, deforestation, and product use. As of the end of 2018 over 1,000 suppliers from over 40 countries had signed up to participate in Project Gigaton and hundreds of them have started to report avoided emissions. In 2018 alone, 382 suppliers reported avoiding 58,904,206 MT of emissions, totaling 93,656,639 MT toward the 1 gigaton target in the first two years of the program. We encourage suppliers to set specific, measurable, actionable, relevant and time-bound (“SMART”) goals, because we believe they lead to substantially better results over time; to date, 47% of Project Gigaton suppliers have set such goals. For suppliers who are participating in Project Gigaton and setting SMART goals, we recognize their leadership on our Project Gigaton website publicly. In addition, we provide supplier awards, access to leadership and recognition through our “Giga Guru” program. This year we introduced financial incentives for Giga Guru suppliers through reduced trade financing provided by HSBC as a part of their sustainable supply chain finance program.

Comment
We engage our direct suppliers on GHG emissions and climate change in a number of ways. Since 2009 Walmart has asked its suppliers to respond to the CDP Supply Chain questionnaire and over 500 suppliers participate in CDP today. In 2012 Walmart began implementing the Sustainability Index into our business and relationships with suppliers. We began by developing scorecards based on The Sustainability Consortium’s Key Performance Indicators which allow our buyers to evaluate supplier performance against the biggest issues and opportunities across the life cycle of their products. Today, the Index reflects responses from more than 1,500 unique suppliers covering 115 categories and departments across Walmart U.S. and Sam’s Club U.S. The results empowered over 300 buyers, responsible for thousands of items, to manage the sustainability performance of their product portfolio to all buyers. Buyers are using these tools in buy trips, line reviews and annual business planning, and they have launched projects across our business to work with suppliers on driving improvements. Beginning in 2013, buyers in the U.S. and key leaders in our global sourcing network have sustainability objectives (including several climate and GHG focused objectives) on their evaluations to help ensure these projects get traction. Walmart and Sam’s Club U.S. suppliers have improved their Sustainability Index scores by 28% compared with 2016.
As a retailer, our company performance depends on direct and frequent engagement with our customers, associates and community leaders, as well as the people who supply our products, hold our stock and evaluate our performance. Stakeholder perspectives and feedback help improve the relevance and effectiveness of the products and services we offer, and the initiatives we support. Walmart engages in advocacy and coalitions to promote environmental policy and action that aligns with our shared value business objectives.

In 2018 we participated in several climate change related advocacy groups facilitated by notable NGOs including CDP, World Wildlife Fund (WWF), World Resources Institute (WRI), Business for Social Responsibility (BSR), Advanced Energy Economy, and others. These groups and initiatives included We Mean Business, Renewable Energy Buyer’s Alliance (REBA), RE100, the Advanced Energy Buyers Group and the Future of Fuels. These groups are striving to align corporate action on emissions reduction and remove barriers to action including renewable energy policy at the state federal and international levels.

**We Are Still In:** To promote the aims of the Paris Climate Agreement after the announcement of the U.S. withdrawal, Walmart joined an initiative called We Are Still In. This is a signal to world leaders that Americans will not retreat from the global pact to reduce emissions and stem the causes of climate change.

**Renewable Energy Buyers Alliance:** We are members of this coalition that brings together purchasers and suppliers of renewable energy to make the process of transitioning to cleaner energy sources easier.

**Paris and Bonn negotiations:** We participated in the United Nations Climate Change Conferences in 2015 and 2017 to collaborate with international stakeholders in advancing environmental issues around the world.

**Global Forest Watch Pro:** To promote transparency and traceability across our supply chains, in 2017, Walmart joined the World Resources Institute and 20 other companies to launch Global Forest Watch Pro, an online platform that provides companies, banks and other stakeholders with data and tools for monitoring global forest loss because of the production of key

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Consumer Goods Forum: We are a member and our CEO serves on its Board of Directors. This organization promotes collaboration between consumer goods retailers and manufacturers to drive positive change on issues such as climate change and forced labor.

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
Other

C12.3a

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

<table>
<thead>
<tr>
<th>Focus of legislation</th>
<th>Corporate position</th>
<th>Details of engagement</th>
<th>Proposed legislative solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy efficiency</td>
<td>Support with minor exceptions</td>
<td>We have promoted energy efficiency and other GHG reduction activities through regulatory policy dockets, public speaking, and legislative activity. Walmart regularly participates in state utility commission-ordered working groups that submit suggestions to regulatory bodies, and we engage in internal legislative and policy research. In the United States, we are involved in regulatory and legislative actions at the state level, including energy efficiency proceedings. In October 2017, we testified before a Congressional hearing on the topic. In April 2018, we participated in a panel for Congressional staff along with other stakeholders and partners to provide information regarding Project Gigaton.</td>
<td>Whether the proceedings are legislative or regulatory, we advocate for recognition of customer involvement by preserving or creating favorable customer-focused energy efficiency policy. This encourages market innovation and aggressive reduction of GHG emissions.</td>
</tr>
<tr>
<td>Focus of legislation</td>
<td>Corporate position</td>
<td>Details of engagement</td>
<td>Proposed legislative solution</td>
</tr>
<tr>
<td>----------------------</td>
<td>--------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Clean energy</td>
<td>Support with minor</td>
<td>In the United States, we have been involved in regulatory and legislative actions at the state and federal level related to renewable energy. These proceedings related to state level, green energy tariffs and other utility renewable programs, ability to directly source renewable energy, and the treatment of renewable energy instruments (i.e. Renewable Energy Credits). Several of the proceedings involved green tariff or other utility products in which we engaged in the development of the tariff or product (e.g. Georgia Power C&amp;I REDI program, Ameren Missouri green tariff, Dominion Virginia Schedule RC). We also participated in proceedings to support utility development of new renewable energy generation. We have directly engaged on renewable legislation in Kansas, North Carolina and Missouri. We have engaged the U.S. Congress and Federal Energy Regulatory Commission to advocate for greater access to renewable resources in wholesale electricity markets. In addition to direct advocacy, we have engaged state commissions and the Federal Energy Regulatory Commission through the Advanced Energy Buyers’ Group.</td>
<td>We believe that businesses must have the regulatory freedom to directly source electricity from project developers or independent power producers. In some countries and many states within the U.S., our ability to scale renewable energy projects is diminished because we are not able to sign direct power purchase agreements (PPAs). We advocate for policies that allow market-based solutions like PPAs, which can lead to greater price certainty and cost savings. We also advocated before both utility regulators and legislatures for green tariffs and other structures to increase our ability to consume renewable energy in states where the electric utilities are vertically integrated and competitive options are limited.</td>
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<td></td>
<td>exceptions</td>
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<td>Other, please</td>
<td>Support with minor</td>
<td>In October 2015 Walmart submitted comments to the EPA and NHTSA on the proposed Phase 2 Greenhouse Gas Emissions Standards and Fuel Efficiency Standards for Medium- and Heavy-Duty Engines and Vehicles. In 2017, Walmart participated in an American Trucking Association (ATA) advisory company to draft a response to the EPA.</td>
<td>We supported a strong Phase 2 rule that will drive innovation in truck technologies to viable solutions at a pace that ensures the technologies will have the intended triple bottom line outcomes without unintended consequences. We believe that reducing emissions and cost as well as increasing our energy security are critical to our business and our communities. For a trans-border industry, one national standard will be integral to providing the industry the certainty required to reduce the complexity of adherence, to speed commercialization, and to reduce to the cost of innovation.</td>
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<td>exceptions</td>
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<td>Other, please</td>
<td>Support</td>
<td>We work on demand response issues through our membership in the Advanced Energy Management Alliance.</td>
<td>We believe that demand response is an effective method to reduce peaks loads and thereby reduce the need for building additional power plants.</td>
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<tr>
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<td>specify</td>
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<td>(Demand response)</td>
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</table>
(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**
Consumer Goods Forum (CGF)

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

**Please explain the trade association’s position**
The Consumer Goods Forum (CGF) is a global, parity-based industry network, driven by its members. It brings together the CEOs and senior management of over 400 retailers, manufacturers, service providers and other stakeholders across 70 countries and reflects the diversity of the industry in geography, size, product category and format. Forum member companies have combined sales of EUR 2.5 trillion. In November 2010, Walmart’s CEO, Mike Duke, along with other members of the Consumer Goods Forum committed to help achieve zero net deforestation by 2020 and signed a resolution to begin phasing out hydrofluorocarbons by 2015 and to transition toward natural refrigerants. In early 2016, the CGF announced the successful meeting its 2010 Board Resolution on Refrigeration and the publication of its first-ever Refrigeration Booklet. At the same time it also announced the new resolution on refrigeration that aims to support the global phase down of high GWP refrigerants (i.e., HFCs) in all new equipment, where viable, by 2025.

**How have you influenced, or are you attempting to influence their position?**
The Consumer Goods Forum is governed by its Board of Directors, which includes 50 manufacturer and retailer CEOs and Chairmen. Walmart’s current CEO, Doug McMillon is on the Board of Directors for the Consumer Goods Forum. Additionally, Walmart representatives regularly participate in CGF working group meetings and conferences that directly or indirectly influence the activities and focus of the organization.

**Trade association**
Renewable Energy Buyers Alliance

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

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the REBA community has grown to over 200 large energy buyers, and over 150 clean energy developers and service providers. Participants in the REBA community have been a part of 95% of all large-scale US corporate renewable energy deals to date. With dedicated expertise from four successful nonprofit programs that have helped organizations break through barriers in renewable energy procurement in recent years, REBA’s goal is to catalyze 60 gigawatts (GW) of new renewable energy by 2025 and expand the number of organizations buying clean power from dozens today to tens of thousands.

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

The Renewable Energy Buyers Alliance is governed by its board, referred to as the Leadership Circle, consisting of 19 companies in 2019. In 2018 Walmart became a member of the REBA Leadership Circle and Walmart’s current VP of Government Affairs represents Walmart at their meetings. Additionally, Walmart representatives regularly participate in REBA advisory committee meetings and conferences that directly or indirectly influence the activities and focus of the organization.

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**C12.3e**

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

Walmart engages in advocacy and coalitions to promote environmental public policy that aligns with our shared value business objectives. In 2018 we participated in several climate change related advocacy groups facilitated by notable NGOs including CDP, World Wildlife Fund (WWF), World Resources Institute (WRI), Business for Social Responsibility (BSR), Advanced Energy Economy, and others. These groups and initiatives included We Mean Business, Renewable Energy Buyer’s Alliance (REBA), RE100, the Advanced Energy Buyers Group and the Future of Fuels. These groups are striving to align corporate action on emissions reduction and remove barriers to action including renewable energy policy at the state federal and international levels.

**We Are Still In:** To promote the aims of the Paris Climate Agreement after the announcement of the U.S. withdrawal, Walmart joined an initiative called We Are Still In. This is a signal to world leaders that Americans will not retreat from the global pact to reduce emissions and stem the causes of climate change.

Renewable Energy Buyers Alliance: We are members of this coalition that brings together purchasers and suppliers of renewable energy to make the process of transitioning to cleaner energy sources easier.
Paras and Bonn negotiations: We participated in the United Nations Climate Change Conferences in 2015 and 2017 to collaborate with international stakeholders in advancing environmental issues around the world.

Global Forest Watch Pro: To promote transparency and traceability across our supply chains, in 2017, Walmart joined the World Resources Institute and 20 other companies to launch Global Forest Watch Pro, an online platform that provides companies, banks and other stakeholders with data and tools for monitoring global forest loss because of the production of key commodities such as palm oil, soy and Brazilian beef.

Consumer Goods Forum: We are a member and our CEO serves on its Board of Directors. This organization promotes collaboration between consumer goods retailers and manufacturers to drive positive change on issues such as climate change and forced labor.

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?

Carbon-related initiatives continue to be managed at the Executive leadership level by Walmart’s Executive Vice President of Corporate Affairs, providing oversight of Walmart’s publicly stated global sustainability initiatives and goals, including those specifically related to GHG reductions in our operations and supply chain. In 2015, we updated the structure of corporate affairs teams to enhance alignment between global government affairs and public policy. In addition to internal subject matter experts in the international, state, federal and local markets, we have dedicated policy experts focused on new and emerging issues such as energy and climate policy.

Walmart has established policy councils to assess potential new legislation/regulations and commitments within and across key markets. The policy councils include internal stakeholders from various parts of the organization (e.g., gov’t affairs, legal, real estate, communications, compliance). These councils report to an executive steering committee comprised of our SVP of Global Public Policy, CSO, SVP Sustainability, VP Federal Policy, SVP State and Local policy. For example, the Energy and Environment Policy Council (EPEC) is tasked with evaluating...
used to evaluate the Clean Power Plan, the Paris Agreement and a number of proposed state and federal carbon pricing policies in the U.S.

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
Walmart-2019-AR-Final.pdf

Page/Section reference
Walmart’s Fiscal 2019 Annual Report and 10-K (page 17 of 10-K)

Content elements
Risks & opportunities

Comment

Publication
In mainstream reports, incorporating the TCFD recommendations

Status
Complete

Attach the document
Walmex_2018_Annual_Report_MSE.pdf

Page/Section reference
Walmart Mexico 2018 Annual Report

Content elements
Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics
C14. Signoff

C-FI

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

C14.1

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

<table>
<thead>
<tr>
<th>Job title</th>
<th>Corresponding job category</th>
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<tbody>
<tr>
<td>Executive Vice President and Chief Financial Officer, Walmart Inc.</td>
<td>Chief Financial Officer (CFO)</td>
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