Module: Introduction

Page: Introduction

CC0.1

Introduction
Please give a general description and introduction to your organization.

With more than 200 years of expertise, The Hartford (NYSE: HIG), headquartered in Hartford, Conn. is a leader in property and casualty insurance, group benefits and mutual funds. The Hartford sells its products primarily through a network of independent agents and brokers, and for more than 30 years has been the only nationally endorsed direct auto and home insurance program for AARP's 37 million plus members. The Hartford helps its customers prepare for the unexpected, protect what's most important to them and prevail when the unforeseen happens.

The Hartford's business divisions include Business Insurance (Workers' compensation, property, general liability, professional liability, auto), Personal Lines (Home, Auto, Renters, Umbrella), Employee Benefits (Group disability, life, AD&D, absences management, voluntary benefits including critical illness and accident, group retiree health), and Mutual Funds (Equity, fixed income and asset allocation mutual funds subadvised by Wellington Management and Schroders, Broad range of exchange-traded funds: both strategic beta and active ETFs)

The Hartford's business strategy is rooted in a deep understanding of the complex and dynamic world around us, as well as a promise to do business sustainably and ethically. As a supporter of commerce, in particular, we actively champion programs that address risk awareness and mitigation, financial literacy and inclusion, entrepreneurship, and social enterprise. We are particularly proud of the progress we have made in these areas through the sponsorship of financial educational programs, providing access to capital and training to micro-businesses, and making insurance products and services more accessible to those who need them.

CC0.2

Reporting Year

Please state the start and end date of the year for which you are reporting data.
The current reporting year is the latest/most recent 12-month period for which data is reported. Enter the dates of this year first.
We request data for more than one reporting period for some emission accounting questions. Please provide data for the three years prior to the current reporting year if you have not provided this information before, or if this is the first time you have answered a CDP information request. (This does not apply if you have been offered and selected the option of answering the shorter questionnaire). If you are going to provide additional years of data, please give the dates of those reporting periods here. Work backwards from the most recent reporting year.
Please enter dates in following format: day(DD)/month(MM)/year(YYYY) (i.e. 31/01/2001).

Enter Periods that will be disclosed
Fri 01 Jan 2016 - Sat 31 Dec 2016

CC0.3

Country list configuration

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

Select country
United States of America
Canada

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, companies in the electric utility sector, companies in the automobile and auto component manufacturing sector, companies in the oil and gas sector, companies in the information and communications technology sector (ICT) and companies in the food, beverage and tobacco sector (FBT) should complete supplementary questions in addition to the core questionnaire.
If you are in these sector groupings, the corresponding sector modules will not appear among the options of question CC0.6 but will automatically appear in the ORS navigation bar when you save this page. If you want to query your classification, please email respond@cdp.net.
If you have not been presented with a sector module that you consider would be appropriate for your company to answer, please select the module below in CC0.6.

Further Information

Module: Management

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

David Robinson, General Counsel and Executive Vice President. Mr. Robinson chairs The Hartford's committee on climate change, the "Environment Committee". In this capacity, Mr. Robinson, along with the head of Corporate Sustainability, briefs the Nominating and Corporate Governance Committee of the Board of Directors annually. The charter of the Nominating and Corporate Governance Committee states, in part, that "The Committee shall...oversee the Company's strategy and activities regarding sustainability and environmental stewardship". Mr. Robinson also briefs his fellow Enterprise Operating Team (EOT) members twice yearly. (The EOT comprises the company's 18 most senior company executives, including the CEO, CFO and Mr. Robinson.) The Environment Committee, which was created in 2007 as part of The Hartford's public commitments on climate change, is made up of 18 company leaders across the enterprise, including risk management, operations, representatives of the company's Personal Lines and Commercial Markets businesses, and our investment company, as well as Actuarial, Sales, HR,

Strategic Sourcing and Real Estate, Marketing and Communications and Government Affairs. In 2011 we invited volunteers from our early career professional program to join the Committee, and assigned them responsibility for engaging our employees on environmental stewardship at least once quarterly. Since its founding in 2011, The Hartford Environmental Action Team ("HEAT") has grown to nearly 500 members. HEAT leadership meets at least monthly and maintains an internal website to inform employees about the company's environmental stewardship and employee volunteer opportunities. HEAT leadership sets an annual operating plan and meets with the General Counsel to report on and seek guidance on its activities.

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 from these incentives?	The type of incentives	Incentivized performance indicator	Comment
Executive officer	Monetary reward	Emissions reduction target Other: management of weather risks	For certain lines of business at The Hartford such as homeowners and commercial property insurance, proper assessment and underwriting of weather-related risks is key to successful business performance. The Hartford employs performance-based compensation; the stronger the performance, the more substantial the compensation. Also, employees who successfully bring to market new products, including those that address climate change, may be rewarded for their performance. In addition, prudent, successful management of company resources, including efficient use of energy, is rewarded. The Hartford Executive Leadership Team ("C-Suite") has joint accountability and a commitment to promote environmental sustainability. The Hartford's Code of Ethics requires employees to comply with all relevant environmental laws and to do their part to reduce waste, conserve energy and recycle paper, glass, aluminum and plastic.
Business unit managers	Monetary reward	Energy reduction project Energy reduction target Efficiency project Other: Behaviour	The C-Suite has clearly conveyed the importance that the company attaches to strong management of climate change issues through Town Hall meetings, messages on our intranet sites, statements on our external website, and by activities such as the CEO participation in the White House meeting on business resiliency and insurance in the face of climate change. We also

Who is entitled to benefit from these incentives?	The type of incentives	Incentivized performance indicator	Comment
		change related indicator	joined other companies in a full page Wall Street Journal ad to voice our support for the Paris climate negotiations in 2015 and, subsequent to the agreement being reached in 2016, The Hartford added our signature to the letter urging the new US Administration to make the agreement a priority. In 2017, we publicly supported other open letters urging the President to keep the US in the agreement. Business managers are rewarded for helping to meet GHG emissions goals. For example, in 2012 an environment team won the company's most prestigious company award, the "Chairman's Award" for helping to meet a GHG goal early. The award included $2500 for each team member. Managers associated with The Hartford's renewable energy practice receive compensation based on the performance of this practice, which offers insurance coverage for the wind, solar, biomass and fuel cell industries. Communications and Marketing managers' performance may also be tied to the success of their efforts to communicate The Hartford's environmental commitments to our stakeholders. For example, in 2016 we established a "Sustainability Index" to track employee awareness of, and engagement in, The Hartford's commitment to Environmental Stewardship (and other material aspects) and we measure and reward progress toward established target levels.
Facility managers	Monetary reward	Emissions reduction project Emissions reduction target Energy reduction project Energy reduction target Efficiency project Efficiency target	Facilities managers under the SVP for Procurement are primarily responsible for reducing The Hartford's carbon footprint, and they may be rewarded for meeting GHG reduction goals. A facilities manager participated in the team that received the 2012 Chairman's Award described above. In 2015 and 2016, these facilities managers received strong recognition internally and externally (including being named as a finalist for a State of Connecticut environment award) for major energy efficiency upgrades on our Hartford (main) campus. This refurbishment, which includes major environmentally friendly energy efficiency upgrades such as a new HVAC system, LED lighting, efficient elevators and office improvements; and re-purposed/ recycled building materials and furniture. In 2011, another team responsible for reducing the paper consumption of Hartford employees, the "Managed Print Team", won a Chairman's Award for reducing paper use. Facilities managers played a key role in 2014 in setting the GHG emissions reduction goal (the company's third GHG reduction goal) and are actively involved in setting our next one. In May, 2015, The Hartford joined the U.S. Department of Energy Better Buildings Challenge with Datacenter program that calls on private and public sector leaders to improve energy efficiency in buildings across the United States. The Hartford committed to reducing its energy usage in the real estate facilities we own by 20% before 2023. The Hartford achieved the goal within months and was praised as an "Early Achiever" in a May 2016 news release issued by the White House.
Risk managers	Monetary reward	Other: management of weather related risks	For certain lines of business, such as homeowners and commercial insurance, proper assessment and underwriting of weather related risks are key to successful business performance. In 2013,

Who is entitled to benefit from these incentives?	The type of incentives	Incentivized performance indicator	Comment
			Hartford risk managers took the lead in updating The Hartford's Climate Change Statement, which highlights The Hartford's approach to the evolving science, based on the IPCC's 5th assessment and remains in force.
Business unit managers	Recognition (non-monetary)	Emissions reduction project Emissions reduction target Energy reduction project Energy reduction target Efficiency project Efficiency target	Aside from the employee-wide programs listed for "all employees" below, business managers may be recognized for their work that contributes to managing climate change. This recognition can be through membership on a team that receives a Chairman's Award or through alternative rewards and recognition. Teams that receive external recognition for The Hartford's environmental stewardship, such as the Dow Jones Sustainability Index, the 2014 and 2015 EPA Climate Leadership Awards, and the 2013 Edison Award in the "Green" category have received recognition from the CEO and other senior company leaders. In May 2015 The Hartford joined the U.S. Department of Energy Better Buildings Challenge with Datacenter program that calls on private and public sector leaders to improve energy efficiency in buildings across the United States. The Hartford has committed to reducing its energy usage in the real estate facilities we own by 20% before 2023. The Hartford achieved the goal within months and was praised by the White House as an "Early Achiever" in its May 2016 news release. Also in 2016, The Hartford was recognized as a top three most carbon efficient company in the financial sector and named a Global Sector Leader by ET Index Research.
Facility managers	Recognition (non-monetary)	Emissions reduction project Emissions reduction target Energy reduction project Energy reduction target Efficiency project Efficiency target	Aside from the employee-wide programs listed for "all employees" below, business managers may be recognized for their work that contributes to managing climate change. For example, the managers responsible for The Hartford's vehicle fleet received company recognition for moving a significant percent of our vehicle fleet to hybrids. Also, recognition can be extended because of membership on a team that receives a Chairman's Award or other rewards and recognition. Teams that receive other external recognition for The Hartford's environmental stewardship, such as the 2014 and 2015 EPA Climate Leadership Awards, the 2013 Edison Award in the "Green" category have received recognition from the CEO and other senior company leaders. In May 2015 The Hartford joined the U.S. Department of Energy Better Buildings Challenge with Datacenter program that calls on private and public sector leaders to improve energy efficiency in buildings across the United States. The Hartford has committed to reducing its energy usage in the real estate facilities we own by 20% before 2023. The Hartford achieved the goal within months and was praised by the White House as an "Early Achiever" in its May 2016 news release. Also in 2016, The Hartford was recognized as a top three most carbon efficient company in the financial sector and named a Global Sector Leader by ET Index Research.
All employees	Recognition (non-	Emissions reduction project	Employees who participate in company-sponsored environmental events are rewarded in various ways. Since 2011, the HEAT Team has staged an "Alternative Commuter Challenge",

Who is entitled to benefit from these incentives?	The type of incentives	Incentivized performance indicator	Comment
	monetary)	Energy reduction project Efficiency project Other: pro-environment behavior, low GHG commuting practices	encouraging employees to find a less carbon-intensive way to commute to work. The HEAT Team chooses winners. Recognition has included personal messages from the General Counsel through the company's "Rewards and Recognition" program. Employees who carpool into Hartford are rewarded by being able to park in a specially designated parking lot that is particularly convenient in an otherwise tight parking environment. Employees who are owners of EVs may charge their vehicles for free at the EV charging stations the company provides in our two Connecticut locations. In 2016, HEAT coordinated a Zero Emission Vehicle (ZEV) ride-and-drive event to raise awareness of the benefits of these vehicles and offer employees the chance to experience them firsthand. Employees also may use gym and shower facilities for free, thereby removing disincentives for those who commute by bike or running. We leverage a continuous improvement process called Harvest to promote and sponsor employee ideas for green initiatives. Results include efforts to reduce print/paper consumption, single-stream recycling and incentives for employees that utilize environmentally-friendly methods for work commuting (ex. public transportation).

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 more frequently	Board or individual/sub-set of the Board or committee appointed by the Board	Entire United States	> 6 years	Significant risks to the company, or emerging risks that could become significant several years into the future, are monitored to evaluate how they could affect the properties and people we insure. For natural catastrophic perils, exposures are generally limited to ensure that estimated loss from a single 250-year event prior to reinsurance is less than 30% of the statutory surplus of the P&C operations and less than 15% of the statutory surplus of the P&C operations after consideration of reinsurance. We identify opportunities through our quarterly Environment Committee meetings. Some of these opportunities are generated in our investment management company, and our business groups. We are actively looking to adopt scenario analysis consistent with Task Force for Climate Related Financial Disclosures.

CC2.1b

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

The Board has ultimate responsibility for risk oversight, exercised through standing committees. The company's formal risk appetite framework is reviewed by the Board at least annually and includes an enterprise risk appetite statement, risk preferences, tolerances, and limits. Risk is managed at multiple levels, including the company and asset level. The Finance, Investment and Risk Management Committee (FIRMCo), comprised of all Board members, oversees investment, financial and risk management activities of the Company and oversees risks falling outside the responsibility of any other committee. FIRMCo meets at regular Board meetings and is updated on risk management activities by the Enterprise Chief Risk Officer (ECRO) and the Chief Executive Officer (CEO). The Enterprise Risk and Capital Committee (ERCC), chaired by the CEO and comprised of senior leaders oversees the risk profile, capital structure and risk management practices. The ERCC has oversight of significant company-wide risk exposures. ERM is independent of business units and provides risk analysis on an individual and aggregated basis to ensure the Company's risks remain within its risk appetite and tolerances. ERM is led by the ECRO who reports to the CEO and is responsible for maintaining and enforcing ERM's program and policies. With assistance from ERM, business units share risk-related information with senior management and Board committees.
Business risk self-assessments are conducted periodically by each business unit and functional area to identify and disclose their most material risks to senior management and the Board Audit Committee. Emerging risk councils identify, assess, measure and monitor emerging risks and the Emerging Risk Steering Committee reviews and reports significant emerging risks to the ERCC and the FIRMCo. The Hartford's SVP of facilities management and procurement is responsible for identifying and prioritizing activities that reduce our carbon footprint.

CC2.1c

How do you prioritize the risks and opportunities identified?

The Company monitors its major risks at the enterprise level through a number of enterprise reports, including but not limited to, a monthly risk dashboard, tracking the return on risk-capital across products, and regular stress testing. ERM communicates the Company's risk exposures to senior and executive management and the Board, and reviews key business performance metrics, risk indicators, audit reports, risk/control self-assessments and risk event data. The CRO also conducts a process of identifying Emerged and Emerging risks. The Company quantifies its risk exposures using multiple lenses including statutory, economic and, where appropriate, U.S. GAAP. ERM leverages various modeling techniques and metrics to provide a view of the Company's risk exposure in both normal and stressed environments at the company and asset level. ERM regularly monitors the Company's risk exposure and provides regular reporting to the ERCC. The Company defines insurance risk as its exposure to loss due to a range of perils and risks covered under its policies including loss due to catastrophes.
The Hartford has rolled out a company-wide program called Harvest, which conforms with Six Sigma principles, that helps identify opportunities. It formally solicits new ideas from employees and presents to company leaders who vet and prioritize them. This process occurs at both the company and asset level.

The Hartford also relies on its internal work on climate change to help guide the prioritization process. In particular, The Hartford updated its 2007 climate change statement in the fall of 2013 and approved it in 2014. It is now based on the 5th assessment of the IPCC. In addition, for all of our investment decisions, The Hartford employs the HIMCO Environmental Investment Policy Statement that the company established in 2010.

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

CC2.2a

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

A key risk for The Hartford is extreme weather highlighted by growing insured losses due to severe weather events. The Hartford continually improves techniques for managing these weather risks and applies these tools across the enterprise. In 2016, The Hartford experienced catastrophe losses of $416 million before tax, increasing from $332 million before tax in 2015, largely due to higher losses from wind and hail events. There is an ongoing need to underwrite effectively and manage exposures to catastrophic weather-related risks. The Hartford also recognizes growing opportunities to offer products and services that help policyholders move to renewable energy and reduce greenhouse gas emissions. The Hartford's Renewable Energy Practice, launched in 2010 to insure wind, solar and fuel cell industries is recognition of this opportunity. In 2011, this unit began insuring the largest private solar panel installation in the Western Hemisphere. It now underwrites 15 fuel cell generation facilities and in 2014, wrote one of the largest hydroelectric plants in the U.S. with 62 locations. The Hartford has introduced a growing list of insurance products that help customers reduce their environmental impact, including GHG reduction. We offer a discount for electric vehicle (EV) owners (adding to the hybrid discount we first offered in 2011). In his 2016 letter to shareholders, the CEO wrote, "As an insurance company, we understand the inherent risks that environmental challenges present to people and communities. In response, we are reducing our own impact on the environment and conserving natural resources, while reducing our operating costs in the process." The company has been a member of the Dow Jones Sustainability North America Index since 2012 (through 2016) and received Climate Leadership Awards from U.S. EPA in 2014 and 2015. In 2016, The Hartford was recognized as a top three most carbon efficient company in the financial sector and named a Global Sector Leader by ET Index Research.

Climate change aspects influencing our business strategy primarily include protecting customers from and managing the risk arising from increased weather events (hurricanes, tornadoes, wildfires owing to drought, heavier snowfall or ice storms), and responding to customer interest in reducing their greenhouse gas emissions by offering products that meet this need (hybrid / EV discounts, increased coverage limits when customers build or upgrade with environmentally friendly materials / processes, solar panel installation). The Hartford's Catastrophe Information Center provides 24/7 help to our individual and commercial customers on preparing for natural disasters. We operate a Mobile Response Unit to respond to catastrophes. This vehicle crosses the country helping customers after severe weather events. In 2014, our CEO attended a White House Roundtable on Climate Resilience and Insurance, and the company participated in related work streams. We seek to understand and convey to the public effective mitigation techniques; e.g. in the wake of Storm Sandy, The Hartford surveyed more than 450 small businesses most impacted by the storm and we published a report on the findings to educate small businesses.

Key components of short-term strategy influenced by climate change: Since severe weather-related events can occur at any time, our strategy to manage these risks is a company priority. Our Chief Risk Officer and staff are focused on the risks severe weather events pose to our ongoing operations and our Business Resiliency Office ensures the company is not adversely affected in the event of a disaster.

Key components of long term strategy influenced by climate change: We believe that superior risk management, reduced carbon emissions, reduced paper usage, and attendant savings, enhanced insurance product offerings and partnerships with environmental groups will help differentiate us from our competitors. Long term, The Hartford believes that a growing number of customers interested in reducing their greenhouse gas emissions and being more environmentally friendly will create growing business opportunities for insurers.

How this gains strategic advantage over competitors: Competition in property casualty insurance is intense. Companies constantly look for ways to differentiate themselves in the marketplace. We believe that companies that demonstrate a strong, comprehensive and sustained approach to environmental stewardship and offer appropriate products at the appropriate price can build a green insurance brand. Also, in the war for talent, companies demonstrating serious commitment to environmental stewardship are better positioned to attract and retain talented employees.

Substantial business decisions made during the reporting year influenced by climate change driven aspects of the strategy: The decision to integrate our GHG reduction targets into our HR, facilities maintenance and upgrades, corporate vehicle fleet and IT procurement decisions helped the company meet its 2017 commitment early (2012). The Hartford continued this approach in its next GHG reduction target, which is an additional 20% reduction by 2018, using 2013 as the new base year. The Hartford met this goal, 3 years early and is now submitting applications of accreditation to the EPA for goal-attainment and goal setting for our new goals. The Hartford's Executive Leadership Team (C-Suite) has confirmed that policies support environmental stewardship, consistent with business goals. Since 2013, The Hartford has converted more than 10% of the company's fleet vehicles to hybrids. The Hartford worked with the National Wildlife Federation to secure NWF certificates for our 3 Connecticut campuses in 2012. The Hartford also continues its multi-year paper suppression initiative.

In 2016, The Hartford received recognition from The White House for exceeding our DOE/Better Buildings Initiative goal to improve our building energy performance. The Hartford reduced per occupant energy consumption by 21% in only 2 years, exceeding its goal of 20% by 2023. In 2016 and 2017, The Hartford held Earth Day events on our Hartford campus. More than 20 organizations participated, promoting energy conservation, recycling, public transportation and other sustainability initiatives for homes and businesses. The Hartford has a Community garden maintained by employee volunteers and produce is donated to local charitable organizations. Additionally, we donate surplus food from our onsite food service operation to a nonprofit organization serving Hartford's neediest residents, providing support to our community as well as reducing our output.

CC2.2b

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

CC2.2c

Does your company use an internal price on carbon?

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

CC2.2d

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

Direct engagement with policy makers
Trade associations
Funding research organizations

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
Other: Reauthorization of National Flood Insurance Program	Support	Details of engagement in 2016 will continue in 2017 and include lobbying and education in support of the upcoming 2017 NFIP reauthorization lobbying in support of 1) the "Flood Insurance Parity and Modernization Act" (H.R. 1422) which seeks to clarify that private insurance is to be treated the same as federal flood insurance in cases where homeowners with federally-backed mortgages are required to buy the coverage. The legislation, introduced by Senators Heller (R-NV) and Tester (D-MT) and Representatives Ross (R-FL) and Castor (D-FL), is intended to encourage more private insurers to write flood insurance. We are working with the joint insurance trades and other interested stakeholders to encourage timely and long-term NFIP reauthorization. Continued efforts to ensure that the National Flood insurance Program (NFIP) will move to more market based pricing, which is key to give the proper economic signals to insureds in flood-prone areas.	In 2016 and 2017, The Hartford continues to work with Congressional staff on NFIP oversight as we approach 2017 reauthorization. Support new private flood insurance legislation to assist with market based pricing. Over time, ensure actuarially sound rates.
Adaptation resiliency	Support	The Hartford advocates directly and through its trade association in states for price adequacy in the property and casualty products it sells, and also for price adequacy in the states that maintain residual markets for property insurance for homeowners. This effort covers many states, in particular coastal states that are most prone to severe weather events. For example, in the past The Hartford participated in industry efforts in Florida to advocate for provisions in proposed legislation that would have accelerated the glide path to rate adequacy for residual market property rates and would also lower limits of liability, thereby moving higher value properties to the private market. The legislation passed, though without the provision that would have accelerated price adequacy.	Ensure that purchasers of insurance pay an actuarially sound rate for the risks that the property faces. Minimize the incidence of insureds in less risky areas of a state subsidizing insurance costs for insureds who own property in riskier areas.
Other: dilute price signal for risk	Oppose	In 2014, The Hartford worked directly with legislators in Connecticut to oppose legislation which would limit carriers' ability to underwrite and get the appropriate rate for coastal property risks.	Sought the removal of problematic legislative language. Despite our efforts, this legislation passed.

Focus of legislation	Corporate Position	Details of engagement	Proposed legislative solution
Adaptation resiliency	Support	White House level activity on this subject is uncertain at best. The Hartford will actively participate as the opportunity arises.	

CC2.3b

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

Yes

CC2.3c

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

Trade association	Is your position on climate change consistent with theirs?	Please explain the trade association's position	How have you, or are you attempting to, influence the position?
American Insurance Association	Consistent	Many weather changes envisioned by climate change models such as increased rainfall, more intense thunderstorms, hail and periodic drought can be addressed through ongoing changes in rating, underwriting, building codes, improved construction and land use that encourage loss mitigation and less building in areas most exposed to severe weather events. Hurricanes and wildfire remain areas of significant concern for the property-casualty insurance industry. Insurers favor continued research into hurricane development, frequency, intensification and tracking as well as wildfire exposure.	The Hartford is consulting with AIA to create a series of principles on climate change. AIA has referred to The Hartford's climate change statement and its past CDP responses to explain the AIA position on climate change.

CC2.3d

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

Yes

CC2.3e

Please provide details of the other engagement activities that you undertake

In May 2016, The Hartford's CEO Chris Swift, joined the Insurance Development Forum's Steering Committee. The IDF is a public/private partnership led by the insurance industry and supported by international organizations whose overall objective is to optimize and extend the use of insurance-related facilities to protect vulnerable populations, companies and public institutions against risks and shocks. It will implement and coordinate insurance-related activities and programming in line with the UN Agenda 2030. Other steering committee members include the UNDP Administrator, the World Bank Group's Chief Financial Officer and the Governor of the Bank of England.

In November 2016, The Hartford was one of the first companies to publicly and loudly add its name to the organizations urging the incoming U.S. administration to remain committed to the Paris Agreement, something we did again in May 2017.

The Hartford's approach to environmental sustainability was also featured as a case study in the book "Adapting to Change: The Business of Climate Resilience" by Dr. Ann Goodman (Business Expert Press/BEP, 2016).

These activities are in addition to The Hartford's initiatives and actions achieved in prior years, many of which still continue today:

The Hartford has also been a member of U.S. Department of Energy's "Workplace Charging Station Partnership", which promotes the installation of EV charging stations at company facilities to encourage employee commuter use of electric vehicles. The Hartford's workplace charging stations and its other environmental activities have been highlighted on the U.S. DOE website. The Hartford joined the U.S. DOE "Better Buildings Challenge" to drive greater efficiency in our buildings and data center. In 2016, The White House recognized The Hartford as one of 17 participants in a press release as an "Early Achiever", achieving our 21% energy use reduction for our Hartford campus 4 years early. (https://obamawhitehouse.archives.gov/the-press-office/2016/05/11/fact-sheet-administration-announces-new-actions-and-progress-made-make) A Hartford representative also participated with a U.S. DOE official on a panel to describe workplace charging stations and the private sector approach to installing and administering them.

In 2015, at the invitation of the Connecticut Governor, The Hartford joined the Governor's Climate Change Council as one of only two private sector representatives. The General Counsel continues to represent the company on the Council. In addition, The Hartford has accepted the invitation to join the new city of Hartford Climate Stewardship Council in 2016.

At the invitation of the U.S. Environmental Protection Agency, The Hartford participated in two EPA webinars. After receiving EPA Climate Leadership Awards in 2014 and 2015, the EPA invited The Hartford to participate in a webinar for financial services companies across the country on climate leadership in the financial sector. The Hartford also participated in a webinar hosted by EPA's Northeast Regional Administrator for EPA employees across the Northeast U.S. on how insurers view the risk of climate change and severe weather events. In 2014, The Hartford engaged in a Ceres initiative to establish a common understanding among investors on valuing of green bonds. In 2012, The Hartford was a sponsor for the National Renewable Energy Laboratory Investment Week, in which $800 million in investment dollars was matched with companies developing new technologies in the renewable energy arena. In conjunction with The Hartford's participation as a case study for the 2013 report by the Center for Climate and Energy Solutions titled "Weathering the Storm", The Hartford's General Counsel

participated in a seminar during Climate Week 2013. U.S. policymakers attended this event. Also, The Hartford's General Counsel participated in an event organized by the Commissioner of the Connecticut Department of Energy and Environmental Protection on the implications for climate change in Connecticut. Representatives of The Hartford have also spoken publicly and participated in panels regarding climate change at conferences, including those sponsored by the Association of Climate Change Officers. The Hartford has also transported its new Catastrophe Mobile Response Unit on a cross country tour to demonstrate its capabilities to customers and agents. The Oklahoma insurance commissioner and staff also toured it.

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?

The parts of the company who oversee the direct and indirect activities that influence policy are also represented on The Hartford Environment Committee, which helps develop this policy and acts as a clearinghouse for ensuring consistency in the company's climate change strategy. The Hartford's representatives who have presented publicly are also members of the Environment Committee. The General Counsel, who oversees all Government Affairs activities, is chair of the Environment Committee.

CC2.3g

Please explain why you do not engage with policy makers

Further Information

CC2.2a: Attachment is screenshot of white house press release regarding reduced occupant energy consumption (https://obamawhitehouse.archives.gov/the-press-office/2016/05/11/fact-sheet-administration-announces-new-actions-and-progress-made-make)

Attachments

https://www.cdp.net/sites/2017/16/8116/Climate Change 2017/Shared Documents/Attachments/ClimateChange2017/CC2.Strategy/WhiteHouseAnnouncement_MakingBuildingsMoreEfficient.pdf
https://www.cdp.net/sites/2017/16/8116/Climate Change 2017/Shared Documents/Attachments/ClimateChange2017/CC2.Strategy/AdaptingToChangeBook.pdf

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?

Absolute 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
Abs1	Scope 1+2 (location-based)+3 (upstream)	100%	25.7%	2015	100959	2027	No, as there is currently no established science-based targets methodology in this sector	Current target to reduce GHGs by 20 percent by 2018, using 2013 as the base year. We have also developed medium and long-term, science based target-aligned goals for 2027 and 2037 in which we aim to reduce our total scope 1, 2 and 3 GHGe from 100,959 tons in 2015 to 75,000 tons (or lower) by 2027, and attaining at least a 2.1% reduction each year through 2037. These goals will be submitted to the EPA in 2017. This is the Company's fourth voluntary GHG emission reduction target. The Company met the previous three targets (the third target is planned to be retired this year). The Scope 3 emissions of business travel and employee commuting are covered in the current target, as well as the previous three targets. The Hartford is not eligible for setting a science based target based on the fact that it qualifies as a financial institution, but our targets are intended to satisfy the science-based

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
								target criteria.
Abs2	Scope 1+2 (location-based)+3 (upstream)	100%	46.2%	2015	100959	2037	No, as there is currently no established science-based targets methodology in this sector	Current target to reduce GHGs by 20 percent by 2018, using 2013 as the base year. We have also developed medium and long-term, science based target-aligned goals for 2027 and 2037 in which we aim to reduce our total scope 1, 2 and 3 GHGe from 100,959 tons in 2015 to 75,000 tons (or lower) by 2027, and attaining at least a 2.1% reduction each year through 2037. These goals will be submitted to the EPA in 2017. This is the Company's fourth voluntary GHG emission reduction target. The Company met the previous three targets (the third target is planned to be retired this year). The Scope 3 emissions of business travel and employee commuting are covered in the current target, as well as the previous three targets. The Hartford is not eligible for setting a science based target based on the fact that it qualifies as a financial institution, but our targets are intended to satisfy the science-based target criteria.

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

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

CC3.1d

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

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

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
Abs1	8.3%	63.0%	Through year 1 of our new medium and long term targets, emissions have been reduced by 16.0 percent compared with the 2015 target base year. Therefore the percent complete for the medium-term target is 16.0/25.7)*100 = 63.0 percent. For our new medium and long-term, science-based target-aligned goals for 2027 and 2037 we aim to reduce our total scope 1, 2 and 3 GHGe from 100,959 tons in 2015 to 75,000 tons (or lower) by 2027, and attaining at least a 2.1% reduction each year through 2037. These goals will be submitted to the EPA in 2017.
Abs2	4.5%	35.1%	Through year 1 of our new medium and long term targets, emissions have been reduced by 16.0 percent compared with the 2015 target base year. Therefore the percent complete for the long-term target is 16.0/35.1)*100 = 35.1 percent. For our new medium and long-term, science-based target-aligned goals for 2027 and 2037 we aim to reduce our total scope 1, 2 and 3 GHGe from 100,959 tons in 2015 to 75,000 tons (or lower) by 2027, and attaining at least a 2.1% reduction each year through 2037. These goals will be submitted to the EPA in 2017.

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

CC3.2

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

Yes

CC3.2a

Please provide details of your products and/or services that you classify as low carbon products or that enable a third party to avoid GHG emissions

Level of aggregation	Description of product/Group of products	Are you reporting low carbon product/s or avoided emissions?	Taxonomy, project or methodology used to classify product/s as low carbon or to calculate avoided emissions	% revenue from low carbon product/s in the reporting year	% R&D in low carbon product/s in the reporting year	Comment
Group of products	The Hartford offers a number of insurance products that help customers avoid GHG emissions by encouraging customers to purchase a hybrid or Electric Vehicle (EV) with premium discounts and encouraging / facilitating installation of energy efficient equipment and use of environmentally friendly materials. Products for hybrids or EVs include: Hybrid Vehicle Credits, Hybrid vehicle Upgrade Coverage and EV credits Products to reduce GHG emissions include: Green Homeowners Coverage, Green Equipment Breakdown Coverage, EV chargers, Green Choice Additional Coverage, Renewable Energy Equipment Choice, Green Builders Risk Endorsement, and Equipment Breakdown Coverage Extension. The Hartford's contractors pollution and professional insurance products encourage third parties to avoid or lower their greenhouse gas (GHG) emissions. Our insureds, typically construction companies or construction project owners, are afforded coverage terms which lower GHG emissions and encourage environmentally friendly practices. The Hartford's pollution insurance policies lower GHG emissions by providing "green building material" upgrades or improvements when assessing costs for restoration of damaged properties. These "green building materials" are materials recognized by the Leadership in Energy and Environmental Design (LEED) or Energy Star as being environmentally preferable to those of the previously	Avoided emissions				We have not yet formalized the calculation to report this data.

Level of aggregation	Description of product/Group of products	Are you reporting low carbon product/s or avoided emissions?	Taxonomy, project or methodology used to classify product/s as low carbon or to calculate avoided emissions	% revenue from low carbon product/s in the reporting year	% R&D in low carbon product/s in the reporting year	Comment
	damaged property. The Hartford's pollution insurance policies also extend coverage to insureds for their disposal of waste materials to qualified treatment, storage, or recycling facilities. A qualified location is one that is adequately permitted and within environmental regulatory compliance. Insurance coverage is not provided for unqualified locations, therefore promoting responsible business practices by the insured and subsequently lowering GHG emissions. The Hartford's construction professional insurance often extends affirmative language for an insured's errors and omissions with respect LEED design and related accreditation, fostering qualified individuals to practice in this space. These products, along with underwriting practices which scrutinize an insured's environmental impact, provide and encourage lower GHG emissions.					
Product	We also offer a GHG-saving service to our customers under The Hartford's paper suppression efforts. To date, The Hartford has sent 350,000+ documents with an average of 14 pages per document - saving approximately 4.9 million sheets of paper. The Digital Paper Suppression program is a component of the overall strategy. By allowing customers to opt into electronic delivery of their documents, The Hartford is projecting to increase the number of documents sent via e-signature to 2.1 million, which will save approximately 29.4 million sheets of paper over the next three years.	Avoided emissions				We have not yet formalized the calculation to report this data.
Group of products	Through our Renewable Energy insurance practice, we support the renewable energy industry by offering uniquely designed insurance products for this industry.	Avoided emissions				We have not yet formalized the calculation to report this data.

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	7	
To be implemented*	1	1695
Implementation commenced*	1	000
Implemented*	4	2499
Not to be implemented	0	0

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	Elevator Upgrades - Upgraded motors and controls for 2 elevator banks (10 cars)	89	Scope 2 (location-based)	Voluntary	12000	7228		>30 years	Complete
Energy efficiency: Building fabric	Steam Traps - test and repair more than 300 steam traps	135	Scope 2 (location-based)	Voluntary	75500	33000	<1 year	6-10 years	Complete
Energy efficiency: Building services	Building Automation - monitor and adjust occupied hour settings regularly to minimize energy demand	1695	Scope 2 (location-based)	Voluntary	313000	0	<1 year	Ongoing	Complete
Energy efficiency: Building fabric	Tower A Roof Replacement - Increased roof insulation with Tower A Roof replacement	580	Scope 2 (location-based)	Voluntary	90000	840000	<1 year	Ongoing	Complete
Energy efficiency: Building fabric	Insulation Upgrades - Install new insulation and jackets on piping and valves (heating and cooling loops, HW)	2275	Scope 2 (location-based)	Voluntary	313000	840000	1-3 years	21-30 years	To be implemented
Energy efficiency: Building fabric	Windsor Lighting - Re lamp 456,000 SF building (interior and exterior lighting) with LED	754	Scope 2 (location-based)	Voluntary	216921	413921	21-25 years	11-15 years	To be implemented
Energy efficiency: Processes	Building Retro Commissioning - Engage electric utility provider's Building Retro Commissioning (RCx) program to review operation of mechanical equipment, lighting		Scope 2 (location-based)	Voluntary					Due diligence has commenced, recommendations pending

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
	and related controls. Recommended improvements are supported with sustainable energy management strategies.								

CC3.3c

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

Method	Comment
Employee engagement	Starting in 2011, The Hartford contacted 100 percent of our employees to survey them on their commuting habits during the prior year. This provides a firm number to report to CDP on this portion of our Scope 3 emissions. It also provides the company the opportunity to share with all of our employees what the company is doing on environmental stewardship and includes links to The Hartford's CDP response and sustainability report. The survey response rate for our 2016 survey is 37 percent, which is in line with prior all-employee surveys going back to 2011. We also conduct an annual Commuters Challenge to encourage green commuting by our employees (ridesharing, biking, walking, using public transportation or telecommuting). In addition, we engage employees through quarterly employee engagement events sponsored by The Hartford Environment Action Team (HEAT). In 2016 HEAT led a Zero Emission Vehicle ride-and-drive event for employees to learn firsthand about these vehicles and encouraged consideration for employees to purchase one in the future. The event was coordinated with Plug-In America and alternative work commuting options were shared. HEAT partners with local non-profit organizations including KNOX and Bushnell Park Foundation each year to sponsor tree plantings on Arbor Day to revitalize local parks. To support sustained recycling efforts among its employees, The Hartford publishes the locations of local recycling centers on its intranet site. We also work with an electronics recycling partner, who recycles or reuses electronic devices using a zero-landfill process. The Hartford also developed a process excellence program (HARVEST) that encourages employees to develop innovative solutions and increased efficiencies at all levels across

Method	Comment
	the enterprise. Additionally, an internal website is available to all employees to provide access to The Hartford's corporate and environmental sustainability as well as opportunities to volunteer. A newsfeed is also available for employees to exchange information about efforts they do to promote sustainability both in and out of the workplace.
Internal finance mechanisms	Numerous Hartford carbon reduction initiatives (work from home, real estate consolidation, fleet vehicle efficiency, acquisition of hybrid vehicles to comprise more than 10% of the vehicle fleet, office building efficiency upgrades, computer desktop power management and IT Data Center equipment efficiency upgrades) have all undergone internal financing metrics before receiving approval.

CC3.3d

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

Further Information

Additional details regarding The Hartford's products that allow policy holders to avoid GHG emissions: Green Homeowners Coverage (Personal Homeowners - optional coverage that expands coverage limits by up to 10% when an insured uses environmentally friendly materials or processes to make repairs or upgrades after a covered loss) - Green Equipment Breakdown Coverage (Personal Homeowners - optional coverage that allows customers to replace broken down systems such as heating and cooling systems or refrigerators with more efficient systems that have accepted environmental certification) - Electric Vehicle chargers (Personal Homeowners - new policies clearly include home-based EV chargers as covered property - "auto equipment" is typically excluded from Homeowners policies) - Green Choice Additional Coverage (Commercial Property - includes $100,000 coverage to upgrade to green alternatives in the event of a loss, can be applied to uses such as repair or replacement using more environmentally friendly materials, equipment or processes; certification fees associated with LEED and other standards; indoor air quality restoration or debris recycling) - Renewable Energy Equipment Choice (Commercial Marine - covers loss to renewable energy equipment including solar, wind and geo-thermal) - Green Builders Risk Endorsement (Commercial Marine - includes coverage on all Builders Risk policies for building commissioning expense, certification fees, vegetative roofing, $50,000 debris recycling and $50,000 indoor air quality testing) - Equipment Breakdown Coverage Extension (Commercial Business Owners policies - as part of overall Special Property Coverage Form, we will pay up to additional 25% of cost to replace broken down equipment with alternatives that are better for the environment, safer of more efficient.

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 mainstream reports (including an integrated report) in accordance with the CDSB Framework	Complete	19-20 (risk factors) of attached 10K	https://www.cdp.net/sites/2017/16/8116/Climate Change 2017/Shared Documents/Attachments/CC4.1/2016_Form10K.pdf	Under Risk Factors (starting on page 18) the risks associated with climate change are discussed on pages 19-20.
In voluntary communications	Underway - previous year attached	10, 22, 24	https://www.cdp.net/sites/2017/16/8116/Climate Change 2017/Shared Documents/Attachments/CC4.1/2015_gri-g4-matrix.pdf	The GRI G4 response posted on thehartford.com provides an overview of The Hartford's Scope 1, Scope 2, and Scope 3 GHG emissions performance in 2015
In voluntary communications	Underway - previous year attached	10-11	https://www.cdp.net/sites/2017/16/8116/Climate Change 2017/Shared Documents/Attachments/CC4.1/2015-sustainability-report.pdf	Our 2015 Sustainability Report highlights The Hartford's GHG emissions performance through infographics, providing a high-level snapshot of our efforts.
In voluntary communications	Complete	All	https://www.cdp.net/sites/2017/16/8116/Climate Change 2017/Shared Documents/Attachments/CC4.1/HIG_com_Sustainability_EnvironmentPages.pdf	The Hartford's Environmental Stewardship page on The Hartford's corporate site is continually updated to provide current information on our climate change efforts and GHG emissions performance through links to annual reporting, media releases, and policy

Publication	Status	Page/Section reference	Attach the document	Comment
				information. The entire web page is relevant.
In voluntary communications	Complete	All	https://www.cdp.net/sites/2017/16/8116/Climate Change 2017/Shared Documents/Attachments/CC4.1/statement-on-climate-change.pdf	The Hartford's statement on climate change (also found on TheHartford.com under the "Environment" page linked above), is our most authoritative public statement on The Hartford's approach to climate change. The entire document is relevant.
In voluntary communications	Complete	All	https://www.cdp.net/sites/2017/16/8116/Climate Change 2017/Shared Documents/Attachments/CC4.1/2016ETSectorCarbonLeaderAward_HIGcom.pdf	ET Index Research released its annual ET Carbon Rankings Dec. 5, 2016, and named The Hartford a 2016 Sector Carbon Leader for ranking in the top three most carbon efficient companies within its Sustainability Industry Classification System (SICS) Financials Sector. This news release is posted in The Hartford's Newsroom accessible from the corporate site (thehartford.com); Full press release is relevant.

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
Uncertainty surrounding new regulation	In the U.S., the business of insurance is principally regulated by insurance departments in each state. Individual state legislatures may approach laws differently and that	Increased operational cost	Up to 1 year	Direct	More likely than not	Medium	Financial implications vary. In the aftermath of an extreme weather event a regulator may require the Company to cover losses that it did not charge policyholders for. Costs can be	The Hartford manages this risk primarily through its Government Affairs Group (GA), and through its participation in industry trade associations like the American Insurance Association (AIA).	To manage the regulatory uncertainty effectively, The Hartford must fund the GA Group and provide necessary funding for its professionals to travel to the states where these problems arise, or

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	can be very consequential for insurers with significant variances possible. One major source of uncertainty arises when a state regulator or a state legislative body takes action that has the effect of changing the understanding of the terms of an insurance contract after the insurer has priced the contract based on the insurer's original intent. As stated in The Hartford's 10K, because these laws and regulations are complex, there is also a risk that any particular regulator's interpretation of a legal, accounting, or reserving issue may change over time to our						tens of thousands of dollars or more for one event. Another common cost in the aftermath of a severe weather event is responding to requests on the status of insurance claims. Since regulators do not use a single template, the Company may create multiple templates to present the data for the same event.	GA actively engages with legislators and regulators in each state when the states are considering new legislation or regulations or are reinterpreting regulations already in place. The Company engages federally on insurance related regulatory and legislative issues. If the issue spans across the industry, The Hartford seeks AIA engagement to achieve satisfactory regulatory solutions.	to be able to advise the company on how best to proceed in an individual jurisdiction. In addition to our professional staff, we also belong to a variety of industry trade associations and we may also retain consultants to assist in advocacy. The Hartford is active at the federal level as well. In 2016, the cost of lobbying activities at the federal level was approximately $1.51 million.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	detriment, or expose us to different or additional regulatory risks. The application of these regulations by insurers involves interpretations and judgments that may be inconsistent with the ultimate opinion of state insurance departments. We cannot provide assurance that such differences of opinion will not result in regulatory, tax or other challenges to the actions we have taken to date. The result of those potential challenges could require us to increase levels of statutory capital and reserves or incur higher operating and/or tax costs.								

CC5.1b

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

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Snow and ice	The Hartford's 10K notes that severe winter weather is among the unpredictable events that can expose our insurance operations to claims arising out of catastrophes. Losses could occur for both our personal lines and commercial lines customers.	Increased operational cost	Up to 1 year	Direct	Virtually certain	Low-medium	The cost of actual loss from snow and ice varies greatly from year to year. In 2016, The Hartford paid out $416 million in natural catastrophe claims, primarily due to increased frequency and severity from wind and hail events. This compares to cat losses of $341 million in 2014 and $332 million in 2015.	The Hartford addresses this potential cost through its underwriting practices, which take into account such factors as the building materials and age of roofs and loss history of snow-related auto accidents in each geographic area. We assess risk individually as well as by concentration of risks in geographic zones. We work with major modeling firms in modeling catastrophes. The Hartford buys reinsurance as a means to manage the risk to an	The cost of managing this risk is zero incremental to the cost of running our business. Our actuaries, underwriters & ERM staff are responsible for assessing & pricing this risk, applying these techniques to new risks we insure, & changing the pricing and our risk appetite as the loss history evolves. We generally limit est. pre-tax loss of nat cats for P&C exposures from a single 250-yr event to < 30% of statutory

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								acceptable level.	surplus pre reinsurance & to < 15% of statutory surplus post reinsurance.
Tropical cyclones (hurricanes and typhoons)	As we state in our 10K, changing climate conditions across longer time scales, including the potential risk of broader climate change, may be increasing or may in the future increase the frequency and severity of natural catastrophes such as hurricanes. Losses could occur for both our personal lines and commercial lines customers.	Reduced stock price (market valuation)	Up to 1 year	Direct	About as likely as not	Medium-high	The cost of actual loss from tropical cyclones varies greatly from year to year. In 2016, The Hartford paid out $416 million in natural catastrophe claims, primarily due to increased frequency and severity from wind and hail events. This compares to cat losses of $341 million in 2014 and $332 million in 2015.	The Hartford addresses this potential cost through its underwriting practices, which take into account such factors as building materials, construction methodologies and building code requirements and loss history from hurricanes in each geographic area.We assess risk individually as well as by concentration of risks in geographic zones. We establish risk limits and monitor exposure as a percentage of statutory surplus. We work with major modeling firms in modeling catastrophes. The	The cost of managing this risk is zero incremental to the cost of running our business. Our actuaries, underwriters & ERM staff are responsible for assessing & pricing this risk, applying these techniques to new risks we insure, & changing the pricing and our risk appetite as the loss history evolves. We generally limit est. pre-tax loss of nat cats for P&C exposures from a single 250-yr event to < 30% of statutory surplus pre reinsurance & to

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								Hartford buys reinsurance as a means to manage the risk to an acceptable level.	< 15% of statutory surplus post reinsurance.
Change in precipitation extremes and droughts	The Hartford's 10K cites more frequent brush fires in certain geographies due to prolonged periods of drought. Droughts can lead to wildfires, which may lead to insured losses. As our 10K further indicates, precipitation extremes such as deluge flooding may also lead to increased insured losses.	Increased operational cost	Up to 1 year	Direct	Virtually certain	Medium	The cost of actual loss from wildfires varies greatly from year to year. In 2016, The Hartford paid out $416 million in natural catastrophe claims, primarily due to increased frequency and severity from wind and hail events. This compares to cat losses of $341 million in 2014 and $332 million in 2015.	The Hartford addresses this potential cost through its underwriting practices, which take into account such factors as the fire resistant characteristics of building materials and roofs and loss history of from fire in similar geographies. We assess risk individually as well as by concentration of risks in geographic zones. We work with major modeling firms in modeling catastrophes. The Hartford buys reinsurance as a means to manage the risk to an acceptable level.	The cost of managing this risk is zero incremental to the cost of running our business. Our actuaries, underwriters & ERM staff are responsible for assessing & pricing this risk, applying these techniques to new risks we insure, & changing the pricing and our risk appetite as the loss history evolves. We generally limit est. pre-tax loss of nat cats for P&C exposures from a single 250-yr event to < 30% of statutory surplus pre reinsurance & to

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
									< 15% of statutory surplus post reinsurance.
Other physical climate drivers	As identified by The Hartford's 10K, potential examples of the impact of climate change on catastrophe exposure include severity of wind and thunderstorm and tornado/hailstorm events. In 2016, The Hartford paid out $416 million in natural catastrophe claims, primarily due to increased frequency and severity from wind and hail events. This compares to cat losses of $341 million in 2014 and $332 million in 2015.	Increased operational cost	Up to 1 year	Direct	Virtually certain	Medium	The cost of actual loss from other weather events varies greatly from year to year. In 2016, The Hartford paid out $416 million in natural catastrophe claims, primarily due to increased frequency and severity from wind and hail events. This compares to cat losses of $341 million in 2014 and $332 million in 2015.	The Hartford addresses this potential cost through its underwriting practices, which take into account such factors as the building materials and age of roofs and ability to withstand hail, as well as the loss history of hail and other weather related losses in each geographic area. We assess risk individually as well as by concentration of risks in geographic zones. We establish risk limits and monitor exposure as a percentage of statutory surplus. We work with major modeling firms in modeling catastrophes. The Hartford buys	The cost of managing this risk is zero incremental to the cost of running our business. Our actuaries, underwriters & ERM staff are responsible for assessing & pricing this risk, applying these techniques to new risks we insure, & changing the pricing and our risk appetite as the loss history evolves. We generally limit est. pre-tax loss of nat cats for P&C exposures from a single 250-yr event to < 30% of statutory surplus pre reinsurance & to < 15% of statutory surplus

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								reinsurance as a means to manage the risk to an acceptable level.	post reinsurance.

CC5.1c

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

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Reputation	As the science matures and the public focuses on the advantages ofcareful environmental stewardship, we are experiencing greater interest in The Hartford's efforts to manage our carbon footprint, paper consumption, and related activities. The Hartford is intensely focused on its reputation and has systems	Reduced demand for goods/services	Unknown	Direct	Very unlikely	Low	The Hartford's reputation could suffer if we cannot maintain operations, and therefore delay claim payment to our insureds, or quotes to prospective customers, during a severe weather event. Ultimately, this damage to our reputation would probably have a minor negative impact on our	The Hartford training for business resiliency includes drills that encourage employees to work from home in order to test our ability to maintain operations during severe weather events. During a severe winter event in 2013, more than 70 percent of Hartford employees	The cost of managing the process that ensures that we have the ability to operate during severe weather events is embedded in the company's overall operational costs. Therefore, the added incremental costs we incur to protect our reputation is

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	and processes in place to protect it. The company is consistently recognized as one of the world's most ethical companies by the Ethisphere Institute, receiving this designation 9 out of the past 10 years. The Hartford has also received sustained recognition of its environmental stewardship efforts. We have been a member of the Dow Jones Sustainability North America Index since 2012 (through 2016). In 2013 we received both the Edison Green Award silver medal and the Aquarion Award for our innovative approach to environmental stewardship. U.S. EPA awarded The Hartford with a Climate						business. The financial impact would likely be limited to small single digits, (for instance, 3% or less) in affected parts of our operations and duration would also likely be limited to one year or less.	worked remotely, and succeeded in conducting business seamlessly while significant portions of the entire East Coast were shut down. Similar winter storms took place in the winters of 2014 and 2015, and The Hartford's business resiliency preparations proved equally successful. More generally, The Hartford engages in robust business resiliency planning and training as part of its overall enterprise risk management.	zero.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	Leadership Award for Excellence in GHG Management (Goal Achievement) in 2014 and for Excellence in Goal Setting in 2015. In May 2015 The Hartford joined the U.S. Department of Energy Better Buildings Challenge with Datacenter program that calls on private and public sector leaders to improve energy efficiency in buildings across the U.S. The Hartford committed to reducing its energy usage in the real estate facilities we own by 20% before 2023 and after achieving the goal within months, we earned praise by the White House as an "Early Achiever,"								

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	featured in a 2016 press release. In 2016, we were also recognized as a top three most carbon efficient company in the financial sector and named a Global Sector Leader by ET Index Research as well as a State of Connecticut environmental "Green Circle" award finalist. Potential reputational risks exist if our future actions do not reflect the environmental stewardship we have historically demonstrated and earned external recognition for, but we believe our continuing efforts align with past behavior. In 2016, the environmental advocacy group Ceres again rated The Hartford highly for our								

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	efforts to address climate change in all six rating categories, consistent with past recognition. The Hartford's approach to environmental sustainability was also featured as a case study in the book “Adapting to Change: The Business of Climate Resilience" by Dr. Ann Goodman (Business Expert Press/BEP, 2016).								

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 changes in 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
Other regulatory drivers	To the extent that climate change drives state, local and federal regulators to implement stronger building codes and other mitigation and adaptation measures, The Hartford may see loss costs for certain weather related events decrease, thereby allowing the company to offer more coverage at lower rates. In its investment portfolio, The Hartford has approximately $500 million invested directly in utility-grade solar, wind and hydroelectric power generation	Increase in capital availability	Up to 1 year	Direct	About as likely as not	Low-medium	The expected rate of return to the company on our $100 million investments in Federal tax credits purchased in 2016 is anticipated to be over 20% on an IRR basis earned over a 5 year period.	The Hartford's Tax Department and The Hartford Investment Management Company (HIMCO) has worked collaboratively with an institutional investor to reach this agreement.	We do not consider the costs of managing this opportunity, or ramping it up significantly, to be meaningful. The staff expertise to take advantage of increased regulatory drivers that increase financial incentives to invest in, or get tax advantages from, renewable energy is already well developed inside the company. The company would incur these costs under any circumstance. Therefore,

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	facilities in the U.S. Roughly $150 million was added in a transaction that was completed in 2016. The Hartford is seeking to take advantage of opportunities in several states to receive premium tax credits in those states by investing in renewable energy. We invested $100 million in Federal Solar Tax Credits in 2016. We continue to actively pursue these opportunities.								the net additional annual cost associated with this action from the company baseline is $0.
General environmental regulations, including planning	To the extent that new regulations drive insureds to more environmentally friendly products, The	Increased demand for existing products/services	Up to 1 year	Direct	About as likely as not	Low-medium	The Hartford earned over $7 million in earned premiums from our renewable energy practice in 2016, up	We are positioned to benefit to the degree hybrid or electric vehicles become more sought after	We do not consider the costs of managing this opportunity, or ramping it up

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	Hartford could experience an increased uptake in its offerings of insurance products that service this area. For example, the company's renewable energy practice offers end-to-end coverage for the wind, solar and biomass industries, from R&D through construction, to production. If future regulation encourages renewable energy use, The Hartford could benefit. Likewise, if regulation encourages commercial vehicle owners and individuals to drive hybrid or electric						from $5 million in 2015, $4 million in 2013 and $3 million in 2012. With renewable energy investment in the U.S. of $44 billion, the upside in future years could be considerable. We underwrite 15 fuel cell generation facilities. In 2014 we wrote one of the largest hydroelectric plants in the U.S., with its 62 separate U.S. locations, and we continue to insure this plant. We continue to play a major role in the solar industry, providing coverages for commercial and residential installation.	by our customers. The Hartford is managing the opportunity by seeking business for the products we already have in the insurance market and by working to stay in front of developments that will precipitate changes in our products. Our product development team can react quickly to adjust products to address emerging perils. Our emerging risks team tracks such developments.	significantly, to be meaningful. The products are already developed, have already received approval of regulators where needed, and are already in the market. The company would incur the cost of developing and selling insurance products under any event. Therefore, the net additional annual cost associated with this action from the company baseline is $0.

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	vehicles, The Hartford could benefit through its current product offerings in these areas. As the first insurer to offer coverage of garage EV charging stations in its homeowners policies, this is also an area where regulation may assist. Also, to the extent that commercial entities are required or encouraged to build green buildings or replace equipment with more energy efficient equipment, Hartford products that offer these coverages could benefit. Likewise, any						With 61 wind farms proposed or under construction and more than 1,200 already operational in the U.S., we are continuing to see sizeable opportunities in this space. We continue also to play a major role in the fuel cell industry. In the area of energy storage, we also continue to provide coverage for special technology such as flywheel energy storage.		

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	regulations that encourage individuals to build greener houses or use hybrids or EVs could drive further uptake for the products that The Hartford offers.								
Air pollution limits	To the extent that air pollution limits result in growth for the wind, solar, biomass or other renewable energy sectors, The Hartford's Renewable Energy Insurance Practice could experience considerable growth.	Increased demand for existing products/services	Up to 1 year	Direct	Unlikely	Low	The Hartford earned over $7 million in earned premiums from our renewable energy practice in 2016, up from $5 million in 2015, $4 million in 2013 and $3 million in 2012. With renewable energy investment in the U.S. of $44 billion, the upside in future years could be considerable. We underwrite 15 fuel cell generation facilities. In	We are positioned to benefit to the degree hybrid or electric vehicles become more sought after by our customers. The Hartford is managing the opportunity by seeking business for the products we already have in the insurance market and by working to stay in front of developments that will	We do not consider the costs of managing this opportunity, or ramping it up significantly, to be meaningful. The Renewable Energy practice is already operating. Therefore, the net additional annual cost associated with this action from the company

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
							2014 we wrote one of the largest hydroelectric plants in the U.S., with its 62 separate U.S. locations, and we continue to insure this plant. We continue to play a major role in the solar industry, providing coverages for commercial and residential installation. With 61 wind farms proposed or under construction and more than 1,200 already operational in the U.S., we are continuing to see sizeable opportunities in this space. We continue also to play a major role in the fuel cell industry. In the area of	precipitate changes in our products. Our product development team can react quickly to adjust products to address emerging perils. Our emerging risks team tracks such developments.	baseline is $0.

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
							energy storage, we also continue to provide coverage for special technology such as flywheel energy storage.		
Carbon taxes	To the extent that carbon taxes result in growth for the wind, solar, fuel cell or other renewable energy sectors, The Hartford's Renewable Energy Insurance Practice could experience considerable growth. Also, to the extent that such taxes affect the behavior of small and medium-sized businesses and individuals regarding their purchasing	Increased demand for existing products/services	Up to 1 year	Direct	Unlikely	Low	The Hartford earned over $7 million in earned premiums from our renewable energy practice in 2016, up from $5 million in 2015, $4 million in 2013 and $3 million in 2012. With renewable energy investment in the U.S. of $44 billion, the upside in future years could be considerable. We underwrite 15 fuel cell generation facilities. In 2014 we wrote	We are positioned to benefit to the degree hybrid or electric vehicles become more sought after by our customers. The Hartford is managing the opportunity by seeking business for the products we already have in the insurance market and by working to stay in front of developments that will precipitate	We do not consider the costs of managing this opportunity, or ramping it up significantly, to be meaningful. The Renewable Energy practice is already operating. Therefore, the net additional annual cost associated with this action from the company baseline is

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	decisions on hybrid or electric vehicles, The Hartford's current product line in these areas could experience increased growth. As The Hartford leverages its electric vehicle charging station infrastructure, we could benefit to the degree that carbon taxes lead to growth of the electric vehicle industry.						one of the largest hydroelectric plants in the U.S., with its 62 separate U.S. locations, and we continue to insure this plant. We continue to play a major role in the solar industry, providing coverages for commercial and residential installation. With 61 wind farms proposed or under construction and more than 1,200 already operational in the U.S., we are continuing to see sizeable opportunities in this space. We continue also to play a major role in the fuel cell industry. In the area of energy storage,	changes in our products. Our product development team can react quickly to adjust products to address emerging perils. Our emerging risks team tracks such developments.	$0.

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
							we also continue to provide coverage for special technology such as flywheel energy storage.		
Cap and trade schemes	To the extent that cap and trade schemes result in growth for the wind, solar, fuel cell or other renewable energy sectors, The Hartford's Renewable Energy Insurance Practice could experience considerable growth.	New products/business services	Up to 1 year	Direct	Unlikely	Low	The Hartford earned over $7 million in earned premiums from our renewable energy practice in 2016, up from $5 million in 2015, $4 million in 2013 and $3 million in 2012. With renewable energy investment in the U.S. of $44 billion, the upside in future years could be considerable. We underwrite 15 fuel cell generation facilities. In 2014 we wrote one of the	We are positioned to benefit to the degree hybrid or electric vehicles become more sought after by our customers. The Hartford is managing the opportunity by seeking business for the products we already have in the insurance market and by working to stay in front of developments that will precipitate changes in	We do not consider the costs of managing this opportunity, or ramping it up significantly, to be meaningful. The Renewable Energy practice is already operating. Therefore, the net additional annual cost associated with this action from the company baseline is $0.

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
							largest hydroelectric plants in the U.S., with its 62 separate U.S. locations, and we continue to insure this plant. We continue to play a major role in the solar industry, providing coverages for commercial and residential installation.With 61 wind farms proposed or under construction and more than 1,200 already operational in the U.S., we are continuing to see sizeable opportunities in this space. We continue also to play a major role in the fuel cell industry. In the area of energy storage, we also	our products. Our product development team can react quickly to adjust products to address emerging perils. Our emerging risks team tracks such developments.	

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
							continue to provide coverage for special technology such as flywheel energy storage.		
Product efficiency regulations and standards	We have commenced a program of investing in energy in "ESPCs" ("Energy Savings and Performance Contracts") that are aimed at reducing energy usage that results in savings to the U.S. Government. They entail investing in modifications to U.S. Government buildings that will result in energy savings. Specifically, The Hartford is the sole	Investment opportunities	3 to 6 years	Direct	Virtually certain	Low-medium	For The Hartford, these investments represent incremental value of between 80 and 100 basis points over U.S. Government bonds. In addition, the U.S. Government benefits from the savings associated with lower energy use once the projects are completed.	The Hartford Investment Management Company (HIMCO) is working with a provider of energy savings products and services to the U.S. Government in order to implement this program.	We do not consider the costs of managing this opportunity, or ramping it up significantly, to be meaningful. The products are already developed, have already received approval of regulators where needed, and are already in the market. The company would incur the cost of researching and implementing

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	financier of the energy efficiency upgrades that are currently underway at the U.S. Capitol, The U.S. Supreme Court Building and the U.S. Library of Congress and at a large Midwest air force base.								these types of investment products in any event. Therefore, the net additional annual cost associated with this action from the company baseline is $0.
Product efficiency regulations and standards	Production and investment tax credits on wind and solar energy have increased opportunities for The Hartford. Tax treatment of alternative energies have resulted in increased investment and development in this space, particularly for Engineering, Procurement,	Investment opportunities	3 to 6 years	Direct	Virtually certain	Low-medium	For The Hartford, these investments represent incremental value of between 80 and 100 basis points over U.S. Government bonds. In addition, the U.S. Government benefits from the savings associated with lower energy use once the	The Hartford Investment Management Company (HIMCO) is working with a provider of energy savings products and services to the U.S. Government in order to implement this program.	We do not consider the costs of managing this opportunity, or ramping it up significantly, to be meaningful. The products are already developed, have already received approval of regulators where needed, and

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	and Construction (EPC) firms. These opportunities are generating a change in our business approach, as The Hartford is tasked with developing policy language which addresses the often unique organizational structure and project delivery methods of these EPC's. In addition to EPC challenges, brownfields are often utilized as economical locations for alternative energy facilities. Creating underwriting guidelines and policy language which profitably address the risks for						projects are completed.		are already in the market. The company would incur the cost of researching and implementing these types of investment products in any event. Therefore, the net additional annual cost associated with this action from the company baseline is $0.

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	alternative energy projects at brownfields can generate a change in our business. As more companies look to invest and develop within the alternative energy space, The Hartford will inherently change to create products which adapt to the risks these projects create.								

CC6.1b

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

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Other physical climate opportunities	As changes in weather patterns emerge, The Hartford has the	Increased demand for existing products/services	Up to 1 year	Indirect (Client)	About as likely as not	Low-medium	The Hartford maintains the flexibility to adjust our	The Hartford offers a range of products to help our customers	We do not consider the costs of managing this

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	opportunity to better position our products in order to offer further protection to our customers. The Hartford already offers a full range of insurance products that help customers who want protection from weather events and their consequences, including protection from damage that could occur from fires brought on by drought, snow and ice, severe heat, changing weather patterns, wind and numerous other perils. Offering such protection, and then managing that risk, is at the heart of what insurers do. The further changes						products to adapt to changes in the physical climate. To the degree that customers seek greater protection from weather related consequences of climate change, The Hartford could experience a meaningful increase in sales of our insurance products. If, over ten years, it represents a 10% increase in current revenues, revenues would rise by over $2 billion.	protect themselves from the risks associated with climate change and help them reduce their impact on the environment . For example, we are positioned to benefit to the degree hybrid or electric vehicles become more sought after by our customers. The Hartford is managing the opportunity by seeking business for the products we already have in the insurance market and by working to stay in front of developments that will precipitate changes in our products. Our product development team can react quickly to adjust	opportunity, or ramping it up significantly, to be meaningful. The products are already developed, have already received approval of regulators where needed, and are already in the market. The company would incur the cost of developing and selling insurance products under any event. Therefore, the net additional annual cost associated with this action from the company baseline is $0.

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	in the physical climate as currently outlined in the IPCC Report -- in particular, "change in precipitation extremes and droughts" and "changes in tropical cyclones", have the potential for us to adjust our product offerings in order to manage the risks embedded in these changing weather patterns.							products to address emerging perils. Our emerging risks team tracks such developments.	
Other physical climate opportunities	Opportunities exist for The Hartford as public and private entities enter into construction projects to address changes in physical climate. Projects addressing these changes include, but are not	Increased demand for existing products/services	Up to 1 year	Indirect (Client)	About as likely as not	Low-medium	The Hartford maintains the flexibility to adjust our products to adapt to changes in the physical climate. To the degree that customers seek greater protection from weather related consequences	The Hartford offers a range of products to help our customers protect themselves from the risks associated with climate change and help them reduce their impact on the environment . For example, we	We do not consider the costs of managing this opportunity, or ramping it up significantly, to be meaningful. The products are already developed, have already received approval of

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	limited to: infrastructure adaptability and improvements, flood control, shoring and erosion control, waterproofing, and green building. Insurance buyers looking to adequately transfer risks associated with these projects create business opportunities for The Hartford. Opportunities also exist for The Hartford as more construction projects implement Green Performance Contracting (GPC) standards. GPC changes the traditional construction approach with respect to materials, equipment, design,						of climate change, The Hartford could experience a meaningful increase in sales of our insurance products. If, over ten years, it represents a 10% increase in current revenues, revenues would rise by over $2 billion.	are positioned to benefit to the degree hybrid or electric vehicles become more sought after by our customers. The Hartford is managing the opportunity by seeking business for the products we already have in the insurance market and by working to stay in front of developments that will precipitate changes in our products. Our product development team can react quickly to adjust products to address emerging perils. Our emerging risks team tracks such developments.	regulators where needed, and are already in the market. The company would incur the cost of developing and selling insurance products under any event. Therefore, the net additional annual cost associated with this action from the company baseline is $0.

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	methodology, and energy efficiency. Underwriting GPC and developing insurance products to address its use is an inherent opportunity for The Hartford which has resulted from changes in physical climate.								

CC6.1c

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

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Reputation	The Hartford seeks to improve its reputation as a careful environmental steward by reducing our use	Reduced operational costs	Up to 1 year	Direct	Likely	Low-medium	The Hartford has saved 1.7 billion pieces of paper since the project started and is currently saving $6.4	The Hartford is also currently engaged in a multi-year, comprehensive, enterprise-wide multifaceted	This cost is embedded in our overall operational and investment budget. The Hartford is

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	of resources, including paper. We are engaged in a multi-year enterprise-wide paper suppression initiative that examines the documents The Hartford sends to its agents and customers & determines whether the mailing is necessary, whether it can be done with less paper or less often, & if it can be done electronically. The Hartford now allows claimants to elect electronic delivery & aims to suppress all commercial agency print. We also halted printing most new, renewal & endorsement policies. The Personal Lines organization is						million annually. The digital paper suppression program is a component of the overall strategy. Under the digital suppression program, by allowing customers to opt into electronic delivery of their documents, The Hartford is projected to save more than $38 million in paper and postage over the 5 years of the program.	paper suppression initiative. This initiative examines the documents The Hartford sends to its agents and customers, and determines whether the mailing is necessary, whether it can be done with less paper or less often, and whether it can be done electronically. This is a comprehensive, state-by-state analysis that is continually refined by the digital team along with our lines of business - commercial, personal lines, group benefits, mutual funds, and now claims.	projected to save $38 million in paper and postage over the 5 year life of the digital suppression program. Since the company already incurs the cost of employing the staff that work on this program, the net additional annual cost associated with it is $0.

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	actively working on customer experiences that allow full service capabilities without the need for printing and mailing. Examples include e-signature; electronic document management (EDM); electronic payment; and digital ID cards. Since 2014, our EDM program reach has expanded more than 80%, and now allows for the avoidance of more than 2.2M pieces of mail annually. Our electronic payment capabilities have also expanded, resulting in a 23% reduction of paper checks received and reducing our total payment volume, which was nearly 1.4M								

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	in March 2017. Nearly 35% of new business opts into EDM, and we are actively soliciting in-force customers to enroll via email and contact center campaigns. These efforts have pushed adoption rates from 5.9% to 17.8% over the last two years. With our upcoming sales redesign, paperless enrollment becomes automatic rather than a choice and customers need to opt-out in order to receive mailings. We expect these activities to rapidly push the adoption of EDM to more than 30%. Our internal paper								

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	consumption continues to decline due to implementation of a managed-print system, dual monitors, & removal of printers for work-from-home employees. In 2016, we reduced our paper consumption by an estimated 15% from 2015. In 2016, the company recycled 718 tons of waste from paper still used, including recycling 100% of paper deposited in office recycling bins. 99% of the company's domestically-procured paper is FSC certified and adheres to the Sustainable Forestry Initiative parameters. Through its electronics recycling partner in 2016, The								

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	Hartford recycled or reused more than 20,000 electronic devices, representing 88 tons of e-waste, using a zero-landfill process.								
Other drivers	The Hartford is gaining experience by having brought insurance products to market that help our insureds reduce their carbon footprint, and by serving the growing renewable energy sector. The Hartford has also issued a statement stating that climate change can play a role in how The Hartford evaluates the creditworthiness of specific issuers and industries. We have also publically	Increased demand for existing products/services	Up to 1 year	Direct	About as likely as not	Low-medium	The Hartford insures thousands of hybrid vehicles and as the demand for these vehicles grows, we expect to see future growth in line with our market share, which is in the low single digits.	We are positioned to benefit to the degree hybrid or electric vehicles become more sought after by our customers. The Hartford is managing the opportunity by seeking business for the products we already have in the insurance market and by working to stay in front of developments that will precipitate changes in our products. Our product development team can react quickly to adjust	We do not consider the costs of managing this opportunity, or ramping it up significantly, to be meaningful. We already have some products in the marketplace, and the cost of creating new ones is already embedded in our cost structure. Therefore, the net additional annual cost associated with this action from the company baseline is $0.

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	committed to develop products and make investment decisions that promote environmentally responsible activity while enhancing The Hartford's competitive position, and to reduce our own energy consumption and encourage others to do likewise. If consumers begin to prefer one insurer over another based on commitment to environmental stewardship, The Hartford is strongly positioned for the future. Also, to the extent that weather variability induces commercial and individual customers to increase the amount of							products to address emerging perils. Our emerging risks team tracks such developments. We train our underwriters at the local level to appropriately price and manage these products.	

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	insurance they buy, The Hartford could benefit from industry growth generally.								
Other drivers	To the extent that changes increase the consumer demand for renewable energy, we stand to benefit with our understanding of the insurance needs of these industries.	Increased demand for existing products/services	Up to 1 year	Direct	About as likely as not	Low-medium	If consumer demand for renewable energy grows, we are well positioned to capture some economic benefit through insuring more renewable energy projects. With renewable energy investment in the U.S. of $44 billion, the upside in future years could be considerable. In 2014 we wrote one of the largest hydroelectric plants in the U.S., with 62 separate U.S. locations and we continue to insure this	We are positioned to benefit to the degree hybrid or electric vehicles become more sought after by our customers. The Hartford is managing the opportunity by seeking business for the products we already have in the insurance market and by working to stay in front of developments that will precipitate changes in our products. Our product development team can react quickly to adjust products to address emerging perils. Our emerging	We do not consider the costs of managing this opportunity, or ramping it up significantly, to be meaningful. We already have a renewable energy practice, and the costs of ramping it up are negligible. Therefore, the net additional annual cost associated with this action from the company baseline is $0.

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
							plant. We have also increased our capacity to take on larger exposures. With 61 wind farms proposed or under construction and more than 1,200 already operational in the U.S., we are continuing to see sizeable opportunities in this space.	risks team tracks such developments. We train our underwriters at the local level to appropriately price and manage these products.	

CC6.1d

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

CC6.1e

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

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	Tue 01 Jan 2013 - Tue 31 Dec 2013	22798
Scope 2 (location-based)	Tue 01 Jan 2013 - Tue 31 Dec 2013	50108
Scope 2 (market-based)	Tue 01 Jan 2013 - Tue 31 Dec 2013	41935

Scope	Base year	Base year emissions (metric tonnes CO2e)

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
US EPA Mandatory Greenhouse Gas Reporting Rule
US EPA Climate Leaders: Direct Emissions from Stationary Combustion
US EPA Climate Leaders: Direct Emissions from Mobile Combustion Sources
US EPA Climate Leaders: Direct HFC and PFC Emissions from Use of Refrigeration and Air Conditioning Equipment
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

No other methodologies used.

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)
HFCs	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	53.06	Other: kg CO2 per MMBTU	US EPA Emission Factors for Greenhouse Gas Inventories - Stationary Combustion
Distillate fuel oil No 2	73.96	Other: kg CO2 per MMBTU	US EPA Emission Factors for Greenhouse Gas Inventories - Stationary Combustion
Propane	61.71	Other: kg CO2 per MMBTU	US EPA Emission Factors for Greenhouse Gas Inventories - Stationary Combustion
Jet gasoline	9.75	Other: kg CO2 per Gallon	US EPA Emission Factors for Greenhouse Gas Inventories - Direct Emissions for Mobile
Motor gasoline	8.78	Other: kg CO2 per Gallon	US EPA Emission Factors for Greenhouse Gas Inventories - Direct Emissions for Mobile
Distillate fuel oil No 2	10.21	Other: kg CO2 per Gallon	US EPA Emission Factors for Greenhouse Gas Inventories - Direct Emissions for Mobile

Further Information

The electricity emission factors are provided on the attached spreadsheet.

Attachments

https://www.cdp.net/sites/2017/16/8116/Climate Change 2017/Shared Documents/Attachments/ClimateChange2017/CC7.EmissionsMethodology/CDP-Worksheet-for-question-CC7.4.xlsx

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

CC8.1

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

Operational control

CC8.2

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

16157

CC8.3

Please describe your approach to reporting Scope 2 emissions

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

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
26026	32	

CC8.4

Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure?

No

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

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	Less than or equal to 2%	Assumptions Extrapolation	Assumptions and extrapolation are the main sources of uncertainty in our GHG emissions data. As a normal course of business, metering inaccuracies and data gaps are eliminated. Metering inaccuracies are challenged and corrected on a monthly basis prior to GHG data collection. Actual lease start and finish dates and data directly from utility bills are reviewed, corrected, and tabulated on a monthly basis. Any data gaps found are corrected prior to GHG data collection. The Hartford makes assumptions and extrapolates with respect to GHG emissions from portfolio properties where The Hartford is not the sole tenant. These properties constitute approximately 28% of the total portfolio square footage.
Scope 2 (location-based)	Less than or equal to 2%	Assumptions Extrapolation	Assumptions and extrapolation are the main sources of uncertainty in our GHG emissions data. As a normal course of business, metering inaccuracies and data gaps are eliminated. Metering inaccuracies are challenged and corrected on a monthly basis prior to GHG data collection. Actual lease start and finish dates and data directly from utility bills are reviewed, corrected, and tabulated on a monthly basis. Any data gaps found are corrected prior to GHG data collection. The Hartford makes assumptions and extrapolates with respect to GHG emissions from portfolio properties where The Hartford is not the sole tenant. These properties constitute approximately 28% of the total portfolio square footage
Scope 2 (market-based)	Less than or equal to 2%	Assumptions Extrapolation	Assumptions and extrapolation are the main sources of uncertainty in our GHG emissions data. As a normal course of business, metering inaccuracies and data gaps are eliminated. Metering inaccuracies are challenged and corrected on a monthly basis prior to GHG data collection. Actual lease start and finish dates and data directly from utility bills are reviewed, corrected, and tabulated on a monthly basis. Any data gaps found are corrected prior to GHG data collection. The Hartford makes assumptions and extrapolates with respect to

Scope	Uncertainty range	Main sources of uncertainty	Please expand on the uncertainty in your data
			GHG emissions from portfolio properties where The Hartford is not the sole tenant. These properties constitute approximately 28% of the total portfolio square footage

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/2017/16/8116/Climate Change 2017/Shared Documents/Attachments/CC8.6a/The Hartford 2016 GHG Assurance Review Letter 5-10-17.pdf	Details of the Scope 1 assurance undertaken can be found in Table 1 on Page 1 of the attached assurance	ISO14064-3	100

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 (%)
				review letter.		

CC8.6b

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

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

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/2017/16/8116/Climate Change 2017/Shared Documents/Attachments/CC8.7a/The Hartford 2016 GHG Assurance Review Letter 5-10-17.pdf	Details of the Scope 2 assurance undertaken can be found in Table 1 on Page 1 of the attached assurance review letter.	ISO14064-3	100
Market-based	Annual process	Complete	Limited assurance	https://www.cdp.net/sites/2017/16/8116/Climate Change 2017/Shared Documents/Attachments/CC8.7a/The Hartford 2016 GHG Assurance Review Letter 5-10-17.pdf	Details of the Scope 2 assurance undertaken can be found in Table 1 on Page 1 of the attached assurance review letter.	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
No additional data verified	The Hartford does not verify any data beyond the verification of emissions figures reported in CC8.6, CC8.7 and CC14.2.

CC8.9

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

No

CC8.9a

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 2016 - 31 Dec 2016)

CC9.1

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

Yes

CC9.1a

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

Country/Region	Scope 1 metric tonnes CO2e
United States of America	16134
Canada	5

CC9.2

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

By GHG type

CC9.2a

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

Business division	Scope 1 emissions (metric tonnes CO2e)

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)
CO2	16094
CH4	14.6
N2O	41.8
HFCs	7.0

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 2016 - 31 Dec 2016)

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 States of America	25834	0	72687	72687
Canada	32	32	41	0

CC10.2

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

By facility

CC10.2a

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

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

CC10.2b

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

Facility	Scope 2, location-based (metric tonnes CO2e)	Scope 2, market-based (metric tonnes CO2e)
Hartford, CT	10850	0
Simsbury, CT	335	0
Windsor, CT	1914	0
Aurora, IL	623	0
San Antonio, TX	1404	0
Oklahoma City, OK	1044	0
Charlotte, NC	984	0
Maple Grove, MN	0	0
New Hartford, NY	444	0
Santee, CA	0	0
Other Leased/Multi-Tenant Facilities	8428	0

CC10.2c

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

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

Further Information

Page: CC11. Energy

CC11.1

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

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

CC11.2

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

Energy type	MWh
Heat	0
Steam	0
Cooling	0

CC11.3

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

77083

CC11.3a

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

Fuels	MWh
Natural gas	33565
Distillate fuel oil No 2	316
Jet gasoline	3806
Motor gasoline	39396

CC11.4

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

Basis for applying a low carbon emission factor	MWh consumed associated with low carbon electricity, heat, steam or cooling	Emissions factor (in units of metric tonnes CO2e per MWh)	Comment
Energy attribute certificates, Renewable Energy Certificates (RECs)	72687	0	Generator Names and IDs: Cloud County Wind Farm (KS) - ID No. 56784 Laredo Ridge Wind LLC (NE) - ID No. 57262 Minco Wind I, LLC (OK) - ID No. 57590 Fuel Type: Wind. These RECs are Green e-certified. Total RECs purchased = 73,000 MWh

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
72727	71230	1497	1497	1497	The source of the renewable electricity that is produced is a photovoltaic array located at the Windsor, Connecticut facility.

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?

Decreased

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	16.69	Decrease	2015 Scope 1 emissions were 19,071 mT CO2e; 2016 were 16157, for a difference of 2,914, which is a percentage decrease of 15.28%. 2015 Scope 2 emissions were 31,561; 2016 Scope 2 emissions were 26,026 for a difference of 5,535 for a percentage decrease of 17.54%. The cumulative 2015 gross Scope 1

Reason	Emissions value (percentage)	Direction of change	Please explain and include calculation
			and 2 emissions of 50,632 minus the 2016 cumulative gross Scope 1 and 2 emissions of 42,183 equals 8,449, which is a 16.69% decrease. Various emission reduction activities contributed to the decrease in Scope 1 & 2 emissions including the Work from Home and Remote Work programs, the associated real estate consolidation, and the ongoing efforts to modernize our physical plant and make the attendant energy efficiency investments.
Divestment	0		
Acquisitions	0		
Mergers	0		
Change in output	0		
Change in methodology	0		
Change in boundary	0		
Change in physical operating conditions	0		
Unidentified	0		
Other	0		

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
0.0000002305	metric tonnes CO2e	18300000000	Location-based	16.34	Decrease	The decrease can be attributed to emission reduction activities implemented in our facilities in 2016 including elevator upgrades, building automation, steam traps tested/repaired, roof replacement, insulation upgrades, LED lighting upgrades in Windsor, CT office, and utilization of electric utility provider's Building Retro Commissioning program.

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
2.50	metric tonnes CO2e	full time equivalent (FTE) employee	16900	Location-based	14.22	Decrease	The rate of the Company's GHG emissions reduction exceeded the reduction in FTE employees for 2016. The primary reason for this decrease is the company's emission reduction activities.

Further Information

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 CO2e)	Number of credits (metric tonnes CO2e): Risk adjusted volume	Credits canceled	Purpose, e.g. compliance

Further Information

Page: CC14. Scope 3 Emissions

CC14.1

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

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
Purchased goods and services	Relevant, not yet calculated	0	NA	0.00%	We are in the process of evaluating the scope of our purchases and a methodology for reporting. We have engaged with suppliers on their approach with other business consumers of their goods and services.
Capital goods	Relevant, not	0	NA	0.00%	We are in the process of evaluating the scope of

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
	yet calculated				our capital goods and a methodology for reporting.
Fuel-and-energy-related activities (not included in Scope 1 or 2)	Not relevant, explanation provided	0	NA	0.00%	The Hartford does not engage in any of the fuel- and energy related Scope 3 activities that are described on page 34 of the Greenhouse Gas Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard (September 2011).
Upstream transportation and distribution	Not relevant, explanation provided	0	As an insurance company, we do not distribute any goods upstream. Hence, there is no relevant methodology.	0.00%	We do not distribute any goods upstream.
Waste generated in operations	Relevant, not yet calculated	0	NA	0.00%	We do not calculate the waste (municipal waste that goes into individual office trash cans plus food waste in office cafeterias.)
Business travel	Relevant, calculated	8321	Miles traveled for air, rail, and rental cars are provided by travel providers. Air and rail travel miles are multiplied by the emission factors provided in the EPA Emission Factors for Greenhouse Gas Inventories. For air travel, these factors vary based on flight time. For rental car travel, the fuel usage is tracked based fuel purchases by employees. The consumption data is multiplied by EPA emission factors resulting in the quantity of emissions.	100.00%	All business travel captured.
Employee commuting	Relevant, calculated	34105	To estimate employee commuting emissions, The Hartford annually surveys our entire employee base on their commuting habits. For the calendar year 2016, survey data (consisting of approximately 1,972 responses or 12% of the	12.00%	Based on commuter survey response rate.

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
			employees) was collected in early 2017 on commuting modes, frequency, and distance as well as gas mileage of vehicles used during 2016. For both non-company owned personal transportation and carpool vehicles, the quantity of gallons of gasoline consumed is multiplied by emissions factors provided in the EPA Emission Factors for Greenhouse Gas Inventories resulting in the quantity of emissions from these vehicles. Bus and rail travel miles are multiplied by the emission factors provided in the EPA Emission Factors for Greenhouse Gas Inventories to determine the quantity of emissions from mass transit commuting. Total employee commuting emissions for all employees is estimated by multiplying the total emissions from the survey by the ratio of total employees to survey participants.		
Upstream leased assets	Not relevant, explanation provided	0	We include all upstream leased assets within our operational boundary so their emissions are captured in our Scope 1 and 2 emissions.	0.00%	We include all upstream leased assets within our operational boundary so their emissions are captured in our Scope 1 and 2 emissions.
Downstream transportation and distribution	Not relevant, explanation provided	0	Aside from the distribution to our customers of their insurance policies and information regarding their policies, we do not engage in downstream distribution. Customers receive this information either electronically or through the U.S. post office. Hence, there is no relevant methodology.	0.00%	Aside from the distribution to our customers of their insurance policies and information regarding their policies, we do not engage in downstream distribution. Customers receive this information either electronically or through the U.S. post office.
Processing of	Not relevant,	0	Insurance is a risk transfer system, not a	0.00%	Insurance is not a physical product. It is a

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
sold products	explanation provided		physical product. Hence, there is no relevant methodology.		transfer system in which the insured transfers the chance of financial loss to the insurer. The insurance contract (the policy) is the only physical manifestation of this transfer system.
Use of sold products	Not relevant, explanation provided	0	Insurance is a risk transfer system, not a physical product. Hence, there is no relevant methodology.	0.00%	Insurance is not a physical product. It is a transfer system in which the insured transfers the chance of financial loss to the insurer. The insurance contract (the policy) is the only physical manifestation of this transfer system.
End of life treatment of sold products	Not relevant, explanation provided	0	Insurance is a risk transfer system, not a physical product. Hence, there is no relevant methodology.	0.00%	Insurance is not a physical product. It is a transfer system in which the insured transfers the chance of financial loss to the insurer. The insurance contract (the policy) is the only physical manifestation of this transfer system.
Downstream leased assets	Not relevant, explanation provided	0	We do not engage in leasing out owned property, so there is no relevant methodology.	0.00%	We do not engage in leasing out owned property.
Franchises		0	We do not have franchises, so there is no relevant methodology.	0.00%	The Hartford does not have franchises.
Investments	Not evaluated	0	NA	0.00%	We have not yet investigated this as a Scope 3 source, and therefore do not know its relevance to our business. We are aware of an emerging effort to decide the carbon content of various financial instruments. We stay on top of the latest developments by engaging with leaders in this field, such as HIP Investors and Ecofys. To date, there is no accepted methodology to determine the carbon footprint of common financial instruments held by insurers such as

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
					U.S. Treasury bills, specific municipal bonds, CMBS (Commercial Backed Mortgage Securities) or RMBS (Residential Backed Mortgage Securities.) We are not aware of any effort currently to begin the work to build a credible methodology to capture the carbon content of most of the above-named financial instruments.
Other (upstream)	Not evaluated	0	NA	0.00%	NA
Other (downstream)	Not evaluated	0	NA	0.00%	NA

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/2017/16/8116/Climate Change 2017/Shared Documents/Attachments/CC14.2a/The Hartford 2016 GHG Assurance Review Letter 5-10-17.pdf	Details of the limited assurance can be found in Table 1 on Page 1 of the assurance review letter.	ISO14064-3	100

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	Emissions reduction	11.98	Decrease	Emission reduction activities, especially the expense reduction efforts at the company are ongoing, particularly in light of the cost pressures industry-wide,

Sources of Scope 3 emissions	Reason for change	Emissions value (percentage)	Direction of change	Comment
	activities			contributed to this decrease.
Employee commuting	Emissions reduction activities	16.56	Decrease	Emission reduction activities, especially the Remote Work and Work from Home initiatives contributed to this decrease. Employee personal choice in commuting more efficiently has also played a part.

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
Yes, other partners in the value chain

CC14.4a

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

We engage suppliers on reporting their efforts toward environmental sustainability and their social responsibility activities. The Hartford poses 13 questions in all information technology requests for proposal. The questions include responsible life cycle management, proposed product design, manufacturing, operation and disposal. The Hartford contracts only top tier vendors for e-waste handling. We collaborate with our IT equipment recovery vendor who takes control of the electronic equipment at end of life for reuse or recycling. Through our electronics recycling partner, The Hartford recycled or reused more than 20,000 electronic devices in 2016 using a zero-landfill process. This endeavor prevented more than 88 tons of e-waste from entering the solid waste stream. In 2016, we directly engaged with 34 of our top IT and Corporate suppliers regarding their environmental practices, diversity and inclusion activities and ethics programs. From 2015 to 2016 we broadened the scope of our inquiries both in terms of the types of suppliers as well as the breadth of questions asked. We also engaged with them to support our strategies as well as to support theirs. We also engage with our customers that help reduce greenhouse gas emissions using our products and via an opt-out in receiving paper correspondence where allowed by regulators.

CC14.4b

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

Type of engagement	Number of suppliers	% of total spend (direct and indirect)	Impact of engagement
Active engagement	34	48%	The Hartford has a formalized process in place to identify sustainability risks in the supply chain. This is accomplished through our enterprise supplier governance process. The vendors with whom we engaged in 2016 represented 48% of the total external spend in the Office of the Chief Technology Office.

CC14.4c

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

Further Information

Module: Sign Off

Page: CC15. Sign Off

CC15.1

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

Name	Job title	Corresponding job category
Christopher J. Swift	Chairman and Chief Executive Officer, The Hartford	Chief Executive Officer (CEO)

Further Information