CDP 2016 Climate Change 2016 Information Request Marriott International, Inc.

## **Module: Introduction**

Page: Introduction

CC0.1

#### Introduction

Please give a general description and introduction to your organization.

Marriott International is a leading lodging company with more than 4,400 properties (as of year-end 2015) that we operate ("manage"), franchise or license under 19 brands in 87 countries and territories worldwide. As we expand our portfolio and create economic opportunities around the world, we 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. Both in our hotels and beyond, we seek to understand and act on the direct and indirect environmental impacts of our business operations. We aspire to be the global hospitality leader that demonstrates how responsible hotel management can be a positive force for the environment.

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

We evaluate our business goals through the lens of sustainability and seek to pull-through the resulting environmental goals at our properties. Not only do we focus on these environmental goals enterprise-wide through our various operations and executive councils, but we also collaborate with external partners to encourage sustainability accomplishments in our industry. 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 now listed as a Scope 3 industry reporting protocol by CDP. We have adopted this standard, and now use the Green Hotels Global<sup>™</sup> tool and dashboard that reports on the environmental impact of each individual hotel in our portfolio. This is a valuable resource for our customers seeking environmental data about their business travel and meetings, as well as an important engagement and data-gathering tool to assess pull-through of our strategies worldwide.

We work to facilitate greening the furniture, fixture and equipment (FF&E) supply chain for hotels through the Hospitality Sustainable Purchasing Consortium.

# CDP

Marriott was the first company in the hospitality industry to develop a LEED® (Leadership in Energy and Environmental Design) hotel prototype pre-approved by US Green Building Council (USGBC). Marriott worked with USGBC to develop prototypes for our five select-service and extended stay brands as part of its LEED® Volume program. At the end of 2015, we had 143 hotels which are LEED® certified or registered, making Marriott the lodging company with the greatest number of hotels certified and registered as LEED buildings. Marriott is also working with developers and investors to push development of sustainable hotels in emerging markets.

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, the Nobility of Nature fresh water initiative in China and mangrove restoration in Thailand. We work with seafood suppliers and fisheries across the globe through our FutureFish program, which is designed to help the company's hotels around the world source, prepare and serve sustainable seafood.

We remain committed to conservation, active employee and stakeholder engagement and significant reductions in energy and water use and carbon emissions. We are currently setting our next generation of sustainability targets and will build upon the success of our current strategy. In this disclosure, we can report reductions in emissions per square meter of conditioned space of over 13% since 2007.

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

Thu 01 Jan 2015 - Thu 31 Dec 2015

#### 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

#### 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(\$)

#### CC0.6

#### Modules

As part of the request for information on behalf of investors, electric utilities, companies with electric utility activities or assets, companies in the automobile or auto component manufacture sub-industries, companies in the oil and gas sub-industries, companies in the information technology and telecommunications sectors and companies in the food, beverage and tobacco industry group should complete supplementary questions in addition to the main questionnaire. If you are in these sector groupings (according to the Global Industry Classification Standard (GICS)), the corresponding sector modules will not appear below but will automatically appear in the navigation bar when you save this page. If you want to query your classification, please email 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. If you wish to view the questions first, please see https://www.cdp.net/en-US/Programmes/Pages/More-questionnaires.aspx.

#### **Further Information**

## **Module: Management**

#### CC0.3

## Page: CC1. Governance

## 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

## 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. Since 2007, our Global Green Council has been guiding our environmental strategy by evaluating our practices, setting long-term goals, developing an environmental strategic plan and catalyzing our progress. The Council reports to the President and Chief Executive Officer, Arne Sorenson, on our environmental strategy and results; our President and CEO provides annual updates to the Board of Directors.

#### CC1.2

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

Yes

## CC1.2a

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

Who is entitled to benefit The type of from these incentives? incentives	Incentivized performance indicator	Comment
--	--	---------

Who is entitled to benefit from these incentives?	The type of incentives	Incentivized performance indicator	Comment
Corporate executive team	Monetary reward	Energy reduction target Behaviour change related indicator	MBOs – Compensation is linked to results in meeting objectives. The executives and senior managers of the Global Green Council have MBOs relating to hotel development, our energy and water use targets, sustainability reporting and stakeholder engagement, supply chain issues and conservation initiatives.
Other: VPs Engineering	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.
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	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	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.
Other: Business Councils	Recognition (non-monetary)	Behaviour change related indicator	Quarterly and annual awards recognize performance. Marriott has 80 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-monetary)	Emissions reduction project Energy 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
		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.

## **Further Information**

# Page: CC2. Strategy

## 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

## 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	Board or individual/sub-	Marriott operates and	1 to 3 years	Monitoring of risks and opportunities related to climate change occurs at

Frequency of monitoring	To whom are results reported?	Geographical areas considered	How far into the future are risks considered?	Comment
more frequently	set of the Board or committee appointed by the Board	franchises hotel properties in 87 countries.		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 and reviewed by the Global Green Council.

#### 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 2015, we began the process of setting next generation sustainability goals which will involve extensive stakeholder engagement.

Within the corporation, numerous functional areas monitor risks and opportunities associated with climate change, including Operations, Engineering, Architecture and Construction, Procurement, Sustainability and Supplier Diversity, Corporate Social Responsibility, Law 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, legislators, consultants and others.

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

• The Green Hotels Global™ dashboard reports 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.

• 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.

• Marriott Business Councils operate in 80 markets and represent all Marriott brands. They leverage resources across business lines to focus on common objectives, including risk management, local environmental impacts and community needs.

#### CC2.1c

#### How do you prioritize the risks and opportunities identified?

With over 4,400 managed or franchised properties around the world, Marriott faces a variety of potential risks and opportunities given the size and geographic scope of its operations. Materiality and priorities are determined within the context of corporate business strategy.

Marriott's steady focus on efficiency is driven not only by financial performance, but also by a commitment to identify and act on our environmental footprint. 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 recognize the increasing concern about the implications of climate change to our current customers and next generation travelers and the importance of natural capital resources conservation in emerging markets. We also have the responsibility to respond when necessary to natural events such as hurricanes, floods and drought.

Since 2007, Marriott's Global Green Council has helped integrate a sustainability lens into how we think about, design and deliver programs and services enterprisewide. The executives on the Council, and the functional departments they represent, help prioritize risks and opportunities through our environmental strategy. As this strategy is refined to establish and pursue next generation goals, new structures will be created to help set priorities and track performance.

#### 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
--------------------------------------	-------------------------------------	---------

#### CC2.2

#### Is climate change integrated into your business strategy?

Yes

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

I. Sustainable hotel operations are a business priority. We have established the organizational structures, programs and tools to pursue our sustainability goals. We realize costs savings and brand recognition in delivering sustainable lodging facilities and event services. Our strategy also looks beyond cost reduction and our properties, to address the preservation of natural capital resources and mitigating the effects of climate change.

Marriott's Global Green Council, a cross-functional team of senior executives, advances sustainability initiatives across the company. The Council reports to Arne Sorenson, President and CEO, who provides annual updates to the Board of Directors. Data platforms capture energy use and other environmental metrics at the property level and report this data to the relevant continental and global departments. The Global Engineering and Facilities Management team communicates weekly 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.

Marriott associates form the foundation of our environmental strategy, delivering vital pull-through and inspiration. In 2015, we began using internal Talent Network Teams (TNTs) to address business challenges through short-term, dynamic cross-discipline teams. Two of the first teams in the TNT pilot focused on sustainability challenges. We provide standards and training to associates worldwide on practices such as Energy and Environment Action Plan audits, green meetings, recycling and linen/terry re-use. We communicate regularly on environmental and conservation topics through intranet channels, through storytelling on "Heart of the House" (stories.marriott.com) and via social media. Property managers communicate environmental policies, best practices and initiatives with their employees through bulletin boards, daily briefings and departmental meetings. Marriott's sustainability efforts are part of our headquarters orientation for new associates. Our corporate Environmental Policy is part of Marriott's Principles of Responsible Business, which are communicated internally and externally.

II. Our environmental strategy includes comprehensive goals designed to increase sustainability in hotel operations, help preserve natural capital resources and reduce the impact of climate change. This strategy is linked to aspects of climate change material to our business. 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 stabilize the climate have demonstrable business value. We also face both challenges and opportunities relating to regulation, consumer preferences and our reputation for environmental stewardship. As we expand in markets outside the United States, we seek to understand and to address risks and opportunities related to different locales and cultures.

III. Climate change continues to influence the way we communicate our business. We share property-level environmental sustainability data to our resources for meeting planners and customers. In addition to the carbon and water footprint of each hotel, Green Hotels Global™ provides information on over 100 operational and management practices. We developed a sales training guide on how to utilize the hotel data from Green Hotels Global to effectively communicate sustainability to our business travel and group customers. Currently, Marriott has the largest number of TripAdvisor GreenLeaders hotels with over 1800 hotels receiving the GreenLeaders' badge. GreenLeaders helps TripAdvisor's community of more than 350 million travelers plan greener trips by highlighting accommodations engaging in sustainable practices.

We have also engaged the Global Operations group at corporate headquarters in an ongoing, successful GO Sustainability campaign. By engaging corporate leaders in their own work environment at Marriott Headquarters in specific site-wide goals and behavior change, we encourage a sustainability mindset that will potentially influence program and product development.

#### IV. Marriott's environmental strategy goals:

- Reduce energy and water consumption 20% from 2007 to 2020
- 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.

We have established a variety of programs and tools to help us meet our goals and are pursuing multiple initiatives, collaborating with property owners, developers, suppliers and industry peers/groups. We are also in the process of refining our strategy and setting next generation targets.

V. 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. Through the Green Hotels Global<sup>™</sup> dashboard, we offer environmental metrics to business travel buyers and meeting planners and customizable carbon and water footprint data to our group customers, many of whom have included our hotels in their preferred programs because they were able to provide this level of data. Our ongoing, visible and successful commitment to sustainability in and beyond our hotels has led to numerous awards and favorable rankings.

VI. In 2015, Marriott contracted with a consulting firm to engage our executives and stakeholders across the company in a comprehensive goal-setting exercise for our next generation sustainability strategy. The process will incorporate working "top down" to envision ambitious goals and "bottom up" to define an achievable path that will deliver strategic value. Also in 2015, Marriott decided to use domestic production for all towels in U.S. hotels. Providing "Made in the USA" towels and bath mats reduces supply chain greenhouse gas emissions by eliminating more than 300 ocean going container shipments annually. Our largest select-service brand, Courtyard by Marriott, has adopted Transcendent, the web-based enterprise asset management tool, as a brand standard. Before 2015, this tool was used primarily at, full-service properties. Going forward, it will allow engineers at Courtyard properties to run their hotels more efficiently by tracking preventive maintenance status and energy savings project implementation.

CC2.2b

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

## Does your company use an internal price of carbon?

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

# CC2.2d

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

## 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

## CC2.3a

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

Focus of legislation	Corporate Position	Details of engagement	Proposed legislative solution
----------------------	--------------------	-----------------------	-------------------------------

## CC2.3b

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

Yes

CC2.3c

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 practice, offering a range of practical products and programmes and tackling emerging sustainability 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 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.

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

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

#### CC2.3e

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

Marriott executives, including President and Chief Executive Officer Arne Sorenson, participate in the World Economic Forum, attending annual gatherings in Davos, as well as regional meetings and Global Agenda Council on the Future of Travel & Tourism meetings. In 2015, Sorenson addressed the Future of Travel and Tourism council, calling for increased industry collaboration and leadership on sustainability.

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 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, and waste diversion rate. Additionally, sessions at GBTA's annual convention help to educate attendees about sustainability and how they can incorporate these considerations into their travel programs

A Marriott Sales leader served as co-chair of the U.S. Government Services Administration's (GSA) Government-wide Travel Advisory Committee and was successful, with the assistance of our VP Sustainability & Supplier Diversity, in getting committee consensus on a key recommendation related to lodging sustainability. Included in the final report to the GSA in March 2015 was the recommendation to utilize the Hotel Carbon Measurement Initiative as the source for developing a baseline, target and annual reporting on the government's carbon emissions as they relate to hotel stays.

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. In 2015, Marriott worked with the University of Texas San Antonio to conduct research and begin developing models to measure the efficiency of hotel operations. In 2015, we began a partnership with a team from Penn State University to help design and conduct waste audits at six of our properties. Marriott also participated in a case study of recycling and food waste management in the context of customer-facing sustainability programs conducted by an interdepartmental fellows program at Michigan State University. These collaborative studies help inform our own practices as they build the body of knowledge for sustainable lodging management.

#### 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 and quarterly meetings to review progress, the Council supports our major engagements with policy makers and stakeholders.

## CC2.3g

Please explain why you do not engage with policy makers

## **Further Information**

# Page: CC3. Targets and Initiatives

## 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

# 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
----	-------	-------------------------------	-------------------------------	-----------	---	-------------	-------------------------------------	---------

## 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
Int1	Scope 1+2 (location- based)	100%	20%	Other: metric tonnes C02e per square meter of conditioned space	2007	0.164	2020	No, but we anticipate setting one in the next 2 years	Marriott's strategy includes 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 our goal here in terms of emissions.

# 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		Increase		While we anticipate increases in the number of rooms in our managed portfolio, that growth varies according to strategic opportunities, and we cannot accurately forecast our absolute emissions for 2020. Regardless of growth, our efforts to reduce energy consumption are consistent. Marriott hotels have become more energy efficient since 2007. Energy use per conditioned square meter in the portfolio of properties we operate has decreased over 13% since 2007. Absolute emissions from our franchised properties, accounted for in Scope 3, are also expected to increase.

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	
----	-----------------------------------	-----------	--	---------------------------------------	-------------	---	---------	--

# CC3.1e

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

ID	% complete (time)	% complete (emissions or renewable energy)	Comment
Int1	61.5%	66%	From 2014 to 2015, our emissions intensity decreased 1.6%. Since 2007, we have reduced our emissions per square meter of conditioned space by 13.2%.

# 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

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

#### 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 Description of product/Group aggregation 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
--	---	--	--	--	---------

## 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*	20	3340
Implementation commenced*	49	10210
Implemented*	399	47200
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, full-service properties in the Americas, Asia Pacific and Mid- East/Africa select "Signature Projects" based upon the following criteria: the project can be completed during the first half of the year AND it	47200	Scope 1 Scope 2 (location- based)	Voluntary	8105600	15572900	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

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
	has the potential to significantly impact cost and emissions linked to reductions in energy use. 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								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. Both represent total Signature projects in the continental operating groups which have adopted this tracking system (the Americas, Asia Pacific and MidEast/Africa). These totals are not a complete list of all emissions reducing activities in the global portfolio and some of the same data is included in the individual project categories in the rows 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
Energy efficiency: Building services	LED lighting retrofit projects continued to be an effective emissions-reduction project with an attractive ROI in 2015, helping Marriott make progress toward our energy reduction targets, as well as reducing our Scope 2 emissions. These data include projects for hotels in the Americas, Asia Pacific and Mideast/Africa. 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 replacements reduce lighting energy requirements as well as cooling load in our lodging properties.	35700	Scope 2 (location- based)	Voluntary	5899000	9883000	1-3 years	3-5 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 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.	3360	Scope 1 Scope 2 (location- based)	Voluntary	690800	1314200	1-3 years	Ongoing	Expansion and improved operations of our building automation systems continued in 2015, with additional projects implemented. We build strategic partnerships

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
									where possible to leverage implementation across the portfolio. These data include the 2015 savings from the Americas Vulcan initiative, which has been driving building automation across brands since 2010, saving over 18 million kWh through 2015.
Energy efficiency: Processes	We developed a Chilled Water Diagnostic Tool in 2013 for managed properties in the Americas. This process improvement helps each full-service hotel identify cost savings opportunities in their Chilled Water Production. The tool calculated their total plant "Design KW/Ton" and "Actual KW/Ton, and offered tips on how they could optimize their plant to lower the Scope 2 energy required to produce the chilled water for property cooling. The data here represent savings from improvements in 2015	3490	Scope 2 (location- based)	Voluntary	546000	0	<1 year	Ongoing	To fully engage property engineers in the use of this tool, our Senior Director for Energy and Environment, Americas, travels extensively to conduct training sessions in various markets. This effort and similar initiatives are designed to change the way our building operators look at their plant – highlighting the opportunities for large energy savings from sometimes small adjustments to ensure that systems function as designed.

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
Energy efficiency: Building services	Marriott continues to partner with KiWi Power's demand response program in the U.K. Eight additional properties were added to the partnership in 2015.	80	Scope 2 (location- based)	Voluntary	9600	3700	<1 year	3-5 years	Demand response programs provide incentives to companies to better manage and reduce their grid-supplied electricity during times of peak demand. As a result, grid operators can avoid bringing higher polluting power stations fully online in order to provide extra capacity.
Energy efficiency: Building services	HVAC system upgrades, including chiller replacements with high efficiency units and cooling tower upgrades generate significant emissions reductions.	9050	Scope 1 Scope 2 (location- based)	Voluntary	1550000	5345000	4-10 years	Ongoing	These data represent large HVAC projects in the Americas, Asia Pacific and Mid-East/Africa.
Energy efficiency: Processes	Smart, integrated occupancy thermostat systems interlock with entry doors and the property management systems to deliver agile temperature setback efficiency without impacting guest comfort and preference. New installations at nine additional hotels in the Americas in 2015 reduced	6990	Scope 1 Scope 2 (location- based)	Voluntary	886900	2012900	1-3 years	11-15 years	The thermostat systems have settings for each of three room states: 1. available rooms – if no guest has checked in, the temperature can be set back to a more efficient level; 2. Occupied rooms with guests not present – temperature settings are slightly set back; and 3. Fully occupied rooms –

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
	scope 1 and scope 2 emissions and are contributing to our buildings being more integrated and smarter.								temperatures are set for guest comfort.
Energy efficiency: Building services	Kitchens in our full-service hotels require large exhaust systems. Installing smart ventilation systems with multi-sensor controls and variable speed drives which adjust to the ventilation needed reduce energy consumption significantly. The nine Demand Ventilation Kitchen hood and or CO2-based outside air control projects in the Americas reduce scope 1 and 2 emissions by reducing fan motor energy and the energy required to condition incoming outside air.	1450	Scope 1 Scope 2 (location- based)	Voluntary	236200	651800	1-3 years	11-15 years	Variable speed drives and smart control technology help ensure that fans and other motors run only when needed.
Energy efficiency: Building services	Variable speed drives help many building systems operate as needed, saving valuable resources. Variable Speed drives on our building air handlers, circulation pumps, domestic booster systems and cooling tower	2160	Scope 2 (location- based)	Voluntary	424936	784892	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
	continue to be compelling investments in energy efficiency.								

# 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) drive 3rd party studies of our more complex facilities in order to identify the efficiency opportunities
Employee engagement	Our full-service properties in the Americas have used an engineering gamification tool since 2013 to drive operational excellence. One quarter of the available points in the game target Environmental Stewardship and competition points are awarded for the following achievements: • Exceeding your property's Energy Intensity Goal • Completing your Signature ROI Project • Completing the Chilled Water Diagnostic • Update property data in Green Hotels Global or Achieve Trip Advisor Green Leaders status 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 Sustainability Report, various intranet channels and social media, including "Heart of the House," Marriott World Express, Bill Marriott's and Arne Sorenson's blogs, LinkedIn, Facebook, Tumblr, Weibo and Twitter; Global Operations Sustainability campaign at headquarters; SERVE Our World speaker series at headquarters; 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

Method	Comment
	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.
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.

CC3.3d

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

## **Further Information**

# Page: CC4. Communication

## 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	Complete	Pages 9-10	https://www.cdp.net/sites/2016/29/11329/Climate Change	

Publication	Status	Page/Section reference	Attach the document	Comment
filings			2016/Shared Documents/Attachments/CC4.1/SEC-MARRIOTT INT-2015 10-K.pdf	
In voluntary communications	Underway - previous year attached	2015 Sustainability Report, Environmental Performance Update	https://www.cdp.net/sites/2016/29/11329/Climate Change 2016/Shared Documents/Attachments/CC4.1/2015 Update_Environmental Performance.pdf	2016 Sustainability Updates will be published on the corporate responsibility website.

## **Further Information**

# Module: Risks and Opportunities

## Page: CC5. Climate Change Risks

# 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
Product efficiency regulations and standards	Green building standards, such as the U.S. Green Building Council's (USBC) Leadership in Energy and Environmental Design (LEED®) standards, which have been adopted as either a mandatory compliance regulation or encouraged through incentives throughout the U.S., as well as other national and international standards impact project costs related to compliance and certification.	Increased operational cost	Up to 1 year	Direct	Virtually certain	Low	Mandatory green building standards may increase project costs related to compliance and certification. New and existing building codes represent a risk to Marriott as we develop new properties and work with owners to remodel existing buildings. Incorporating green building standards may increase the costs of project-related design and construction.	Marriott is working collaboratively with our business partners to expand LEED® -certified and other 3rd party certified (e.g., Green Key, Green Globe) hotels across the entire Marriott portfolio. LEED® is an internationally recognized certification system developed by the U.S. Green Building Council. LEED® certification provides independent, third- party verification that a building project meets the highest green construction and operations performance measures. LEED®- certified buildings reduce waste sent to landfills, conserve energy and water, are healthier and safer	While there may be small administrative and scope cost increases to owners related to green building standards, these costs are usually offset in an ever- shortening payback timeframe by more significant ROI generated by lower operational costs. Marriott continues to support this initiative through a dedicated associate who oversees the LEED® design projects and certifications.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								for occupants, and reduce harmful greenhouse gas emissions. We have worked with the USGBC to certify prototypes for all of our select service and extended stay brands as part of their volume build program, which adds LEED®- certified properties to our portfolio at a greater rate than seen under the one-off certification process. We are also seeing an increase of LEED® registrations outside of the United States including projects in Asia, Central America and Europe, and have hotels certified according to other standards such as Green Globe and ISO 14001.	
Other	As part of the	Increased	Up to 1	Direct	Virtually	Low	Fines for non-	Marriott partnered	Additional energy

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
regulatory drivers	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 develop energy efficiency plans with periodical review and tracking of the energy savings. Energy audits were required before December 2015 or fines could be imposed which varied by country.	operational cost	year		certain		compliance vary by EU member country, and can be as high as \$57,000.	with Siemens in Europe to complete additional audits where necessary at five hotels in 2015. 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 the LEEN goal setting process.	audits to bring hotels into compliance with the regulation cost \$5,700 per hotel.
Product efficiency regulations	Changing lighting standards, such as bans on	Increased operational cost	Up to 1 year	Direct	Virtually certain	Low	Lighting retrofits costs vary widely, depending upon	We work with our suppliers to develop compelling	Lighting retrofits vary in size and scale, but often

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
and standards	halogen bulbs in certain applications may require lighting retrofits.						the size and type of installation.	ROI lighting projects.	have a payback period of 1-3 years due to the energy efficiency of LED technology.
Carbon taxes	To discourage greenhouse gas emissions, various governments have or are 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.	Increased operational cost	Up to 1 year	Direct	Virtually certain	Low	Carbon taxes contribute small increases in operational expenses in the regions where they have been enacted, such as the U.K. In 2015, the assessment for electricity under the CCL was 0.554 pence per kilowatt hour. A full-service Marriott hotel using 1 million kWh of electricity annually would owe approximately 5,500 GBP for electricity portion of the CCL (the tax also includes gas fuel). The financial implications will grow for global	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 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	Financial investments in energy efficiency vary by installation type and other factors 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.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
							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 .559 pence/kWh in 2016.	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 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.	

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
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 fuel both within and across countries. The current impact of these types of taxes is greater for our operations outside the United States.	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 2014 to March 2015), the obligation for Marriott properties under the UK CRC Energy Efficiency Scheme was 1,577,363 GBP, or 2.3million USD.	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 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	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 payback timeframe for a CHP varies by installation, but can be as short as 2-3 years.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								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 conservation for our many properties already operating at high efficiency. In the UK, this approach includes participating in the Kiwi Power Demand Response program.	
Uncertainty surrounding new regulation	The diverse, complex and fluid nature of climate change regulation is challenging for						Uncertainty surrounding new climate change regulation is a challenge for	Marriott has taken a highly proactive approach to complying with environmental laws	The specific costs associated with uncertainty surrounding new regulation vary

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	global corporations.						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.	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 purchase of new equipment, helping to ensure that they are buying the most energy- efficient equipment available	and are not discreet, but include staff time spent engaging with various stakeholders.

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 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.	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 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	Energy ROI projects usually have a payback timeframe of less than three years. In 2015, the Americas engineering team completed energy ROI projects with a total annual savings of almost 28 million kilowatt- hours.

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
								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 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	

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								promotes various projects that address our sustainability strategy, including "Signature" projects, chiller diagnostics, energy intensity reduction, water conservation and food waste diversion.	
Tropical cyclones (hurricanes and typhoons)	More frequent 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.	Increased operational cost	Unknown	Direct	More likely than not	Unknown	Cyclones can 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.	Marriott has 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,	Operational cost increases due to higher insurance costs and business disruption might occur.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
							property destruction would impact the availability of materials and resources, increasing repair costs and timeframes for resumption of operations at affected hotels.	community workforce development, well- being of children, and diversity and inclusion—that comprise our global social responsibility strategy.	
Change in precipitation extremes and droughts	Severe changes 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.	Reduced demand for goods/services	Unknown	Direct	Unknown	Unknown	Longer dry or wet 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	Marriott fully complies with local water restrictions in drought affected regions such as California. Our linen and terry re- use standards were established to conserve water and energy are in- line with water restrictions.	Compliance 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
							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 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	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	Costs specifically related to the risk of changes in average temperature have not been quantified. However, at many of our

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
							considerable. Increases in the costs of energy, fuel and other expenses central to the conduct of our business could pose a financial risk.	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 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.	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
Changing consumer behaviour	With growing environmental awareness on the part of many travelers, as well 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.	Reduced demand for goods/services	>6 years	Direct	Unlikely	Medium	Awareness of environmental issues and climate change has grown 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	Marriott is managing risks relating to changing consumer behavior through continual 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 Green Hotels	Our energy- efficiency and water reduction efforts typically have payback timeframes of 2 years or less. The anticipated payback period for the LEED® prototypes is less than three years. We have leveraged our relationship with vendors to provide us cost-neutral, environmentally- sustainable products and services.

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
							and competitive advantage in the industry.	Global <sup>™</sup> to capture and report property-level sustainability data. Our customers can use the online dashboard to access information on the environmental impact and sustainability practices of our hotels. The built-in calculator allows customers to view and ultimately roll- up their carbon and water footprint post-event or post hotel stays to more immediately quantify this information. We have aligned the questions in Green Hotels Global to allow data to seamlessly become part of TripAdvisor's GreenLeaders helps TripAdvisor's community of more than 350 million	

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								travelers plan greener trips by highlighting North American and European accommodations engaging in good environmental practices.	

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

CC5.1e

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

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

#### **Further Information**

#### Page: CC6. Climate Change Opportunities

## 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

#### 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 regulations and standards	The development and adoption of green building and energy management	Reduced operational costs	Up to 1 year	Direct	Virtually certain	Low- medium	Green building standards, such as the U.S. Green Building Council's (USGBC) LEED®	Five brands in Marriott's select- service and extended-stay portfolio Courtyard, Fairfield Inn &	While there may be administrative costs related to green building standards, these costs are usually offset by more

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	standards creates an opportunity for Marriott to lead the hospitality industry.						standards and other national and international standards create opportunities for Marriott to demonstrate leadership in promoting and supporting green hotel development.	Suites, Residence Inn, SpringHill Suites and TownePlace Suites – are LEED Volume certified. The LEED volume- build program allows our owners and franchisees to achieve LEED status throughout the development process, so that it is fully certified upon building completion. LEED certification through the volume build program streamlines the process for hotel developers and owners, saving both time and money. Owners of these hotels save about \$100,000 in upfront costs and six months of design time. Additionally,	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.

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								owners can expect to save 25 percent in energy and water consumption and should recover their additional investment in two to six years depending on federal and local government incentives. We support our 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 2015, we had 143 hotels which are LEED® certified or registered, making Marriott the company with the most hotel brands approved in the USGBC Volume Build	

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								program, and the greatest number of hotels certified and registered as LEED buildings.	

## CC6.1b

# Please describe the 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	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.	With Green Hotels Global™, customers can view the carbon footprint and information on various environmental practices related to energy efficiency at each of the hotels in our system.	Participation in Green Hotels Global™ costs each property just over 300 USD.
Change in temperature	Marriott's ability to run	Reduced operational	Up to 1 year	Direct	Unknown	Low	Possible increases in temperature extremes	Our efforts to increase the	Most of the energy-saving

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
extremes	more energy efficient hotels offers the opportunity to outperform competitors in regulating the temperature at its hotels.	costs					could increase the severity and duration of seasonal dips in demand. In addition, increases in demand for energy to regulate 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.	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 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	policies and equipment replacement efforts conducted with our property owners are either cost neutral, or offer a short payback time. With utility incentives and cost savings through energy load curtailment, the anticipated payback time for new building automation systems associated with the Constellation Energy and Kiwi Power programs are under two years.

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								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. Marriott partners with utility companies to address overloaded power grids. In 2011, Marriott entered into a five-year agreement with Constellation Energy to leverage building automation systems at properties in the U.S. through participation in demand response markets. This	

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								program has significantly improved the energy efficiency of our hotels. A similar demand response agreement has been signed with Kiwi Power in the U.K. and Marriott was the first hotel company to pilot the program in 2013, and in 2015 8 hotels participated fully in the program.	

# CC6.1c

# Please describe the 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	Increased demand for existing products/services	3 to 6 years	Direct	Very likely	Low	Amid rising expectations regarding business action and accountability,	We recognize our obligation to mitigate the impact of our business on the natural	Specific associated costs include those related to stakeholder engagement and

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	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.						our leadership position in addressing environmental sustainability helps maintain our reputation and provides a competitive advantage in the hotel industry.	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 innovation, collaboration, constructive engagement with key stakeholders, driving pull- through at our properties across	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
								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 London Heathrow Marriott recently earned the Green Hotelier's Green Hotel of Europe award.	
Changing consumer	With growing environmental	Increased demand for	3 to 6 years	Direct	Very likely	Low- medium	Awareness and knowledge of	To respond to changing market	The anticipated payback

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
behaviour	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 development of new properties and franchises is also linked to our ability to adapt to new market proirities.	existing products/services					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.	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 water footprints to our customers through Green Hotels Global <sup>™</sup> . Green Buildings: We have addressed the needs of owners and developers seeking to build	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 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
								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 the end of 2015, charging stations were installed at 245 properties. Guests at these hotels can charge their EVs using the 240V	

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								charging stations.	

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 physical climate parameters that have the potential to generate a substantive change in your business operations, revenue or expenditure

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

## **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)

Scope	Base year	Base year emissions (metric tonnes CO2e)
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

Gas	Reference
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 C02e/therm	US EPA Emissions Factors for Greenhouse Gas Inventories, http://www.epa.gov/stateply/documents/emission-factors.pdf (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: kgC02e/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

#### **Further Information**

Electricity Emissions Factors: • US EPA, eGRID Subregion GHG Output Emission Rates, 9th Edition revised 2/24/2014; • 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 2015 - 31 Dec 2015)

#### 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

680718

CC8.3

Does your company have any operations in markets providing product or supplier specific data in the form of contractual instruments?

Yes

#### CC8.3a

Please provide your gross global Scope 2 emissions figures in metric tonnes CO2e

Scope 2, location-based	Scope 2, market-based (if applicable)	Comment
3234409	3234409	

#### CC8.4

Are there are 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?

#### 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 excluded	No emissions excluded	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.

### CC8.5

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	Data Gaps	Approximately 25% of the hotels in the total portfolio were missing at least one month of data, or had data

Yes

Scope	Uncertainty range	Main sources of uncertainty	Please expand on the uncertainty in your data
	less than or equal to 10%	Assumptions Extrapolation	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.
Scope 2	More than 5% but	Data Gaps	Approximately 25% 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 (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.
(location-	less than or equal	Assumptions	
based)	to 10%	Extrapolation	
Scope 2	More than 5% but	Data Gaps	Same as row above.
(market-	less than or equal	Assumptions	
based)	to 10%	Extrapolation	

# 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	https://www.cdp.net/sites/2016/29/11329/Climate Change 2016/Shared Documents/Attachments/CC8.6a/Marriott CY15 Assurance Statement-ASRauthorized.pdf	Page 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 Emissions Monitoring Systems (CEMS)

Regulation % of emissions covered by the system Compliance period Evidence of	of submission
---	---------------

#### 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

### 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	https://www.cdp.net/sites/2016/29/11329/Climate Change 2016/Shared Documents/Attachments/CC8.7a/Marriott CY15 Assurance Statement-ASRauthorized.pdf	Page 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
Other: Emissions intensity by business division	GHG Emissions Intensity (kg per square meter) for each of Marriott's four continental operating groups.

# CC8.9

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

No

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

#### **Further Information**

## Page: CC9. Scope 1 Emissions Breakdown - (1 Jan 2015 - 31 Dec 2015)

# 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

Country/Region	Scope 1 metric tonnes CO2e
United Kingdom	42084
Rest of world	638634

### CC9.2

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

By business division

## CC9.2a

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

Business division	Scope 1 emissions (metric tonnes CO2e)
Americas	407346
Asia Pacific	131301
Europe	92523
Middle East & Africa	49548

#### CC9.2b

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

Facility	Scope 1 emissions (metric tonnes CO2e)	Latitude	Longitude
----------	--	----------	-----------

### CC9.2c

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

GHG type	Scope 1 emissions (metric tonnes CO2e)

#### CC9.2d

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

Activity	Scope 1 emissions (metric tonnes CO2e)

## **Further Information**

# Page: CC10. Scope 2 Emissions Breakdown - (1 Jan 2015 - 31 Dec 2015)

## CC10.1

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

## Yes

# 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)
United Kingdom	57884	57884	111533	0
Rest of world	3176525	3176525	5565276	0

# CC10.2

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

# By business division

## CC10.2a

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

Business division	Scope 2 emissions, location based (metric tonnes CO2e)	Scope 2 emissions, market-based (metric tonnes CO2e)
Americas	1557052	1557052
Asia Pacific	945807	945807
Europe	231751	231751
Middle East & Africa	499800	499800

### CC10.2b

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

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

## CC10.2c

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

Activity	Scope 2 emissions, location based (metric tonnes CO2e)	Scope 2 emissions, 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%

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

Energy type	Energy purchased and consumed (MWh)
Heat	112340
Steam	231993
Cooling	245473

# CC11.3

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

3543002

## CC11.3a

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

Fuels	MWh
Natural gas	3143615
Other: Heating Oil	14387
Diesel/Gas oil	118891
Propane	182968
Town gas or city gas	81374

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	Comment
No purchases or generation of low carbon electricity, heat, steam or cooling accounted with a low carbon emissions factor	0	

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
5087003	5087003	0	0	0	

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?

## 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.
Divestment			
Acquisitions	1.6	Increase	Marriott's acquisition of the Delta hotel chain added 1.6% to the total available rooms in the managed portfolio.
Mergers			
Change in output	1.5	Increase	Occupancy at our 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			
Change in boundary			
Change in physical operating conditions			
Unidentified			
Other	1.8	Increase	Some properties shifted energy sourcing from direct to indirect energy, resulting in increased emissions from higher grid emissions factors

#### 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
0.000270	metric tonnes CO2e	14486000000	Location- based	2	Decrease	Total revenues (as published in the 2015 10-K) increased more than gross global emissions.

### 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
0.1446	metric tonnes CO2e	Other: square meter of conditioned space	27075379	Location- based	1.6	Decrease	Our decrease in emissions intensity is primarily due to emissions reducing activities.

# Page: CC13. Emissions Trading

# CC13.1

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

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

# 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?

# CC13.2

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

No

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 of CO2e)	Number of credits (metric tonnes CO2e): Risk adjusted volume	Credits cancelled	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
					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.
Capital goods	Relevant, not yet calculated				(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 Supplier Sustainability Performance Scorecard to facilitate greening the furniture, fixture and equipment (FF&E) supply chain for the industry. The scorecard criteria include not only carbon emissions, but other key factors such as water conservation, waste reduction, air quality and responsible labor practices.
Fuel-and-energy- related activities	Not relevant, explanation				As an end user of energy, these Scope 3 sources are not within our direct sphere of influence, nor are they

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
(not included in Scope 1 or 2)	provided				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.
Waste generated in operations	Relevant, not yet calculated		Marriott calculates landfill waste per occupied room and reports waste diversion rates by individual property through the Green Hotels Global <sup>™</sup> dashboard.		For properties we operate in the Americas, landfill waste per occupied room decreased 2.5% from 2014 rates.
Business travel	Relevant, calculated	67387	This number represents an average of emissions from business travel from the United States. Total business travel miles were computed with emissions factors for both low and high emissions flights and the totals were averaged	100.00%	
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 GO Sustainability campaign at Marriott HQ.

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
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 transportation and distribution outside its facilities.
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.
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	3185603	Marriott calculated emissions for franchised properties according to the same methodology as used for managed properties within our Scope 1 and 2 boundary.	37.00%	The Green Hotels Global <sup>™</sup> Dashboard was rolled out in 2013 to all Marriott branded properties, giving visibility for the first time to data on our environmental metrics from our franchised properties. Missing data was accounted for using the same gross-up methodology as used to calculated Scope 1 and 2 emissions from the

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
					managed portfolio.
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)					

## CC14.2

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	https://www.cdp.net/sites/2016/29/11329/Climate Change 2016/Shared Documents/Attachments/CC14.2a/Marriott CY15 Assurance Statement-ASRauthorized.pdf	Page 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	3.6	Increase	Air mileage on trips originating in the United States increased 4% over the previous year.
Franchises	Change in output	4	Increase	Increase in Scope 3 emissions from franchised properties reflects unit growth and increased occupancy.

#### 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 engagement and measures of success

#### Supplier Engagement

Marriott is a founding member of and the first lodging company participant in the Hospitality Sustainable Purchasing (HSP) 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 the industry with a unified approach and metrics for greening our global furniture, fixtures and equipment (FF&E) supply chain through the creation of the HSP Index.

Marriott works closely with Avendra, the largest professional procurement company serving the hospitality industry in North and Central America, to source most of our U.S.-based food and beverage, engineering, rooms, office and spa supplies. In 2015, 93% of Marriott's purchasing contracts through Avendra in North America were with suppliers that have a sustainability policy in place. Avendra is working to help improve sustainability options across ten different supply categories by 2016.

#### **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. We use the Green Hotels Global<sup>™</sup> dashboard to report on each property's environmental impact using the HCMI methodology. This tool engages property management teams in measuring and disclosing the carbon, water and waste footprint of the hotel, as well as reporting on the status of operational and management practices in such categories as Energy, Water and Waste Management, Supply Chain, Environmental Policy and Certifications.

Beginning in 2013, our customers used Green Hotels Global<sup>™</sup> to calculate the emissions associated with their room nights and meetings at any of our managed and franchised properties worldwide. 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 and the Green Hotels Global<sup>™</sup> dashboard. Marriott hotels in the Green Hotels Global<sup>™</sup> system are also included in TripAdvisor's GreenLeaders program. GreenLeaders helps TripAdvisor's community of more than 350 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.

#### Other Partners

To help mitigate the direct and indirect environmental impacts of our business, we have invested in a portfolio of innovative conservation initiatives that are part of our environmental strategy. 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+ – a five-year partnership with the Amazonas Sustainable Foundation (FAS). In 2008 we pledged to help FAS protect 1.4 million acres of rainforest in the Juma Sustainable Development Reserve in Amazonas, Brazil.

• Thailand's Mangrove Restoration – a project with the International Union for Conservation of Nature (IUCN) to help restore the critical mangrove ecosystem damaged by the 2004 tsunami while supporting communities through the use of sustainable seafood sources and local procurement practices.

• Reforestation in Canada -- Guests at Delta Hotels and Resorts can reduce the environmental footprint of their hotel stay and help reforestation efforts through a partnership between the hotels and WEARTH. The program gives guests the option to virtually plant one tree for each night they have opted out of housekeeping. WEARTH plants the actual trees on behalf of every applicable GreenSTAY guest night, and guests must opt out of housekeeping at least three nights to participate in the program.

#### 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

Number of suppliers	% of total spend (direct and indirect)	Comment
91		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. 91 FF&E and Office Furniture suppliers representing over \$262 million in procurement provided data to the program in 2015. In addition, 93% of suppliers working with our purchasing partner Avendra have a sustainability policy in place by the end of 2015.

#### CC14.4c

If you have data on your suppliers' GHG emissions and climate change strategies, please explain how you make use of that data

How you make use of the data	Please give details
Use in supplier scorecards	Through MindClick's program, Marriott can review which of the participating furniture, fixtures and equipment (FF&E) and operating supplies & equipment (OS&E) have committed to various sustainability practices. We use this information to inform our standards development, design, contracting and purchasing choices, and consider MSAP performance in selection of vendors.

#### CC14.4d

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 Experience	Business unit manager

#### **Further Information**

CDP 2016 Climate Change 2016 Information Request