

# Welcome to your CDP Climate Change Questionnaire 2020

# C0. Introduction

# C<sub>0.1</sub>

# (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. What started small, with a single discount store and the simple idea of selling more for less, has grown over the last 50 years into the largest retailer in the world. Each week, over 265 million customers and members visit our more than 11,500 stores under 56 banners in 27 countries and eCommerce websites. With fiscal year 2020 (Feb. 1, 2019 – Jan. 31, 2020) revenue of \$524 billion, Walmart employs over 2.2 million associates worldwide. Walmart continues to be a leader in sustainability, corporate philanthropy and employment opportunity. It's all part of our unwavering commitment to creating opportunities and bringing value to customers and communities around the world. Additional information about Walmart can be found by visiting <a href="http://corporate.walmart.com">http://corporate.walmart.com</a>, on Facebook at <a href="http://facebook.com/walmart">http://facebook.com/walmart</a> and on Twitter at <a href="http://twitter.com/walmart">http://twitter.com/walmart</a> and our 2020 Environmental, Social and Governance (ESG) Report at <a href="https://corporate.walmart.com/esgreport/">https://corporate.walmart.com/esgreport/</a>

# C<sub>0.2</sub>

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

	Start date	End date	Indicate if you are providing emissions data for past reporting years
Reporting year	January 1, 2019	December 31, 2019	No

# C<sub>0.3</sub>

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

Argentina

Canada

China

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

# C<sub>0.4</sub>

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

USD

# C<sub>0.5</sub>

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

Operational control

# C1. Governance

# C1.1

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

Yes

# C1.1a

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

Position of individual(s)	Please explain
Director on board	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 regarding Walmart's social, community and sustainability initiatives. The NGC is made up of members of the board of directors and chaired by a director on the board. The NGC charter is available on our corporate website. (http://stock.walmart.com/investors/corporate-governance/board-of-directors-committee-information/nominatinggovernance-committee/).



# C1.1b

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

Frequency with which climate- related issues are a scheduled agenda item	Governance mechanisms into which climate- related issues are integrated	Please explain
Scheduled – some meetings	Reviewing and guiding strategy Reviewing and guiding annual budgets Monitoring implementation and performance of objectives Monitoring and overseeing progress against goals and targets for addressing climate-related issues	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 2020 ESG Report (https://corporate.walmart.com/esgreport/).

# C1.2

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

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



# C1.2a

(C1.2a) Describe where in the organizational structure this/these position(s) and/or committees lie, what their associated responsibilities are, and how climate-related issues are monitored (do not include the names of individuals).

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, review of climaterelated issues is also the responsibility of the Nominating and Governance Committee (NGC) of the board. The board has five primary standing committees, including the NGC, which reviews and advises management on Walmart's social, community and sustainability initiatives. The NGC is comprised of members of the board. 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/corporategovernance/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?

	Provide incentives for the management of climate-related issues	Comment
Row 1	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).

Entitled to incentive	Type of incentive	Activity inventivized	Comment
Corporate executive team	Monetary reward	Emissions reduction target Environmental criteria	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,



		included in purchases Supply chain engagement	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 2020 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 within their areas of the business as part of their annual evaluation and compensation. The Walmart Executive team includes segment Chief Executive Officers (CEO), functional Executive Vice Presidents (EVP), and their reports (whose responsibilities directly or 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.
Chief Sustainability Officer (CSO)	Monetary reward	Emissions reduction target Environmental criteria included in purchases Supply chain engagement	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 2020 ESG Report for full set of commitments. The



Chief Procurement Officer (CPO)	Monetary reward	Environmental criteria included in purchases Supply chain engagement	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.  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.
Business unit manager	Monetary reward	Energy reduction target Other (please specify) renewable energy target	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.
Buyers/purchasers	Monetary reward	Supply chain engagement	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.
Energy manager	Monetary reward	Emissions reduction target	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.
Environment/Sustainability manager	Monetary reward	Emissions reduction target Efficiency target Supply chain engagement	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.
Management group	Monetary reward	Emissions reduction target Behavior change related indicator	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.
Other, please specify Suppliers	Non- monetary reward	Environmental criteria included in purchases Supply chain engagement	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, recently renamed THESIS, a science-based, third-party survey tool developed by The Sustainability Consortium in collaboration with universities, NGOs, and suppliers. THESIS enables suppliers to report on key performance indicators for the most relevant environmental and social issues across the lifecycle of a product type. Walmart analyses the THESIS results to help engage suppliers in continuous improvement, targeted sustainability projects and helping drive a more sustainable product portfolio. We continue to find different ways to recognize the suppliers that the Index indicates are performing well in their categories.



# C2. Risks and opportunities

# C2.1

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

Yes

# C2.1a

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

	From (years)	To (years)	Comment
Short-term	0	3	
Medium-term	3	10	
Long-term	10	30	



# C2.1b

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

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 issues and this response, a substantive impact can be described as a measurable financial impact that may be on the order of one or more percentage points of the company's annual net income and then evaluated against attenuating factors. These factors could include 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.

# C2.2

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

# Value chain stage(s) covered

Direct operations Upstream

#### Risk management process

Integrated into multi-disciplinary company-wide risk management process

#### Frequency of assessment

More than once a year

#### Time horizon(s) covered

Medium-term Long-term

#### **Description of process**

Climate issues are identified 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). Major issues coming out of these annual enterprise-level risk assessments get assigned to business teams to address (mitigate, adapt, etc.) and report back to



Walmart 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.

Second, individual business segments and functions also assess climate-related issues as part of developing their annual strategic and 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. Assets are generally managed centrally in each market, which allows specialists to prioritize risk areas

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. 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.



### Criteria for prioritizing:

Risks are generally prioritized based on the immediacy of the risk and the potential impact to the company's operations of taking action versus taking no action. For example, an immediate regulatory requirement mandating a certain level of carbon emission performance requires immediate action to ensure compliance. A potential regulatory change that may have impacts 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:

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. When climate-related disaster strike such as the major wildfires in California and Canada, flooding in Peru and hurricanes across the southern U.S. and Puerto Rico - our presence in 27 countries and thousands of U.S. locations positions Walmart to provide support through product donations and supply chain operations. In addition to relief efforts, we also mobilize our associates. For example, during Hurricane Harvey in 2017, Walmart embedded teams in Red Cross shelters to provide food, medication, and emergency assistance.

# C2.2a

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

	Relevance & inclusion	Please explain
Current	Relevant,	Current regulation often affects costs in our operations and value
regulation	always	chain. For example, reviewing current carbon pricing mechanisms
	included	(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.	
Emerging regulation	Relevant, always included	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.	
Technology	Relevant, sometimes included	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).	
Legal	Relevant, always included	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.	
Market	Relevant, always included	Understanding market trends 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.	
Reputation	Relevant, sometimes included	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.	
Acute physical	Relevant, always included	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.
Chronic physical	Relevant, always included	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.

# **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 the potential to have a substantive financial or strategic impact on your business?

	Primary reason	Please explain
Row 1	Risks exist, but none with potential to have a substantive financial or strategic impact on business	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 \$520 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 "substantive" 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.

# 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?

	Primary reason	Please explain
Row	Opportunities exist, but	While climate effects may create opportunities for individual
1	none with potential to have	business teams in particular regions, we do not anticipate
	a substantive financial or	opportunities that could be considered financially material at the
	strategic impact on	aggregate level for Walmart overall. For example, changes in
	business	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 \$520 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.

# C3. Business Strategy

# C3.1

# (C3.1) Have climate-related risks and opportunities influenced your organization's strategy and/or financial planning?

Yes, and we have developed a low-carbon transition plan

# C3.1a

# (C3.1a) Does your organization use climate-related scenario analysis to inform its strategy?

Yes, qualitative and quantitative

# C3.1b

# (C3.1b) Provide details of your organization's use of climate-related scenario analysis.

Climate-related scenarios and models applied	Details
RCP 8.5	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 KPI's for 20 key agricultural commodities (e.g. tomatoes, corn, bananas, coffee, grapes etc.) by 2025.



### **RCP 2.6**

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.

### **IEA 450**

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 (WEO) 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 pointestimate 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.

#### **IEA NPS**

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. 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.

# C3.1d

# (C3.1d) Describe where and how climate-related risks and opportunities have influenced your strategy.

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	Text field [maximum 2,400 characters] Walmart has prioritized efforts to enhance the sustainability of products and product supply chains, with a focus on environmental issues such as: climate, waste and natural capital.
		Sourcing requirements, specifications, and supplier engagement efforts are ways we help send a "market signal" and build capabilities to produce more sustainable products.



Issue-specific policies & guidelines: To supplement our Standards for Suppliers, Walmart has developed sourcing policies and guidelines for particular categories and issues. We use these to encourage our suppliers to adopt best practices and clarify our expectations relevant to priority sustainability issues.

Certifications: Based on input from our NGO partners, we ask our suppliers to certify that particular commodities such as palm oil, tuna, coffee and cotton have been produced with specific certifications. Certifications help certifying organizations communicate to consumers that certain environmental or social practices deep in supply chains (e.g., farm or fishery) meet the certifying organization's standards.

Product and packaging specifications: We have set a goal to have 100% of our private brand packaging be recyclable, reusable or industrially compostable by 2025.

Disaster response: When climate-related disaster strike such as the major wildfires in California and , flooding in Peru and hurricanes across the southern U.S. and Puerto Rico - our presence in 27 countries and thousands of U.S. locations positions Walmart to provide support through product donations and supply chain operations. In addition to relief efforts, we also mobilize our associates. For example, during Hurricane Harvey in 2017, Walmart embedded teams in Red Cross shelters to provide food, medication, and emergency assistance.

# Supply chain and/or value chain

Yes

To improve the sustainability of a given product supply chain, we start by listening to our customers and other stakeholders to set aspirations, such as emissions reduction or economic inclusion, and prioritize improvements to the product supply chain system, such as farming practices or commodity traceability. To help set aspirations and priorities for system change, we also draw on insights from several data sources, including THESIS, a science-based, third-party survey tool developed by The Sustainability Consortium in collaboration with universities, NGOs, and suppliers. THESIS enables suppliers to report on key performance indicators for the most relevant



environmental and social issues across the lifecycle of a product type. Approximately 1,500 unique suppliers have reported through THESIS, representing 61% of our U.S. volume in the 117 categories where the survey is available. Coverage declined from 80% last year as we opened the survey up to a broader base of suppliers and transitioned to a supplier self-directed approach. We believe that coverage will increase as suppliers become accustomed to the new approach. Based on stakeholder and THESIS inputs, we develop sustainability strategies for each category. We aim to improve the sustainability not only of Walmart assortments but to also impact supply chain systems more broadly — for example, by improving traceability or supporting adoption of more sustainable farming practices. Varying by product category, our strategies include actions related to product sourcing, collaborative projects with suppliers and NGOs, customer engagement, advocacy, and/or philanthropy. 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 three years ago, over 2,300 Walmart suppliers from 40 countries have signed on to the project. In 2019 alone, more than 1,000 suppliers reported avoiding over 136 million metric tons of GHG emissions, totaling 230 million metric tons of GHG emissions since we began measuring progress in 2017 (calculated in accordance with Walmart's Project Gigaton Methodology).

# Investment in Yes R&D

Our plan is to transform our transportation network into one that is powered by emission-free sources. To achieve this, we need the support of many others, including the evolution of necessary infrastructure to support the common business use of advancements in electrification and other zero emissions technologies. Zero emission vehicles are a new technology, and we are working to pilot a variety of such applications to make sure we find the right fit for our needs. We remain technology agnostic and believe our networks and the unique demands of our business will likely require a portfolio of different technologies, including but not limited to, renewable diesel, electric-battery and hydrogen fuels. We have already started piloting vehicles in the U.S. and our businesses in India and China currently deliver items almost exclusively on electric motorcycles in many areas.



		When it comes to long-haul/heavy-duty Class 8 tractors, the future is not as certain. Nonetheless, we are excited about the innovation potential here. Even though the capabilities of some of the emerging technologies are still in early stages, Walmart is committed to being part of the solution. We will work with our trusted equipment manufacturers and others on finding and testing solutions as soon as they are available.
Operations	Yes	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 aligned with the 2-degree pathway. This includes our goal to reduce our emissions by 18% in our company operations by 2025, to be powered by 50% renewable energy by 2025. In order to achieve our emissions goals in our 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 optimization initiatives such as installing LED lighting and energy management systems, installing more efficient HVAC, increasing our use of more sustainable refrigerants, scaling new technologies and operational practices to reduce trucking fleet impacts, installing onsite renewable energy generation and purchasing of offsite renewable energy.
		In order to achieve our longer term emissions target, we must phase out high GWP refrigerant gases, including HFCs, to refrigerant gases with low- and ultra-low GWP for new systems as they become commercially viable in each market where we operate. For example, in the U.S. and internationally we already operate hundreds of facilities (stores and distribution centers) that utilize ultra-low GWP refrigerants including carbon dioxide (CO2), glycol and ammonia (NH3) with more on the way. We, along with our industry leading design consultants, continue to use these facilities, along with other laboratory-based tests, to inform the design of our future systems.  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
product supply for customers in time of disaster, and monitoring transportation routes that may be affected by weather risks.

# C3.1e

# (C3.1e) Describe where and how climate-related risks and opportunities have influenced your financial planning.

	Financial planning elements that have been influenced	Description of influence
Row 1	Direct costs Capital allocation	Programs that we are implementing to ensure we achieve our emissions targets in our operations include investments in energy optimization initiatives such as installing LED lighting and energy management systems, installing more efficient HVAC, increasing our use of more sustainable refrigerants, scaling new technologies and operational practices to reduce trucking fleet impacts, installing onsite renewable energy generation and purchasing of offsite renewable energy.  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. 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.

# C3.1f

(C3.1f) Provide any additional information on how climate-related risks and opportunities have influenced your strategy and financial planning (optional).

# C4. Targets and performance

# C4.1

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



#### Absolute target

# C4.1a

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

Target reference number

Abs 1

Year target was set

2016

**Target coverage** 

Company-wide

Scope(s) (or Scope 3 category)

Scope 1+2 (market-based)

Base year

2015

**Covered emissions in base year (metric tons CO2e)** 

19,547,272

Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)

100

**Target year** 

2025

Targeted reduction from base year (%)

18

Covered emissions in target year (metric tons CO2e) [auto-calculated]

16,028,763.04

Covered emissions in reporting year (metric tons CO2e)

17,563,596

% of target achieved [auto-calculated]

56.3783131591

Target status in reporting year

Underway

Is this a science-based target?



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

# Please explain (including target coverage)

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 baseline and 2019, Walmart reduced its absolute Scope 1 and 2 emissions by 10.15%, equivalent to 1.98 million metric tons of CO2e. Several factors contributed to this reduction. These include, but are not limited to, reductions in electricity and transport fuel related emissions as a result of investments in energy efficiency projects, renewable energy sourcing and fleet efficiency strategies.

### Target reference number

Abs 2

### Year target was set

2016

#### Target coverage

Company-wide

### Scope(s) (or Scope 3 category)

Scope 3 (upstream & downstream)

# Base year

2015

#### Covered emissions in base year (metric tons CO2e)

1,000,000,000

# Covered emissions in base year as % of total base year emissions in selected Scope(s) (or Scope 3 category)

100

# Target year

2030

# Targeted reduction from base year (%)

100

# Covered emissions in target year (metric tons CO2e) [auto-calculated]

0

### Covered emissions in reporting year (metric tons CO2e)

770,000,000



### % of target achieved [auto-calculated]

23

### Target status in reporting year

Underway

# Is this a science-based target?

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

### Please explain (including target coverage)

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 target and to reduce or avoid emissions throughout our value chain by 1 billion metric tons by 2030. Since its launch three years ago, over 2,300 Walmart suppliers from 40 countries have signed up to participate in Project Gigaton. Suppliers reported cumulative avoided emissions of over 230 million metric tons of GHG emissions (calculated in accordance with Walmart's Project Gigaton Methodology.

# C4.2

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

Target(s) to increase low-carbon energy consumption or production Other climate-related target(s)

# C4.2a

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

Target reference number

Low 1

Year target was set

2016

**Target coverage** 

Company-wide



Target type: absolute or intensity

Intensity

Target type: energy carrier

Electricity

Target type: activity

Consumption

Target type: energy source

Renewable energy source(s) only

Metric (target numerator if reporting an intensity target)

MWh

Target denominator (intensity targets only)

megawatt hour (MWh)

Base year

2015

Figure or percentage in base year

0.25

Target year

2025

Figure or percentage in target year

0.5

Figure or percentage in reporting year

0.296

% of target achieved [auto-calculated]

18.4

Target status in reporting year

Underway

Is this target part of an emissions target?

Abs1 - Increasing the amount of renewable electricity used is part of our plan to achieve our emissions reduction target.

Is this target part of an overarching initiative?

No, it's not part of an overarching initiative

Please explain (including target coverage)

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.



# C4.2b

# (C4.2b) Provide details of any other climate-related targets, including methane reduction targets.

# Target reference number

Oth 1

Year target was set

2005

# **Target coverage**

Country/region

Target type: absolute or intensity

Intensity

Target type: category & Metric (target numerator if reporting an intensity target)

Waste management metric tons of waste diverted from landfill

# Target denominator (intensity targets only)

metric ton of waste

#### Base year

2005

# Figure or percentage in base year

0

# **Target year**

2025

# Figure or percentage in target year

0.9

# Figure or percentage in reporting year

0.82

# % of target achieved [auto-calculated]

91.1111111111

# Target status in reporting year

Underway

# Is this target part of an emissions target?

n/a



# Is this target part of an overarching initiative?

Other, please specify

Walmart's aspiration to create zero waste and support a circular economy.

# Please explain (including target coverage)

In 2005, we set an aspirational goal to create zero waste in our own operations globally. We aim to achieve zero waste\* by 2025 in four markets: Canada, Japan, the U.K. and the U.S. In 2019, we diverted 80%4 of our unsold products, packaging and other operational materials from landfills and incineration globally. In the US market we diverted 82 percent (as reported in this question), 88% in Canada, 85% in UK and 78% in Japan.

\*Meeting or exceeding Zero Waste International Alliance business recognition program requirements, which include adoption of ZWIA definition of Zero Waste and achievement of 90 percent or more diversion of all discarded resources from landfills, incinerators and the environment.

# C4.3

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

Yes

# C4.3a

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

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	0	0
To be implemented*	7,000	2,500,000
Implementation commenced*	1,000	1,000,000
Implemented*	4,000	900,000
Not to be implemented	0	0

# C4.3b

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



### Initiative category & Initiative type

Energy efficiency in buildings Lighting

# Estimated annual CO2e savings (metric tonnes CO2e)

350,000

### Scope(s)

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

# Voluntary/Mandatory

Voluntary

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

40,000,000

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

250,000,000

### Payback period

4-10 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 27 countries the amount of diversity of our facilities and level of technology saturation can vary greatly. In 2019, more than 3,000 interior and exterior lighting upgrades were completed in stores and clubs.

# Initiative category & Initiative type

Energy efficiency in buildings Lighting

# Estimated annual CO2e savings (metric tonnes CO2e)

7,000

# Scope(s)

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

# Voluntary/Mandatory

Voluntary

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



800,000

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

5,000,000

# Payback period

4-10 years

#### Estimated lifetime of the initiative

6-10 years

#### Comment

Refrigerated door case lighting upgrades at over 400 stores.

# Initiative category & Initiative type

Energy efficiency in buildings Building Energy Management Systems (BEMS)

# Estimated annual CO2e savings (metric tonnes CO2e)

20,000

# Scope(s)

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

# Voluntary/Mandatory

Voluntary

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

3,000,000

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

13,000,000

# Payback period

4-10 years

### Estimated lifetime of the initiative

6-10 years

#### Comment

Energy submetering was added to more than 500 stores. Data received from these submeters will help control energy use and costs in our facilities. .

# Initiative category & Initiative type

Low-carbon energy consumption Solar PV



### Estimated annual CO2e savings (metric tonnes CO2e)

### Scope(s)

Scope 2 (location-based) 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

#### Comment

At Walmart, we have over 500 renewable and or low-carbon energy systems installed in our stores, clubs and distribution centers worldwide. 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. In 2019, Walmart Mexico, Walmart Chile, and Massmart completed new solar photo-voltaic plants at their facilities.

# Initiative category & Initiative type

Low-carbon energy consumption Wind

# Estimated annual CO2e savings (metric tonnes CO2e)

600,000

#### Scope(s)

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

#### Comment

In 2019, two large-scale wind farms that Walmart has contracted for through long term PPAs were completed and begin operation. This included the Crocker Wind Farm in South Dakota (200 MW) and the Bright Stalk Wind Farm in Illinois (205 MW). These wind farms combined are estimated to provide Walmart over 1 million MWhs of renewable energy annually.

# C4.3c

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

Method	Comment
Compliance with regulatory requirements/standards	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.
Dedicated budget for other emissions reduction activities	Our fleet services division also has a dedicated budget to pursue low- emission R&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.
Employee engagement	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.
Financial optimization calculations	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.
Internal finance mechanisms	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.
Partnering with governments on technology development	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.
Internal incentives/recognition programs	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.

# C4.5

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

Yes

# 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**

All products produce greenhouse gas emissions during their manufacturing, and electricity-consuming products also generate emissions when used by customers at home. Designers, manufacturers and brands have a unique opportunity to help deliver more efficient and innovative products to shelf by making smart material choices during product design, as well as helping the customer lower the greenhouse gas emissions associated with their use of the product after bringing it home.

Actions we encourage suppliers to take in the Product Use and Design Action Area include; Design products to be more energy efficient. Furthermore, product manufacturers can help deliver more innovative products to shelves by making smart,



sustainable material choices in the design of their products, such as incorporating recycled content, which can reduce the overall carbon footprint of the product.

We are not considering generating CERs or ERUs for these avoided emissions.

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

# Taxonomy, project or methodology used to classify product(s) as low-carbon or to calculate avoided emissions

Other, please specify
Project Gigaton Methodology

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

0.01

#### Comment

In 2019, suppliers participating in Project Gigaton reported 27.1 million metric tons of emissions through the Product Use and Design action area. (Calculated in accordance with Walmart's Project Gigaton Accounting Methodology).

Project Gigaton's Product Use and Design pillar counts activities associated with upstream greenhouse gas emissions reductions from product material production/manufacturing (such as optimizing design or sourcing materials sustainably), as well as activities associated with downstream greenhouse gas emissions reductions during customer use of a product after bringing it home (such as improvements in the energy efficiency of the product, or use of low global warming potential (GWP) refrigerants in products like air conditioners). Walmart's methodology for calculating greenhouse gas improvements during product use involves estimating the lifetime emissions savings resulting from a more energy efficient or low-GWP product when compared to a baseline model. Walmart's methodology for calculating greenhouse gas improvements through product design involves a collection of approaches related to sourcing materials sustainably and/or optimizing design:

Source sustainably: 1. Increasing usage of post-consumer recycled content 2. Using certified virgin fiber Optimizing design: 3. Reducing material usage

For more detail on the methodology including scope and baseline definition, product lifetimes, emission factors uses etc. please refer to page 58 of the 2019 Project Gigaton Methodology document: https://www.walmartsustainabilityhub.com/media-library/document/2018-project-gigaton-accounting-methodology/ proxyDocument?id=00000165-159f-d0cc-ab77-95ff84350000



## **C5. Emissions methodology**

## C5.1

(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)

5,584,171

Comment

#### Scope 2 (location-based)

#### Base year start

January 1, 2005

#### Base year end

December 31, 2005

#### Base year emissions (metric tons CO2e)

14,194,178

Comment

#### Scope 2 (market-based)

#### Base year start

January 1, 2005

#### Base year end

December 31, 2005

## Base year emissions (metric tons CO2e)

14,194,178

## Comment



## C5.2

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

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

## C6. Emissions data

## C<sub>6.1</sub>

(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)

6,484,616

#### Comment

Walmart Mexico's refrigerant related emissions were modeled for 2019 to replace unusual consumption data that was determined not to adequately reflect actual consumption. The model approach replaced the 2019 data with average amounts of R404 using the actuals from 2016, 2017, 2018 and part of 2020. This model approach resulted in a Scope 1 total for Walmart Mexico that is less than was originally reported by Walmex. This approach and resulting modeled data was reviewed by our 3rd party verifier and deemed to be acceptable and consistent with best practice for estimating actual usage.

## C6.2

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

#### Row 1

#### Scope 2, location-based

We are reporting a Scope 2, location-based figure

#### Scope 2, market-based

We are reporting a Scope 2, market-based figure

#### Comment



## C6.3

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

### Reporting year

Scope 2, location-based

12,190,878

Scope 2, market-based (if applicable)

11,078,980

Comment

## C<sub>6.4</sub>

(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

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



## C<sub>6.5</sub>

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

#### Purchased goods and services

#### **Evaluation status**

Relevant, calculated

#### **Metric tonnes CO2e**

143,267,842

#### **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

#### Please explain

#### Capital goods

#### **Evaluation status**

Not relevant, calculated

#### **Metric tonnes CO2e**

645,328

#### **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 number of newly constructed buildings globally and the specific square footage for each store was obtained from Walmart's real estate database. Ecoinvent was used to calculate the life cycle CO2-eq for the construction materials used in a building per



square foot. This was 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

#### Please explain

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

#### **Evaluation status**

Relevant, calculated

#### **Metric tonnes CO2e**

3,327,874

#### **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

#### Please explain

#### **Upstream transportation and distribution**

#### **Evaluation status**

Not relevant, calculated

#### **Metric tonnes CO2e**

342,577

#### **Emissions calculation methodology**

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

0

#### Please explain

#### Waste generated in operations

#### **Evaluation status**

Not relevant, calculated

#### **Metric tonnes CO2e**

968,265

#### **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, Tires = 0.04. For more



information about EPA's WARM program please visit http://epa.gov/epawaste/conserve/tools/warm/SWMGHGreport.html.

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

0

#### Please explain

#### **Business travel**

#### **Evaluation status**

Not relevant, calculated

#### **Metric tonnes CO2e**

76,296

#### **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

0

#### Please explain

#### **Employee commuting**

#### **Evaluation status**

Not relevant, calculated

#### **Metric tonnes CO2e**

3,500,000

#### **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  $\times$  % of employees using mode of transport  $\times$  one way commuting distance (vehicle-mi or passenger-mi)  $\times$  2  $\times$  working days per year  $\times$  emission factor of transport mode (kg CO2e/vehicle-mi or kg CO2e/passenger-mi)). Passenger transport mode emissions factors were obtained from the EPA's most updated eGRID factors spreadsheet available at the time of reporting. While 3.5 million metric tons is 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

#### Please explain

#### **Upstream leased assets**

#### **Evaluation status**

Not relevant, explanation provided

#### Please explain

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**

5,099

#### **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

0

#### Please explain



#### Processing of sold products

#### **Evaluation status**

Not relevant, explanation provided

#### Please explain

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**

32.211.000

#### **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

#### Please explain

### End of life treatment of sold products

#### **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

#### Please explain

#### **Downstream leased assets**

#### **Evaluation status**

Not relevant, calculated

#### **Metric tonnes CO2e**

130,000

#### **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

#### Please explain

#### **Franchises**

#### **Evaluation status**

Not relevant, explanation provided

#### Please explain

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

#### Investments



#### **Evaluation status**

Not relevant, explanation provided

#### Please explain

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

### Other (upstream)

**Evaluation status** 

Please explain

## Other (downstream)

**Evaluation status** 

Please explain

## **C6.7**

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

No

## C<sub>6</sub>.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

0.0000335206

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

17,563,596

**Metric denominator** 

unit total revenue

Metric denominator: Unit total

523,964,000,000

Scope 2 figure used



Market-based

#### % change from previous year

3.1

### **Direction of change**

Decreased

#### Reason for change

Carbon emissions intensity (Scopes 1 and 2 per revenue) calculation is based on emissions for calendar year and divided by total annual revenues as measured by Walmart's fiscal year. Walmart's unadjusted absolute Scope 1 and 2 emissions decreased by 0.29% while the company's total revenues increased by 1.86% from the previous reporting year. This resulted in a 3.1% 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, related emissions as a result of investments in energy efficiency projects and renewable energy sourcing which counteracted increases in Scope 1 from business growth. In August of 2018, Walmart divested its Walmart Brazil retail business. For the year over year calculation using 2018/FY19, 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.

#### **Intensity figure**

0.01556

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

17,563,596

#### **Metric denominator**

square foot

Metric denominator: Unit total

1,128,505,000

#### Scope 2 figure used

Market-based

% change from previous year

0.23

#### **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. Walmart's carbon emissions intensity per retail area decreased 0.23% from the previous reporting year. Several factors contributed to this reduction. These included reductions in electricity use related emissions (Scope 2) as a result of investments in energy efficiency and renewable energy sourcing which counteracted increases in Scope 1 from business growth.

## C7. Emissions breakdowns

## C7.1

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

Yes

## C7.1a

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

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	3,222,983	IPCC Fifth Assessment Report (AR5 – 100 year)
CH4	1,608	IPCC Fifth Assessment Report (AR5 – 100 year)
N2O	9,772	IPCC Fifth Assessment Report (AR5 – 100 year)
HFCs	3,067,216	IPCC Fifth Assessment Report (AR5 – 100 year)
PFCs	154	IPCC Fifth Assessment Report (AR5 – 100 year)

## **C7.2**

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

Country/Region	Scope 1 emissions (metric tons CO2e)
Africa	70,398
China	191,838
India	6,647
Japan	69,889



United Kingdom of Great Britain and Northern Ireland	331,893
Canada	257,603
Mexico	668,736
Argentina	184,998
Chile	260,751
Central America	72,111
Other, please specify	4,346,972
United States and Puerto Rico	

## 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.

Business division	Scope 1 emissions (metric ton CO2e)		
Walmart U.S.	3,877,309		
Walmart International	2,137,644		
Sam's Club	456,821		
Other	12,842		

## C7.3c

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

Activity	Scope 1 emissions (metric tons CO2e)
Retail Formats	3,637,729
Wholesale & Membership Formats	559,228
Discount Formats	358,034
Convenience Formats	197
Non Store Formats	120,999

## C7.5

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

Country/Region	Scope 2,	Scope 2,	Purchased and	Purchased and
	location-	market-	consumed	consumed low-carbon



	based (metric tons CO2e)	based (metric tons CO2e)	electricity, heat, steam or cooling (MWh)	electricity, heat, steam or cooling accounted for in Scope 2 market-based approach (MWh)
Japan	308,560	308,560	592,243	0
China	882,376	882,376	1,408,197	0
India	8,514	8,514	18,024	6,247
United Kingdom of Great Britain and Northern Ireland	281,573	281,573	1,144,215	4,243
Africa	531,652	531,652	511,204	4,823
Canada	138,839	138,839	973,624	0
Mexico	1,076,951	419,797	2,251,653	1,374,701
Argentina	70,138	70,138	199,256	0
Chile	199,066	108,191	456,317	208,683
Central America	61,266	61,266	344,512	0
Other, please specify United States and Puerto Rico	8,575,759	8,211,890	19,294,089	1,071,995

## **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.

Business division	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Walmart U.S.	7,466,965	7,103,263
Walmart International	3,558,935	2,810,906
Sam's Club	942,301	942,134
Other	222,677	222,677

## C7.6c

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



Activity	Scope 2, location-based (metric tons CO2e)	Scope 2, market-based (metric tons CO2e)
Retail Formats	8,834,142	7,722,411
Wholesale & Membership Formats	1,181,896	1,181,728
Discount Formats	491,821	491,821
Convenience Formats	840	840
Non Store Formats	859,860	859,860

## **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.

	Change in emissions (metric tons CO2e)	Direction of change	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	75,800	Decreased	0.43	On an adjusted basis, between 2018 and 2019, Walmart reduced its absolute Scope 1 and 2 emissions by only 0.29%, equivalent to 50,800 metric tons of CO2e. Between 2018 and 2019, Walmart total renewable energy consumption increased as new onsite and several large offsite projects were completed and became operational towards the end of the year. The increase in renewable energy usage translated into a 75,600 mtCO2e reduction or 0.66% YOY for Scope 2 (market-based) and 0.43% of total emission (Scope 1 & 2). Calculation = Change in Scope 2 (market-based) attributed to renewable energy / (Previous year scope 1 + 2) * 100.



Other emissions reduction activities	500,000	Decreased	2.8	On an adjusted basis, between 2018 and 2019, Walmart reduced its absolute Scope 1 and 2 emissions by only 0.29%, equivalent to 50,800 metric tons of CO2e. One of the major drivers of this decrease is attributed to is Walmart investment in energy efficiency retrofit initiatives, specifically in its U.Sbased facilities. Across our fleet of stores, clubs and distribution centers Walmart teams completed approximately 2,900 different efficiency-related projects in 2018, followed by nearly 4,000 projects in 2019. These included upgrades in lighting, HVAC and building energy management systems. The projects implemented in 2018 and beginning of 2019 alone are estimated to help the company avoid over 500,000 metric tons of CO2e in 2019, a 2.8% decrease in absolute emissions from the previous year. Calculation = Change in Scope 1 + 2 attributed to energy efficiency / (Previous year scope 1 + 2) * 100.
Divestment				
Acquisitions				
Mergers				
Change in output	42,467	Increased	0.24	Between 2018 and 2019 total miles driven by our private fleet of vehicle increased leading to an estimated increase of 42,467 mt CO2e, contributing a 0.24% increase in total emissions. Calculation = Change in Scope 1 attributed to increased transportation demand / (Previous year scope 1 + 2) * 100.
Change in methodology	46,008	Increased	0.26	Using the latest emission factors available at the time of reporting resulted in an additional 46,008 metric tons CO2e between 2018 and 2019. to the Scope 2 emissions. This represented a 0.26 increase in total emissions. Calculation = Change in Scope 2 attributed to emission factor



				differences / (Previous year scope 1 + 2) * 100.
Change in boundary				
Change in physical operating conditions				
Unidentified	429,793	Increased	2.44	Various initiatives and other factors contributed to an additional 2.44% increase in total emissions. Calculation = Unidentified change in emissions / (Previous year scope 1 + 2) * 100.
Other				

## C7.9b

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

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.

	Indicate whether your organization undertook this energy- related activity in the reporting year
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	Yes



Consumption of purchased or acquired steam	No
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	No

## C8.2a

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

	Heating value	MWh from renewable sources	MWh from non- renewable sources	Total (renewable and non-renewable)
Consumption of fuel (excluding feedstock)	LHV (lower heating value)	50,485	15,203,308	15,253,793
Consumption of purchased or acquired electricity		2,677,970	24,650,509	27,328,479
Consumption of purchased or acquired heat		0	7,596	7,596
Total energy consumption		2,728,455	39,861,414	42,589,868

## C8.2b

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

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



## C8.2c

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

### **Fuels (excluding feedstocks)**

Diesel

#### **Heating value**

LHV (lower heating value)

#### Total fuel MWh consumed by the organization

5,199,636

## MWh fuel consumed for self-generation of electricity

147,594

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

5,052,042

#### **Emission factor**

229

#### Unit

kg CO2e per MWh

#### **Emissions factor source**

U.S. EPA, Emission Factors for Greenhouse Gas Inventories (Nov 2015)

#### Comment

#### **Fuels (excluding feedstocks)**

Petrol

#### **Heating value**

LHV (lower heating value)

#### Total fuel MWh consumed by the organization

155,858

## MWh fuel consumed for self-generation of electricity

8,364

## MWh fuel consumed for self-generation of heat

147,495



#### **Emission factor**

549

#### Unit

kg CO2e per MWh

#### **Emissions factor source**

U.S. EPA, Emission Factors for Greenhouse Gas Inventories (Nov 2015)

#### Comment

## **Fuels (excluding feedstocks)**

**Biodiesel** 

#### **Heating value**

LHV (lower heating value)

#### Total fuel MWh consumed by the organization

884,878

## MWh fuel consumed for self-generation of electricity

0

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

884,878

#### **Emission factor**

255

#### Unit

kg CO2e per MWh

### **Emissions factor source**

U.S. EPA, Emission Factors for Greenhouse Gas Inventories (Nov 2015)

#### Comment

#### Fuels (excluding feedstocks)

Liquefied Petroleum Gas (LPG)

#### **Heating value**

LHV (lower heating value)

#### Total fuel MWh consumed by the organization

659,632



## MWh fuel consumed for self-generation of electricity

0

## MWh fuel consumed for self-generation of heat

659,632

#### **Emission factor**

264

#### Unit

kg CO2e per MWh

#### **Emissions factor source**

U.S. EPA, Emission Factors for Greenhouse Gas Inventories (Nov 2015)

#### Comment

#### Fuels (excluding feedstocks)

Compressed Natural Gas (CNG)

### **Heating value**

#### Total fuel MWh consumed by the organization

178

## MWh fuel consumed for self-generation of electricity

0

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

178

#### **Emission factor**

233

## Unit

kg CO2e per MWh

#### **Emissions factor source**

U.S. EPA, Emission Factors for Greenhouse Gas Inventories (Nov 2015)

#### Comment

#### **Fuels (excluding feedstocks)**

Jet Kerosene



#### **Heating value**

LHV (lower heating value)

#### Total fuel MWh consumed by the organization

74,792

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

0

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

74,792

#### **Emission factor**

222

#### Unit

kg CO2e per MWh

#### **Emissions factor source**

U.S. EPA, Emission Factors for Greenhouse Gas Inventories (Nov 2015)

#### Comment

### **Fuels (excluding feedstocks)**

Crude Oil Heavy

#### **Heating value**

LHV (lower heating value)

#### Total fuel MWh consumed by the organization

20,674

## MWh fuel consumed for self-generation of electricity

0

## MWh fuel consumed for self-generation of heat

20,674

#### **Emission factor**

181

#### Unit

kg CO2e per MWh

#### **Emissions factor source**

U.S. EPA, Emission Factors for Greenhouse Gas Inventories (Nov 2015)

#### Comment



#### **Fuels (excluding feedstocks)**

Other, please specify Heating Oil

#### **Heating value**

LHV (lower heating value)

#### Total fuel MWh consumed by the organization

4.287

## MWh fuel consumed for self-generation of electricity

0

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

4,287

#### **Emission factor**

241

#### Unit

kg CO2e per MWh

#### **Emissions factor source**

U.S. EPA, Emission Factors for Greenhouse Gas Inventories (Nov 2015)

#### Comment

## Fuels (excluding feedstocks)

Kerosene

#### **Heating value**

LHV (lower heating value)

#### Total fuel MWh consumed by the organization

400

## MWh fuel consumed for self-generation of electricity

0

## MWh fuel consumed for self-generation of heat

400

## **Emission factor**

215

#### Unit



kg CO2e per MWh

#### **Emissions factor source**

U.S. EPA, Emission Factors for Greenhouse Gas Inventories (Nov 2015)

#### Comment

## Fuels (excluding feedstocks)

Liquefied Natural Gas (LNG)

#### **Heating value**

LHV (lower heating value)

#### Total fuel MWh consumed by the organization

75,564

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

0

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

75,564

#### **Emission factor**

263

#### Unit

kg CO2e per MWh

#### **Emissions factor source**

U.S. EPA, Emission Factors for Greenhouse Gas Inventories (Nov 2015)

#### Comment

#### Fuels (excluding feedstocks)

Natural Gas

#### **Heating value**

LHV (lower heating value)

#### Total fuel MWh consumed by the organization

7,881,289

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

O

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



7,881,289

#### **Emission factor**

263

#### Unit

kg CO2e per MWh

#### **Emissions factor source**

U.S. EPA, Emission Factors for Greenhouse Gas Inventories (Nov 2015)

#### Comment

#### **Fuels (excluding feedstocks)**

Propane Gas

#### **Heating value**

LHV (lower heating value)

#### Total fuel MWh consumed by the organization

287,670

## MWh fuel consumed for self-generation of electricity

0

## MWh fuel consumed for self-generation of heat

287.670

#### **Emission factor**

263

#### Unit

kg CO2e per MWh

#### **Emissions factor source**

U.S. EPA, Emission Factors for Greenhouse Gas Inventories (Nov 2015)

#### Comment

## C8.2e

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



#### Sourcing method

Power purchase agreement (PPA) with a grid-connected generator with energy attribute certificates

#### Low-carbon technology type

Wind

## Country/region of consumption of low-carbon electricity, heat, steam or cooling

North America

#### MWh consumed accounted for at a zero emission factor

1,873,814

#### Comment

U.S. and Mexico

#### Sourcing method

Power purchase agreement (PPA) with on-site/off-site generator owned by a third party with no grid transfers (direct line)

#### Low-carbon technology type

Solar

## Country/region of consumption of low-carbon electricity, heat, steam or cooling

Other, please specify
United States and Puerto Rico

#### MWh consumed accounted for at a zero emission factor

130,119

#### Comment

#### Sourcing method

Power purchase agreement (PPA) with on-site/off-site generator owned by a third party with no grid transfers (direct line)

#### Low-carbon technology type

Solar

## Country/region of consumption of low-carbon electricity, heat, steam or cooling

India



## MWh consumed accounted for at a zero emission factor

6.247

#### Comment

#### Sourcing method

Power purchase agreement (PPA) with on-site/off-site generator owned by a third party with no grid transfers (direct line)

### Low-carbon technology type

Wind

# Country/region of consumption of low-carbon electricity, heat, steam or cooling

United States of America

#### MWh consumed accounted for at a zero emission factor

1,621

#### Comment

#### Sourcing method

Power purchase agreement (PPA) with a grid-connected generator with energy attribute certificates

#### Low-carbon technology type

Solar

## Country/region of consumption of low-carbon electricity, heat, steam or cooling

United States of America

#### MWh consumed accounted for at a zero emission factor

138.233

#### Comment

#### Sourcing method

Power purchase agreement (PPA) with a grid-connected generator with energy attribute certificates

#### Low-carbon technology type



Hydropower

## Country/region of consumption of low-carbon electricity, heat, steam or cooling

Mexico

#### MWh consumed accounted for at a zero emission factor

162,286

#### Comment

#### Sourcing method

Green electricity products (e.g. green tariffs) from an energy supplier, supported by energy attribute certificates

### Low-carbon technology type

Wind

## Country/region of consumption of low-carbon electricity, heat, steam or cooling

United States of America

#### MWh consumed accounted for at a zero emission factor

12,962

### Comment

## Sourcing method

Green electricity products (e.g. green tariffs) from an energy supplier, supported by energy attribute certificates

#### Low-carbon technology type

Solar

# Country/region of consumption of low-carbon electricity, heat, steam or cooling

United States of America

#### MWh consumed accounted for at a zero emission factor

33,497

### Comment



#### Sourcing method

Green electricity products (e.g. green tariffs) from an energy supplier, supported by energy attribute certificates

#### Low-carbon technology type

Other, please specify
Mix of solar, wind and hydro.

## Country/region of consumption of low-carbon electricity, heat, steam or cooling

Chile

#### MWh consumed accounted for at a zero emission factor

208,000

#### Comment

#### Sourcing method

Power purchase agreement (PPA) with on-site/off-site generator owned by a third party with no grid transfers (direct line)

### Low-carbon technology type

Solar

# Country/region of consumption of low-carbon electricity, heat, steam or cooling

Chile

#### MWh consumed accounted for at a zero emission factor

683

#### Comment

#### Sourcing method

Power purchase agreement (PPA) with on-site/off-site generator owned by a third party with no grid transfers (direct line)

## Low-carbon technology type

Solar

## Country/region of consumption of low-carbon electricity, heat, steam or cooling

Mexico



## MWh consumed accounted for at a zero emission factor 1,911

Comment

## C9. Additional metrics

## 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.

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

## C10.1a

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

## Verification or assurance cycle in place

Annual process

#### Status in the current reporting year

Complete

#### Type of verification or assurance

Limited assurance

#### Attach the statement

Wal-Mart CY2019 CDP Letter TR Version SA Amended - FINAL - 20200920.pdf

#### Page/ section reference



Page 2

#### 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 2 emissions and attach the relevant statements.

## Scope 2 approach

Scope 2 market-based

#### Verification or assurance cycle in place

Annual process

#### Status in the current reporting year

Complete

#### Type of verification or assurance

Limited assurance

#### Attach the statement

Wal-Mart CY2019 CDP Letter TR Version SA Amended - FINAL - 20200920.pdf

## Page/ section reference

Page 2

#### Relevant standard

ISO14064-3

#### Proportion of reported emissions verified (%)

100

## C10.1c

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

## Scope 3 category

Scope 3: Business travel



#### 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 CY2019 CDP Letter TR Version SA Amended - FINAL - 20200920.pdf

## Page/section reference

Page 2

#### Relevant standard

ISO14064-3

### Proportion of reported emissions verified (%)

100

## C<sub>10.2</sub>

(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 you are regulated by.



#### Other carbon tax, please specify

#### Period start date

January 4, 2017

#### Period end date

March 31, 2029

#### % of total Scope 1 emissions covered by tax

1.5

#### Total cost of tax paid

756,755

#### 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 you are regulated by or anticipate being regulated by?

The Zero Emissions Cred (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

#### % of supplier-related 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 creating 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 over year) in all major business units. Today, the Index, recently renamed THESIS, enables suppliers to report on key performance indicators for the most relevant environmental and social issues across the lifecycle of a product type. Approximately 1,500 unique suppliers have reported through THESIS, representing 61% of our U.S. volume in the 117 categories where the survey is available. Coverage declined from 80% last year as we opened the survey up to a broader base of suppliers and transitioned to a supplier self-directed approach. We believe that coverage will increase as suppliers become accustomed to the new approach

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 2019 over



2,300 suppliers from over 40 countries had signed up to participate in Project Gigaton and hundreds of them have started to report avoided emissions.

In 2019 alone, over 1,000 suppliers reported avoiding 136 million metric tons CO2e of emissions, totaling 230 million metric tons CO2e toward the 1 gigaton target in the first three 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, 56% of Project Gigaton suppliers have set such goals.

#### 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, recently renamed THESIS, enables suppliers to report on key performance indicators for the most relevant environmental and social issues across the lifecycle of a product type. Approximately 1,500 unique suppliers have reported through THESIS, representing 61% of our U.S. volume in the 117 categories where the survey is available. Coverage declined from 80% last year as we opened the survey up to a broader base of suppliers and transitioned to a supplier self-directed approach. We believe that coverage will increase as suppliers become accustomed to the new approach. The results empowered buyers, responsible for thousands of items, to manage the sustainability performance of their product portfolio. 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. Based on stakeholder and THESIS inputs, we develop sustainability strategies for each category. We aim to improve the sustainability not only of Walmart assortments but to also impact supply chain systems more broadly — for example, by improving traceability or supporting adoption of more sustainable farming practices. Varying by product category, our strategies include actions related to product sourcing, collaborative projects with suppliers and NGOs, customer engagement, advocacy, and/or philanthropy.

## C12.1d

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

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 2019 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 in 2016. 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 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.

## C12.3

# (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?

Focus of	Corporate	Details of engagement	Proposed legislative solution
legislation	position		



	I		
Energy efficiency	Support with minor exceptions	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.	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.
Clean energy generation	Support with minor exceptions	In the United States, we have been involved in regulatory and legislative actions at the state and federal level related to renewable energy. These included 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&I REDI program, Florida Power & Light	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



Other, please specify Emissions reductions in transportation	Support with minor exceptions	SolarTogether program, PNM Solar Direct program). 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, South 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, legislative bodies, and the Federal Energy Regulatory Commission through the Renewable Energy Buyers Alliance. 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	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
		the EPA	providing the industry the certainty required to reduce the complexity of adherence, to speed commercialization, and to reduce to the cost of innovation.
Other, please specify Demand response	Support	We work on demand response issues through direct advocacy and our membership in the Advanced Energy Management Alliance.	We believe that demand response is an effective method to reduce peaks loads and thereby reduce the need for building additional power plants.



## C12.3b

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

Yes

## C12.3c

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

#### Trade association

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 hydroflourocarbons 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



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

The Renewable Energy Buyers Alliance (REBA) is a membership association for businesses and organizations seeking to procure renewable energy across the United States. Since 2014, 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.

## 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 2019 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.

<u>We Are Still In:</u> 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.

<u>Renewable Energy Buyers Alliance</u>: 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.



<u>Paris and Bonn negotiations:</u> 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.

<u>Global Forest Watch Pro:</u> 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 (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.

## 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\_2020\_Annual\_Report.pdf

## Page/Section reference

Page 16

#### **Content elements**

Risks & opportunities

#### Comment

Walmart Inc. 2020 Annual Report

#### **Publication**

In mainstream reports, incorporating the TCFD recommendations

#### **Status**

Complete

#### Attach the document

Walmex\_2019\_Annual\_Report\_MSE.pdf

## Page/Section reference

Page 80-86

#### **Content elements**

Strategy

Risks & opportunities

**Emissions figures** 

**Emission targets** 

Other metrics

#### Comment

Walmart Mexico and Central America's 2019 Annual Report

#### **Publication**

In voluntary sustainability report

#### **Status**



#### Complete

#### Attach the document

walmart-esg-report-2020.pdf

## Page/Section reference

Page 23-29

#### **Content elements**

Governance

Strategy

Risks & opportunities

**Emissions figures** 

**Emission targets** 

Other metrics

#### Comment

Walmart Inc. 2020 ESG Report

## C15. 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.

## C15.1

(C15.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	Chief Financial Officer (CFO), Walmart Inc.	Chief Financial Officer (CFO)

## SC. Supply chain module

## SC0.0

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



## SC0.1

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

	Annual Revenue
Row 1	

## SC0.2

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

## **SC1.1**

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

## SC1.2

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

## SC1.3

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

Allocation challenges Please explain what would help you overcome these challenges

## SC1.4

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

## SC2.1

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



## SC2.2

(SC2.2) Have requests or initiatives by CDP Supply Chain members prompted your organization to take organizational-level emissions reduction initiatives?

## SC3.1

(SC3.1) Do you want to enroll in the 2020-2021 CDP Action Exchange initiative?

## SC3.2

(SC3.2) Is your company a participating supplier in CDP's 2019-2020 Action Exchange initiative?

## SC4.1

(SC4.1) Are you providing product level data for your organization's goods or services?

## **Submit your response**

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

	I am submitting to		Are you ready to submit the additional Supply Chain Questions?
I am submitting my	Investors	Public	No, Submit Supply Chain Questions
response	Customers		Later

#### Please confirm below

I have read and accept the applicable Terms