

**Module: Introduction****Page: Introduction**

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**CC0.1****Introduction**

Please give a general description and introduction to your organization.

Marriott International is a global lodging company with more than 6,000 properties (as of year-end 2016) that we operate (“manage”), franchise or license under 30 brands in 122 countries and territories worldwide. With the September 2016 acquisition of Starwood Hotels & Resorts, Marriott now offers the most comprehensive portfolio of hotel brands and a truly global reach.

We welcome the responsibility to be a good global steward and remain grounded in a set of core values: put people first, pursue excellence, embrace change, act with integrity and serve our world. Our relentless focus on innovation and action fuel the way we do business and the way we approach our responsibility to the planet. As we continue to integrate Starwood into Marriott, we seek new opportunities to pull-through the most successful strategies for sustainable hotel operations worldwide.

In 2016, Marriott’s environmental goals included:

- Reduce energy and water consumption 20% from 2007 to 2020. (2007 baseline energy intensity baseline of 402.2 kWh per square meter of conditioned space and 2007 water intensity baseline of .89 cubic meter per occupied room.)
- Empower our hotel development partners to build green hotels
- Green our multi-billion dollar supply chain
- Educate and inspire associates and guests to conserve and preserve
- Address environmental challenges through innovative conservation initiatives including rainforest protection and water conservation

This year, our company has invested considerable resources in developing our next generation sustainability and social impact goals, engaging internal and external stakeholders and partners in a comprehensive process to define a new strategy that builds on our successful efforts to date and embraces new challenges. Our new goals will be announced in 2017.

We continue to collaborate with external partners to encourage sustainability and mitigate climate change in our industry. Since 2015, we have worked with the

International Tourism Partnership on unified industry goals for youth employment, carbon, water, and human rights that will be introduced this year. We have recently mapped our new goals against relevant U.N. Sustainable Development Goals. Marriott played a key role in developing industry standards for carbon measurement through supporting the creation of and participating in the Hotel Carbon Measurement Initiative, which is used as a Scope 3 industry reporting protocol by CDP. We have developed key partnerships with local governments, communities and NGOs for our signature conservation initiatives, including the Juma REDD+ project in Brazil's Amazon rainforest, and mangrove restoration in Thailand.

In this disclosure, we can report reductions in emissions per square meter of conditioned space in Marriott-managed properties (exclusive of former Starwood brand properties) of 15.8% since 2007, our original target base year.

Marriott completed the acquisition of Starwood Hotels & Resorts Worldwide on September 23, 2016. Unless otherwise noted, the numerical data in this disclosure represent the combined numbers for Marriott and former Starwood brand properties

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## CC0.2

### Reporting Year

Please state the start and end date of the year for which you are reporting data.

The current reporting year is the latest/most recent 12-month period for which data is reported. Enter the dates of this year first.

We request data for more than one reporting period for some emission accounting questions. Please provide data for the three years prior to the current reporting year if you have not provided this information before, or if this is the first time you have answered a CDP information request. (This does not apply if you have been offered and selected the option of answering the shorter questionnaire). If you are going to provide additional years of data, please give the dates of those reporting periods here. Work backwards from the most recent reporting year.

Please enter dates in following format: day(DD)/month(MM)/year(YYYY) (i.e. 31/01/2001).

#### Enter Periods that will be disclosed

Fri 01 Jan 2016 - Sat 31 Dec 2016

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## CC0.3

### Country list configuration

Please select the countries for which you will be supplying data. If you are responding to the Electric Utilities module, this selection will be carried forward to assist you in completing your response.

Select country

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### CC0.4

#### Currency selection

Please select the currency in which you would like to submit your response. All financial information contained in the response should be in this currency.

USD(\$)

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### CC0.6

#### Modules

As part of the request for information on behalf of investors, companies in the electric utility sector, companies in the automobile and auto component manufacturing sector, companies in the oil and gas sector, companies in the information and communications technology sector (ICT) and companies in the food, beverage and tobacco sector (FBT) should complete supplementary questions in addition to the core questionnaire.

If you are in these sector groupings, the corresponding sector modules will not appear among the options of question CC0.6 but will automatically appear in the ORS navigation bar when you save this page. If you want to query your classification, please email [respond@cdp.net](mailto:respond@cdp.net).

If you have not been presented with a sector module that you consider would be appropriate for your company to answer, please select the module below in CC0.6.

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### Further Information

**Module: Management**

**Page: CC1. Governance**

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**CC1.1**

**Where is the highest level of direct responsibility for climate change within your organization?**

Board or individual/sub-set of the Board or other committee appointed by the Board

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**CC1.1a**

**Please identify the position of the individual or name of the committee with this responsibility**

Marriott's Global Green Council, led by ten global officers/executives representing the following disciplines: Global Operations (co-Chair); Global Communications & Public Affairs (co-Chair); Global Design; Finance; Human Resources; Law; Lodging Development; IT; Brand, Marketing, Sales and Consumer Services; Owner & Franchise Services; Corporate Social Responsibility, and Sustainability and Supplier Diversity. In 2016, the traditional Green Council cohort was expanded to include the President and CEO and continent presidents so that these executives could help guide, inform, and review the next generation of Marriott sustainability goals.

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**CC1.2**

**Do you provide incentives for the management of climate change issues, including the attainment of targets?**

Yes

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**CC1.2a**

**Please provide further details on the incentives provided for the management of climate change issues**

Who is entitled to benefit from these incentives?	The type of incentives	Incentivized performance indicator	Comment
Executive officer	Monetary reward	Energy reduction target Other: Behaviour	MBOs – Compensation is linked to results in meeting objectives. Our Global Officer of Operations has an MBO related to our sustainability initiatives.

Who is entitled to benefit from these incentives?	The type of incentives	Incentivized performance indicator	Comment
		change related indicator	
Other: VPs	Monetary reward	Energy reduction project Energy reduction target	MBOs – same as above. Our Global Vice President of Guest Experience, our Senior Director of Global Engineering, and our Vice Presidents and Senior Directors of Engineering at the continent level have energy and water reduction goals, both for annual and long-term targets. Our Senior Vice President of Operations has an MBO related to energy and water reduction.
Energy managers	Monetary reward	Energy reduction project Energy reduction target	MBOs – same as above. Our Senior Directors/Directors of Energy and Environment at the Continent level have specific MBOs related to energy, water and waste, including annual targets and long-term goals.
Other: Environment/sustainability managers	Monetary reward	Other: Behaviour change related indicator	MBOs – same as above. Our Vice President of Sustainability and Supplier Diversity has MBOs related to our overall environmental strategy, stakeholder engagement and supply chain issues.
Public affairs managers	Monetary reward	Other: Behaviour change related indicator	MBOs – same as above. Our Vice President and Directors of Corporate Social Responsibility have MBOs related to conservation projects, stakeholder engagement and sustainability reporting.
Facility managers	Monetary reward	Energy reduction project Energy reduction target Efficiency project Efficiency target	MBOs – same as above. Our General Managers and property Directors of Engineering have MBOs related to property performance against goals. Former Starwood brand facility managers/"Property General Managers" are incentivized by having the following performance indicators included in their annual personal goals: 1) participation in Starwood's annual climate change data gathering survey, 2) achieving their annual energy reduction goal, 3) completing mandatory initiatives that have been established to reduce their hotel's environmental impact, and 4) ensuring the compliance with energy and climate related brand standards.
Other: Business Councils	Recognition (non-monetary)	Other: Behaviour change related indicator	Quarterly and annual awards recognize performance. Marriott has 92 Business Councils comprised of Hotel General Managers and other field leaders in key markets around the world focused on driving community/environment, government relations and culture.
Other: Hotels	Recognition (non-	Emissions reduction project	Hotels receive internal and external recognition for performance against sustainability goals and for innovative projects which help meet our sustainability targets.

Who is entitled to benefit from these incentives?	The type of incentives	Incentivized performance indicator	Comment
	monetary)	Energy reduction project Efficiency project	
Other: Hotel Owners	Recognition (non-monetary)	Energy reduction project Efficiency project	Our hotel partners receive internal and external recognition during annual Marriott owner/franchisee conferences for supporting environmental and community service projects which help meet our sustainability goals.

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**Further Information**

**Page: CC2. Strategy**

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**CC2.1**

**Please select the option that best describes your risk management procedures with regard to climate change risks and opportunities**

Integrated into multi-disciplinary company wide risk management processes

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**CC2.1a**

**Please provide further details on your risk management procedures with regard to climate change risks and opportunities**

Frequency of monitoring	To whom are results reported?	Geographical areas considered	How far into the future are risks considered?	Comment
Six-monthly or more frequently	Board or individual/sub-set of the Board or committee appointed by the Board	Marriott operates and franchises hotel properties in 122 countries.	1 to 3 years	Monitoring of risks and opportunities related to climate change occurs at regular intervals and levels dependent upon the nature of the risk. Property performance data related to energy and water consumption is monitored monthly and reported quarterly and annually. Risks and opportunities related to regulation, customer preference and corporate reputation are evaluated regularly by relevant departments. Data from these sources were reviewed by the Green Council, senior executives, discipline leaders, and subject matter experts as part of developing the next generation sustainability and social impact goals.

## CC2.1b

### Please describe how your risk and opportunity identification processes are applied at both company and asset level

Identifying risks and/or opportunities from climate change and assessing the degree to which they could affect Marriott's business is the focus of the executive-level Global Green Council, a cross-discipline team responsible for developing, catalyzing and driving accountability for the company's environmental strategy. In 2016, the climate change risk assessment process was incorporated into next-generation sustainability and social impact goal setting.

Within the corporation, numerous functional areas monitor risks and opportunities associated with climate change, including Operations, Engineering, Global Design, Procurement, Sustainability, Supplier Diversity, Corporate Social Responsibility, Law, Marketing, Investor Relations, and Sales. Our audit department has included our environmental strategy in its Enterprise Risk Management process. Marriott gathers information from a broad array of external sources, such as NGOs, governments, industry organizations, consultants, and others.

Key structures and tools help identify risks and opportunities at the division, brand and property level:

- Green Hotels Global™ is a global brand standard that provides a dashboard on each property's environmental impact, practices and policies.
- Energy & Environmental Action Plans guide engineering and other property leaders through an energy and water audit process to help identify opportunities to perform against goals.
- At former Starwood brand properties, designated employees at each property self-report their perceived exposure to physical risks from climate change in mandatory annual surveys.
- Transcendent is a web-based enterprise asset management tool that tracks a property's preventive maintenance status, projects and capital expenditure plans, and rolls data up at the country, continent and corporate level.
- Utility database systems track consumption across our managed portfolio, allowing data to be analyzed and benchmarked.

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**CC2.1c****How do you prioritize the risks and opportunities identified?**

With over 6,000 managed or franchised properties around the world, Marriott faces a variety of potential climate-related risks and opportunities as a result of the size and geographic scope of its operations. Materiality and priorities for addressing these risks are determined within the context of corporate business strategy. We also have an ongoing responsibility to respond when necessary to natural events such as hurricanes, floods and drought.

We collaborate with our stakeholders and external partners to understand the direct and indirect environmental impact of our hotels, to mitigate risks and to develop innovative solutions to manage our business sustainably. We have conducted extensive stakeholder engagement with group customers, property owners, industry partners and NGOs, and studied ESG analyst assessments, to help define materiality. In 2016, prioritization of risks and opportunities related to climate change was part of the process of developing the next generation sustainability and social impact goals.

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**CC2.1d**

Please explain why you do not have a process in place for assessing and managing risks and opportunities from climate change, and whether you plan to introduce such a process in future

Main reason for not having a process	Do you plan to introduce a process?	Comment
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**CC2.2****Is climate change integrated into your business strategy?**

Yes

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**CC2.2a**



**Please describe the process of how climate change is integrated into your business strategy and any outcomes of this process**

I. A description of how the business strategy has been influenced:

Marriott's business strategy is to lead the global hospitality industry by providing unparalleled choice and service for our guests, opportunities for our associates and communities, and financial benefits for our owners, franchisees, and shareholders. With the acquisition of Starwood Hotels and Resorts in 2016, Marriott offers the largest range of brands and properties of any lodging company in the world. Our business is built on relationships and the core value of "serving our world." We recognize the responsibility of being a good global steward. Moreover, sustainable hotel operations are a business priority, and we realize costs savings and brand recognition in delivering sustainable lodging facilities and event services.

In 2016, progress against our current environmental strategy was evaluated in the context of setting next generational sustainability and social impact goals. This process was particularly relevant in a year that saw the ratification of the COP21 agreement and the implementation of the UN Sustainable Development Goals. These efforts have highlighted global challenges and the necessity for concerted action, providing a backdrop as Marriott defined its material sustainability goals, including environmental metrics. Marriott worked with PwC and sustainability expert Andrew Winston to help guide and inform the goal-setting process. We engaged an energy consultant to model our path forward and we conducted extensive stakeholder interviews to help define materiality and refine our strategy. On an ongoing basis, the Global Engineering and Facilities Management team communicates with continental engineering leaders about strategy, best practices and progress on energy reduction targets. The Vice President of Sustainability and Supplier Diversity works routinely with our Global Operations team, Directors of Energy and Environment and Sales team. Internal Audit monitors sustainability as part of Enterprise Risk Management. Properties in our Starwood portfolio complete an annual property survey that includes climate change issues and have access to an online sustainability platform to track initiatives and receive guidance.

II. At least one example:

Going forward, a commitment has been made by our President and CEO that our new sustainability targets will be monitored as part of quarterly business review meetings with our continent presidents. Marriott is also in the process of consolidating the platforms that maintain and monitor our global utility data and environmental metrics. This will allow improved data accessibility and accuracy to ensure the right resources have accurate data to make timely and appropriate decisions.

III. What aspects of climate change have influenced the strategy:

We face risks related to global temperature changes and extremes which drive our energy efficiency efforts. Given the potential for extreme weather to disrupt travel and damage property, measures taken to reduce climate change impacts have demonstrable business value. We also face both challenges and opportunities relating to regulation, consumer preferences, and our reputation for environmental stewardship. With a growing market presence outside the United States, we also seek to understand and to address risks and opportunities related to different locales and cultures. The opportunity to support decarbonization of the global economy motivates our heightened focus on renewable energy.

IV. How the short term strategy has been influenced by climate change:

Climate change continues to influence the way we communicate to our stakeholders. We share property-level environmental sustainability data with our most valuable travel buyers, meeting planners and customers. In addition to the carbon and water footprint of each hotel Individual guests can review information about environmental sustainability practices through TripAdvisor. Currently, Marriott has the largest number of TripAdvisor GreenLeaders hotels with over 2200 hotels receiving the GreenLeaders' badge. GreenLeaders helps TripAdvisor's community of more than 390 million travelers plan greener trips by highlighting accommodations engaging in sustainable practices.

v. Long term strategy:

Marriott's environmental goals include:

- Reduce energy and water consumption 20% from 2007 to 2020. (2007 baseline energy intensity baseline of 402.2 kWh per square meter of conditioned space and 2007 water intensity baseline of .89 cubic meter per occupied room.)
- Empower our hotel development partners to build green hotels
- Green our multi-billion dollar supply chain
- Educate and inspire associates and guests to conserve and preserve
- Address environmental challenges through innovative conservation initiatives including rainforest protection and water conservation

Going forward, our new goals will include targets for carbon and renewable energy.

vi. How this is gaining a strategic advantage over your competitors:

Recognition of Marriott's sustainability efforts helps to enhance our brand and to attract and retain associates, customers, owners, and business partners who share our values. Our LEED® Volume build program with the USGBC provides incentives for owners and developers to build sustainable hotels under Marriott's select service and extended stay brands. Many of our group customers have included our hotels in their preferred programs because of the environmental metrics available through the Green Hotels Global™ dashboard.

vii. What have been the most substantial business decisions made during the reporting year influenced by the climate change driven aspects of the strategy:

Marriott completed its acquisition of Starwood Hotels & Resorts in September 2016, significantly expanding our global footprint. Starwood's own legacy of performance in carbon emissions reductions and integration of sustainability goals into its operation is a distinct advantage as we move forward with a combined portfolio. As part of the considerable challenges in integrating the two companies, we will be looking to leverage the resources and best practices to provide our hotels with actions to support reduction targets.

viii. How the Paris Agreement has influenced the business strategy:

Marriott believes global collaboration and action on the environment and energy security is critical for a sustainable future for all. We recognize the need for collective action to reduce greenhouse gas emissions.

iv. Do you use forward-looking scenario analyses, including a 2oC scenario, to inform your organization's businesses, strategy, and/or financial planning:

Forward-looking scenarios to assess climate change risks and opportunities were considered in our next-generation sustainability and social impact goal setting process.

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**CC2.2b**

Please explain why climate change is not integrated into your business strategy

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**CC2.2c**

**Does your company use an internal price on carbon?**

No, and we currently don't anticipate doing so in the next 2 years

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CC2.2d

Please provide details and examples of how your company uses an internal price on carbon

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CC2.3

**Do you engage in activities that could either directly or indirectly influence public policy on climate change through any of the following? (tick all that apply)**

Trade associations  
Other

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CC2.3a

On what issues have you been engaging directly with policy makers?

Focus of legislation	Corporate Position	Details of engagement	Proposed legislative solution
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CC2.3b

**Are you on the Board of any trade associations or provide funding beyond membership?**

Yes

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CC2.3c

Please enter the details of those trade associations that are likely to take a position on climate change legislation

Trade association	Is your position on climate change consistent with theirs?	Please explain the trade association's position	How have you, or are you attempting to, influence the position?
World Travel and Tourism Council	Consistent	The World Travel and Tourism Council (WTTC)'s Action Agenda (set forth in the Report "Leading the Challenge on Climate Change) is comprised of ten action items which will advance efforts to address climate change. WTTC and participating members outlined climate change policies and commitments around five themes; accountability and responsibility; local community sustainable growth and capacity building; educating customers and stakeholders; greening supply chains; and innovations, capital investment and infrastructure. WTTC reported on the progress made on the agenda and reiterated the commitment in advance of COP21.	Marriott supports and endorses the World Travel & Tourism Council's (WTTC) Action Agenda as part of our Environmental Policy. In addition, Marriott was instrumental in establishing the Hotel Carbon Measurement Initiative (HCMI) with the International Tourism Partnership and the WTTC. This joint effort, which also included collaboration with The World Resources Institute, Greenview Consulting, Cornell University and KPMG, grew to include over 20 hospitality companies as part of the working group. In 2012, the HCMI released a methodology for carbon measurement of hotels and set of metrics based on available data.
International Tourism Partnership	Consistent	The International Tourism Partnership (ITP) describes its mission in the following way: "ITP brings together the world's leading international hotel companies to provide a voice for environmental and social responsibility in the industry. We work to demonstrate in a very practical way that environmental and social responsibility makes good business sense." ITP does this by highlighting best practices, offering a range of practical products and programmes and tackling emerging environmental sustainability and social issues through its collaborative working groups.	Marriott continues to provide data to Cornell and Greenview to use HCMI (described in row above as a joint ITP/WTTC project) for the development of carbon footprint benchmarking within markets. The data is part of the publicly available ITP/Greenview Hotel Footprinting Tool. Representatives from Marriott participate in ITP working groups, including: Carbon Measurement Working Group (the Hotel Carbon Measurement Initiative referenced above), the Hotel Water Measurement Initiative, Youth Employment Working Group, and the Human Rights Working Group.
Global Business Travel Association	Consistent	The Global Business Travel Association (GBTA) is the world's premier business travel and meetings organization. The GBTA Sustainability Committee provides leadership and resources to help GBTA member organizations balance the social, economic and environmental impact of their business travel programs.	Marriott's VP of Sustainability and Supplier Diversity serves as the Vice-Chair of the GBTA sustainability committee and co-developed and participated in convention session: Connecting the Dots: Buyers, Suppliers, and Sustainability Data. The session was designed to help business travel managers and suppliers in their efforts to integrate sustainability into their corporate travel management programs.

Do you publicly disclose a list of all the research organizations that you fund?

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**CC2.3e**

**Please provide details of the other engagement activities that you undertake**

Marriott has worked over the past year with the International Tourism Partnership on setting industry goals on youth employment, carbon, water, and human rights, driving change throughout the sector in support of the UN Sustainable Development Goals. Marriott has participated in several COP events, including representing the hospitality industry at a tourism roundtable at COP 21.

Marriott is an active participant on the Global Business Travel Association (GBTA) Sustainability Committee, which provides leadership and resources to help member organizations integrate sustainability into their corporate travel management programs. One of the resources developed by GBTA through assistance from Marriott and other members is a CSR module to the Hotel Request for Proposal (RFP) module that most of our corporate customers use during their annual bid process for preferred business travel hotels. The module includes sustainability questions such as carbon footprint per occupied room, water footprint per occupied room, waste diversion rate, and sustainable certifications. Additionally, sessions at GBTA's annual convention help to educate attendees about sustainability and how they can incorporate these considerations into their travel programs.

Marriott supports academic research in corporate sustainability and continues to partner with several universities to conduct studies and support both undergraduate and graduate research activities. We supported a partnership with a team from Penn State University to help design and conduct waste audits at four of our properties. These collaborative studies help inform our own practices as they build the body of knowledge for sustainable lodging management.

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**CC2.3f**

**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?**

Pursuit of our environmental strategy is the responsibility of our Global Green Council, which sets our goals and establishes policies. With representation from all major disciplines, the Council supports our major engagements with policy makers and stakeholders.

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**CC2.3g**

**Please explain why you do not engage with policy makers**

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**Further Information**

**Page: CC3. Targets and Initiatives**

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**CC3.1**

**Did you have an emissions reduction or renewable energy consumption or production target that was active (ongoing or reached completion) in the reporting year?**

Intensity target

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**CC3.1a**

Please provide details of your absolute target

ID	Scope	% of emissions in scope	% reduction from base year	Base year	Base year emissions covered by target (metric tonnes CO2e)	Target year	Is this a science-based target?	Comment
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**CC3.1b**

Please provide details of your intensity target

ID	Scope	% of emissions in scope	% reduction from base year	Metric	Base year	Normalized base year emissions covered by target	Target year	Is this a science-based target?	Comment
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ID	Scope	% of emissions in scope	% reduction from base year	Metric	Base year	Normalized base year emissions covered by target	Target year	Is this a science-based target?	Comment
Int1	Scope 1+2 (location-based)	100%	20%	Other: per sq meter of conditioned space	2007	0.164	2020	No, but we anticipate setting one in the next 2 years	Marriott's strategy included the goal to reduce energy use per square meter of conditioned space 20% by 2020 over 2007 levels. For the purposes of this CDP disclosure, we are stating this goal here in terms of emissions. Our next-generation goals include a carbon target, and we will report performance against that target next year. We will review science-based target setting in 2018.
Int2	Scope 1+2 (location-based)	99.1%	30%	Other: Per built guest room	2008	16.73	2020	No, and we do not anticipate setting one in the next 2 years	We are reporting the 2020 targets for Starwood here, as the company operated separately for most of 2016. Going forward, there will be one set of goals for Marriott, inclusive of the former Starwood brands.
Int3	Scope 3: Franchises	99.1%	30%	Other: Per built guest room	2008	15.85	2020	No, and we do not anticipate setting one in the next 2 years	We are reporting the 2020 targets for Starwood here, as the company operated separately for most of 2016. Going forward, there will be one set of goals for Marriott, inclusive of the former Starwood brands.

**CC3.1c**

**Please also indicate what change in absolute emissions this intensity target reflects**

ID	Direction of change anticipated in absolute Scope 1+2 emissions at target completion?	% change anticipated in absolute Scope 1+2 emissions	Direction of change anticipated in absolute Scope 3 emissions at target completion?	% change anticipated in absolute Scope 3 emissions	Comment
Int1	Increase		No change		Given projections in growth for Marriott's portfolio, absolute emissions are projected to have increased by 2020 over the 2007 baseline. This target will no longer be tracked in the future, as the next generation goals will be in effect.
Int2	Increase		No change		See above – targets for former Starwood brands will not be tracked separately in the future.
Int3	No change		Increase		See above – targets for former Starwood brands will not be tracked separately in the future.

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CC3.1d

Please provide details of your renewable energy consumption and/or production target

ID	Energy types covered by target	Base year	Base year energy for energy type covered (MWh)	% renewable energy in base year	Target year	% renewable energy in target year	Comment
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CC3.1e



**For all of your targets, please provide details on the progress made in the reporting year**

<b>ID</b>	<b>% complete (time)</b>	<b>% complete (emissions or renewable energy)</b>	<b>Comment</b>
Int1	69%	79%	Since 2007, Marriott managed properties have reduced their emissions per square meter of conditioned space by 15.8%.
Int2	67%	53%	Since 2008, Starwood has reduced its Owned & Managed (Scopes 1 & 2) emissions intensity by 15.75%.
Int3	67%	100%	Since 2008, Starwood has reduced its Franchise (Scope 3) emissions intensity by 42.98%.

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**CC3.1f**

Please explain (i) why you do not have a target; and (ii) forecast how your emissions will change over the next five years

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**CC3.2**

**Do you classify any of your existing goods and/or services as low carbon products or do they enable a third party to avoid GHG emissions?**

No

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**CC3.2a**

Please 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	Description of product/Group of products	Are you reporting low carbon product/s or avoided emissions?	Taxonomy, project or methodology used to classify product/s as low carbon or to calculate avoided emissions	% revenue from low carbon product/s in the reporting year	% R&D in low carbon product/s in the reporting year	Comment
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**CC3.3**

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

Yes

**CC3.3a**

**Please identify the total number of projects at each stage of development, and for those in the implementation stages, the estimated CO2e savings**

Stage of development	Number of projects	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation		
To be implemented*	110	24431
Implementation commenced*	84	11565
Implemented*	570	80706
Not to be implemented		

**CC3.3b**

For those initiatives implemented in the reporting year, please provide details in the table below

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/ Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
Other	Using Energy and Environmental Action Plans as a roadmap, Marriott full-service properties select "Signature Projects" based upon the following criteria: the project can be completed during the first half of the year AND it has the potential to significantly impact cost and emissions linked to reductions in energy use. Additional "ROI" projects are often completed as well, when the internal rate of return is compelling. These voluntary projects reduce Scope 1 & 2 emissions, drive down operating costs by reducing resource consumption and taking advantage of utility rebates/incentives, and help Marriott achieve its 2020 energy conservation goals	80706	Scope 1 Scope 2 (location-based)	Voluntary	12824900	28902200	1-3 years		Signature projects include lighting upgrades, installation of variable frequency drive pumps, fans and air handling units, chiller upgrades and other energy efficiency projects. As a result, calculations for payback periods are done on the basis of the aggregated data. The estimated lifetime of the initiative varies by the nature of the project. Marriott's Energy and Environment Plans and the Signature projects culled from them annually provide the best way to estimate the project pipeline data requested in 3.3a. The data points provided here are linked to the completed projects in 3.3a. These totals are

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/ Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
									not a complete list of all emissions reducing activities in the global portfolio and the same data is included in the individual project categories in the rows below, which are included to illustrate the scope of individual project types. All project data in represent Marriott properties only, exclusive of former Starwood brand hotels.
Energy efficiency: Building services	LED lighting retrofit projects continued to be an effective emissions-reduction project with an attractive ROI in 2016, helping Marriott make progress toward our energy reduction targets, as well as reducing our Scope 2 emissions. We identify strategic partnerships where possible, and install LED bulbs where the lighting needs are best suited to the technology and provide the most compelling internal rate of return. Highly efficient LED	32630	Scope 2 (location-based)	Voluntary	5402600	9572000	1-3 years	6-10 years	Lighting retrofits have been part of our environmental efforts for years; as newer technology lowers replacement costs, systems are upgraded at our properties around the world. Large-scale lighting retrofits are often tied to other renovation projects, as well as to advances in lighting technology. The timing of these factors and their impact on the ROI of

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/ Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
	replacements reduce lighting energy requirements as well as cooling load in our lodging properties.								subsequent projects will vary from property to property.
Energy efficiency: Processes	Marriott continues to incorporate and integrate building automation systems (BAS) and other automated controls to increase the efficiency of the buildings we manage.	15145	Scope 1 Scope 2 (location-based)	Voluntary	2648200	6355900	1-3 years	16-20 years	
Energy efficiency: Processes	Refrigeration represents an area of opportunity for energy savings at many of our full-service properties. Improvements to motors and fans, smart controls and door modifications offer energy savings and reduce carbon emissions.	911	Scope 2 (location-based)	Voluntary	193000	384800	1-3 years	11-15 years	
Energy efficiency: Building services	HVAC system upgrades, including chiller replacements with high efficiency units and cooling tower upgrades generate significant emissions reductions.	7776	Scope 1 Scope 2 (location-based)	Voluntary	1216300	4439900	4-10 years	16-20 years	
Energy efficiency: Building services	Kitchens in our full-service hotels require large exhaust systems. Installing smart ventilation systems with multi-sensor controls and	4102	Scope 1 Scope 2 (location-based)	Voluntary	438300	1076900	1-3 years	11-15 years	

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/ Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
	variable speed drives which adjust to the ventilation needed reduce energy consumption significantly. The projects reduce both fan motor energy and the energy required to condition incoming outside air.								
Low carbon energy installation	Several on-site solar installations provide power for a portion of a property's energy needs or for a discrete purpose such as pool heating. The rooftop photovoltaic system installed at the Anaheim Marriott in California provides enough energy for nearly one-third of the property's 1,030 guest rooms.	652	Scope 2 (location-based)	Voluntary	282800	892500	1-3 years		Estimated lifetime of the initiatives varies by project.

**CC3.3c**

**What methods do you use to drive investment in emissions reduction activities?**

Method	Comment
Financial optimization calculations	Our Energy and Environmental Action Plans evaluate return on investment projects and help prioritize owner investments. Marriott Retro-commissioning (MRCx) drives 3rd party studies of our more complex facilities in order to identify the efficiency opportunities
Employee engagement	Our properties in the Americas have used an engineering gamification tool since 2013 to drive operational excellence. This tool was adopted by our European hotels in 2015 and is in the process of being implemented in our Middle-East, Africa, and Asia-Pacific regions. A substantial portion of the available points in the tool target Environmental Stewardship and competition points are awarded for the following achievements: <ul style="list-style-type: none"> <li>• Exceeding your property's Energy Intensity Goal</li> <li>• Completing your Signature ROI Project</li> <li>• Completing the Chilled Water Diagnostic</li> <li>• Achieve TripAdvisor GreenLeaders status</li> </ul> Last year, available points for Signature ROI projects and Chilled Water Diagnostics were increased, further encouraging these actions. Additionally, our associates receive points for completing equipment preventative maintenance, maintenance and upkeep, and work request activities in a timely manner, which has an inherent positive impact on energy reduction through efficiently operating equipment.
Employee engagement	We engage our employees through various training opportunities and communicate through our Corporate Social Responsibility pages on Marriott.com, our annual sustainability reporting, various intranet channels and social media, including: "Heart of the House," Bill Marriott's and Arne Sorenson's blogs: the "Serve Our World" Overheard@Marriott LinkedIn blog series; and a dedicated public affairs and sustainability twitter handle (@MarriottPOV). We also have various Facebook pages, Planet Marriott Tumblr (Europe), and Weibo (in China) channels that support our efforts. Internal Talent Network Teams (TNTs) address business challenges, including those related to sustainability and CSR, through short-term, dynamic, cross-discipline corporate-level teams. We also promoted a sustainability campaign within our Global Operations team and a quarterly CSR-focused SERVE Our World speaker series at headquarters. There are also company-wide Environmental Awareness Month activities, sales tools and internal recognition of hotel performance. Property managers share information on Marriott environmental policies, best practices and initiatives with their employees through bulletin boards, daily briefings and departmental meetings. Question #4 on Marriott's annual associate engagement survey centers on sustainability with 85 percent of associates agreeing that their property and the company are taking steps to protect the environment. Efforts at former Starwood brand properties include: establishing property level sustainability teams and sustainability champions, creating an internal Sustainability Resource Center website, providing webinars and training materials, developing companywide awareness programs and setting associate goals related to sustainability and climate change. Marriott is reviewing best practices from former Starwood brands' employee engagement, as we develop and implement a combined strategy for the company.
Compliance with regulatory requirements/standards	Many cities across the United States require LEED® certification for new commercial construction. Marriott's LEED® Volume build program with the USGBC provides incentives for owners and developers to build sustainable hotels under Marriott's select service and extended stay brands. By constructing projects through this program, owners can build more environmentally sustainable buildings and expect to reduce their total energy and water consumption by 25%. Marriott complies with all relevant local, regional and national regulations, including those relating specifically to climate change, such as the UK CRC Energy Efficiency Scheme. Under that mandatory program, Marriott's UK properties report and pay taxes on annual carbon emissions.

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CC3.3d

If you do not have any emissions reduction initiatives, please explain why not

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**Further Information**

**Page: CC4. Communication**

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CC4.1

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	Status	Page/Section reference	Attach the document	Comment
In other regulatory filings	Complete	Page 9	<a href="https://www.cdp.net/sites/2017/29/11329/Climate Change 2017/Shared Documents/Attachments/CC4.1/Marriott 2016 10-K.pdf">https://www.cdp.net/sites/2017/29/11329/Climate Change 2017/Shared Documents/Attachments/CC4.1/Marriott 2016 10-K.pdf</a>	
In voluntary communications	Underway - previous year attached	Page 3	<a href="https://www.cdp.net/sites/2017/29/11329/Climate Change 2017/Shared Documents/Attachments/CC4.1/Marriott_International_Sustainability_Highlights_2016.pdf">https://www.cdp.net/sites/2017/29/11329/Climate Change 2017/Shared Documents/Attachments/CC4.1/Marriott_International_Sustainability_Highlights_2016.pdf</a>	

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**Further Information**

**Module: Risks and Opportunities**

**Page: CC5. Climate Change Risks**

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CC5.1



Have you identified any inherent climate change risks that have the potential to generate a substantive change in your business operations, revenue or expenditure? Tick all that apply

- Risks driven by changes in regulation
- Risks driven by changes in physical climate parameters
- Risks driven by changes in other climate-related developments

CC5.1a

Please describe your inherent risks that are driven by changes in regulation

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Other regulatory drivers	As part of the European Union 2020 energy initiatives, the EU Energy Efficiency Directive is designed to reduce total energy consumption by 20% in all EU member states. Some of the provisions in the Directive require businesses to monitor energy consumed, perform energy audits and	Increased operational cost	Up to 1 year	Direct	Virtually certain	Low	Fines for non-compliance vary considerably by EU member state.	Marriott's energy management practices reduced the impact of this legislation – many hotels were in compliance without extra investment. As an example, Marriott Cologne is part of the Learning Energy Efficiency Network (LEEN). This collaboration allows companies to share expertise and commit to energy savings projects. Energy Audits are part of	Additional energy audits to bring hotels into compliance with the regulation cost approximately \$5,700 per hotel.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	develop energy efficiency plans with periodical review and tracking of the energy savings. Energy audits were required before December 2015 and every four years after or fines could be imposed which varied by country.							the LEEN goal setting process. Marriott provides continuous learning opportunities for building engineers. In 2016, over 130 attended "Engineering Academy," a two-day course in energy management.	
Product efficiency regulations and standards	Changing lighting standards, such as bans on halogen bulbs in certain applications may require lighting retrofits.	Increased operational cost	Up to 1 year	Direct	Virtually certain	Low	Lighting retrofits costs vary widely, depending upon the size and type of installation.	We work with our suppliers to develop compelling ROI lighting projects.	Lighting retrofits vary in size and scale, but often have a payback period of 1-3 years due to the energy efficiency of LED technology. In 2016, over 9.5 million USD were invested in lighting retrofits at hotels managed by Marriott.
Carbon taxes	To discourage greenhouse gas emissions, various governments have or are	Increased operational cost	Up to 1 year	Direct	Virtually certain	Low	Carbon taxes contribute small increases in operational expenses in the regions where	Marriott remains focused on reducing energy consumption, which is one of the key goals of our	Financial investments in energy efficiency vary by installation type and other factors

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>anticipated to introduce taxes on the carbon content of various fuels. Some current carbon tax schemes such as the UK Climate Change Levy (CCL) apply to all businesses, while others target the companies with significant emissions such as utilities, which can then pass on increased costs to their customers.</p>						<p>they have been enacted, such as the U.K. In 2016, the assessment for electricity under the CCL was 0.559 pence per kilowatt hour. A full-service Marriott hotel using 1 million kWh of electricity annually would owe approximately 5,590 GBP for electricity portion of the CCL (the tax also includes gas fuel). The financial implications will grow for global operations if the number of countries legislating carbon taxes grows, and as the tax rates increase over time. The CCL electricity rate will increase to .569 pence/kWh from April 2017 forward.</p>	<p>environmental strategy. Energy conservation helps mitigate the risks posed by fuel and carbon taxes. Pull-through of our strategy at the property-level drives results, and our support for each hotel is tailored to the characteristics of the property, its location and our partnership with the property owner. We have developed and/or acquired tools and technology which help facilitate implementation of conservation projects, such as the Transcendent asset management platform and Energy and Environment Action Plans (EEAPs). Our engineering leaders provide additional guidance to hotels with the</p>	<p>such as government incentives, but these projects have a typical payback period of 1-3 years. CHP plants in the U.K. help offset the costs of the Climate Change Levy, as a portion of the energy generated by the plant is exempt from the tax to reflect the emissions savings provided by this system.</p>

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								greatest opportunities for energy savings, leverage strategic partnerships across countries and continents, work with utility partners to identify rebates and incentives to develop attractive ROI for owners and explore innovative ways to approach conservation for our many properties already operating at high efficiency.	
Fuel/energy taxes and regulations	Some governments have taxes designed to encourage companies to reduce energy consumption, including the UK CRC Energy Efficiency Scheme. Currently these tax rates vary widely across types and use of	Increased operational cost	Up to 1 year	Direct	Very likely	Unknown	Carbon and fuel taxes are responsible for moderate increases in energy expenses in the regions where they have been enacted, such as the U.K. For the most recent tax year (April 2015 to March 2016), the obligation for Marriott properties	Marriott remains focused on reducing energy consumption, which is one of the key goals of our environmental strategy. Energy conservation helps mitigate the risks posed by fuel and carbon taxes. Pull-through of our strategy at the property-level drives results, and	Financial investments in energy efficiency vary by installation type and government incentives, but these projects have a typical payback period of 1-3 years. CHP plants help offset the costs of the CRC in the UK by reducing emissions. The

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>fuel both within and across countries. The current impact of these types of taxes is greater for our operations outside the United States. With the acquisition of Starwood Hotels and Resorts, our non-U.S. footprint grew significantly.</p>						<p>under the UK CRC Energy Efficiency Scheme was 1,455,511 GBP, or 1.8 million USD.</p>	<p>our support for each hotel is tailored to the characteristics of the property, its location and our partnership with the property owner. We have developed and/or acquired tools and technology which help facilitate implementation of conservation projects, such as the Transcendent asset management platform and Energy and Environment Action Plans (EEAPs). Our engineering leaders in Europe, where this tax is levied, leverage strategic partnerships across countries, work with utility partners to identify rebates and incentives to develop attractive ROI for owners and explore innovative ways to approach</p>	<p>payback timeframe for a CHP varies by installation, but can be as short as 2-3 years.</p>

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								conservation for our many properties already operating at high efficiency.	
Uncertainty surrounding new regulation	The diverse, complex and fluid nature of climate change regulation is challenging for global corporations.		Unknown	Direct	Unknown	Unknown	<p>Uncertainty surrounding new climate change regulation is a challenge for global corporations such as Marriott, as laws vary by municipality, state and country. Public policy debates and the uncertain status of legislative action in the U.S. make it more difficult to assess risks in this area. Adapting to multiple, changing and potentially conflicting standards is also a management challenge.</p>	<p>Marriott has taken a highly proactive approach to complying with environmental laws and regulations by consulting with expert organizations and agencies and taking steps to mitigate and manage our environmental impacts and policies. We report regularly to our owners and franchisees our latest achievements in energy conservation, newest technologies, and developments in energy management. We work with them closely on the</p>	<p>The specific costs associated with uncertainty surrounding new regulation vary and are not discreet, but include staff time spent engaging with various stakeholders.</p>

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								purchase of new equipment, helping to ensure that they are buying the most energy-efficient equipment available	

**CC5.1b**

Please describe your inherent risks that are driven by changes in physical climate parameters

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Change in temperature extremes	Greater extremes in temperature would impact energy consumption and could result in decreased desirability of certain destinations and changes to travel patterns.	Increased operational cost	Up to 1 year	Direct	Very likely	Low	If seasonal temperature variations become more extreme, some of Marriott's managed lodging properties would be more costly to operate. Possible increases in temperature extremes could increase the	Marriott pursues a comprehensive platform of initiatives and practices designed to drive down operational costs and reduce energy consumption. Greater utilization of data management and monitoring systems and new ways of	Energy ROI projects usually have a payback timeframe of less than three years. In 2016, over 28 million USD were invested in energy savings ROI projects at properties managed by Marriott.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
							<p>severity and duration of seasonal dips in demand. More extreme seasonality could adversely affect the desirability of certain destinations. Hotels in destinations most affected by the climate extremes might experience decreasing occupancy rates concurrent with increased energy costs.</p>	<p>working in energy markets help us continue to meet the energy challenge. We have developed demand response programs with energy companies in the U.S. and the U.K. Our continental engineering leaders leverage relationships with commercial partners to build the most compelling ROI for our property owners and pave the way for global implementation of energy and water conservation projects. Energy and Environment Action Plan audits have been rolled out globally, enabling our property teams to identify and quantify energy reduction opportunities. Property managers</p>	



Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								select "Signature" projects to target for completion early enough in the year to drive down costs. The Americas engineering and facilities team utilizes gamification to drive ownership of and compliance to high-level goals, programs and requirements. One quadrant of the game is devoted entirely to Environmental Stewardship and promotes various projects that address our sustainability strategy, including "Signature" projects, chiller diagnostics, energy intensity reduction, water conservation and food waste diversion. In 2016, this tool was expanded to Europe.	
Tropical	More frequent	Increased	Unknown	Direct	More likely	Unknown	Cyclones can	Marriott has	Operational

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
cyclones (hurricanes and typhoons)	and more severe storms would increase the risk of property damage and related insurance costs for what has generally been very short-term business disruption.	operational cost			than not		endanger our customers, associates and their families and communities, as well as adversely impact our properties. Increased frequency of tropical storms could cause a decrease in business and leisure travel and thus reduce lodging demand. Increased climatic risks may generally increase insurance costs. Widespread property destruction would impact the availability of materials and resources, increasing repair costs and timeframes for resumption of operations at affected hotels.	developed procedures and protocols at both the corporate and operational level to prepare for, mitigate, manage and respond as expeditiously as possible to physical risks such as severe weather and environmental disasters. Marriott has focused on environmental and climate issues identified as risks at the board level as one of five global issues—poverty alleviation, environment, community workforce development, well-being of children, and diversity and inclusion—that comprise our global social responsibility strategy.	cost increases due to higher insurance costs and business disruption might occur.
Change in	Severe changes	Reduced	Unknown	Direct	Unknown	Unknown	Longer dry or wet	Marriott fully	Compliance

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
precipitation extremes and droughts	in weather patterns would impact the desirability of destinations where our operations are located. Prolonged periods of rain and/or drought could also disrupt the food supply chain, impacting our ability to serve our guests and potentially increasing resource costs.	demand for goods/services					periods could make some destinations less desirable which might lead to a decrease in the profitability of hotel operations in the affected location. Such climate conditions could also disrupt the global and local food supply chains, which could affect restaurant and other food service operations at our hotels, contributing to increases in expenses. Water restrictions could also impact landscaping and other hotel operations. Given the size and geographic distribution of Marriott's hotel portfolio, any anticipated decreases in	complies with local water restrictions in drought affected regions such as the southwestern U.S. states. Our linen and terry re-use standards were established to conserve water and energy and are in-line with water restrictions.	with local environmental regulations is part of our normal property management operations, and thus adds no measurable costs.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
							hotel occupancy or increases in food and beverage services costs in specific markets due to the impact of precipitation and droughts would have a low impact on overall profitability.		
Change in mean (average) temperature	Increasing global temperatures would drive up the energy consumption at our properties, thus reducing profits from operations.	Increased operational cost	Up to 1 year	Direct	Virtually certain	Low	Given the number of properties in our managed portfolio, the impact of an increase in average global temperatures could be considerable. Increases in the costs of energy, fuel and other expenses central to the conduct of our business could pose a financial risk.	Marriott's annual 10-year capital planning and budgeting exercise helps accurately identify and forecast the needs of a given facility with respect to long term climate impact and efficiency. The planning process conducted by the hotel management team with building owners includes consideration of property enhancements such as roof insulation/ reflectivity, demand control ventilation, building automation	Costs specifically related to the risk of changes in average temperature have not been quantified. However, at many of our properties, energy costs are among the highest line of expenses.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								systems integration that could increase the ability of the hotel to address the effects of climate. Issues such as plant capacity to handle increased peak energy/cooling loads are also addressed as part of the ongoing equipment maintenance and planned replacement process.	

CC5.1c

Please describe your inherent risks that are driven by changes in other climate-related developments

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Changing consumer behavior	With growing environmental awareness on the part of many travelers, as well	Reduced demand for goods/services	>6 years	Direct	Unlikely	Medium	Awareness of environmental issues and climate change has grown	Marriott is managing risks relating to changing consumer behavior through continual	Our energy-efficiency and water reduction efforts typically have payback

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>as the focus and stakeholder pressure on businesses to reduce their carbon footprint, hotels need to provide products and services that respond to changing consumer demand. The success of growing our brand through development of new properties and franchises is also linked to our ability to adapt to new market priorities.</p>						<p>among our stakeholders, such as Marriott's guests, corporate customers, associates, investors, suppliers, business partners and the communities in which we operate. Amid rising expectations regarding business action and accountability, failure to maintain our leadership position in addressing environmental sustainability could negatively impact Marriott's reputation, brand and competitive advantage in the industry.</p>	<p>pursuit and refinement of our environmental strategy, stakeholder engagement and comprehensive reporting on sustainability efforts and results. We recognize the need for our corporate customers to reduce their Scope 3 emissions from business travel, and we work to make our hotels a sustainable choice through energy-efficient hotel operations and meetings. We supported the development of a standard carbon methodology for the hotel industry and have invested in tools to capture and report property-level sustainability data to our customers. Many of our properties are rated by TripAdvisor's</p>	<p>timeframes of 2 years or less. We have leveraged our relationship with vendors to provide us cost-neutral, environmentally-sustainable products and services.</p>

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								GreenLeaders program. GreenLeaders helps TripAdvisor's community of more than 390 million travelers plan greener trips by highlighting North American and European accommodations engaging in good environmental practices.	

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CC5.1d

Please explain why you do not consider your company to be exposed to inherent risks driven by changes in regulation that have the potential to generate a substantive change in your business operations, revenue or expenditure

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CC5.1e

Please explain why you do not consider your company to be exposed to inherent risks driven by changes in physical climate parameters that have the potential to generate a substantive change in your business operations, revenue or expenditure

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CC5.1f

Please explain why you do not consider your company to be exposed to inherent risks driven by changes in other climate-related developments that have the potential to generate a substantive change in your business operations, revenue or expenditure

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Further Information

Page: **CC6. Climate Change Opportunities**

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CC6.1

Have you identified any inherent climate change opportunities that have the potential to generate a substantive change in your business operations, revenue or expenditure? Tick all that apply

- Opportunities driven by changes in regulation
- Opportunities driven by changes in physical climate parameters
- Opportunities driven by changes in other climate-related developments

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CC6.1a

Please describe your inherent opportunities that are driven by changes in regulation

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Product efficiency	The development	Reduced operational	Up to 1 year	Direct	Virtually certain	Low-medium	Green building standards, such	We support our development	While there may be administrative



Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
regulations and standards	and adoption of green building and energy management standards creates an opportunity for Marriott to lead the hospitality industry.	costs					as the U.S. Green Building Council's (USGBC) LEED® standards and other national and international standards create opportunities for Marriott to demonstrate leadership in promoting and supporting green hotel development.	partners in pursuing construction of LEED buildings, and have helped hotels leverage local incentives to obtain certification for existing buildings. At the end of 2016, Marriott had the largest number of hotels certified and registered as LEED buildings of any hospitality company worldwide, with 301.	costs related to green building standards, these costs are usually offset by more significant ROI generated by lower operational costs. These savings, when combined with incentives offered in many jurisdictions, could provide a payback for the LEED® building investment in about two years. Marriott has invested significant resources in the volume build program over the past several years, including development fees and staff resources.

CC6.1b

Please describe your inherent opportunities that are driven by changes in physical climate parameters

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Change in mean (average) temperature	Increases in average temperatures would present an opportunity for Marriott to outperform peers in managing energy demand at its hotels.	Reduced operational costs	Up to 1 year	Direct	Very likely	Low	<p>Marriott's opportunities regarding changes in physical climate parameters are defined by the ability to perform comparatively better than other hotels in changing operating conditions. Communicating our superior performance may result in business growth by attracting both hotel owners/developers and guests.</p>	<p>Efforts to increase the energy efficiency of the properties we manage will create the opportunity for our hotel operations to remain profitable in the event of increased average temperatures, which would likely increase the number of cooling degree days in the portfolio. Marriott has provided group customers with a dashboard to view the carbon and water footprint, as well as information on various environmental practices related to energy efficiency at each of the hotels in our system. Our sales account teams can provide quarterly reports. Group customers at former Starwood brand properties can</p>	<p>Most of the energy-saving policies and equipment replacement efforts conducted with our property owners are either cost neutral, or offer a short payback time. Participation in Green Hotels Global™ costs each property just over 300 USD annually</p>

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								also receive Meeting Impact Reports with similar environmental metrics and the opportunity to offset their carbon footprint through South Pole Carbon, legacy Starwood's carbon offset partner.	
Change in temperature extremes	Marriott's ability to run more energy efficient hotels offers the opportunity to outperform competitors in regulating the temperature at its hotels.	Reduced operational costs	Up to 1 year	Direct	Unknown	Low	Marriott's opportunities regarding changes in physical climate parameters are defined by the ability to perform comparatively better than other hotels in changing operating conditions. Communicating our superior performance may result in business growth by attracting both hotel owners/developers and guests. Possible increases in temperature extremes could increase the severity and duration of seasonal dips in demand. In addition, increases in demand for energy to regulate	Our efforts to increase the energy efficiency of the properties we manage will create the opportunity for our hotel operations to remain profitable in the event of increased temperature extremes. Our properties utilize Energy and Environment Action Plans, a tool which guides engineering and other property leaders through an energy audit process. The audit covers everything	Most of the energy-saving policies and equipment replacement efforts conducted with our property owners are offer an attractive rate of return on investment.

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
							the building environment (number of heating degree days and cooling degree days) will increase energy costs. Marriott's ability to run more energy-efficient hotels offers the opportunity to outperform competitors.	from linen/terry re-use policies to best practice behaviors for lighting, appliance, HVAC and central plant conservation and efficiency. Calculators are linked to each audit point to assist the properties with assigning an energy unit and dollar value to each act or project. This voluntary best practices audit is available to the property teams for annual evaluations of their current state and their opportunities for resource conservation and Scope 1 and 2 emissions reductions.	

Please describe your inherent opportunities that are driven by changes in other climate-related developments

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Reputation	Growing awareness and knowledge of environmental issues and climate change among important stakeholders around the world, as well as rising expectations for business accountability offer opportunities to highlight Marriott's environmental leadership position in the hospitality industry.	Increased demand for existing products/services	3 to 6 years	Direct	Very likely	Low	Amid rising expectations regarding business action and accountability, our leadership position in addressing environmental sustainability helps maintain our reputation and provides a competitive advantage in the hotel industry.	We recognize our obligation to mitigate the impact of our business on the natural environment. We have been focused on energy conservation for decades, and, since 2007, we have been pursuing a comprehensive set of environmental goals. Marriott continues to proactively address the challenges presented by climate change through our business strategy, internal policies and practices. We strive to enhance our reputation for environmental leadership by focusing on	Specific associated costs include those related to stakeholder engagement and strategy development, such as funding research and associate time dedicated to participation in various industry roundtables and working groups, collaborating with NGOs, preparing reports and responding to various surveys

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								<p>innovation, collaboration, constructive engagement with key stakeholders, driving pull-through at our properties across the globe, delivering results and reporting our progress. We recognize the importance of disclosure to our investors and other key stakeholders. Our efforts and reputation have been recognized through numerous awards, including: Ethisphere Institute's World's Most Ethical Companies. In addition to corporate awards, many individual properties are recognized. The</p>	

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								London Heathrow Marriott earned the Green Hotelier's Green Hotel of Europe award in 2016.	
Changing consumer behavior	With growing environmental awareness on the part of many travelers, as well as sustainability goals, business focus and stakeholder expectations on many other businesses to reduce their carbon footprint, hotels providing products and services that respond to changing consumer demand are better positioned to achieve business goals. The success of growing our brand through	Increased demand for existing products/services	3 to 6 years	Direct	Very likely	Low-medium	Awareness and knowledge of environmental issues and climate change continues to grow among Marriott's stakeholders, including guests, corporate customers, associates, investors, suppliers, business partners and the communities in which we operate.	To respond to changing market forces influenced by climate change, we strive to demonstrate how responsible hotel management can be a positive force for the environment. Business Travel: We recognize our corporate customers' efforts to reduce Scope 3 emissions from business travel, and we work to make our hotels a sustainable choice through energy efficient hotel operations and meetings. We report our hotel carbon and	The anticipated payback timeframe for LEED® prototypes is two to six years depending on federal and local government incentives. We have leveraged our relationship with vendors to provide us cost-neutral, environmentally sustainable products and services. We incur training costs associated with certification in our green meetings standard. The investment in EV charging stations varies according to type of

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	development of new properties and franchises is also linked to our ability to adapt to new market priorities.							water footprints to our customers. Green Buildings: We have addressed the needs of owners and developers seeking to build sustainable hotels with LEED® or other certifications. Natural Capital Resources: Our portfolio of conservation initiatives balances sustainable livelihoods with the protection of key forest and water resources. Green Travel: Marriott has responded to advancements in green travel options and supports guests using electric vehicles (EV) by offering universally accessible 120V charging at all properties. By	installation and the government incentives offered.



Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								the end of 2016, over 300 Marriott hotels had 240V charging stations for EVs.	

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CC6.1d

Please explain why you do not consider your company to be exposed to inherent opportunities driven by changes in regulation that have the potential to generate a substantive change in your business operations, revenue or expenditure

---

CC6.1e

Please explain why you do not consider your company to be exposed to inherent opportunities driven by changes in physical climate parameters that have the potential to generate a substantive change in your business operations, revenue or expenditure

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CC6.1f

Please explain why you do not consider your company to be exposed to inherent opportunities driven by changes in other climate-related developments that have the potential to generate a substantive change in your business operations, revenue or expenditure

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**Further Information**

**Module: GHG Emissions Accounting, Energy and Fuel Use, and Trading**

**Page: CC7. Emissions Methodology**

---

**CC7.1**

**Please provide your base year and base year emissions (Scopes 1 and 2)**

<b>Scope</b>	<b>Base year</b>	<b>Base year emissions (metric tonnes CO2e)</b>
Scope 1	Mon 01 Jan 2007 - Mon 31 Dec 2007	567873
Scope 2 (location-based)	Mon 01 Jan 2007 - Mon 31 Dec 2007	2363056
Scope 2 (market-based)	Mon 01 Jan 2007 - Mon 31 Dec 2007	2363056

---

**CC7.2**

**Please give the name of the standard, protocol or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions**

**Please select the published methodologies that you use**

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

---

**CC7.2a**

**If you have selected "Other" in CC7.2 please provide details of the standard, protocol or methodology you have used to collect activity data and calculate Scope 1 and Scope 2 emissions**

The collection of activity data and the subsequent carbon calculations follow the methodology of The GHG Protocol and the World Travel & Tourism Council/International Tourism Partnership's Hotel Carbon Measurement Initiative (HCMI).

---

**CC7.3**

**Please give the source for the global warming potentials you have used**

<b>Gas</b>	<b>Reference</b>
CO2	IPCC Fourth Assessment Report (AR4 - 100 year)
CH4	IPCC Fourth Assessment Report (AR4 - 100 year)
N2O	IPCC Fourth Assessment Report (AR4 - 100 year)

---

**CC7.4**

**Please give the emissions factors you have applied and their origin; alternatively, please attach an Excel spreadsheet with this data at the bottom of this page**

Fuel/Material/Energy	Emission Factor	Unit	Reference
Natural gas	5.31	Other: kg CO2e/therm	US EPA Emissions Factors for Greenhouse Gas Inventories, <a href="http://www.epa.gov/stateply/documents/emission-factors.pdf">http://www.epa.gov/stateply/documents/emission-factors.pdf</a> (revised 4 April 2014)
Town gas or city gas	0.2	Other: kg CO2e/kWh	Hong Kong Environmental Protection Dept and the Electrical and Mechanical Services Dept
Other: Heating Oil	10.2	Other: kgCO2e/gallon	US EPA Emissions Factors for Greenhouse Gas Inventories
Steam	6.632	Other: kg CO2e/therm	US EPA Emissions Factors for Greenhouse Gas Inventories
Other: Hot Water	6.632	Other: kg CO2e/therm	US EPA Emissions Factors for Greenhouse Gas Inventories
Other: Chilled Water	66.5	Other: kg CO2e/MBtu	US DOE EIA, Voluntary Reporting of Greenhouse Gases, Appendix N. Emissions Factors for Steam and Chilled/Hot Water.
Diesel/Gas oil	10.2	Other: kg CO2e/gallon	US EPA Emissions Factors
Propane	5.74	Other: kg CO2e/gallon	US EPA Emissions Factors
Distillate fuel oil No 2	74.2138	Other: kg CO2e/MBtu	US EPA Emissions Factors for Greenhouse Gas Inventories
Distillate fuel oil No 4	75.2938	Other: kg CO2e/MBtu	US EPA Emissions Factors for Greenhouse Gas Inventories
Other: Gasoline	70.4738	Other: kg CO2e/MBtu	US EPA Emissions Factors for Greenhouse Gas Inventories
Anthracite	104.4418	Other: kg CO2e/MBtu	US EPA Emissions Factors for Greenhouse Gas Inventories
Bituminous coal	94.0318	Other: kg CO2e/MBtu	US EPA Emissions Factors for Greenhouse Gas Inventories

#### Further Information

The base year emissions published here are for Marriott managed properties only; the data do not include former Starwood brand properties. Starwood used a base year of 2008. Electricity Emissions Factors: • US EPA, eGRID Subregion GHG Output Emission Rates; • Canada – see Provincial emissions factors, Environment

Canada, National Inventory Report, 1990-2008, Annex 13; For the Rest of the World, emissions factors published by the International Tourism Partnership (ITP) and World Travel & Tourism Council (WTTC) as contained in the Hotel Carbon Measurement Methodology (HCMI) Version 1.1 None of these emissions factors include losses from transmission and distribution.

**Page: CC8. Emissions Data - (1 Jan 2016 - 31 Dec 2016)**

---

**CC8.1**

**Please select the boundary you are using for your Scope 1 and 2 greenhouse gas inventory**

Operational control

---

**CC8.2**

**Please provide your gross global Scope 1 emissions figures in metric tonnes CO2e**

1279706

---

**CC8.3**

**Please describe your approach to reporting Scope 2 emissions**

Scope 2, location-based	Scope 2, market-based	Comment
We are reporting a Scope 2, location-based figure	We have operations where we are able to access electricity supplier emissions factors or residual emissions factors, but are unable to report a Scope 2, market-based figure	We do not yet have a system in place to track market-based emissions factors. These systems will be established in support of our next generation sustainability goals, which include a renewable energy target.

---

**CC8.3a**

Please provide your gross global Scope 2 emissions figures in metric tonnes CO<sub>2</sub>e

Scope 2, location-based	Scope 2, market-based (if applicable)	Comment
5554203		

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**CC8.4**

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

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**CC8.4a**

Please 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	Relevance of Scope 1 emissions from this source	Relevance of location-based Scope 2 emissions from this source	Relevance of market-based Scope 2 emissions from this source (if applicable)	Explain why the source is excluded
Sources of diesel fuel consumption that are non-regular, not directly tied to fuel purchase records and not a material source of emissions, such as those from back-up generators.	Emissions are not relevant	No emissions from this source	No emissions from this source	Diesel fuel is sometimes used in our properties in the Americas in back-up generators which may be used briefly for temporary power supply during utility outages. Such transient and brief uses of fuel do not generate a material source of emissions for the property.
Perfluorocarbons	Emissions are not relevant	No emissions from this source	No emissions from this source	Perfluorocarbons are not included as they are a minor component of the overall emissions impact. The only potential source of perfluorocarbons in our portfolio would be within Data Centers. Data Center applies to spaces specifically designed and equipped to meet the needs of high density computing equipment such as server racks used for data storage and processing. Typically these facilities require dedicated uninterrupted power supplies and cooling systems, where cooling is the source of perfluorocarbons. Given that when tested, corporate office emissions constitute less than half of 1% of our overall Scope 1 impact, and that there are only a few data centers within our corporate offices, we have not accounted for these emissions in this year's GHG inventory.
58 Hotels	Emissions are relevant but not yet calculated	Emissions are relevant but not yet calculated		58 hotels were closed for more than 30 days in 2016 due to renovations or other reasons and either were not able to provide energy data for the 2016 reporting year or the data they provided could not be properly assessed as the hotel did not operate as they typically would due to the hotel closure in 2016. While we're not able to calculate these emissions accurately, give that there are 58 hotels in this group, the emissions most likely would have been relevant.

Please estimate the level of uncertainty of the total gross global Scope 1 and 2 emissions figures that you have supplied and specify the sources of uncertainty in your data gathering, handling and calculations

Scope	Uncertainty range	Main sources of uncertainty	Please expand on the uncertainty in your data
Scope 1	More than 5% but less than or equal to 10%	Data Gaps Assumptions Extrapolation	<p>Approximately 23% of the hotels in the total portfolio were missing at least one month of data, or had data that was questionable, or had not yet registered in the GHG platform. To account for all hotels in the managed portfolio, we applied a gross-up factor to the measured scope 1 and 2 emissions. This gross up factor was based on a ratio of the available rooms for those hotels that provided accurate data, to the total available rooms of the entire portfolio. To calculate the emissions for each above-property facility (other than World Headquarters (WHQ) for which we have primary data), we multiply the scope 1 and 2 emissions of WHQ by the ratio of the gross floor area of WHQ to the non WHQ facilities. For air conditioning fugitive emissions, we added 1% to the total emissions. For hotels that operate gasoline or diesel powered vehicles and maintenance equipment, we added 1% to the total emissions. The quality control process in place at Starwood is designed to ensure the accuracy and completeness of reported energy consumption. For the eighth consecutive year, the need for extrapolation has continued to have been reduced through better data reporting systems, better enforcement of data reporting and quality control checks. Extrapolation is used to derive emissions associated with a small percentage of non-reporting properties (9.31% of the total number of qualified properties), as well as properties that provide data but are deemed unusable due to accuracy concerns (8.08% of total number of qualified properties).</p>
Scope 2 (location-based)	More than 5% but less than or equal to 10%	Data Gaps Assumptions Extrapolation	<p>Approximately 23% of the hotels in the total portfolio were missing at least one month of data, or had data that was questionable, or had not yet registered in the GHG platform. To account for all hotels in the managed portfolio, we applied a gross-up factor to the measured scope 1 and 2 emissions. This gross up factor was based on a ratio of the available rooms for those hotels that provided accurate data, to the total available rooms of the entire portfolio. To calculate the emissions for each above-property facility (other than World Headquarters (WHQ) for which we have primary data), we multiply the scope 1 and 2 emissions of WHQ by the ratio of the gross floor area of WHQ to the non WHQ facilities. The quality control process in place at Starwood is designed to ensure the accuracy and completeness of reported energy consumption. For the eighth consecutive year, the need for extrapolation has continued to have been reduced through better data reporting systems, better enforcement of data reporting and quality control checks. Extrapolation is used to derive emissions associated with a small percentage of non-reporting properties (9.31% of the total number of qualified properties), as well as properties that provide data but are deemed unusable due to accuracy concerns (8.08% of total number of qualified properties).</p>
Scope 2 (market-based)			



**CC8.6**

**Please indicate the verification/assurance status that applies to your reported Scope 1 emissions**

Third party verification or assurance process in place

**CC8.6a**

**Please provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements**

Verification or assurance cycle in place	Status in the current reporting year	Type of verification or assurance	Attach the statement	Page/section reference	Relevant standard	Proportion of reported Scope 1 emissions verified (%)
Annual process	Complete	Limited assurance	<a href="https://www.cdp.net/sites/2017/29/11329/Climate Change 2017/Shared Documents/Attachments/CC8.6a/Marriott Starwood CY16 Assurance Statement.pdf">https://www.cdp.net/sites/2017/29/11329/Climate Change 2017/Shared Documents/Attachments/CC8.6a/Marriott Starwood CY16 Assurance Statement.pdf</a>	3	ISO14064-3	100

**CC8.6b**

**Please provide further details of the regulatory regime to which you are complying that specifies the use of Continuous Emission Monitoring Systems (CEMS)**

Regulation	% of emissions covered by the system	Compliance period	Evidence of submission
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**CC8.7**

Please indicate the verification/assurance status that applies to at least one of your reported Scope 2 emissions figures

Third party verification or assurance process in place

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**CC8.7a**

Please provide further details of the verification/assurance undertaken for your location-based and/or market-based Scope 2 emissions, and attach the relevant statements

Location-based or market-based figure?	Verification or assurance cycle in place	Status in the current reporting year	Type of verification or assurance	Attach the statement	Page/Section reference	Relevant standard	Proportion of reported Scope 2 emissions verified (%)
Location-based	Annual process	Complete	Limited assurance	<a href="https://www.cdp.net/sites/2017/29/11329/Climate Change 2017/Shared Documents/Attachments/CC8.7a/Marriott Starwood CY16 Assurance Statement.pdf">https://www.cdp.net/sites/2017/29/11329/Climate Change 2017/Shared Documents/Attachments/CC8.7a/Marriott Starwood CY16 Assurance Statement.pdf</a>	3	ISO14064-3	100

---

**CC8.8**

Please identify if any data points have been verified as part of the third party verification work undertaken, other than the verification of emissions figures reported in CC8.6, CC8.7 and CC14.2

**Additional data points verified**

**Comment**

---

**CC8.9**

**Are carbon dioxide emissions from biologically sequestered carbon relevant to your organization?**

No

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**CC8.9a**

Please provide the emissions from biologically sequestered carbon relevant to your organization in metric tonnes CO2

---

**Further Information**

Scope 1 and 2 emissions reported here are for all Marriott managed and/or owned properties, inclusive of former Starwood brand properties.

**Page: CC9. Scope 1 Emissions Breakdown - (1 Jan 2016 - 31 Dec 2016)**

---

**CC9.1**

**Do you have Scope 1 emissions sources in more than one country?**

Yes

---

**CC9.1a**

**Please break down your total gross global Scope 1 emissions by country/region**

<b>Country/Region</b>	<b>Scope 1 metric tonnes CO2e</b>
Americas	627758
Asia Pacific (or JAPA)	377221
Europe	133478
Africa and Middle East	112663

---

**CC9.2**

**Please indicate which other Scope 1 emissions breakdowns you are able to provide (tick all that apply)**

---

**CC9.2a**

**Please break down your total gross global Scope 1 emissions by business division**

<b>Business division</b>	<b>Scope 1 emissions (metric tonnes CO2e)</b>
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**CC9.2b**

**Please break down your total gross global Scope 1 emissions by facility**

Facility	Scope 1 emissions (metric tonnes CO2e)	Latitude	Longitude
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**CC9.2c**

Please break down your total gross global Scope 1 emissions by GHG type

GHG type	Scope 1 emissions (metric tonnes CO2e)
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---

**CC9.2d**

Please break down your total gross global Scope 1 emissions by activity

Activity	Scope 1 emissions (metric tonnes CO2e)
----------	--

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**Further Information**

**Page: CC10. Scope 2 Emissions Breakdown - (1 Jan 2016 - 31 Dec 2016)**

---

**CC10.1**

Do you have Scope 2 emissions sources in more than one country?

Yes

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**CC10.1a**

Please break down your total gross global Scope 2 emissions and energy consumption by country/region

Country/Region	Scope 2, location-based (metric tonnes CO2e)	Scope 2, market-based (metric tonnes CO2e)	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low carbon electricity, heat, steam or cooling accounted in market-based approach (MWh)
Americas	1921317			
Asia Pacific (or JAPA)	2257915			
Europe	365516			
Africa and Middle East	1009453			

---

**CC10.2**

Please indicate which other Scope 2 emissions breakdowns you are able to provide (tick all that apply)

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**CC10.2a**

Please break down your total gross global Scope 2 emissions by business division

Business division	Scope 2, location-based (metric tonnes CO2e)	Scope 2, market-based (metric tonnes CO2e)
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**CC10.2b**

Please break down your total gross global Scope 2 emissions by facility

Facility	Scope 2, location-based (metric tonnes CO2e)	Scope 2, market-based (metric tonnes CO2e)
----------	--	--

**CC10.2c**

Please break down your total gross global Scope 2 emissions by activity

Activity	Scope 2, location-based (metric tonnes CO2e)	Scope 2, market-based (metric tonnes CO2e)
----------	--	--

**Further Information**

**Page: CC11. Energy**

**CC11.1**

**What percentage of your total operational spend in the reporting year was on energy?**

More than 5% but less than or equal to 10%

---

**CC11.2**

**Please state how much heat, steam, and cooling in MWh your organization has purchased and consumed during the reporting year**

Energy type	MWh
Heat	274079
Steam	483792
Cooling	687587

---

**CC11.3**

**Please state how much fuel in MWh your organization has consumed (for energy purposes) during the reporting year**

6125479

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**CC11.3a**

**Please complete the table by breaking down the total "Fuel" figure entered above by fuel type**

Fuels	MWh
-------	-----



Fuels	MWh
Natural gas	5109572
Other: Heating Oil	10792
Diesel/Gas oil	448715
Propane	405827
Town gas or city gas	86314
Distillate fuel oil No 2	38358
Distillate fuel oil No 4	117
Other: Gasoline	21138
Anthracite	2524
Bituminous coal	2122

---

**CC11.4**

Please provide details of the electricity, heat, steam or cooling amounts that were accounted at a low carbon emission factor in the market-based Scope 2 figure reported in CC8.3a

Basis for applying a low carbon emission factor	MWh consumed associated with low carbon electricity, heat, steam or cooling	Emissions factor (in units of metric tonnes CO2e per MWh)	Comment

---

**CC11.5**

Please report how much electricity you produce in MWh, and how much electricity you consume in MWh

Total electricity consumed (MWh)	Consumed electricity that is purchased (MWh)	Total electricity produced (MWh)	Total renewable electricity produced (MWh)	Consumed renewable electricity that is produced by company (MWh)	Comment
9254105.67	9252349.67			1756.00	

#### Further Information

**Page: CC12. Emissions Performance**

#### CC12.1

**How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to the previous year?**

Increased

#### CC12.1a

**Please 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**

Reason	Emissions value (percentage)	Direction of change	Please explain and include calculation
Emissions reduction activities	2	Decrease	Projected annual savings from energy efficiency and conservation projects indicate emissions reductions of at least 2% over last year's reported gross emissions. Marriott properties reduced energy intensity by 2.4%
Divestment			
Acquisitions	2.9	Increase	This figure was estimated by assessing the net emissions increase from properties added and removed from the combined portfolio.

Reason	Emissions value (percentage)	Direction of change	Please explain and include calculation
Mergers			
Change in output	1.5	Increase	The number of occupied rooms at Marriott properties increased over 3% year over year, which has varying impact on emissions depending upon the size/type of property. This is an estimate based upon observations of energy data.
Change in methodology	0.8	Decrease	Updated emissions factors resulted in a slight decrease of calculated emissions, as shown by comparison of emissions using different versions of emissions factors.
Change in boundary			
Change in physical operating conditions			
Unidentified	0.8	Increase	
Other			

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#### CC12.1b

**Is your emissions performance calculations in CC12.1 and CC12.1a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?**

Location-based

---

#### CC12.2

**Please describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tonnes CO2e per unit currency total revenue**

Intensity figure =	Metric numerator (Gross global combined Scope 1 and 2 emissions)	Metric denominator: Unit total revenue	Scope 2 figure used	% change from previous year	Direction of change from previous year	Reason for change
0.000333	metric tonnes CO2e	20494000000	Location-based	3.6	Decrease	To calculate the change from the previous year, combined emissions for Starwood and Marriott in 2015 were used, as were pro forma revenue figures for 2015 and 2016 for both companies as reported in Marriott's 2016 10-K filing. The revenue increased 6% over 2015, leading to a decrease in this emissions intensity metric.

### CC12.3

Please provide any additional intensity (normalized) metrics that are appropriate to your business operations

Intensity figure =	Metric numerator (Gross global combined Scope 1 and 2 emissions)	Metric denominator	Metric denominator: Unit total	Scope 2 figure used	% change from previous year	Direction of change from previous year	Reason for change
0.138	metric tonnes CO2e	Other: square meters of conditioned space	22595332	Location-based	1.1	Decrease	This metric does not include the former Starwood brand properties. Energy-efficiency projects continue to help Marriott reduced emissions intensity.

### Further Information

CC 12.3 is a metric that we are applying to Marriott-managed properties, exclusive of the former Starwood brand properties, which tracked a different intensity metric. Work continues to fully integrate tracking and measurement of environmental metrics in the combined portfolio.

---

**CC13.1**

**Do you participate in any emissions trading schemes?**

No, and we do not currently anticipate doing so in the next 2 years

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**CC13.1a**

Please complete the following table for each of the emission trading schemes in which you participate

Scheme name	Period for which data is supplied	Allowances allocated	Allowances purchased	Verified emissions in metric tonnes CO2e	Details of ownership

---

**CC13.1b**

What is your strategy for complying with the schemes in which you participate or anticipate participating?

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**CC13.2**

**Has your organization originated any project-based carbon credits or purchased any within the reporting period?**

No

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**CC13.2a**

Please provide details on the project-based carbon credits originated or purchased by your organization in the reporting period

Credit origination or credit purchase	Project type	Project identification	Verified to which standard	Number of credits (metric tonnes CO2e)	Number of credits (metric tonnes CO2e): Risk adjusted volume	Credits canceled	Purpose, e.g. compliance

**Further Information**

**Page: CC14. Scope 3 Emissions**

**CC14.1**

Please account for your organization's Scope 3 emissions, disclosing and explaining any exclusions

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
Purchased goods and services	Relevant, not yet calculated				Marriott has not calculated emissions for this source due to lack of emissions factors covering the breadth of purchased goods and services. While such data to create meaningful measurements of Scope 3 emissions for purchased goods and services are being produced by various policy and industry organizations, we are already managing our supply chain in accordance with

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
					<p>our Principles of Responsible Business. Improving the sustainability of our supply chain is material to our business and key stakeholders, and as such, has been a pillar of our business policies and environmental strategy. We continue to face challenges with tracing each step in the journey of a given product that we source. Multiple organizations with different systems and requirements working across international borders can be involved in the production of any given product. For this reason we continue to work with our biggest suppliers to collaborate on solutions that reduce energy, water and waste, and in some cases, provide innovative products that replace less sustainable solutions. Our next generation sustainability and social impact goals include a focus on responsible sourcing.</p>
Capital goods	Relevant, not yet calculated				<p>(See explanation above about lack of current emissions factors) Viewing capital goods through a sustainability lens is a priority for Marriott. To help move the needle in this area, Marriott has partnered to help refine and evaluate useful measurements. Marriott is a founding member, and the first lodging brand member, of the Hospitality Sustainable Purchasing Consortium (HSPC). Along with MindClick and the U.S. Green Building Council, HSPC has created a Sustainability Index to facilitate greening the furniture, fixture and equipment (FF&amp;E) supply chain for the industry. We use the index in the Marriott Sustainability Assessment Program (MSAP), an annual review of vendors' Fair Labor and Human Rights practices, Environmentally Responsible Manufacturing efforts, and Product</p>

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
					Sustainability. 93 FF&E and Office Furniture suppliers representing over \$258 million in procurement provided data to the program in 2016 . 80% of Marriott's 2016 FF&E suppliers had a sustainability strategy in place. As part of our next generation sustainability and social impact goals, we plan to source the top 10 FF&E product categories from the MSAP's top tier.
Fuel-and-energy-related activities (not included in Scope 1 or 2)	Not relevant, explanation provided				As an end user of energy, these Scope 3 sources are not within our direct sphere of influence, nor are they feasible to measure with reasonable accuracy for our diverse locations and thus do not meet our standard of relevance.
Upstream transportation and distribution	Relevant, not yet calculated				In the absence of primary and secondary data applicable to Marriott's global supply chain, Marriott has provided guidance to our hotels for more than a decade to encourage sustainability in our kitchens through such actions as purchasing organic and responsibly sourced food, planting herb and vegetable gardens, establishing relationships with local farmers and recycling cooking oil. As part of our next generation sustainability and social impact goals, we plan to source 50% of produce (by total spend) locally.
Waste generated in operations					
Business travel	Relevant, calculated	83581	Emissions from air travel were calculated using appropriate emissions factors for short- and long-haul flights using data provided by travel partners	100.00%	This figure represents air travel from corporate offices. For Marriott travel, only flights originating in US or UK are included. For legacy Starwood offices, data include travel from corporate offices in all regions. For the North American division, calculations only include the business travel emissions from the flight miles of those



Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
					legacy Starwood employees within the U.S. and Canada who used Orbitz and/or Eugencia to book their flights. For air travel of employees based in legacy Starwood offices in Latin America, all flight mileage was estimated.
Employee commuting	Not relevant, explanation provided				Given the size and scope of our workforce and various modes of transport used for different communities, this category is less feasible to measure and/or influence. At our global headquarters, we have programs in place to help reduce emissions from employee commuting, including public transit subsidies and carpooling resources. Commuting was a focus area of our Global Operations' "GO Sustainability" campaign at Marriott HQ.
Upstream leased assets	Not relevant, explanation provided				The upstream leased assets category is not relevant for our Scope 3 accounting, as we have included estimates of these properties' emissions in Scope 1 & 2.
Downstream transportation and distribution	Not relevant, explanation provided				As a hospitality company, Marriott provides services at its managed and franchised properties, and does not manufacture products for transportation and distribution outside its facilities.
Processing of sold products	Not relevant, explanation provided				As a hospitality company, Marriott provides services at its managed and franchised properties, and does not manufacture products for sale.
Use of sold products	Not relevant, explanation provided				As a hospitality company, Marriott provides services at its managed and franchised properties, and does not manufacture products that are processed by third parties.

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
End of life treatment of sold products	Not relevant, explanation provided				As a hospitality company, Marriott provides services at its managed and franchised properties, and does not sell goods such as engines or fuel which produce direct-use phase emissions.
Downstream leased assets	Not relevant, explanation provided				Consistent with our focus on management, franchising, and licensing, we own very few of our lodging properties. Owning properties to be leased and operated by others is not part of our business model.
Franchises	Relevant, calculated	4942824	Marriott calculated emissions for franchised properties according to the same methodology as used for managed properties within our Scope 1 and 2 boundary. These emissions include those from franchised properties under the former Starwood brands.	44.00%	
Investments	Not relevant, explanation provided				We are a worldwide operator, franchisor, and licensor of hotels and timeshare properties under numerous brand names at different price and service points, and as such, investments are not a source of Scope 3 emissions for our business.
Other (upstream)					
Other (downstream)					

**Please indicate the verification/assurance status that applies to your reported Scope 3 emissions**

Third party verification or assurance process in place

**CC14.2a**

**Please provide further details of the verification/assurance undertaken, and attach the relevant statements**

Verification or assurance cycle in place	Status in the current reporting year	Type of verification or assurance	Attach the statement	Page/Section reference	Relevant standard	Proportion of reported Scope 3 emissions verified (%)
Annual process	Complete	Limited assurance	<a href="https://www.cdp.net/sites/2017/29/11329/Climate Change 2017/Shared Documents/Attachments/CC14.2a/Marriott Starwood CY16 Assurance Statement.pdf">https://www.cdp.net/sites/2017/29/11329/Climate Change 2017/Shared Documents/Attachments/CC14.2a/Marriott Starwood CY16 Assurance Statement.pdf</a>	3	ISO14064-3	98

**CC14.3**

**Are you able to compare your Scope 3 emissions for the reporting year with those for the previous year for any sources?**

Yes

**CC14.3a**

**Please identify the reasons for any change in your Scope 3 emissions and for each of them specify how your emissions compare to the previous year**

Sources of Scope 3 emissions	Reason for change	Emissions value (percentage)	Direction of change	Comment
Business travel	Change in output	1.8	Increase	Increase in air travel emissions reflects increased air travel in 2016.
Franchises	Acquisitions	9.8	Increase	Increase in Scope 3 emissions from franchised properties reflects significant unit growth.

#### CC14.4

**Do you engage with any of the elements of your value chain on GHG emissions and climate change strategies? (Tick all that apply)**

Yes, our suppliers  
Yes, our customers

#### CC14.4a

**Please give details of methods of engagement, your strategy for prioritizing engagements and measures of success**

In 2016, Marriott conducted extensive stakeholder engagement as part of materiality assessments for our sustainability strategy. This engagement included direct meetings with key suppliers and group customers as well as executives and subject matter experts throughout Marriott and provided useful feedback to refine the strategy supporting our next generation sustainability goals.

##### Supplier Engagement

Marriott is a founding member of the Hospitality Sustainable Purchasing Consortium, established in May 2011. Facilitated by MindClick SGM, the consortium of hospitality management companies, suppliers, architecture firms and sustainability experts has been working in collaboration with the U.S. Green Building Council to provide our industry with the Sustainability Index, a unified rating methodology and metrics for both vendors and customers to gauge sustainability levels, beginning with the furniture, fixtures and equipment (FF&E) supply chain.

Marriott works closely with Avendra, the largest professional procurement company serving the hospitality industry in North and Central America, to source over 80% most of our U.S.-based food and beverage, engineering, rooms, office and spa supplies. Marriott supported Avendra's efforts to champion improved sustainability in ten product/service categories through the end of 2016. Going forward, Avendra has identified five priority areas in consultation with a leading sustainability NGO. Avendra mapped procurement categories against a set of sustainability metrics, including climate change risks. Over the next five years, Avendra will focus on

improved sustainability in agricultural crops, Textiles & Uniforms, Seafood, Animal Proteins, and Plastic and Paper Products. As the former Starwood brand hotels are integrated into Avendra's systems in 2016, the full value of this work will be realized across the portfolio.

#### Customer Engagement

Marriott helped launch and actively participated in the International Tourism Partnership and World Travel and Tourism Council's Hotel Carbon Measurement Initiative (HCMI) which established the first common carbon calculator for the hospitality industry. Since 2013, Marriott has used a sustainability dashboard to calculate the emissions associated with our group customers' room nights and meetings at any of our managed and franchised properties worldwide using the HCMI methodology. Group customers at former Starwood brand properties can receive Meeting Impact Reports which also use the HCMI methodology to calculate the environmental impact of meetings and events.

Our Vice President of Sustainability and Supplier Diversity participates in sales meetings with corporate and group customers, as well as national conferences of meeting planners to discuss Marriott's environmental strategy, various sustainability practices. Marriott hotels are also included in TripAdvisor's GreenLeaders program. GreenLeaders helps TripAdvisor's community of more than 390 million travelers plan greener trips by highlighting North American and European accommodations engaging in good environmental practices.

While we strive to do all that we can to provide a wonderful guest experience in an energy-efficient hotel, our guests play a significant role in our carbon footprint through their in-room use of lighting, HVAC and linens and towels. Given the potential for substantial water and energy resource and cost savings, we have a linen and terry re-use brand standard which includes brand-specific guest communications and associate training at all managed and franchised properties. As we integrate the portfolio, we will be combining and expanding our housekeeping opt-out programs [Make a Green Choice, Your Choice, Green Stay], providing the full portfolio with a multitude of ways by which guests can participate in reducing their environmental footprint.

#### Other Partners

While Marriott's presence drives economic opportunity in communities around the globe, we are also focused on strategic partnerships to help preserve vital natural capital resources. Marriott's collaborative projects include:

- Juma REDD+ – The Government of Amazonas and the Amazonas Sustainable Foundation (FAS), delivered its first-ever certificate of carbon emissions reduction to Marriott International in 2016. The certificate states the reduction of 400,000 tons of dioxide-carbon (tCO<sub>2</sub>) by activities at the Sustainable Development Reserve (RDS) in Juma between 2006 and 2013, through the partnership and support of Marriott International, FAS and the Government of Amazonas.
- Thailand's Mangrove Restoration – Marriott has partnered with the International Union for Conservation of Nature (IUCN) to help restore the critical mangrove ecosystem while supporting communities through the use of sustainable seafood sources and local procurement practices. More than 50,000 mangrove trees have been planted in Thailand as a result of the project.

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#### CC14.4b

**To give a sense of scale of this engagement, please give the number of suppliers with whom you are engaging and the proportion of your total spend that they represent**

Type of engagement	Number of suppliers	% of total spend (direct and indirect)	Impact of engagement
Other: Supplier Scorecards and Collaboration/Innovation	93		As of December 1, 2014, all Marriott approved furniture, fixtures & equipment (FF&E) vendors are required to enroll in Marriott's annual Supplier Sustainability Assessment Program (MSAP) administered by MindClick. MSAP is an annual review of vendors' Fair Labor and Human Rights practices, Environmentally Responsible Manufacturing efforts, and Product Sustainability. 93 FF&E and Office Furniture suppliers representing over \$258 million in procurement provided data to the program in 2016 (as represented in figure in first column). 80% of Marriott's 2016 FF&E suppliers had a sustainability strategy in place. In addition, 99.2% of suppliers working with our purchasing partner in North America, Avendra, had a sustainability policy in place by the end of 2016.

CC14.4c

Please explain why you do not engage with any elements of your value chain on GHG emissions and climate change strategies, and any plans you have to develop an engagement strategy in the future

#### Further Information

**Module: Sign Off**

**Page: CC15. Sign Off**

CC15.1

Please provide the following information for the person that has signed off (approved) your CDP climate change response

Name	Job title	Corresponding job category
Lenny Jachimowicz	Vice President Operations- Engineering and Guest Room Entertainment	Business unit manager

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**Further Information**

**CDP 2017 Climate Change 2017 Information Request**