

Module: Introduction**Page: Introduction**

CC0.1**Introduction**

Please give a general description and introduction to your organization.

Entergy Corporation is an integrated energy company engaged primarily in electric power production and retail distribution operations. Entergy owns and operates power plants with approximately 30,000 megawatts of electric generating capacity, including nearly 10,000 megawatts of nuclear power, making it one of the nation's leading nuclear generators.

Entergy delivers electricity to 2.8 million utility customers in Arkansas, Louisiana, Mississippi and Texas. Entergy has annual revenues of more than \$12 billion and approximately 13,000 employees.

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
Wed 01 Jan 2014 - Wed 31 Dec 2014

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

CC0.4**Currency selection**

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

USD(\$)

CC0.6**Modules**

As part of the request for information on behalf of investors, electric utilities, companies with electric utility activities or assets, companies in the automobile or auto component manufacture sub-industries, companies in the oil and gas sub-industries, companies in the information technology and telecommunications sectors and companies in the food, beverage and tobacco industry group should complete supplementary questions in addition to the main questionnaire.

If you are in these sector groupings (according to the Global Industry Classification Standard (GICS)), the corresponding sector modules will not appear below but will automatically appear in the navigation bar when you save this page. If you want to query your classification, please email respond@cdp.net.

If you have not been presented with a sector module that you consider would be appropriate for your company to answer, please select the module below. If you wish to view the questions first, please see <https://www.cdp.net/en-US/Programmes/Pages/More-questionnaires.aspx>.

Further Information

Module: Management

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

(i) Chairman and CEO of Entergy - Leo Denault. Mr. Denault has overarching responsibility for managing risk including climate change risk, executing strategy that positions the company to prosper in a carbon constrained economy and ensuring actions are taken to meet Entergy's 10-year voluntary greenhouse gas stabilization goal.

(ii) The Chairman and CEO is the highest ranking executive in charge of the company. He chairs the Board of Directors and oversees Entergy's entire corporate structure, governance and management.

The Audit Committee of the Board of Directors, Rod West, Executive Vice President and Chief Administrative Officer and Chuck Barlow, Vice President, Environmental Strategy & Policy have responsibility for oversight and implementation of Entergy's position, performance and advocacy associated with climate change.

The Chief Financial Officer has general responsibility for the process of ensuring that all risks are identified, evaluated and, if necessary, quantified through the Enterprise Risk Management Process. Business Function executive management is responsible for ensuring all risks are identified, evaluated and, if necessary, quantified in order to ensure that risks, including climate change risks associated with its operations are accurately represented.

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
Corporate executive team	Monetary reward	Emissions reduction project Emissions reduction target Energy reduction project Energy reduction target Efficiency project	Entergy's compensation programs for executive officers are based on a philosophy of pay-for-performance which is embodied in the design of our annual and long-term incentive plans. Our compensation awards reward the achievement of shareholder value using metrics that are deemed by the Board to be consistent with the overall goals and strategic direction that the Board has set for the company. Achievement of the Company's environmental objectives influences long term shareholder value and correspondingly the equity awarded each year under the long-term incentive programs. In 2014, the Company established and executed two strategic imperatives; "Grow the Utility" and "Preserve Optionality & Manage Risk at EWC". Key performance results in 2014 included developing a new long-term resource supply plan that includes the generation, transmission and distribution resources needed to serve the load growth and improving nuclear capability factors. Achieving these performance results contributes to mitigating climate risks while enhancing our ability to maintain low rates and deliver clean, reliable power. Entergy continued to execute its climate strategy and to work towards achieving its voluntary 10-year GHG stabilization commitment. During 2014 Entergy: 1) placed in service the 560 MW natural gas-fired CCGT, Ninemile 6, 2) completed first full year of operation under Midcontinent Independent System Operator, Inc. (MISO), 3) increased the efficiency of its natural gas-fired power plant fleet by 10%, 4) reduced absolute CO2 emissions compared to 2013 while increasing billed electric sales, 5) entered into an agreement to acquire Union Power Station near El Dorado, Ark., an efficient, natural gas-fired 1,980-megawatt generating facility, a significant step in the ongoing modernization of our fleet while meeting increased demand at prices favorable to our customers and with low emission rates, 6) improved nuclear capability factors increasing non-emitting electric generation, 7) received approval from the Mississippi Public Service Commission to install thin-film solar panels on three five-acre sites. These achievements were all integral to the achieving core

Who is entitled to benefit from these incentives?	The type of incentives	Incentivized performance indicator	Comment
			strategic objectives and to achieving Entergy's 10-year commitment to stabilize its cumulative CO2 emissions at 20 percent below year 2000 levels through 2020.
Other: Environment/sustainability managers	Monetary reward	Emissions reduction project Emissions reduction target Energy reduction project Energy reduction target Efficiency project Behaviour change related indicator	Through the company's Annual Planning, Performance and Review (PP&R) process and the Management/Employee Incentive Plans, environmental/sustainability managers and staff are systematically held accountable for various objectives and measureable targets related to climate change. These include climate change position advocacy; adaptation position advocacy; communicating climate change issues and GHG accounting/verification efforts. These employees work directly on Entergy's climate change/sustainability position, carbon accounting/inventory/verification, stakeholder engagement and advocacy. These employees have specific performance goals regarding these climate change activities and receive incentives commensurate with successful completion of these goals. Impact Awards (monetary bonus) and Community Connector Grants (monetary grant to non-profit) are awarded as deemed appropriate by supervisors for employee activities in the climate change and environmental area. Moreover, each year, when determining the Entergy Achievement Multiplier, the annual incentive plan's funding mechanism, and setting individual awards, the Personnel Committee reviews accomplishments and performance across the full range of the Company's strategic objectives and has the authority to adjust the Entergy Achievement Multiplier accordingly.
All employees	Recognition (non-monetary)	Behaviour change related indicator	Entergy recognizes employees for participation in climate-related activities including climate/adaptation issue advocacy, communicating climate change issues and participation in climate-related volunteerism. see https://vimeo.com/29968623 http://integratedreport.entergy.com/#screen6 http://www.entergy.com/csr/
All employees	Monetary reward	Behaviour change related indicator	Impact Awards (monetary bonus) and Community Connector Grants (monetary grant to non-profit) are awarded as deemed appropriate by supervisors for employee activities in the climate change and environmental area.

Further Information

Attachments

[https://www.cdp.net/sites/2015/53/5653/Climate Change 2015/Shared Documents/Attachments/ClimateChange2015/CC1.Governance/Corporate_Governance_Guidelines.pdf](https://www.cdp.net/sites/2015/53/5653/Climate%20Change%202015/Shared%20Documents/Attachments/ClimateChange2015/CC1.Governance/Corporate_Governance_Guidelines.pdf)

[https://www.cdp.net/sites/2015/53/5653/Climate Change 2015/Shared Documents/Attachments/ClimateChange2015/CC1.Governance/PersonnelCharter.pdf](https://www.cdp.net/sites/2015/53/5653/Climate%20Change%202015/Shared%20Documents/Attachments/ClimateChange2015/CC1.Governance/PersonnelCharter.pdf)

[https://www.cdp.net/sites/2015/53/5653/Climate Change 2015/Shared Documents/Attachments/ClimateChange2015/CC1.Governance/PersonnelCharter.pdf](https://www.cdp.net/sites/2015/53/5653/Climate%20Change%202015/Shared%20Documents/Attachments/ClimateChange2015/CC1.Governance/PersonnelCharter.pdf)

[https://www.cdp.net/sites/2015/53/5653/Climate Change 2015/Shared Documents/Attachments/ClimateChange2015/CC1.Governance/2015_Proxy_Statement.pdf](https://www.cdp.net/sites/2015/53/5653/Climate%20Change%202015/Shared%20Documents/Attachments/ClimateChange2015/CC1.Governance/2015_Proxy_Statement.pdf)
[https://www.cdp.net/sites/2015/53/5653/Climate Change 2015/Shared Documents/Attachments/ClimateChange2015/CC1.Governance/Entergy_2014_Integrated_Report.pdf](https://www.cdp.net/sites/2015/53/5653/Climate%20Change%202015/Shared%20Documents/Attachments/ClimateChange2015/CC1.Governance/Entergy_2014_Integrated_Report.pdf)

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	United States: Mississippi, Louisiana, Texas, Arkansas, New York, Massachusetts, Vermont, Rhode Island, Michigan	> 6 years	Results of risk evaluations are summarized on a quarterly basis and presented to executive management and the Audit Committee of the Board Of Directors via the SEC reporting process. Entergy evaluates risks to its facilities and customer base on multiple time horizons from short term severe weather impacts to longer term (>50 yrs.) physical risks of climate change associated with flooding and sea level rise on the Gulf Coast of the U.S.

CC2.1b

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

(i) Company Level - Enterprise Risk Management (ERM) – Entergy's Internal Audit function facilitates an integrated company-wide process for all businesses to analyze risks associated with climate change. The risks are described, evaluated and scored based on probability of occurrence and severity of outcome. Controls are established for priority items and sensitivity testing conducted to ensure priority items are addressed.

In addition, at the company level Entergy's Investment Approval Process (IAP) requires all projects of sufficient materiality to include scenarios reflecting the costs and/or benefits of carbon regulation utilizing the company's proprietary CO2 cost projections.

(ii) Asset Level Risk Assessment and Monitoring. Entergy assesses risks consistent with the ERM and IAP processes at an asset level. The risks are described, evaluated and scored based on probability of occurrence and severity of outcome; controls are established for priority items and, if necessary, sensitivity testing conducted to ensure priority items are addressed. Asset level investment decisions incorporate scenarios on the cost of carbon regulation/legislation. Potential climate-related physical impacts to facilities from factors such as severe weather, subsidence, wetlands loss and sea level rise are evaluated on an ongoing basis. Results are

reported to business function executive management with priorities identified by the likelihood of occurrence and severity of impact.

Example: Asset Level: Building Resilient Communities - Entergy has deep experience in assessing operating risks from extreme weather events. Its service territory along the Gulf Coast is in a hurricane prone area that is also at risk of sea-level rise. While Entergy is focused on business continuity and reducing losses to our assets, our larger strategic focus is on working with our communities, and our customers, to enhance their prosperity and plan for a more resilient future.

CC2.1c

How do you prioritize the risks and opportunities identified?

At the Corporate Level, Entergy prioritizes the risks and opportunities it identifies using materiality criteria based on the likelihood/severity of a risk, and likelihood and magnitude of an opportunity.. Entergy performs extensive modelling and analysis at the group level regarding the various legislative and regulatory scenarios for carbon. From this analysis, Entergy has derived its CO2 Point of View and its internal price of carbon that is used in investment decisions. These analysis aids in the risk/opportunity prioritization process. In addition, Entergy engages stakeholders and funds research on physical risks associated with climate change; this information is also used to inform the prioritization process.

At the asset/operating company level, each business prioritizes risks and opportunities based on a certain materiality threshold that depends on the asset's valuation and proportion of the company. The criteria used include likelihood/severity of a risk and likelihood and magnitude of an opportunity These thresholds are set by the company's External Reporting/Accounting/Legal groups and are used to determine the significance of quantifiable risks.

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

(i) How Entergy's business strategy has been influenced - Entergy manages business risks posed by climate change by incorporating the costs/benefits of carbon regulation into investment decisions (costs are derived from the company's CO2 projections), through the company's CO2 emissions stabilization target, and through its proactive approach to adaptation. In addition, internal subject matter experts analyse and communicate the regulatory, physical and other business risks posed by climate change to executive management and incorporates these risks into the multi-disciplinary integrated company-wide risk management process. Entergy monitors and engages in the regulatory and legislative process to inform its business strategy and encourage rational GHG controls.

(ii) Aspects of climate change that have influenced the strategy include: Physical and regulatory aspects of climate change have influenced Entergy's strategy. Physical aspects include the need for adaptation, this aspect affects electric generation sourcing and impacts Entergy's customer base. Regulatory changes impact energy prices, both short and long term. Both of these aspects impact decisions regarding energy production and sourcing and impact Entergy's customer base due to changes in the physical environment. Substantive business decisions, provided below, have resulted from this influence, including electric generation portfolio management decisions and investments, acquisition of more efficient generation sources, purchased power buying decisions and implementation of our adaptation strategy.

(iii) Short-term strategy influence -- The most important components of Entergy's short term strategy (2015-2017) influenced by climate change are portfolio management of electric generation units, preserving the nuclear generation capacity, completion and renewal of our CO2 emissions target stabilization commitment, long-term resource buying decisions and the company's environmental goals. One example is the company's planned construction and capital investments in generation, including clean energy combined-cycle gas and nuclear generation (2015-2017), \$3.3 billion. (see Entergy's 2014 SEC 10K, pg. 24 - 25)

(iv) Long-term strategy influence - As discussed in the 2012 System IRP pg. 22-25, the major components influencing long term risk are the future price of natural

gas and future price of CO2 through 2030. The most important components of Entergy's long-term strategy influenced by climate change are the company's ongoing CO2 stabilization commitment to 2020, its long-term electric generation portfolio management activities that involve capital investments in clean energy combined-cycle gas and nuclear generation (2015-2017), inclusion of a carbon price into investment decisions (ongoing), our adaptation strategy and stakeholder engagement. Entergy's 2012 Integrated Resource Plans go out through 2030. The resource planning process, after considering scenarios for fuel prices, CO2 prices, energy efficiency penetration, regulatory and market frameworks and load growth, identifies a Preferred Portfolio that describes the System's long-range strategy for managing risk and meeting customers' power needs.

(v) Strategic business advantage - Entergy's proactive leadership on climate change has resulted in an electric generation portfolio that is top quartile low CO2 emitting (compared with the 100 largest utilities in the US) thereby providing a competitive advantage in any current or future carbon constrained economy. Currently, our low and no-emitting facilities in the northeast US are enjoying this advantage under the RGGI cap and trade program. In addition, this leadership position provides the company with credibility amongst the highest circles of advocacy in the country and world. Entergy leverages this credibility to advocate for sensible immediate action on climate change and adaptation.

(vi) Substantive Business Decisions during the Reporting Year (2014). Example - Portfolio Management: Proposed carbon regulations have reinforced Entergy's Utility efforts to transform its electric generation portfolio. During 2014, the company put in service the 560 MW Ninemile Unit 6 CCGT power plant, completed the first full year of operations in the Midcontinent Independent System Operator (MISO) and announced an agreement to acquire the Union Power Station, an efficient, natural gas-fired 1,980-megawatt generating facility. The Entergy Utility operating companies' plan to invest \$3.3 billion over the 2015 - 2017 period on generation, including cleaner, more efficient generation, which includes acquiring Union Power Station, and environmental compliance spending. Over the past twelve years the Utility Companies and Entergy Wholesale Commodities (EWC) have added 4,458 megawatts of clean, highly efficient combined cycle natural gas generation (CCGT) and 700 megawatts of non-emitting nuclear generation through capacity increases of existing plants. This has allowed the retirement or reduced use of 4,000 MWs of older, less efficient legacy gas steam units.

Example: 2014 substantive business decisions related to the company's CO2 emissions stabilization target - 2001 to 2014. In 2014 the company's actions contributed to our voluntary goal to stabilize our cumulative CO2 emissions at 20 percent below year 2000 levels through 2020. This decision was influenced by the desire to reduce the company's carbon footprint and reduce the regulatory risk of carbon regulation. As of the end of 2014, Entergy was 59.3 million short tons CO2 below its 2001 through 2014 stabilization goals on a cumulative basis.

Example: 2014 decisions related to climate change physical risks and adaptation.

Entergy continued and expanded its outreach to manage adaptation risk and build more resilient communities.

In 2014, Entergy worked with DOE, NOAA, DOI, EPA, USGCRP, GAO and CEQ to advance community planning for resilience and helping lead a discussion about the importance of understanding how complex systems interact in order optimize the effectiveness of adaptation planning to manage physical risks from climate change. [Also see CC4 – Communications]

In 2012, Entergy, along with two local universities, participated in two Coastal Resilience Technical Conferences with its customers to identify ways to cost effectively reduce business interruption losses from extreme weather and climate change.

Starting in 2011, working with Americas Wetland Foundation, Entergy participated in eleven "Blue Ribbon Resilient Community Leadership Forums" across the Gulf Coast to have a balanced dialogue with to stakeholders in coastal communities on specific vulnerabilities, risk mitigation options and cost effective investments to build resilience. These efforts build on Entergy's \$4 million "Building a Resilient Gulf Coast" study that provides the first comprehensive analysis of climate risks and adaptation economics along the Gulf Coast.

CC2.2b

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

CC2.2c

Does your company use an internal price of carbon?

Yes

CC2.2d

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

Entergy regularly updates its point-of-view on scenarios of carbon dioxide legislation/regulation and forecasts a CO2 price range that the regulation scenario could impose. The forecast is based on Strategic Outlooks (formerly the Integrated Energy Outlooks) issued by ICF International. Entergy uses a forecast price on CO2 as a strategic tool to evaluate 1) the impacts and opportunities a CO2 price could have on long lived asset investments, 2) to inform Integrated Resource Plan scenarios designed to determine the optimal mix of future resources, and 3) to help identify least cost methods for meeting its voluntary CO2 stabilization goals.

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
Cap and trade	Support	Over the past several years: CEO face to face meetings with over 40 members of Congress, five key Administration officials, and three southern state governors; public letter of support for Waxman - Markey cap and trade legislation; CAO delivered CDP address at NYSE (2013), speaking at public forums, collaborating with others, writing articles and by authoring four op-eds and one advertorial; Charter member of C2ES BELC advocating for market mechanisms to place a price on carbon; CEO a member of the C2ES Board of Directors and a C2ES Strategic Partner; CEO participated in "We Can Lead" on the need for a climate bill; CEO presentations to investors, at Annual Meeting, in Annual Reports, In Sustainability Reports calling for cap and trade with a predictable price on carbon.	Economy-wide, sustainable price on carbon that predictably increases over time; investment in R&D for development and deployment of retrofit carbon capture and sequestration that is affordable enough for China and the developing world to invest in; auction of allowances with a portion recycled to neutralize regressive impacts of higher energy prices on low income families; Check and assess provisions if global agreements to reduce GHG emissions don't materialize.
Carbon tax	Support	In 2012, CEO publicly called for a "Carbon Tax" at C2ES in Washington DC; CEO gave a defense of that position before Louisiana Public Service Commissioners	Sustainable, predictable price on carbon that increases over time with revenues recycled to reduce deficit, reduces distorted taxes and recycles revenue to low income families to reduce regressive impacts of higher energy prices
Energy efficiency	Support	In 2012, Investing in Energy Efficiency at Entergy Texas, Entergy Arkansas and Entergy New Orleans; Supports weatherization initiatives for low income customers	Work with regulatory commissions to allow rate of return on energy efficiency investments and deals equitable with lost revenues
Clean energy generation	Support	In 2014, extensive participation in advocacy for market reform to preserve the value of existing nuclear generation. In 2011, CEO participated in interview with Washington Post Editorial Staff advocating a modified CES as an effective market mechanism for placing a price on carbon; CEO wrote Wall Street Journal Op-Ed titled "Cool the Planet with Natural Gas" advocating a CES that substitutes natural gas for coal as a way to reduce carbon emissions	CES that allows trading of credits around reduced coal utilization for increased natural gas utilization
Adaptation resiliency	Support	In 2011 - 2012, participated in 11 Blue Ribbon Resilient Community Leadership Forums to educate stakeholders on risk mitigation options and served as a catalyst for investing in solutions that preserve and protect prosperity, safety and quality of life; Organized and participated in two Coastal Resilience Technical Conferences with customers to quantify risks and work collaboratively towards developing economically sensible investment approaches to manage risk and build a more resilient Gulf Coast. In 2013 Entergy collaborated with the World	Work with stakeholders to quantify risks to coastal communities, identify cost effective adaptation investments to manage risks. Work collaboratively with customers to prioritize utility system hardening investments to compliment actions and investments they've taken to become more resilient. Prioritize hardening investments to reduce business interruption economic losses. Work to enhance prosperity, ensure safety for families and preserve quality of life in coastal communities we serve. Preserve and enhance economic viability of customer base.

Focus of legislation	Corporate Position	Details of engagement	Proposed legislative solution
		Business Council for Sustainable Development (WBCSD) and was a lead author for a soon to be released report on Adaptation and Climate Resilience in the Power Sector that will identify best practices and discuss the cost benefits for a number of resilience investments. Entergy has been sharing information gained by working with our communities and customers on how to build resilience to climate change with federal agencies, industry groups and customers helping them apply processes we used to address climate hazards to risks they are facing. Entergy's Senior Manager, Climate Consulting was appointed by the Secretary of Interior to serve on her Advisory Committee on Climate Change and Natural Resource Science (ACCNRS). He was also appointed to serve on EPA's National Environmental Justice Advisory Committee (NEJAC) Community Resilience Working Group. He also was a contributor to the National Climate Assessment (NCA) Southeast Regional Chapter. He worked with DOE and helped them form a Utility Resilience Partnership where companies commit to developing resilience plans, share best practices and report on progress (launched in 2015 with Entergy as a Charter Member).	
Other: Retrofit CCS Technology	Support	In 2009, Entergy asked the MIT Energy Initiative (MITEI) to bring together the nation's leading experts in this field to assess the current issues surrounding retrofit technologies and to formulate a concrete action plan to move forward quickly	Accelerate research for low carbon technologies, including retrofit CCS technology, for coal-fired power plants – There is a critical need to develop and deploy cost-effective retrofit CCS technology that can be deployed here in the U.S., but, more importantly, in China, India, and developing nations, where the vast majority of new coal-fired power plants are being built. If we are to be successful in meeting climate change goals, we need to develop cost-effective solutions for coal

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?
EEI	Mixed	EEI believes efforts to further reduce GHG emissions should involve all sectors of the economy and seek to minimize their cumulative effects on costs to customers, impact on the economy, and the reliability of the electric system. Electric utilities will continue their efforts to transition to a cleaner, more modern electric generating fleet, help improve energy efficiency, and electrify the transportation sector. EEI supports R&D to accelerate deployment of Carbon Capture and Sequestration (CCS) and advocates for laws and regulation to remove barriers to implementation.	Entergy is an EEI member company and actively participates on EEI's Executive Committee, Environmental Committee, Legislative Committee and GHG Committee where it shares its points of view climate change and clean energy policy. CEO is on the Executive Committee and VP Environmental Strategy and Policy is on the substantive Executive Environmental Advisory Committee. CEO is on the Board of Directors.
C2ES	Consistent	C2ES continues to favor market-based approaches that put a price on carbon as the most cost-effective means of reducing GHG emissions. C2ES also supports carbon capture and storage (CCS) is likely to be critical for reducing global greenhouse gas emissions from stationary sources. Apart from such approaches, which would require major new legislation, there is a range of actions the Administration and Congress can take to significantly reduce GHG emissions, expand clean energy sources, and make communities and critical infrastructure more climate-resilient. For example: the Administration can adopt stronger standards through 2025 for medium- and heavy-duty vehicles; finalize its proposed GHG emission standards for new power plants; set GHG emissions standards for existing power plants, while allowing states to meet them with a range of market-based measures; increase the energy efficiency of appliances and industrial equipment; open more federal lands to renewable energy development; and increase efforts to tackle short-lived climate forcers such as methane, black carbon, and HFCs.	As a Strategic Partner with the Center for Climate and Energy Solutions (a non-profit working to advance strong policy on the twin challenges of energy and climate change) Entergy is closely aligned with the Center's vision that using economy-wide market mechanisms to put a price on carbon as the most efficient method for incentivizing investment in energy efficiency and clean technologies to reduce GHG emissions and the importance of adaptation planning and investment to build resilience to climate change. Entergy participates on the C2ES Board of Directors and is a charter member of the C2ES Business Environment Leadership Council (BELC). Entergy supports C2ES position on the importance of CO2 Carbon Capture and Sequestration (CCS). Entergy has serious concerns with EPA's proposed 111(d) regulations and continues to advocate improvements.
Clean Energy Group	Consistent	Advocates using economy-wide market mechanisms to put a price on carbon as the most efficient method for incentivizing investment in energy efficiency and clean technologies to	Entergy is a Clean Energy Group member company and actively participates in shaping Clean Energy Group strategy energy and environmental policy.

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?
		reduce GHG emissions; Could be in the form of cap and trade, For Utility Sector cap and trade, CEG favors an output based allocation of allowances clean Energy Standard or a Carbon Tax.	
Center for Clean Air Policy	Consistent	Advocates using economy-wide market mechanisms to put a price on carbon as the most efficient method for incentivizing investment in energy efficiency and clean technologies to reduce GHG emissions; Could be in the form of cap and trade, Clean Energy Standard or a Carbon Tax.	Entergy actively participates in the Center for Clean Air Policy Climate Policy initiative where it exchanges ideas on innovative policy to further the company's points of view on climate change and clean energy.
Americas Energy Coast	Consistent	Advocates for a systems approach to building resilience to wind damage, flooding and storm surge along the Gulf Coast; Advocates for "multiple lines of defense" that includes wetlands restoration, barrier island restoration paired with levy protection; encourages communities to invest in economically sensible resilience measures to reduce vulnerability to risks from climate change impacts.	Entergy is Americas Wetland Foundation member and a member of AWF's Americas Energy Coast organizations. Entergy and AWF share a strong view on the importance restoring and maintaining coastal wetlands and barrier islands are to building resilient communities. Entergy and AWF have worked closely on launching the Gulf Coast Adaptation Study and organizing eleven Blue Ribbon Resilient Community Leadership Forums throughout the Gulf Coast.

CC2.3d

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

No

CC2.3e

Do you fund any research organizations to produce or disseminate public work on climate change?

Yes

CC2.3f**Please describe the work and how it aligns with your own strategy on climate change**

Entergy funds research with the Electric Power Research Institute (EPRI) to develop retrofit carbon capture and sequestration technology for fossil power plants, Water Basin Optimization Tools and Sustainability. Entergy also funded research at MIT's Energy Initiatives to explore existing retrofit CCS Technology and to provide recommendations on additional research the Department of Energy could do to help accelerate the deployment of this technology. Entergy funds research with the Center for Climate and Energy Solutions (C2ES), the Clean Energy Group (CEG) and Center for Clean Air Policy (CCAP) to explore innovative policy solutions that puts an economy-wide price on carbon and utilizes market mechanisms to ensure economic efficiency. These projects are in direct support of Entergy's Guiding Principles for Climate Policy described in 2.3h

CC2.3g**Please provide details of the other engagement activities that you undertake**

Entergy participates in the Coalition on Innovative Climate Solutions (CICS) working on reasonable legal solutions to climate change within the framework of the Federal Clean Air Act.

CC2.3h**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?**

Entergy has established "Guiding Principles" for Climate Policy to help ensure our actions and activities are consistent with our climate strategy. These Guiding Principles are:

- 1) Risks are real, we need to act now;
- 2) Use an economy wide, market based approach to find efficient solutions (need a strong, sustainable price on carbon)
- 3) Build in permanent low income protection by recycling revenue to offset higher energy costs
- 4) U.S. policy must be informed by global reality - research on retrofit CCS that's affordable enough for China to invest in; "pledge and review"
- 5) plan for adaptation;

In addition, Entergy employs a proactive "Issues Management Process" to help proactively identify preferred positions on 34 key issues important to the company. Climate Change and Adaptation are two of the key issues included in this process. Annually subject matter experts are asked to provide input and help prepare an Issues Sheet on each of the key issues. The Issue Sheet provides definition of the issue, describes Entergy's current approach to addressing the issue and a timeline of current activity. The draft is circulated for comment, sent for review by Entergy's Strategy Committee to assure the approach is consistent with the diverse interests of Entergy's Businesses, reviewed and approved by management and then circulated broadly within the company. The Issues Management process is refreshed annually.

In 2012, Entergy created the officer-level position of Vice President, Environmental Strategy & Policy, partially in order to oversee the consistent development and

implementation of climate policy across the Company's business units.

CC2.3i

Please explain why you do not engage with policy makers

CC2.4

Would your organization's board of directors support an international agreement between governments on climate change, which seeks to limit global temperature rise to under two degree Celsius from pre-industrial levels in line with IPCC scenarios such as RCP2.6?

Yes

CC2.4a

Please describe your board's position on what an effective agreement would mean for your organization and activities that you are undertaking to help deliver this agreement at the 2015 United Nations Climate Change Conference in Paris (COP 21)

Entergy's board of directors articulated a commitment to the environment in 2002 with the adoption of Entergy's Environmental Vision Statement, which sets expectations in areas of sustainable development, performance excellence and environmental advocacy. see <http://www.entergy.com/content/environment/VisionStatement.pdf> Any agreement should be in accordance with Entergy's "Guiding Principles" for Climate Policy described in 2.3(h)

Further, Entergy is informing the debate through its advocacy with U.S. officials and through membership in Edison Electric Institute, Center for Climate and Energy Solutions (C2ES) and the C2ES Business Environment Leadership Council (BELC) that seek to constructively inform COP21.

Further Information**Attachments**

Page: CC3. Targets and Initiatives

CC3.1

Did you have an emissions reduction 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 (metric tonnes CO2e)	Target year	Comment
Abs3	Scope 1+2+3	84%	20%	2000	48260000	2020	2011 to 2020. In 2011, after completing two five year commitments, Entergy made a 10-year commitment to stabilize our cumulative CO2 emissions at 20 percent below year 2000 levels through 2020, taking into account all three commitment periods.
Abs2	Scope 1+2+3	84%	20%	2000	48260000	2010	2006 to 2010. Entergy's second commitment expanded the scope and length of the overall goal. In 2006, Entergy committed to stabilizing direct CO2 emissions from its owned power plants and controllable purchases at 20% below 2000 levels. Entergy beat this commitment on a cumulative basis by more than 3 percent.
Abs1	Scope 1	63%	0%	2000	48260000	2005	2001 - 2005. Entergy's first voluntary commitment was to stabilize direct CO2 emissions from owned power plants at year 2000 levels through 2005. The company completed this commitment at 23% below year 2000 levels while increasing power production by 21% in the same time period. Entergy was cumulatively 57 million metric tons below its CO2 stabilization commitment and six percent below 1990 levels.

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	Target year	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

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

ID	% complete (time)	% complete (emissions)	Comment
Abs3	44%	47%	During 2014 Entergy was 0.14% below the annual target. Since inception in 2001, the cumulative emissions 2001 – 2014 are 9.1% below the cumulative 2001 –2014 stabilization budgets with actual cumulative emissions of 589.7 million tons of CO2 compared to the cumulative stabilization target (2001 to 2013) of 649.0 million tons CO2.
Abs2	100%	97%	2006 to 2010. Entergy's second commitment expanded the scope and length of the overall goal. In 2006, Entergy

ID	% complete (time)	% complete (emissions)	Comment
			committed to stabilizing direct CO2 emissions from its owned power plants and controllable purchases at 20% below 2000 levels. Entergy beat this commitment on a cumulative basis by more than 3 percent.
Abs1	100%	77%	2001 - 2005. Entergy's first voluntary commitment was to stabilize direct CO2 emissions from owned power plants at year 2000 levels through 2005. The company completed this commitment at 23% below year 2000 levels while increasing power production by 21% in the same time period. Entergy was cumulatively 57 million metric tons below its CO2 stabilization commitment and six percent below 1990 levels.

CC3.1e

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

Does the use of your goods and/or services directly enable GHG emissions to be avoided by a third party?

Yes

CC3.2a

Please provide details of how the use of your goods and/or services directly enable GHG emissions to be avoided by a third party

Energy Efficiency Programs

(i) How emissions are avoided: Scope 2 emissions of Entergy's customers are reduced by Entergy's products/services, such as demand side management (DSM), that help customers use electricity more efficiently. Focus includes efficient use of electricity through outreach programs, low-income initiatives and grants. Reducing energy consumption eliminates emissions associated with generation, reduces the amount of new generation to be built and reduces customer's electric bills. Entergy has 33 active DSM programs in Texas, Arkansas, Louisiana and Mississippi for residential, commercial and industrial customers.

(ii) Estimate of avoided emissions:

Entergy estimates that the reduction in MWhs from energy efficiency during 2014 avoided ~ 124,394 metric tons of CO₂. In 2014 ~ \$76.4 million was invested in DSM programs creating 32 MWs and 230,000 MWh of annual energy savings. A total of \$252.8 million was invested 2002-2014 to create 350 MWs and 982,000 MWh of energy savings.

(iii) Methodology: Estimate was generated using the EPA Climate Leaders GHG Inventory Protocol and the Standard for Greenhouse Gas Accounting and Verification (ISO 14064). GWP for carbon dioxide of 1 was used. Emission factor: Entergy's compliance-based continuous emission monitors (CEMS) are generally significantly more accurate than most emission factor-based quantification approaches. Assumptions related to the project baseline values were used.

(iv) Entergy is not considering originating CERs or ERUs within the framework of CDM or JI for these activities.

In 2014, Entergy also continued its participation with Energy Star to help businesses and individuals save money through improved energy efficiency.

Over 607,000 customers visited Entergy's Save Money web page (www.entergy.com/savemoney) to conduct energy audits and obtain energy efficiency information.

Low Carbon Energy Production Installation

(i) How emissions are avoided: Scope 2 emissions for Entergy's customers are reduced as a result of the company's Portfolio Transformation Strategy and as the result of operating in MISO (Midcontinent Independent System Operator). As a result of these two initiatives the Utility's electric generation from highly efficient Combined Cycle Gas Turbines (CCGT) increased by 43% in 2014 compared to 2013 while generation from less efficient Legacy Gas turbine units decreased by 20%. In 2014 Entergy placed into service its new natural gas-fired 560 MW Ninemile 6 combined cycle gas turbine (CCGT). Entergy also announced an agreement to acquire Union Power Station, a 1,980 MW natural gas fired CCGT power plant. Over the past 12 years, Entergy's operating companies have added ~4,458 MWs of highly efficient CCGT capacity and 700 MWs of non-emitting nuclear generation through capacity increases at existing plants. This has allowed the retirement or reduced use of 4,000 MWs of older, less efficient legacy gas steam units. The heat rate for utility operating companies' CCGT fleet was 7,209 btu/KWh in 2014 compared to a heat rate of 11,320 btu/KWh for Legacy Gas Units. In 2011, 20% of the electric energy produced by Entergy's natural gas units came from the CCGT units (both Utility and EWC). That percentage increased to 55% in 2014.

In addition, Scope 2 emissions for Entergy's customers are reduced as a result of improved nuclear unit capacity factors. In 2014 Entergy's nuclear fleet operated with a 91.2% capacity factor compared to capacity factor of 86.3% in 2013 resulting in 1,133 GWh more non-emitting generation in 2014 compared to 2013. In 2014, 61% of Entergy's electric generation was supplied by nuclear power plants.

(ii) Estimate of avoided emissions: Entergy estimates that avoided CO₂ emissions from investments in efficient, natural gas fired CCGT and the 1,133 GWh increase in nuclear production avoided 4,544,354 metric tons of CO₂ in 2014. Entergy estimates that direct, Scope 1 emissions avoided through its employment of nuclear generation total over 50 million metric tons per year.

(iii) Methodology used for estimations: This emission avoidance estimate was generated using the EPA Climate Leaders GHG Inventory Protocol and the Standard for Greenhouse Gas Accounting and Verification (ISO 14064). A GWP for carbon dioxide (1) is used. Emission factor: CO₂ content Natural Gas 117.08 lb CO₂/MMBtu In simple terms, Entergy's GHG emission intensity for energy displaced from older gas units (metric tons per MWh) was multiplied by the number of nuclear MWhs generated. For the emissions avoided from added CCGT capacity the emission rate for older gas units being displaced was subtracted from the CCGT emission rate multiplied the annual MWh generated from the new CCGT capacity. The emission intensity represents the emission factor used and the GWP for carbon dioxide. Assumptions related to project baseline were used.

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	2	
To be implemented*	5	1155999
Implementation commenced*	3	1015622
Implemented*	7	4126164
Not to be implemented		

CC3.3b

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

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/ Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
Low carbon energy installation	The activities described here are in the same scope as Entergy's 3rd target, its Scope 1+2+3 voluntary emission stabilization goal (I) Entergy invested \$655 million for the 560 MW Ninemile 6 natural gas-fired CCGT power plant that was placed in service in 2014 (ii) Entergy estimates that annual direct Scope 1 emissions avoided from the addition of 560 MW of CCGT capacity avoids 269,771 metric tons CO2 per year. (iii) This is a voluntary activity driven by a business opportunity with fuel cost savings passed on to customers. Until there is an economy wide price on carbon emissions, there are no monetary savings	269771	Scope 1	Voluntary	50430000	655000000	11-15 years	>30 years	The new CCGT unit heat rate is approximately 7,200 btu/KWh and displaces generation from Entergy legacy gas units with an average heat rate of 11,320 btu/KWh. This results in fuel cost savings and CO2 emission reductions.

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
	associated with this type of generation directly associated with GHG avoidance. However, in addition to fuel cost savings, we are saving the compliance costs of certain air regulations (hazardous air pollutants) and lessening the impact of others (such as the Cross-State Air Pollution Rule, proposed Clean Power Plan). (iv) This activity is expected to continue in the near term (5 years) and the lifetime of these efforts are 30+ years.								
Low carbon energy installation	The activities described here are in the same scope as Entergy's 3rd target, its Scope 1+2+3 emission stabilization goal. (I) Completed first full year of operation under Mid-	3740000	Scope 1	Voluntary	271000000	100000000	<1 year	Ongoing	MISO Operation: In 2014 Entergy completed its first full year of operation Under Midcontinent Independent System Operator. Fuel savings and CO2 emission reductions were realized by greater utilization of CCGT capacity, lower utilization of less efficient legacy gas units which resulted in a 10%

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
	Continent Independent System Operator (MISO) that results in more efficient utilization of generating resources reducing CO2 emissions and fuel costs (ii Entergy estimates that annual direct Scope 1 emissions avoided from MISO operations avoided 3,740,000 metric tons CO2. (III) This is a voluntary activity driven by a business opportunity with fuel costs passed on to customers. Until there is an economy wide price on carbon emissions, there are no monetary savings associated with this type of generation directly associated with GHG avoidance. However, in addition to fuel cost savings, we are saving the								improvement in non-baseload generation heat rate when compared to 2013.

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
	compliance costs of certain air regulations (hazardous air pollutants) and lessening the impact of others (such as the Cross-State Air Pollution Rule). (iv) This activity is expected to be ongoing.								
Energy efficiency: Processes	Energy Efficiency Programs (i) How emissions are avoided: Scope 2 emissions of Entergy's customers are reduced by Entergy's products/services, such as demand side management (DSM), that help customers use electricity more efficiently. These efforts focus on efficient use of electricity through outreach programs, low-income initiatives and grants. Reducing	73133	Scope 1		17500000	76400000	1-3 years	6-10 years	Entergy utilities are committed to pursuing cost-effective energy efficiency and DSM programs; the plan includes 990 MW of peak load reduction through 2031. Various cost recovery mechanisms are in place to fund the energy efficiency programs. The DSM programs are generally on track to meet long-term goals. In 2014 approximately \$76.4 million was invested in DSM programs creating 32 MWs and 230,000 MWh of annual energy savings. A total of \$252.8 million was invested over the period of 2002-2014 to create a total of 350 MWs and 982,000 MWh of energy savings. In 2014, Entergy also continued its participation with Energy Star to help businesses

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	Scope	Voluntary/ Mandatory	Annual monetary savings (unit currency - as specified in CC0.4)	Investment required (unit currency - as specified in CC0.4)	Payback period	Estimated lifetime of the initiative	Comment
	energy consumption eliminates emissions associated with generation, reduces the amount of new generation to be built and has the added benefit of reducing customer's electric bills. Entergy has 33 active DSM programs in Texas, Arkansas, Louisiana and Mississippi for residential, commercial and industrial customer classes (ii) Estimate of avoided emissions: Emission reductions resulting from 2014 energy savings are estimated to have avoided 73,133 metric tons CO2. This activity can result in a reduction of Scope 1, 2 and 3 emissions for the company. (iii) This is a mandatory activity in AR, TX and New Orleans,								and individuals save money through improved energy efficiency. Over 607,000 customers visited Entergy's Save Money web page (www.entergy.com/savemoney) to conduct energy audits and obtain energy efficiency information.

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
	EGSL/ELL Quick Start Energy Efficiency program offerings began 4Q2014 and EMI's Quick Start Energy Efficiency Program offerings begin 4Q2014 subject to final regulatory approvals. (iv) Estimate of avoided emissions: 2104 natural gas heat rate (btu/KWh) times estimated energy savings (KWh/yr) times the CO2 content of natural gas (lb CO2/MMBtu) divided by lbs CO2 per metric ton (v) This activity is expected to continue both near and long term. (Estimated 1-10 years).								

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

Method	Comment
Compliance with regulatory requirements/standards	Compliance with permit limits, mandates for energy efficiency programs, preparation of mandatory/voluntary GHG emissions inventories and participation in voluntary carbon markets has driven investment in emission reduction activities.
Dedicated budget for energy efficiency	Entergy's Utility Operating companies implement energy efficiency programs approved by their Public Service Systems. These programs have a dedicated budget and result in both capacity and energy savings for Entergy. These programs result in energy/cost savings and environmental footprint reduction for our customers. Additionally, investments in generation portfolio management and individual facility efficiency improvements result in overall emission reductions for the company.
Dedicated budget for low carbon product R&D	Entergy participates in R&D programs through the Electric Power Research Institute (EPRI) dedicated to nuclear generation, emission reductions, sustainability and low carbon generation research.
Employee engagement	Entergy's employees are engaged through a variety of programs, including volunteerism, the Make an Impact program and the goal to engage 25% of the Utility's employees in environmental activities, initiatives and programs.
Financial optimization calculations	Entergy Utility Operating Companies conduct Integrated Resource Plans (IRPs) to select the optimal mix of resources to meet customers future energy needs. As with any legislative or regulatory proposal, Entergy engages in rigorous internal evaluations of carbon policy in order to optimize the company's decisions. These decisions include whether or not to conduct power uprates, acquisitions, deactivations, power purchases and divestitures.
Internal price of carbon	Entergy maintains a projection on CO2 pricing. This internal cost and projection is used to evaluate business decisions such as whether or not to conduct power uprates, acquisitions, deactivations, power purchases and divestitures.
Internal finance mechanisms	Entergy's Environmental Initiative Fund remains at a funding level of approximately \$1 million per year. This fund is primarily used to fund carbon offset projects in Entergy's utility service area and states in which we operate wholesale assets. It also funds efforts to facilitate economy-wide emission reductions through reforestation, sequestration and wetlands restoration, and similar projects.
Marginal abatement cost curve	Entergy has engaged third-party consultants to produce and evaluate marginal cost abatement curves both for climate change mitigation and adaptation measures.
Partnering with governments on technology development	Entergy believes that we must institute a large, government-led innovation effort that is directed toward basic research and funding demonstration projects. The only long-term solution to climate change is new technology. A government-led effort would jump-start innovation, provide financing until private funding becomes available and serve a great national purpose.

CC3.3d

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

Further Information**Attachments**

[https://www.cdp.net/sites/2015/53/5653/Climate_Change_2015/Shared Documents/Attachments/ClimateChange2015/CC3.TargetsandInitiatives/1.2.3_Corporate_CO2_POV_2015.pdf](https://www.cdp.net/sites/2015/53/5653/Climate_Change_2015/Shared_Documents/Attachments/ClimateChange2015/CC3.TargetsandInitiatives/1.2.3_Corporate_CO2_POV_2015.pdf)
[https://www.cdp.net/sites/2015/53/5653/Climate_Change_2015/Shared Documents/Attachments/ClimateChange2015/CC3.TargetsandInitiatives/RELUNIONACQUISITIONCORPORATEFINAL.pdf](https://www.cdp.net/sites/2015/53/5653/Climate_Change_2015/Shared_Documents/Attachments/ClimateChange2015/CC3.TargetsandInitiatives/RELUNIONACQUISITIONCORPORATEFINAL.pdf)
[https://www.cdp.net/sites/2015/53/5653/Climate_Change_2015/Shared Documents/Attachments/ClimateChange2015/CC3.TargetsandInitiatives/Entergy_GHG_Inventory_2014.pdf](https://www.cdp.net/sites/2015/53/5653/Climate_Change_2015/Shared_Documents/Attachments/ClimateChange2015/CC3.TargetsandInitiatives/Entergy_GHG_Inventory_2014.pdf)
[https://www.cdp.net/sites/2015/53/5653/Climate_Change_2015/Shared Documents/Attachments/ClimateChange2015/CC3.TargetsandInitiatives/Entergy_2014_Integrated_Report.pdf](https://www.cdp.net/sites/2015/53/5653/Climate_Change_2015/Shared_Documents/Attachments/ClimateChange2015/CC3.TargetsandInitiatives/Entergy_2014_Integrated_Report.pdf)
[https://www.cdp.net/sites/2015/53/5653/Climate_Change_2015/Shared Documents/Attachments/ClimateChange2015/CC3.TargetsandInitiatives/2014-05-05_ELLIRP.pdf](https://www.cdp.net/sites/2015/53/5653/Climate_Change_2015/Shared_Documents/Attachments/ClimateChange2015/CC3.TargetsandInitiatives/2014-05-05_ELLIRP.pdf)
[https://www.cdp.net/sites/2015/53/5653/Climate_Change_2015/Shared Documents/Attachments/ClimateChange2015/CC3.TargetsandInitiatives/nnualStabilizationGoalProgress-FINALandVERIFIED030915\(2\).pdf](https://www.cdp.net/sites/2015/53/5653/Climate_Change_2015/Shared_Documents/Attachments/ClimateChange2015/CC3.TargetsandInitiatives/nnualStabilizationGoalProgress-FINALandVERIFIED030915(2).pdf)
[https://www.cdp.net/sites/2015/53/5653/Climate_Change_2015/Shared Documents/Attachments/ClimateChange2015/CC3.TargetsandInitiatives/2015RegulatoryConferenceYear1inMISOpublic.pptx](https://www.cdp.net/sites/2015/53/5653/Climate_Change_2015/Shared_Documents/Attachments/ClimateChange2015/CC3.TargetsandInitiatives/2015RegulatoryConferenceYear1inMISOpublic.pptx)
[https://www.cdp.net/sites/2015/53/5653/Climate_Change_2015/Shared Documents/Attachments/ClimateChange2015/CC3.TargetsandInitiatives/ENO_2015_IRP_Renewable_Technology_Assessment_5Sep14.pdf](https://www.cdp.net/sites/2015/53/5653/Climate_Change_2015/Shared_Documents/Attachments/ClimateChange2015/CC3.TargetsandInitiatives/ENO_2015_IRP_Renewable_Technology_Assessment_5Sep14.pdf)

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
In mainstream financial reports in accordance with the CDSB Framework	Complete	5-6, 14-15, 18-20, 34, 52, 56	https://www.cdp.net/sites/2015/53/5653/Climate_Change_2015/Shared Documents/Attachments/CC4.1/Entergy_2014_Integrated_Report.pdf

Publication	Status	Page/Section reference	Attach the document
In mainstream financial reports in accordance with the CDSB Framework	Complete	11, 38-40, 105, 257-258, 276, 279-280, 299, 302-306	https://www.cdp.net/sites/2015/53/5653/Climate Change 2015/Shared Documents/Attachments/CC4.1/2014_Entergy_Form_10K.pdf
In mainstream financial reports in accordance with the CDSB Framework	Complete	5- 9	https://www.cdp.net/sites/2015/53/5653/Climate Change 2015/Shared Documents/Attachments/CC4.1/2014_Annual_Report.pdf
In mainstream financial reports in accordance with the CDSB Framework	Underway - previous year attached	36-57	https://www.cdp.net/sites/2015/53/5653/Climate Change 2015/Shared Documents/Attachments/CC4.1/2013_Investor_Guide.pdf
In other regulatory filings	Complete	1-13	https://www.cdp.net/sites/2015/53/5653/Climate Change 2015/Shared Documents/Attachments/CC4.1/ENO_2015_IRP_Renewable_Technology_Assessment_5Sep14.pdf
In other regulatory filings	Complete	3, 8-11, 17, 34, 36-39	https://www.cdp.net/sites/2015/53/5653/Climate Change 2015/Shared Documents/Attachments/CC4.1/2014-05-05_ELL_IRP.pdf
In voluntary communications	Complete	1-16	https://www.cdp.net/sites/2015/53/5653/Climate Change 2015/Shared Documents/Attachments/CC4.1/Entergy_GHG_Inventory_2014.pdf
In voluntary communications	Complete	1-33	https://www.cdp.net/sites/2015/53/5653/Climate Change 2015/Shared Documents/Attachments/CC4.1/ETR_GHG_Inventory_Mgmt_Plan_2014.pdf
In voluntary communications	Complete	1-20	https://www.cdp.net/sites/2015/53/5653/Climate Change 2015/Shared Documents/Attachments/CC4.1/ICF_Verification_Statement_and_Report_2013.pdf
In voluntary communications	Complete	1-19	https://www.cdp.net/sites/2015/53/5653/Climate Change 2015/Shared Documents/Attachments/CC4.1/RWESTEPKeynoteFINALFINAL31MAR143PM.pdf
In voluntary communications	Complete	1-3	https://www.cdp.net/sites/2015/53/5653/Climate Change 2015/Shared Documents/Attachments/CC4.1/JeffWilliamsPowerGenv3Final.pdf
In voluntary communications	Complete	1-13	https://www.cdp.net/sites/2015/53/5653/Climate Change 2015/Shared Documents/Attachments/CC4.1/JeffWilliamsforRisingSeasNYC092414.pptx

Further Information

Module: Risks and Opportunities

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
International agreements	Nations are now working toward a new international agreement to be agreed in Paris in December 2015. The United States' intended contribution to this agreement is an economy-wide target of reducing its greenhouse gas emissions by 26-28 percent below its 2005 level in 2025 and to make best efforts to reduce its emissions by 28 percent .	Increased operational cost	>6 years	Direct	More likely than not	Medium-high	The financial implications of a cap and trade program and performance standards are summarized below: • Entergy updated its Louisiana and Gulf States Integrated Resource Plan in 2014. The	The methods that Entergy used in 2014 to manage this risk include: integrated resource planning, portfolio management, purchase power agreements, maintaining the nuclear option,	Costs associated with some management methods include: 1) Across its six regulated utilities operating in four states, Entergy invested \$252.8 million from 2002 to 2014 to deliver approximately

Risk driver	Description	Potential impact	Timeframe	Direct / Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>Entergy may be affected by operational restrictions on fossil-fuel power plants and/or emissions control requirements as a result of International agreements that impact U.S. policy on climate change.</p> <p>Operational restrictions on fossil-fuel power plants and or requirements to control emissions may require additional capital budget and/or incremental operating costs. Additionally, the potential for offset project development in other countries may limit the availability of inexpensive offsets in the U.S. Entergy continues to support national legislation that would increase planning certainty for electric utilities while addressing carbon dioxide emissions in an efficient, responsible and flexible manner</p>						<p>company examined four scenarios during this process in order to assess alternative electric generation portfolio strategies. The sensitivity analysis for each of the four scenarios considered the implementation of a CO2 cap and trade or other regulatory program. CO2 costs (\$/short ton) ranged from \$6.70 to \$14.32 (both levelized in 2013\$) and the scenarios evaluated the cap and trade programs starting in 2023. • In 2014 EPA proposed a performance standard for new sources, modified/reconstructed sources, and existing sources</p>	<p>demand side management (DSM), participation in the Midcontinent Independent System Operator (MISO), voluntary GHG stabilization commitments, and hedging to mitigate market risks. These methods reduce both the likelihood and magnitude of the risk occurring 2014-2031 by informing Entergy's planning, rate negotiations, pace of electric generation portfolio management and by reducing CO2 emissions. 2014 Case studies: 1. Portfolio mgmt. - Our Ninemile 6 electric</p>	<p>350 MW of load reduction and more than 982,000 MW hours of annual energy savings. Currently, more than 30 energy efficiency and DSM programs are underway. 2) Ninemile 6 is a 560 MW unit that cost approximately \$655 million to construct, excluding interconnection and transmission upgrades. 3) In December 2014, Entergy Arkansas, Entergy Gulf States Louisiana, and Entergy Texas entered into an asset purchase agreement to acquire the Union Power Station, a 1,980</p>

Risk driver	Description	Potential impact	Timeframe	Direct / Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
							<p>under existing CAA authority. Such a performance standard may increase costs for new and existing fossil fuel units.</p>	<p>generation plant was assessed for future cost of carbon prior to investment approval and placed into service in 2014. We reached agreement to acquire Union Power Station. Both are clean, fuel-efficient natural gas-fired resources that enable Entergy to reduce utilization/deactivate less efficient electric generation units.</p> <p>2. MISO: Entergy completed its 1st year in MISO, achieved increased transmission efficiency, greater reliability, fuel and customer savings.</p> <p>3. Voluntary CO2</p>	<p>MW power generation facility located near El Dorado, Arkansas. The base purchase price is expected to be approximately \$948 million (approximately \$237 million for each power block) subject to adjustments.</p>

Risk driver	Description	Potential impact	Timeframe	Direct / Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								target: Entergy set a voluntary CO2 emissions limit from generation and controlled purchases at 20 percent below 2000 levels through 2020. Through year-end 2014, cumulative emissions from 2001 are 9.1 percent below our cumulative 2001-2014 target. 4. DSM: In 2014 Entergy conducted more than 30 energy efficiency and DSM programs or pilots across four states	
Air pollution limits	In 2014 EPA proposed a Clean Power Plan to cut carbon emissions from existing power plants by 30% from 2005 levels. The Clean Power Plan would establish different target emission	Increased operational cost	>6 years	Direct	Very likely	High	Entergy's CO2 POV presents a range of potential CO2 cost outcomes extending from a zero direct cost	The methods that Entergy used to manage this risk include: integrated resource planning,	Costs associated with some of Entergy's 2014 management methods: 1) Manpower cost associated with

Risk driver	Description	Potential impact	Timeframe	Direct / Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>rates (lbs of CO2 per megawatt-hour) for each state due to regional variations in generation mix and electricity consumption, but overall is projected to achieve a 30 percent cut from 2005 emissions by 2030, with an interim target of 25 percent on average between 2020 and 2029. Developing and implementing plans for compliance with greenhouse gas emissions reduction requirements can lead to additional capital, personnel, and operation and maintenance expenditures and could significantly affect the economic position of existing facilities and proposed projects; moreover, long-term planning to meet environmental requirements can be negatively impacted and costs may increase to the extent laws and regulations change prior to full implementation. Future changes in environmental regulation governing the emission of CO2 and other</p>						<p>per ton (low or “business as usual” case) up to a high case (labelled “legislative/national CPP”) reflecting a national mass cap program that mimics the goals of Waxman-Markey (and, to a certain extent, the impact of a 111(d) regulatory approach). The high case starts at \$25.10/ton (real \$2012) in 2020 and escalates to \$38.40/ton in 2030. EIA modelling of the proposed rule on a region that approximates Entergy’s Utility Franchise, provides an approximation: 1) 9.7% increase in electricity prices in 2020 compared to the AEO 2015</p>	<p>portfolio management, maintaining the nuclear option, participation in MISO, voluntary GHG stabilization commitments. Entergy is also actively engaged in the rulemaking process, having submitted comments to the EPA in December 2014 . These methods/activities reduce both the likelihood and magnitude of the risks occurring 2014-2031 by informing Entergy’s planning, rate negotiation process, pace of electric generation portfolio management as well as avoiding/reducin</p>	<p>monitoring legislative/regulatory potential operational and cost implications . 2) Entergy has invested a total of \$252.8 million from 2002 to 2014 to deliver approximately 350 MW of load reduction and more than 982,000 MW hours of annual energy savings; > 30 energy efficiency and DSM programs are underway. 3) Ninemile 6 is a 560 MW unit cost approximately \$655 million to construct, excluding interconnection and transmission upgrades. 4) In 2014, Entergy Arkansas, Entergy Gulf</p>

Risk driver	Description	Potential impact	Timeframe	Direct / Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	greenhouse gases could make some of Entergy's electric generating units uneconomical to maintain or operate, and could increase the difficulty that Entergy and its subsidiaries have with obtaining or maintaining required environmental regulatory approvals, which could also materially affect the financial condition, results of operations and liquidity of Entergy and its subsidiaries. Entergy may be required to install best available control technology (BACT) for new and/or upgraded power generation facilities leading to increased capital costs .The USEPA currently is requiring a BACT analysis for new and/or upgraded power generation facilities and has proposed a new source performance standard for GHGs. EPA is proposing GHG New Source Performance Standards (NSPS) for new electric generating units and Existing Source Performance Standards (ESPS) for						Reference Case, 7.0% increase in electricity prices in 2030; cost increases may be passed on to consumers and result in higher energy bills. 2) 2.9% reduction in energy consumption compared to the reference case as the result of increased DSM/EE penetration. 3) 2.9% increase in renewables from 2020 - 2029 compared to 0.9% increase in the reference case	g CO2 emissions. 2014 Case studies: 1. Portfolio mgmt. Our Ninemile 6 electric generation plant was assessed for future cost of carbon prior to investment approval and placed into service in 2014. We reached agreement to acquire Union Power Station. Both are clean, fuel-efficient natural gas-fired resources that enable Entergy to reduce utilization/deactivate less efficient higher emitting electric generation units. 2. MISO: Entergy completed its 1st year in MISO, achieved increased	States Louisiana, and Entergy Texas entered into an asset purchase agreement to acquire the Union Power Station, a 1,980 MW power generation facility. The base purchase price is expected to be approximately \$948 million (approximately \$237 million for each power block) subject to adjustments.

Risk driver	Description	Potential impact	Timeframe	Direct / Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	existing fossil fuel electric generating units This is based on the determination (and case law) that CO2 can be a regulated pollutant under the Clean Air Act. Improper sequencing of regulations and/or lack of comprehensive regulations (all pollutants) could lead to stranded investments for long-lived assets such as power generation plants							transmission efficiency, greater reliability, fuel and customer savings. 3. CO2 target: Entergy set a voluntary CO2 emissions limit from generation/controlled purchases at 20 percent below 2000 levels through 2020. At year-end 2014, cumulative emissions from 2001 are 9.1% below our cumulative 2001-2014 target. 4. DSM: In 2014 Entergy conducted more than 30 energy efficiency and DSM programs or pilots across four states.	
Cap and trade schemes	A cap and trade scheme, even though unlikely in the next 5 years, may result in	Increased operational cost	>6 years	Direct	More likely than not	Medium-high	Entergy updated its Louisiana and Gulf States	The methods that Entergy used in 2014 to manage	Costs associated with some of Entergy's 2014

Risk driver	Description	Potential impact	Timeframe	Direct / Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>increased operating costs to Entergy. There are a number of legislative and regulatory initiatives concerning air emission that are under consideration at the federal, state, and local level. Because of the nature of Entergy's business, the imposition of any of these initiatives could affect Entergy's operations. Entergy continues to monitor these initiatives and activities in order to analyze their potential operational and cost implications. These initiatives include: new legislation or regulations applicable to stationary sources could take the form of market-based cap-and-trade programs, direct requirements for the installation of air emission controls onto air emission sources, or other or combined regulatory programs; implementation of the Regional Greenhouse Gas Initiative by several states in the north-eastern United States and similar actions in other regions of</p>						<p>Integrated Resource Plan in 2014. The company examined four scenarios during this process in order to assess alternative electric generation portfolio strategies. The sensitivity analysis for each of the four scenarios considered the implementation of a CO2 cap and trade or other regulatory program. CO2 costs (\$/short ton) ranged from \$6.70 to \$14.32 (both levelized in 2013\$) and the scenarios evaluated the cap and trade programs starting in 2023. The source for these estimates are Entergy's CO2 POV that presents</p>	<p>this risk include: integrated resource planning, portfolio management, maintaining the nuclear option, participation in MISO, voluntary GHG stabilization commitments. Entergy is also actively engaged in the rulemaking process, having submitted comments to the EPA in December 2014 . These methods/activities reduce both the likelihood and magnitude of the risks occurring 2014-2031 by informing Entergy's planning, rate negotiation process, pace of electric generation</p>	<p>management methods: 1) Manpower cost associated with monitoring legislative/regulatory potential operational and cost implications . 2) Entergy has invested a total of \$252.8 million from 2002 to 2014 to deliver approximately 350 MW of load reduction and more than 982,000 MW hours of annual energy savings; > 30 energy efficiency and DSM programs are underway. 3) Ninemile 6 is a 560 MW unit cost approximately \$655 million to construct, excluding interconnection and transmission</p>

Risk driver	Description	Potential impact	Timeframe	Direct / Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	the United States. Entergy believes that a cap and trade scheme or a carbon fee/tax will be the ultimate outcome for controlling carbon in the U.S. Currently, Entergy is advocating an economy-wide carbon fee/tax at the federal level. A number of proposals have been considered by Congress and the Administration. One fee rising at a predictable rate over decades would motivate investment in the most promising solutions and reduce carbon emissions.						a range of potential CO2 cost outcomes extending from a zero direct cost per ton (low or “business as usual” case) up to a high case reflecting a national mass cap program that mimics the goals of Waxman-Markey.	portfolio management as well as avoiding/reducing CO2 emissions. 2014 Case studies: 1. Portfolio mgmt. Our Ninemile 6 electric generation plant was assessed for future cost of carbon prior to investment approval and placed into service in 2014. We reached agreement to acquire Union Power Station. Both are clean, fuel-efficient natural gas-fired resources that enable Entergy to reduce utilization/deactivate less efficient higher emitting electric generation units. 2. MISO: Entergy	upgrades. 4) In 2014, Entergy Arkansas, Entergy Gulf States Louisiana, and Entergy Texas entered into an asset purchase agreement to acquire the Union Power Station, a 1,980 MW power generation facility. The base purchase price is expected to be approximately \$948 million (approximately \$237 million for each power block) subject to adjustments.

Risk driver	Description	Potential impact	Timeframe	Direct / Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								completed its 1st year in MISO, achieved increased transmission efficiency, greater reliability, fuel and customer savings. 3. CO2 target: Entergy set a voluntary CO2 emissions limit from generation/controlled purchases at 20 percent below 2000 levels through 2020. At year-end 2014, cumulative emissions from 2001 are 9.1% below our cumulative 2001-2014 target. 3. DSM: In 2014 Entergy conducted more than 30 energy efficiency and DSM programs or pilots across four states.	

Risk driver	Description	Potential impact	Timeframe	Direct / Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Emission reporting obligations	In 2011, Entergy began reporting various categories of its GHG emissions under EPA's Mandatory GHG Reporting Rule, additional categories were added in 2012. These increased reporting programs increase the company's operational cost. Entergy has reported its GHG emissions voluntarily for the last ten years through various programs such as EPA Climate Leaders and through the American Carbon Registry (www.americancarbonregistry.org). Additionally, Entergy voluntarily commissions a third-party verification audit of its GHG Inventory under ISO 14064.1-3.	Increased operational cost	>6 years	Direct	Virtually certain	Low	The financial implications of increased and mandatory reporting are expected to be \$0 to minimal in the near term because existing staff and budgets will handle this reporting. However in the longer-term (>5 yrs.) additional reporting requirements may result in the need for an additional FTE, \$75k/year.	The methods that Entergy is using to manage this risk include voluntary GHG reporting for over a decade, a commitment to continuous improvement of our GHG inventory, and conducting independent assurance. In 2014, activities included third party verification of Scope 1+2+3 emissions, and reporting to the American Carbon Registry. In addition, the company continuously improves its calculation methodology to more accurately reflect its business model, adjustments to the company's	The costs associated with these activities: Entergy spends ~ \$50-\$100 k on emissions verification annually, and 0.5 FTE, ~\$75k /yr. Incremental costs are expected to be \$0 to minimal near term (0-3 years).

Risk driver	Description	Potential impact	Timeframe	Direct / Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								carbon accounting were made as a result of joint the Midcontinent Independent System Operator (MISO). 2014 Case study: 1. Total carbon dioxide emissions representing Entergy's ownership share of power plants and controllable power purchases in the United States were approximately 46.1 million tons in 2011, approximately 45.5 million tons in 2012, approximately 46.2 million tons in 2013, and approximately 41.8 million tons in 2014. The decrease in this number in 2014	

Risk driver	Description	Potential impact	Timeframe	Direct / Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								is largely attributable to the impact on the calculation methodology of the Utility operating companies' transition into the MISO system. Participation in this system resulted in fewer power purchases being classified as "controllable" and thus included in the calculation of the emissions total. These methods/activities reduce the likelihood and magnitude of the risk now and into the mid-term by providing the company assurance that its GHG data is accurate for compliance and planning	

Risk driver	Description	Potential impact	Timeframe	Direct / Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								purposes.	
Fuel/energy taxes and regulations	Regulation of carbon emissions, either via a cap and trade scheme, carbon tax, fuel/energy/taxes, clean energy standard or the Clean Air Act will likely increase fuel costs and may impose restrictions on use of certain fuels. This essentially results in regulating certain fuels, which is likely already impacting fuel prices .	Increased operational cost	>6 years	Direct	Very likely	Medium-high	A fuel/energy tax would add costs. Entergy updated its Integrated Resource Plan (IRP) for Entergy Louisiana and Gulf States in 2014. The IRP examined four scenarios to assess alternative electric generation portfolio strategies under varying market conditions. One of the four scenarios analyzed a resource shift towards cleaner and more stable generation; this scenario assumed high fuel prices for natural gas, coal and oil. Entergy's goal is to grow the utility combined cycle gas turbine capacity (CCGT) 33% by 2020. An	The methods that Entergy uses to manage this risk includes an issues management process to track and influence the development of regulations, integrated resource planning (IRP), portfolio management, purchase power agreements, maintaining a diverse fuel mix including the nuclear option, participating in the Midcontinent Independent System Operator LLC, energy efficiency and demand response programs, the voluntary GHG stabilization	Costs associated with some of Entergy's 2014 management methods: 1) Staff time to conduct the IRP planning process and engage/track the legislative and regulatory process. 2) Ninemile 6 is a 560 MW unit cost approximately \$655 million to construct, excluding interconnection and transmission upgrades. 3) In December 2014, Entergy Arkansas, Entergy Gulf States Louisiana, and Entergy Texas entered into an asset purchase agreement to

Risk driver	Description	Potential impact	Timeframe	Direct / Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
							example financial implication of high fuel prices on a CCGT facility follows: the levelized nominal \$/MWh (for 2015 resources) over the expected life of a 2x1 F Frame CCGT is \$68/MWh for a low fuel cost scenario and \$99/MWh for a high fuel cost scenario.	commitments the company has made over the last decade, and hedging techniques to mitigate market risks. These methods reduce both the likelihood and magnitude of the risk occurring 2014-2031 by informing Entergy's planning, rate negotiation process and pace of electric generation portfolio management. 2014 Case studies: 1. Portfolio mgmt. - Our Ninemile 6 electric generation plant was brought into service in December 2014. We reached agreement to	acquire the Union Power Station, a 1,980 MW power generation facility located near El Dorado, Arkansas. The base purchase price is expected to be approximately \$948 million (approximately \$237 million for each power block) subject to adjustments.

Risk driver	Description	Potential impact	Timeframe	Direct / Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								acquire Union Power Station. Both are clean, fuel-efficient natural gas-fired resources that enable Entergy to reduce utilization/deactivate less efficient electric generation units. 2. MISO: Entergy completed its 1st year in MISO; resulted in increased transmission efficiency, greater reliability, and fuel and customer savings.	
Product efficiency regulations and standards	Entergy may experience reduced demand for goods and services due to new product efficiency regulations and standards. In June 2014, the U.S. Environmental Protection Agency released the Clean Power Plan. In developing the proposed rule, EPA set a	Reduced demand for goods/services	>6 years	Indirect (Client)	Virtually certain	Low-medium	Financial implications include loss of revenue associated with reduced power sales and demand side management (DSM) programs; Entergy's 2012	The methods that Entergy uses to manage this risk includes an issues management process to track and influence the development of regulations,	Across its six regulated utilities that operate in four states, Entergy has invested a total of \$252.8 million from 2002 to 2014 to deliver approximately

Risk driver	Description	Potential impact	Timeframe	Direct / Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	carbon reduction goal based on the “best system of emissions reduction” or BSER. The system relies on four building blocks that together define the “best system” to reduce emissions from the power sector as a whole. These four building blocks include measures to: improve the efficiency of existing units; divert power generation from units that run on coal to those that use natural gas combined cycle technology; deploy new sources of zero-carbon generation, which include renewables and nuclear power; and reduce demand through end-use energy efficiency. States will have flexibility to put together a strategy that combines one or more of these approaches. Some studies project that energy efficiency will be the most used and least-cost option to implement the plan; the studies also show that the effect of energy efficiency is large enough that overall electricity consumption						Integrated Resource Plan forecast a High DSM scenario where the company’s NPV of revenue requirements in excess of the lowest cost scenario outcome is \$8.54 billion (2012). The High DSM case assumes reduced electric generation of ~100-900Mw per year over 2014-2031.	integration of energy efficiency and demand side management into integrated resource planning (IRP), participating in the Midcontinent Independent System Operator (MISO), and implementing energy efficiency and demand response programs in each of its utility operating companies that include recovery mechanisms and developing market opportunities. These methods reduce both the likelihood and magnitude of the risk occurring 2014-2031 by informing Entergy’s planning,	350 MW of load reduction and more than 982,000 megawatt hours (MWh) of annual energy savings. Currently, more than 30 energy efficiency and DSM programs are underway across four states.

Risk driver	Description	Potential impact	Timeframe	Direct / Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	declines. While Entergy already has active energy efficiency and demand side management (EE/DSM) goals and targets for our utility business, this does reduce demand for electricity. These programs affect the amount and timing of customer electricity use. Entergy does not advocate wasteful energy use by our customers. Entergy strongly advocates the efficient use of electricity and understands that this is a technology that can be deployed today to reduce GHG emissions							negotiation of cost recovery mechanisms and market development activities. 2014 Case studies: 1. Entergy utilities are committed to pursuing cost-effective energy efficiency and DSM programs; the plan includes 990 MW of peak load reduction through 2031. The DSM programs are generally on track to meet long-term goals. The level of energy efficiency and DSM load reductions that the utilities ultimately achieve, however, depends on the level that the utilities' retail regulators agree	

Risk driver	Description	Potential impact	Timeframe	Direct / Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								should be deployed. Additionally, implementation of the programs must be accompanied by reasonable cost recovery mechanisms. 2. Entergy's participation in MISO enables the company to utilize demand response resources that reduce the amount of load that would need to be served by higher cost resources.	
General environmental regulations, including planning	Regulatory uncertainty may result in sub-optimal investments that individually appear economically justified but when taken in the aggregate with other environmental compliance obligations may prove uneconomic, this could lead to increased operations	Increased operational cost	>6 years	Direct	Virtually certain	Low	Financial implications depend on the regulatory framework adopted. Entergy's 2013 integrated resource plan evaluated a	The methods that Entergy uses to manage this risk include: electric generation portfolio management towards cleaner, lower-emitting facilities and	1. Existing staff perform regulatory monitoring and advocacy at \$0 additional cost per year; capital costs of \$3.3 billion '15 - '17 for generation,

Risk driver	Description	Potential impact	Timeframe	Direct / Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	costs due to a decrease in power plant heat rates, increases in variable costs for materials and waste disposal and / or decreased utilization. Entergy undergoes an extensive resource planning exercise on a regular, periodic basis. This plan includes inputs on plant retirements, new builds, uprates and extensive environmental regulatory scenarios.						scenario of green growth, high gas price with a 2018 start for cap and trade resulted in \$23.7 billion net present value of revenue required in excess of a scenario with reference gas prices with no CO2 costs . The time horizon is 30+ years - uncertainty on government regulation causes uncertain modelling, making identifying the optimal investment strategy more risky.	continuous monitoring of the regulatory environment. Entergy's generation portfolio is one of the cleanest in the United States among large electric generators. In 2014, activities included an issues management process, continued advocacy for regulatory certainty, preferring regulation of carbon emissions through a cap and trade scheme or a carbon fee/tax. These methods/activities reduce both the likelihood and magnitude of the risk occurring by	including clean generation. 2. Ninemile 6 is a 560 MW unit cost approximately \$655 million to construct, excluding interconnection and transmission upgrades. 3. The Union Power Station, a 1,980 MW power generation facility base purchase price is expected to be approximately \$948 million (approximately \$237 million for each power block) subject to adjustments.

Risk driver	Description	Potential impact	Timeframe	Direct / Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								informing Entergy's planning, rate negotiation process and pace of electric generation portfolio management 2014 Case study: 1. The company continues its portfolio transformation: Ninemile 6 is a 560 MW CCGT unit completed in December 2014 ahead of schedule and below cost; we entered into an asset purchase agreement to acquire the Union Power Station, a 1,980 MW CCGT power generation facility.	
Lack of regulation	Entergy's generation portfolio is one of the cleanest in the United States among large	Reduced stock price (market	1 to 3 years	Direct	Very likely	Medium-high	Financial implications depend on the	The methods that Entergy uses to manage this risk	1. Existing staff perform regulatory

Risk driver	Description	Potential impact	Timeframe	Direct / Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	electric generators. The company is a strong advocate of regulation of carbon emissions through a cap and trade scheme or a carbon fee/tax. Because of this, Entergy stands to benefit from increased investor interest and market valuation in a carbon constrained economy (although overzealous regulation could cause adverse impacts). Continued uncertainty and lack of regulation of GHGs delays this benefit.	valuation)					regulatory framework adopted. Entergy's 2013 integrated resource plan evaluated a scenario of green growth, high gas price with a 2018 start for cap and trade resulted in \$23.7 billion net present value of revenue required in excess of a scenario with reference gas prices with no CO2 costs . The time horizon is 30+ years - uncertainty on government regulation causes uncertain modelling, making identifying the optimal investment strategy more risky.	include: electric generation portfolio management towards cleaner, lower-emitting facilities and continuous monitoring of the regulatory environment. Entergy's generation portfolio is one of the cleanest in the United States among large electric generators. In 2014, activities included an issues management process, continued advocacy for regulatory certainty, preferring regulation of carbon emissions through a cap and trade scheme or a	monitoring and advocacy at \$0 additional cost per year; capital costs of \$3.3 billion '15 - '17 for generation, including clean generation. 2. Ninemile 6 is a 560 MW unit cost approximately \$655 million to construct, excluding interconnection and transmission upgrades. 3. The Union Power Station, a 1,980 MW power generation facility base purchase price is expected to be approximately \$948 million (approximately \$237 million for each power block) subject to adjustments.

Risk driver	Description	Potential impact	Timeframe	Direct / Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								carbon fee/tax. These methods/activities reduce both the likelihood and magnitude of the risk occurring by informing Entergy's planning, rate negotiation process and pace of electric generation portfolio management 2014 Case studies: 1.The company continues its portfolio transformation: Ninemile 6 is a 560 MW CCGT unit was completed in December 2014 ahead of schedule and below cost; we entered into an asset purchase agreement to acquire the	

Risk driver	Description	Potential impact	Timeframe	Direct / Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								Union Power Station, a 1,980 MW CCGT power generation facility.	
Carbon taxes	If adopted, an economy-wide carbon tax would increase Entergy's operating costs and the energy prices for all consumers. Entergy currently advocates a carbon fee or tax as a simple way to put a price on carbon emissions.	Increased operational cost	>6 years	Direct	Likely	Medium-high	A carbon tax would add costs. An example of the financial implications from a cost of carbon from Entergy's 2012 IRP includes a scenario starting in 2018 with CO2 allowance price of \$25.41/U.S. ton, and a 2012-2031 levelized cost in 2011\$ of \$16.65/U.S ton. A scenario of green growth, high gas price, 2018 start for CO2 allowance results in \$23.7 billion net present value of revenue required in excess of a case with no CO2 costs. The source for these estimates are	The methods that Entergy used in 2014 to manage this risk include: integrated resource planning, portfolio management, purchase power agreements, maintaining the nuclear option, participation in the Midcontinent Independent System Operator (MISO), voluntary GHG stabilization commitments, regulatory/legislative monitoring, and hedging to mitigate market risks. These methods reduce both the	1. Existing staff perform regulatory monitoring and advocacy at \$0 additional cost per year; capital costs of \$3.3 billion '15 - '17 for generation, including clean generation. 2. Ninemile 6 is a 560 MW unit that is expected to cost approximately \$655 million to construct when spending is complete, excluding interconnection and transmission upgrades. 3. The Union Power Station, a 1,980 MW power

Risk driver	Description	Potential impact	Timeframe	Direct / Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
							<p>Entergy's CO2 POV that presents a range of potential CO2 cost outcomes extending from a zero direct cost per ton (low or "business as usual" case) up to a high case reflecting a national mass cap program that mimics the goals of Waxman-Markey.</p>	<p>likelihood and magnitude of the risk occurring 2014-2031 by informing Entergy's planning, pace of electric generation portfolio management and by avoiding/reducing CO2 emissions. 2014 Case studies: 1. Portfolio mgmt. - Our Ninemile 6 electric generation plant was placed into service in December 2014. We reached agreement to acquire Union Power Station. Both are clean, fuel-efficient natural gas-fired resources that enable Entergy to reduce utilization/deactiv</p>	<p>generation facility base purchase price is expected to be approximately \$948 million (approximately \$237 million for each power block) subject to adjustments. 4. Across its six regulated utilities that operate in four states, Entergy has invested a total of \$252.8 million from 2002 to 2014 to deliver approximately 350 MW of load reduction and more than 982,000 megawatt hours (MWh) of annual energy savings.</p>

Risk driver	Description	Potential impact	Timeframe	Direct / Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								<p>ate less efficient electric generation units.</p> <p>2. MISO: Entergy completed its 1st year in MISO; resulted in increased transmission efficiency, greater reliability, and fuel and customer savings and avoided GHG.</p> <p>3. Voluntary CO2 target: Entergy set a voluntary CO2 emissions limit from generation and controlled purchases at 20 percent below 2000 levels through 2020. Through year-end 2014, cumulative emissions from 2001 are 9.1 percent below our cumulative 2001-2014</p>	

Risk driver	Description	Potential impact	Timeframe	Direct / Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								target. 4. DSM: In 2014 Entergy conducted more than 30 energy efficiency and DSM programs or pilots across four states.	
Other regulatory drivers	Falling costs of distributed generation and other distributed energy resources (DER); an enhanced focus on development of new DER technologies; increasing customer, regulatory, and political interest in these technologies and advancing demand side management technologies (DSM) may give rise to challenges for the electric utility industry. The timing of such changes is unclear, however there is potential for this technological innovation to become more economically viable due to a combination of stakeholder interest and potential regulatory/government incentives. Consumer production of electricity poses challenges for utilities	Reduced demand for goods/services	>6 years	Direct	More likely than not	Medium	Financial implications include loss of revenue associated with reduced power sales and demand side management (DSM) programs. The financial implication is unclear at this time. Entergy's 2012 Integrated Resource Plan forecast a High DSM scenario where the company's NPV of revenue requirements in excess of the lowest cost scenario outcome is \$8.54 billion	The methods that Entergy uses to manage this risk includes an issues management process to track and influence the development of regulations, integrated resource planning, implementing energy efficiency and demand response programs in each of its utility operating companies and developing market opportunities, and learning from	1. Existing staff perform regulatory monitoring and advocacy at \$0 additional cost per year. 2. Entergy Texas requires the cost of the pre-interconnection study to be borne by the customer; Entergy Texas staff time at \$0 additional cost

Risk driver	Description	Potential impact	Timeframe	Direct / Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	including the safety and reliability of interconnection of customer-owned energy resources to the distribution grid and cross-subsidization through regulatory constructs such as net energy metering policies. Newer technologies such as distributed generation have not yet had a substantive impact on Entergy's electricity sales, but further advances have the potential to do so in the future. The types of risks that may arise with DER deployment at scale include: declining revenue due to lower market prices for electricity; increasing costs; lower profitability potential particularly over the long term; meeting investor expectations in an increasingly competitive environment; increasing costs for non-DER customers; and rate cases and tariff structures not well-suited to manage these risks. Among the factors that could affect market prices for electricity and fuel,						(2012). The High DSM case assumes reduced electric generation of ~100-900Mw per year over 2014-2031.]	interconnection and parallel operation of distributed generation in its operating companies such as Entergy Texas. These methods reduce both the likelihood and magnitude of the risk occurring 2014-2031 by informing Entergy's planning, negotiation of cost recovery mechanisms and market development activities. 2014 Case study: 1. Entergy Texas implemented an Interconnection and Parallel Operation of Distribution Generation Rate Schedule in March, 2014. A	

Risk driver	Description	Potential impact	Timeframe	Direct / Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	all of which are beyond Entergy's control to a significant degree, are the rate of growth in demand for electricity as a result of population changes, regional economic conditions, and the implementation of conservation programs or distributed generation.							customer seeking interconnection and parallel operation of distributed generation with Entergy must complete and submit an application and conduct a pre-interconnection study.	

CC5.1b

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

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Sea level rise	The Fifth Assessment Report (AR5) of the Intergovernmental Panel on Climate	Increased operational cost	Up to 1 year	Direct	Very likely	High	The annual average expected loss in 2010 and 2030 is	Entergy manages risk through storm hardening of facilities, technical conferences with customers to build greater resilience, Blue Ribbon	Costs are in staff time, est. 5 FTEs, \$375 k/yr. Est. \$1 bn in

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>Change (IPCC) presents the results of an extensive climate modelling effort to make predictions of changes in the global climate based on a range of development/emissions scenarios. The IPCC and U.S. National Climate Assessment (USNCA) released information in 2013 and 2014 that indicates the physical risks associated with climate change may continue and strengthen. According to the USNCA, sea level rise and storm surge are increasing damage to U.S. infrastructure. The assessment predicts that in the longer term, sea level rise, extreme storm surge events, and high tides will affect coastal facilities and infrastructure on</p>						<p>\$14.2 billion and \$23.4 billion respectively (2010 dollars) for the Gulf Coast region. For Entergy, the financial implications include infrastructure damage, loss of sales, and possibly customers, due to inundation. Implications may be similar to those experienced in the past, ~\$370 million to \$1.5 billion. Entergy suffered ~\$1.5 billion in restoration costs after</p>	<p>Resilient Community Leadership Forums (BRRCLF), property insurance, bonds to recover restoration costs, reserve funds, regulatory recovery mechanisms, investment in emergency preparedness, and conducting research into adaptation. These methods reduce the likelihood and magnitude of the risks now and into the longer term, >10 years through hardened facilities, preparedness, and financial mechanisms and collaboration that aims to cover damage costs. 2014 Case studies: 1. Entergy participated in the Rising Seas Conference, 9/2014, to discuss material physical risks associated with climate change. The company also engaged with communities and customers to prioritize investments to complement what others are doing in order to build resilience and minimize business interruption losses. 2. Entergy invested in new, more resilient transmission and substation infrastructure to improve service reliability to vital Gulf Coast economic assets. (see http://transmission.wpengine.co</p>	<p>storm hardening '08 – '14. Entergy funded the \$4.2 million Gulf Coast Adaptation Study that identified \$49 billion in investments over 20 years that will avert \$137 billion in losses; and contributed \$200K to America's Wetland Foundation for 11 BRRCLF Forums. During '12, Entergy held two Technical Conferences with customers discussing the benefits of an</p>

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>which many energy systems, markets, and consumers depend. Entergy facilities and its customers could be inundated with sea level rise resulting in increased operational and capital cost due to infrastructure damage, loss of sales during power outages and loss of economic productivity to Entergy's customer base. Entergy and its customers are already dealing with potential impacts of climate change from sea level rise and flooding. These factors, in conjunction with coastal erosion and subsidence already are impacting Southeast Texas; the Louisiana gulf coast is also experiencing significant deltaic land loss/subsidence. Relative sea level may rise 5-6 inches</p>						<p>Hurricanes Katrina and Rita in 2005. Hurricane Isaac, 2012, damaged Entergy's distribution infrastructure, restoration costs are estimated at ~\$370 million . In July 2014, Entergy Gulf States Louisiana and Entergy Louisiana issued ~\$300 million in bonds and used the proceeds to re-establish and replenish storm damage escrow reserves and for</p>	<p>m/) 3. The Gulf Coast Adaptation Study identified \$50 billion in investments over the next 20 years that avert \$135 billion in losses over the lifetime of the measures 4. Entergy engages communities to work together to advance planning for resilience and better manage physical risks from climate change</p>	<p>additional \$321 million in T&D hardening over the next 10 years. Existing staff perform regulatory monitoring and advocacy at \$0 additional cost per year.</p>

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	by 2030.						general corporate purposes.		
Tropical cyclones (hurricanes and typhoons)	The U.S. National Climate Assessment (USNCA) states that extreme weather events are affecting energy production and causing disruptions. The assessment states that the frequency and intensity of extreme weather may change, and that flooding may intensify. Potential climate-change related physical impacts pose financial and physical risks, including increased operational costs due to increased weather-driven volatility of business results and adaptation impacts to our facilities and to our customers. Entergy could experience infrastructure damage and loss of	Increased operational cost	Up to 1 year	Direct	More likely than not	High	Financial implications include infrastructure damage, loss of sales, and possibly customers, due to extreme weather. Implications may be similar to those experienced in the past, ~\$370 million to \$1.5 billion. Entergy suffered ~\$1.5 billion in restoration costs after Hurricanes Katrina and Rita in 2005. Hurricane	Entergy manages risk through storm hardening of facilities, technical conferences with customers to build greater resilience, Blue Ribbon Resilient Community Leadership Forums (BRRF), property insurance, bonds to recover restoration costs, reserve funds, regulatory recovery mechanisms, investment in emergency preparedness, and by conducting research into adaptation. These methods reduce the likelihood and magnitude of the risks now and into the longer term, >10 years through hardened facilities, preparedness, and financial mechanisms and collaboration that aims to cover damage costs. 2014 Case studies: 1. We prepare for extreme weather events year-round, in May 2014, we conducted a weeklong storm drill that simulated a Category 3 hurricane and its potential impact on the Entergy service territory. The drill involved customer service teams, field	Costs are in staff time, est. 5 FTEs, \$375 k/yr. Est. \$1 bn in storm hardening '08 – '14. Entergy funded the \$4.2 million Gulf Coast Adaptation Study that identified \$49 billion in investments over 20 years that will avert \$137 billion in losses; and contributed \$200K to America's Wetland Foundation for 11 BRRF Leadership Forums. During '12,

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>sales during power outages associated with hurricanes. Entergy's infrastructure is located primarily in the Northeast and along the Gulf Coast of the US. In the Northeast, Hurricanes Irene and Sandy demonstrated the region's vulnerability to extreme weather events and the potential for adaptation to reduce impacts. Hurricane Sandy, which hit the Northeast Coast in October 2012, caused massive coastal damage from storm surge and flooding. The Gulf Coast is exceptionally vulnerable to hurricanes and other physical climate-related impacts. Storm surges can have impacts far beyond the area directly affected and</p>						<p>Isaac damaged Entergy's distribution infrastructure, restoration costs are estimated at ~\$370 million. In July 2014, Entergy Gulf States Louisiana and Entergy Louisiana issued ~\$300 million in bonds and used the proceeds to re-establish and replenish storm damage escrow reserves and for general corporate purposes.</p>	<p>crews, plant operators, communications teams and others. 2. We broke ground on new transmission operations centers in Jackson, Miss., and Little Rock, Ark. We are replacing six older centers with two weather-hardened facilities that will have sophisticated communications technology to monitor and manage our transmission system. 3. We invested in new, more resilient transmission, substation and distribution infrastructure in coastal communities to improve service reliability to vital Gulf Coast economic assets. (see http://transmission.wpenginc.com/)</p>	<p>Entergy held two Technical Conferences with customers discussing the benefits of an additional \$321 million in T&D hardening over the next 10 years. Existing staff perform regulatory monitoring and advocacy at \$0 additional cost per year.</p>

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	can cause significant economic and ecological implications. In recent years, Hurricanes Isaac, Katrina, Rita, Gustav and Ike have provided valuable information and learnings regarding the business and customer impacts associated with these weather events.								
Induced changes in natural resources	<p>Entergy could experience lost sales revenue as a result of decreased economic productivity from loss of coastal wetlands and the ecosystem services these wetlands provide. As our 2014 Integrated Report states 'what is the point of having power available if there is no one able to take it?' Louisiana's coastline is being impacted today by coastal erosion, sea level</p>	Reduced demand for goods/services	Up to 1 year	Direct	Very likely	Medium-high	Financial implications include infrastructure damage, loss of sales, and possibly customers, due to extreme weather. Implications may be similar to those experienced in the past, ~\$370 million to	Entergy manages risk through facility hardening, technical conferences with customers to build greater resilience, Blue Ribbon Resilient Community Leadership Forums (BRRC), bonds to recover restoration costs, reserve funds, regulatory recovery mechanisms, funding coastal wetlands restoration, advocating for a multiple lines of defense strategy. These methods reduce the likelihood and magnitude of the risks now and into the longer term, >10 years through hardened facilities, preparedness, and financial mechanisms and collaboration that aim to cover damage costs. 2014 Case	Costs are in staff time, est. 5 FTEs, \$375 k/yr. Entergy funded the \$4.2 million Gulf Coast Adaptation Study that identified \$49 billion in investments over 20 years that will avert \$137 billion in losses; and contributed

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>rise and subsidence. Natural wetland functions that produce benefits to coastal populations include: buffering storm impacts; storing and conveying floodwater; absorbing nutrients, sediment and contaminants; maintaining high biological productivity and biodiversity; and serving as a nursery ground for fish and habitat for wildlife, as well as the base for ecosystem food webs. In terms of natural services, biologic productivity and infrastructural investments, the value of Louisiana's coastal wetlands exceeds \$100 billion. Many coastal populations, especially those in Louisiana, rely on these functions for their very livelihood and continued existence</p>						<p>\$1.5 billion. Entergy suffered~\$1.5 billion in restoration costs after Hurricanes Katrina and Rita in 2005. Hurricane Isaac damaged Entergy's distribution infrastructure, restoration costs are estimated at ~\$370 million . In July 2014, Entergy Gulf States Louisiana and Entergy Louisiana issued ~\$300 million in bonds and used the proceeds to re-establish</p>	<p>studies: 1. Entergy deploys multiple lines of defense to reduce economic losses from extreme storms and flooding including working with our communities and customers to restore and maintain barrier islands and coastal wetlands that serve as natural protection in severe weather situations. Entergy awarded a \$500,000 grant to The Nature Conservancy to support efforts related to wetland restoration, which can help minimize physical impacts and economic disruption of extreme weather, both of which help our business performance. 2. The Gulf Coast Adaptation Study identified \$50 billion in investments over the next 20 years that avert \$135 billion in losses over the lifetime of the measures. Entergy continues to work with numerous agencies to advance community planning for resilience and lead discussions about effectively planning for adaptation measures that manage physical risks from climate change</p>	<p>\$200K to America's Wetland Foundation for 11 BRRC Leadership Forums. Entergy awarded a \$500,000 grant to The Nature Conservancy to support efforts related to wetland restoration, which can help minimize physical impacts and economic disruption of extreme weather. Existing staff perform regulatory monitoring and advocacy at \$0 additional cost per year.</p>

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
							and replenish storm damage escrow reserves and for general corporate purposes		
Change in precipitation extremes and droughts	Changes to precipitation extremes and droughts are a potential risk to Entergy because of our need for cooling water to produce electricity and discharge permit limits tied to river flows or levels, extreme precipitation can impact our ability to operate due to flooding events. Changes to precipitation patterns can impact where cooling water is available. Water is a vital natural resource that is also critical to the Utility operating companies', System	Increased operational cost	Up to 1 year	Direct	More likely than not	High	Financial implications include infrastructure damage, loss of sales, and possibly customers. Implications may be similar to those experienced in the past, ~\$370 million to \$1.5 billion. Entergy suffered ~\$1.5 billion in restoration costs after Hurricanes	Entergy manages risk through facility hardening, property insurance, water resource planning, stakeholder engagement and technical conferences with customers to build greater resilience, bonds to recover restoration costs, reserve funds, and regulatory recovery mechanisms. These methods reduce the likelihood and magnitude of the risks now and into the longer term, >10 years through hardened facilities, preparedness, and financial mechanisms and collaboration that aim to cover damage costs. 2014 Case studies: 1. Entergy deploys multiple lines of defense to reduce economic losses from extreme storms and flooding including working with our communities and customers to restore and maintain barrier	Costs are in staff time, est. 5 FTEs, \$375 k/yr. Entergy funded the \$4.2 million Gulf Coast Adaptation Study that identified \$49 billion in investments over 20 years that will avert \$137 billion in losses; and contributed \$200K to America's Wetland Foundation for 11 BRRC

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>Energy's, and Entergy Wholesale Commodities' business operations. Entergy's facilities use water for cooling, boiler make-up, sanitary uses, potable supply, and many other uses. Two of Entergy's Utility operating companies own and/or operate hydroelectric facilities. Accordingly, water availability and quality are critical to Entergy's business operations. Impacts to water availability or quality could negatively impact both operations and revenues. Changes to precipitation patterns can impact our ability to operate due to flooding events. For example, in August and September 2005, Hurricanes Katrina and Rita caused catastrophic damage to large portions of</p>						<p>Katrina and Rita in 2005. Hurricane Isaac damaged Entergy's distribution infrastructure, restoration costs are estimated at ~\$370 million. In July 2014, Entergy Gulf States Louisiana and Entergy Louisiana issued ~\$300 million in bonds and used the proceeds to re-establish and replenish storm damage escrow reserves and for general</p>	<p>islands and coastal wetlands that serve as natural protection in severe weather situations. Entergy awarded a \$500,000 grant to The Nature Conservancy to support efforts related to wetland restoration, which can help minimize physical impacts and economic disruption of extreme weather, both of which help our business performance. 2. At Lewis Creek Plant in Willis, Texas — a water-constrained area; we work with the water conservation district to optimize water use, gaining best practices that can help us use water wisely throughout our operations. We protect water resources by maintaining a compliance rate with state and federal permit requirements of at least 99 percent from year to year</p>	<p>Leadership Forums. Entergy awarded a \$500,000 grant to The Nature Conservancy to support efforts related to wetland restoration, which can help minimize physical impacts and economic disruption of extreme weather. Existing staff perform regulatory monitoring and advocacy at \$0 additional cost per year.</p>

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	the Utility's service territories in Louisiana, Mississippi, and Texas, including the effect of extensive flooding that resulted from levee breaks in and around the greater New Orleans area. The storms and flooding resulted in widespread power outages, significant damage to electric distribution, transmission, and generation and gas infrastructure, and the loss of sales and customers due to mandatory evacuations and the destruction of homes and businesses.						corporate purposes		
Change in temperature extremes	Changes in temperature extremes result in variances in Entergy's electricity sales. The U.S. National Climate Assessment (USNCA), Southeast Regional report	Wider social disadvantages	Up to 1 year	Direct	More likely than not	Medium	Changes in temperature extremes and weather result in variances in electricity sales and peak demand. It	The methods that Entergy uses to manage these risks include Integrated Resource Plans, investments in energy efficiency and demand side management, rate, investment in Low Income Customer Assistance, cost-recovery mechanisms with Public Service Commissions, insurance policies, and	Costs associated with some management methods include: 1 Across its six regulated utilities operating in

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	states net energy demand is projected to increase, largely due to higher temperatures and increased use of air conditioning. This will potentially stress electricity generating capacity, distribution infrastructure, and energy costs. Energy costs are of particular concern for lower income households, the elderly, and other vulnerable communities. Billed electricity usage decreases in periods of warmer weather while ice storms can cause severe damage to Entergy's transmission and distribution infrastructure.						is plausible that financial implications are similar to those experienced in 2012, an \$80 million decrease in net revenue due to effect of milder weather (and other weather-related factors) on sales volumes. In 2012, Entergy Arkansas suffered ~\$55-65 million in infrastructure damage associated with an ice storm. The increase in extreme heat is a large financial	emergency preparedness; these methods reduce the likelihood and magnitude of risks now and into the longer term, >10 years. 2014 Case studies: 1. Entergy updated its Louisiana and Gulf States Integrated Resource Plan in 2014. The company examined four scenarios during this process in order to assess alternative electric generation portfolio strategies. 2. We raised \$ 2.3 million in customer bill payment assistance funds from customers, employees and shareholders, which help our low-income customers, pay their energy bills and protect our revenue stream. We introduced a new e-newsletter for community advocates in 2014, which provides news on the Low Income Home Energy Assistance Program, the earned income tax credit and other programs that provide assistance to low-income customers and lower our financial risk of non-payment. 3. DSM: In 2014 Entergy conducted more than 30 energy efficiency and DSM programs or pilots across four states.	four states, Entergy invested \$252.8 million from 2002 to 2014 to deliver approximately 350 MW of load reduction and more than 982,000 MW hours of annual energy savings. Currently, more than 30 energy efficiency and DSM programs are underway. 2. Existing staff time, \$0 additional cost, raised \$2.3 million in customer bill payment assistance funds. 3. An

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
							impact on low income families.		estimated ~\$100 -200 thousand for Integrated Resource Planning; staff time for emergency planning and managing restoration are embedded in many existing departments including working with the Public Service Commission on restoration funding.
Uncertainty of physical risks	Uncertainty regarding physical risks creates uncertainty in Entergy's resource planning. As the region adapts to climate risk, population density and location will shift, impacting Entergy's	Increased operational cost	Up to 1 year	Direct	More likely than not	Medium-high	Entergy undergoes an extensive resource planning exercise on a regular, periodic basis. This	Key uncertainties regarding physical risks include the ultimate impact of climate change, the cost and effectiveness of mitigation/adaptation measures and the ability to gain alignment and overcome obstacles. Entergy is addressing these uncertainty factors through	In the near term, we have attractive, cost-effective actions that can increase resiliency, assist the

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	resource planning. The time horizon for this planning is 30+ years - uncertainty regarding population density and location causes uncertainty in our modelling.						plan includes inputs on plant retirements, new builds, uprates and resource requirement scenarios. Uncertainty regarding population density, growth and location create uncertainty in Entergy's resource planning. The time horizon for this planning is 30+ years - uncertainty regarding these factors causes uncertainty in our modelling, making the financial	meaningful stakeholder engagement - this will help us move closer toward consensus on the need for action and alignment on the measures to employ. These methods reduce the likelihood and magnitude of the risks now and into the longer term, >10 years, through prioritization of investments to complement what others are doing in order to build greater resilience. 2014 Case studies: 1. Entergy updated its Louisiana and Gulf States Integrated Resource Plan in 2014. The company examined four scenarios during this process in order to assess alternative electric generation portfolio strategies. 2. Entergy participated in the Rising Seas Conference, 9/2014, to discuss material physical risks associated with climate change. The company also engaged with communities and customers to prioritize investments to complement what others are doing in order to build resilience and minimize business interruption losses. 3. The Gulf Coast Adaptation Study identified \$50 billion in investments over the next 20 years that avert \$135 billion in	growth of our economy and restore our environment . Examples include improved building codes, wetland restoration and stronger levee systems. The Gulf Coast Adaptation Study has identified \$49 billion in investments over the next 20 years that will cost-effectively avert \$137 billion in losses over the lifetime of the measures.

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
							implications difficult to quantify	losses over the lifetime of the measures. Entergy continues to work with numerous agencies to advance community planning for resilience.	

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	Entergy's may experience a negative perception by its customers and suppliers around its carbon performance and/or ability to provide reliable service in the face of extreme	Reduced stock price (market valuation)	1 to 3 years	Direct	Likely	Medium	Financial implications of this risk include loss of goodwill and negative publicity. Both of these factors can result in an impact on the company's stock price	One of the company's long-term aspirations is to contribute to a society that is healthy, educated and productive. Toward that end, Entergy's position includes the concept of a portion of the revenue generated from a carbon fee being used to address the regressive effects of a carbon tax on low- and moderate-income households. Any legislation dealing with carbon control must address the regressive nature of the costs. 2014 Case Studies: 1. We raised \$ 2.3 million in customer bill payment assistance	Costs are in staff time, est. 5 FTEs, \$375 k/yr. Est. \$1 billion in storm hardening '08 – '14. Entergy funded the \$4.2 million Gulf Coast Adaptation Study that identified \$49 billion in

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	weather events.						and overall valuation. Entergy has long been recognized as being a good corporate citizen. Entergy's success is linked inextricably to the success of the communities it serves. We live and work in the communities we serve; therefore, the company's reputation is an important asset.	funds from customers, employees and shareholders, which help our low-income customers, pay their energy bills and protect our revenue stream. We introduced a new e-newsletter for community advocates in 2014, which provides news on the Low Income Home Energy Assistance Program, the earned income tax credit and other programs that provide assistance to low-income customers and lower our financial risk of non-payment. 2. The Gulf Coast Adaptation Study identified \$50 billion in investments over the next 20 years that avert \$135 billion in losses over the lifetime of the measures. Entergy continues to work with numerous agencies to advance community planning for resilience. 3. Entergy invested in new, more resilient transmission and substation infrastructure to improve service reliability to vital Gulf Coast economic assets. (see http://transmission.wpengine.com/)	investments over 20 years that will avert \$137 billion in losses; and contributed \$200K to America's Wetland Foundation for 11 BRRC Leadership Forums. During '12, Entergy held two Technical Conferences with customers discussing the benefits of an additional \$321 million in T&D hardening over the next 10 years. Existing staff perform regulatory monitoring and

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
									advocacy at \$0 additional cost per year.
Induced changes in human and cultural environment	<p>Entergy's customers may migrate out of the region due in part to physical climate impacts resulting in reduced revenue from loss of electricity sales. Changes to the coastline of Louisiana and Texas will cause changes in the rich cultural resources of the area. The Acadian French, Native American and other cultures in</p>	Wider social disadvantages	Up to 1 year	Indirect (Client)	Likely	Medium	<p>Lost revenue from lower electricity sales, potential loss of customers, and possible increased financial assistance to low-income customers; possibly similar to 2005 loss of revenue and number of customers due to Hurricanes Katrina, Rita; ~ 40 – 60,000 customers with annual revenues of ~\$30-60 million.</p>	<p>Entergy is managing this risk by actively advocating for action at the federal, state and local level to limit GHG emissions economy-wide in a way that also provides protection for low-income individuals and for continued support for LIHEAP. The company is partnering with communities on economic development, supporting multiple lines of defense investments including wetlands restoration, barrier island restoration and levees for greater resilience, collaborating with our customers to learn how to prioritize our infrastructure investments in ways that align with the actions they are taking, partnering with communities and customers to build resilient communities and supporting charitable organizations. In 2013, we worked with local and state developmental agencies to help attract new businesses to our communities resulting in approximately \$65 billion of proposed industrial investment in the Gulf South Region resulting in</p>	<p>Costs include staff time and 70,000 hours volunteer time, \$0 incremental cost; corporate philanthropy invested \$5.1 million on community improvement and \$4.6 million for poverty solutions. Entergy donated \$16 million in 2014 to non profit groups to help rebuild the physical and cultural resources in communities. Entergy worked with partners to</p>

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	South Louisiana are at risk and are already being impacted by coastal erosion, subsidence and sea level rise.						Entergy Louisiana estimated lost revenues at ~ \$39 million; Entergy New Orleans experienced a revenue variance of - \$59 million due to a decrease in electricity usage.	community investment and job creation; facilitating increased government assistance for low-income customer assistance.	provide tax assistance that returned \$35 million in Earned Income Tax Credits (EITC and advocated for LIHEAP funds that contributed \$84 million.)
Fluctuating socio-economic conditions	Entergy's customers may experience negative changes in social and economic prosperity on a regional scale in response to regulatory or physical climate impacts, these	Wider social disadvantages	1 to 3 years	Indirect (Client)	More likely than not	Medium	Lost revenue from lower electricity sales, potential loss of customers, and possible increased financial assistance to low-income customers; possibly similar to	Entergy is managing this risk by actively advocating for action at the federal, state and local level to limit GHG emissions economy-wide in a way that also provides protection for low-income individuals and for continued support for LIHEAP. The company is partnering with communities on economic development, supporting multiple lines of defense investments including wetlands restoration, barrier island restoration and levees for greater resilience, collaborating with our customers to learn how to prioritize our	Costs include staff time and 70,000 hours volunteer time, \$0 incremental cost; corporate philanthropy invested \$5.1 million on community improvement and \$4.6 million for poverty solutions.

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	negative changes that may result in a loss of revenue to Entergy due to lower electricity sales. Many of the coastal communities that we serve depend the productivity of local environments , such as fisheries, for their economic livelihood – the productivity of these resources may be affected by climate change. In addition, all four states served by the Entergy utility operating companies rank among						2005 loss of revenue and number of customers due to Hurricanes Katrina, Rita; ~ 40 – 60,000 customers with annual revenues of ~\$30-60 million. Entergy Louisiana estimated lost revenues at ~ \$39 million; Entergy New Orleans experienced a revenue variance of - \$59 million due to a decrease in electricity usage.	infrastructure investments in ways that align with the actions they are taking, partnering with communities and customers to build resilient communities and supporting charitable organizations. In 2014, we worked with local and state developmental agencies to help attract new businesses to our communities resulting in approximately \$65 billion of proposed industrial investment in the Gulf South Region resulting in community investment and job creation; facilitating increased government assistance for low-income customer assistance.	Entergy donated \$16 million in 2014 to non profit groups to help rebuild the physical and cultural resources in communities. Entergy worked with partners to provide tax assistance that returned \$35 million in Earned Income Tax Credits (EITC and advocated for LIHEAP funds that contributed \$84 million.)

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	the top 10 states with the highest poverty rates. Roughly 25 percent of Entergy's 2.4 million residential customers require government assistance to meet their basic daily needs. In addition, the suffering and devastation in the Gulf Coast region								
Increasing humanitarian demands	Entergy customers are being affected by physical climate impacts and these may increase in the future leading to increased humanitarian demands on	Wider social disadvantages	1 to 3 years	Indirect (Client)	More likely than not	Medium	Lost revenue from lower electricity sales, potential loss of customers, and possible increased financial assistance to low-income	Entergy is managing this risk by actively advocating for action at the federal, state and local level to limit GHG emissions economy-wide in a way that also provides protection for low-income individuals and for continued support for LIHEAP. The company is partnering with communities on economic development, supporting multiple lines of defense investments including wetlands restoration, barrier island restoration and	Costs include staff time and 70,000 hours volunteer time, \$0 incremental cost; corporate philanthropy invested \$5.1 million on community improvement and \$4.6

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	the company. Unless low-lying coastal areas begin to adapt to changes already occurring along the Gulf Coast, increased frequency of extreme precipitation, heat events and tropical cyclones will result in increased humanitarian demands.						customers; possibly similar to 2005 loss of revenue and number of customers due to Hurricanes Katrina, Rita; ~ 40 – 60,000 customers with annual revenues of ~\$30-60 million. Entergy Louisiana estimated lost revenues at ~ \$39 million; Entergy New Orleans experienced a revenue variance of - \$59 million due to a decrease in electricity usage.	levees for greater resilience, collaborating with our customers to learn how to prioritize our infrastructure investments in ways that align with the actions they are taking, partnering with communities and customers to build resilient communities and supporting charitable organizations. In 2014, we continued to work with local and state developmental agencies to help attract new businesses to our communities in the Gulf South Region - increased economic activity results in community investment and job creation; facilitating increased government assistance for low-income customer assistance.	million for poverty solutions. Entergy donated \$16 million in 2014 to non profit groups to help rebuild the physical and cultural resources in communities. Entergy worked with partners to provide tax assistance that returned \$35 million in Earned Income Tax Credits (EITC and advocated for LIHEAP funds that contributed \$84 million.)

CC5.1d

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

CC5.1e

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

CC5.1f

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

Further Information

"Investing in Resiliency - By Land, Sea and Air: Rebuilding Transmission in Louisiana's Wetlands" <http://transmission.wpengine.com/> "Gulf Coast Adaptation Study" http://www.entergy.com/content/our_community/environment/GulfCoastAdaptation/report.pdf "Blue Ribbon Resilient Community Leadership Forums" http://www.futureofthegulfcoast.org/page.php?page_ID=2 "Carbon Credits Create Economic Incentives for Restoring Coastline" <http://www.entergynewsroom.com/blog/carbon-credits-create-economic-incentives-for-restoring-coastline/> "Preparing for Hurricane Season" <http://www.entergynewsroom.com/latest-news/entergy-texas-inc-prepares-hurricane-season/> "Keep Cool This Summer with Entergy Hot Weather Tips" <http://www.entergynewsroom.com/latest-news/keep-your-cool-this-summer-entergy-mississippihot-weather-tips/>

Attachments

[https://www.cdp.net/sites/2015/53/5653/Climate Change 2015/Shared Documents/Attachments/ClimateChange2015/CC5.ClimateChangeRisks/2014_Entergy_Form_10K.pdf](https://www.cdp.net/sites/2015/53/5653/Climate%20Change%202015/Shared%20Documents/Attachments/ClimateChange2015/CC5.ClimateChangeRisks/2014_Entergy_Form_10K.pdf)
[https://www.cdp.net/sites/2015/53/5653/Climate Change 2015/Shared Documents/Attachments/ClimateChange2015/CC5.ClimateChangeRisks/JeffWilliamsforRisingSeasNYC092414.pptx](https://www.cdp.net/sites/2015/53/5653/Climate%20Change%202015/Shared%20Documents/Attachments/ClimateChange2015/CC5.ClimateChangeRisks/JeffWilliamsforRisingSeasNYC092414.pptx)
[https://www.cdp.net/sites/2015/53/5653/Climate Change 2015/Shared Documents/Attachments/ClimateChange2015/CC5.ClimateChangeRisks/Entergy Corporate_CO2_POV_2015.pdf](https://www.cdp.net/sites/2015/53/5653/Climate%20Change%202015/Shared%20Documents/Attachments/ClimateChange2015/CC5.ClimateChangeRisks/Entergy%20Corporate_CO2_POV_2015.pdf)
[https://www.cdp.net/sites/2015/53/5653/Climate Change 2015/Shared Documents/Attachments/ClimateChange2015/CC5.ClimateChangeRisks/ENO_2015_IRP_Renewable_Technology_Assessment_5Sep14.pdf](https://www.cdp.net/sites/2015/53/5653/Climate%20Change%202015/Shared%20Documents/Attachments/ClimateChange2015/CC5.ClimateChangeRisks/ENO_2015_IRP_Renewable_Technology_Assessment_5Sep14.pdf)
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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
International	Nations are	Increased	>6 years	Direct	More	Medium-	Entergy ranks in	The methods that	Costs associated

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
al agreement s	now working toward a new international agreement to be agreed in Paris in December 2015. The United States' intended contribution to this agreement is an economy-wide target of reducing its greenhouse gas emissions by 26-28 percent below its 2005 level in 2025 and to make best efforts to reduce its emissions by 28 percent . This intended agreement, if ratified by congress may increase demand for cleaner, low-emitting electric	demand for existing products/services			likely than not	high	the top quintile for the lowest CO2 emission rates when compared to the 100 largest electric generating companies in the U.S. in a recently released benchmarking report. The potential financial impact in a scenario when a price on CO2 starts in 2018 at \$25.41/U.S. ton (2012-2031) levelized cost in 2011\$ of \$16.65/U.S. ton) would be ~\$500 mm/yr. in CO2 costs/yr. (~ 47% lower) vs the national average estimated at ~ \$850 mm/yr. for a generation fleet of the same size.	Entergy used in 2014 to access this opportunity include: integrated resource planning, portfolio management, purchase power agreements, maintaining the nuclear option, demand side management (DSM), participation in the Midcontinent Independent System Operator (MISO), voluntary GHG stabilization commitments, and hedging to mitigate market risks; maintaining a portfolio of nearly 4 million tons of carbon credits. These methods reduce both the likelihood and magnitude of the opportunity occurring 2014-2031 by informing Entergy's planning, rate negotiations, pace of electric	with some management methods include: 1) Ninemile 6 is a 560 MW unit that is expected to cost approximately \$655 million to construct when spending is complete, excluding interconnection and transmission upgrades. 2) In December 2014, Entergy Arkansas, Entergy Gulf States Louisiana, and Entergy Texas entered into an asset purchase agreement to acquire the Union Power Station, a 1,980 MW power generation facility located near El Dorado, Arkansas. The base purchase price is expected to be approximately \$948 million (approximately \$237 million for each power block)

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>generation. Entergy continues to support national legislation that would increase planning certainty for electric utilities while addressing carbon dioxide emissions in a responsible and flexible manner. Entergy is well positioned to benefit from a carbon constrained environment. Over the past 12 years, Entergy's Utility Companies and Entergy Wholesale Commodities (EWC) have invested capital adding</p>							<p>generation portfolio management and by avoiding/reducing CO2 emissions. 2014 Case studies: 1. Portfolio mgmt. - Our Ninemile 6 electric generation plant was assessed for future cost of carbon prior to investment approval and placed into service in 2014. We reached agreement to acquire Union Power Station. Both are clean, fuel-efficient natural gas-fired resources that enable Entergy to reduce utilization/deactivate less efficient electric generation units. 2. MISO: Entergy completed its 1st year in MISO, achieved increased transmission efficiency, greater reliability, fuel and</p>	subject to adjustments.

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>approximately 4,458 megawatts of clean, highly efficient combined cycle natural gas generation (CCGT) and 700 megawatts of non-emitting nuclear generation through capacity increases of existing plants. This has allowed the retirement or reduced use of 4,000 MWs of older, less efficient legacy gas steam units. These investments in clean energy capacity have resulted in a 30% reduction in absolute CO2</p>							<p>customer savings.</p> <p>3. Voluntary CO2 target: Entergy set a voluntary CO2 emissions limit from generation and controlled purchases at 20 percent below 2000 levels through 2020. Through year-end 2014, cumulative emissions from 2001 are 9.1 percent below our cumulative 2001-2014 target.</p>	

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	emissions since 2000 and a 46% reduction in CO2 emission rates. These reductions in absolute CO2 emissions were accomplished during a period where Entergy's annual electric generation grew by 29%.								
Air pollution limits	In 2014 EPA proposed a Clean Power Plan to cut carbon emissions from existing power plants by 30% from 2005 levels. The Clean Power Plan would establish different target emission	Increased stock price (market valuation)	Up to 1 year	Direct	Very likely	Medium-high	Entergy ranks in the top quintile for the lowest CO2 emission rates when compared to the 100 largest electric generating companies in the U.S. in a recently released benchmarking report. The potential financial impact	The methods that Entergy used to assess this opportunity include: integrated resource planning, portfolio management, maintaining the nuclear option, participation in MISO, voluntary GHG stabilization commitments. Entergy is also actively engaged in the rulemaking	Costs associated with some of Entergy's 2014 management methods: 1. Manpower cost associated with monitoring legislative/regulatory potential operational and cost implications . 2. Entergy has invested a total of \$252.8 million from 2002 to 2014 to deliver

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>rates (lbs of CO₂ per megawatt-hour) for each state due to regional variations in generation mix and electricity consumption, but overall is projected to achieve a 30 percent cut from 2005 emissions by 2030, with an interim target of 25 percent on average between 2020 and 2029. Entergy's recent investments in CCGT and nuclear uprates result in top quintile, low CO₂ emission rates (compared to the largest 100 electric</p>						<p>in a scenario when a price on CO₂ starts in 2018 at \$25.41/U.S. ton (2012-2031) levelized cost in 2011\$ of \$16.65/U.S. ton) would be ~\$500 mm/yr. in CO₂ costs/yr. (~ 47% lower) vs the national average estimated at ~ \$850 mm/yr. for a generation fleet of the same size.</p>	<p>process, having submitted comments to the EPA in December 2014. These methods/activities reduce both the likelihood and magnitude of the opportunity occurring 2014-2031 by informing Entergy's planning, rate negotiation process, pace of electric generation portfolio management as well as avoiding/reducing CO₂ emissions. 2014 Case studies: 1. Portfolio mgmt. Our Ninemile 6 electric generation plant was assessed for future cost of carbon prior to investment approval and placed into service in 2014. We reached agreement to acquire Union Power Station. Both are clean,</p>	<p>approximately 350 MW of load reduction and more than 982,000 MW hours of annual energy savings; > 30 energy efficiency and DSM programs are underway. 3. Ninemile 6 is a 560 MW unit that is expected to cost approximately \$655 million to construct when spending is complete, excluding interconnection and transmission upgrades. 4. In 2014, Entergy Arkansas, Entergy Gulf States Louisiana, and Entergy Texas entered into an asset purchase agreement to acquire the Union Power Station, a 1,980 MW power generation facility. The base purchase price is</p>

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>generators in the US) therefore the company may have an advantage under a regulatory scenario for greenhouse gases. Entergy is the nation's 7th largest generator of electricity yet the company's emission rate is below average for SO2 & NOx and significantly below average for CO2. The company has made continuous improvement in emission rates since 2000 and by growing its CCGT capacity will</p>							<p>fuel-efficient natural gas-fired resources that enable Entergy to reduce utilization/deactivate higher emitting generation units. 2. MISO: Entergy completed its 1st year in MISO, achieved increased transmission efficiency, greater reliability, fuel and customer savings. 3. CO2 target: Entergy set a voluntary CO2 emissions limit from generation/controlled purchases at 20 percent below 2000 levels through 2020. At year-end 2014, cumulative emissions from 2001 are 9.1% below our cumulative 2001-2014 target. 4. DSM: In 2014 Entergy conducted more than 30</p>	<p>expected to be approximately \$948 million (approximately \$237 million for each power block) subject to adjustments.</p>

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	have much lower emission rates by 2020. Entergy's goal is to grow its CCGT capacity 33% by 2020. While Entergy has long advocated for action on climate change, regulation of carbon dioxide through the Clean Air Act or Clean Power Plant, as proposed, is not the most efficient or cost-effective method.							energy efficiency and DSM programs or pilots across four states.	
Cap and trade schemes	Entergy believes that a cap and trade scheme or a carbon fee/tax will be	Increased stock price (market valuation)	>6 years	Direct	Unlikely	Medium-high	Entergy updated its Louisiana and Gulf States Integrated Resource Plan in 2014. The	The methods that Entergy used in 2014 to manage this opportunity include: integrated resource planning,	Costs associated with some of Entergy's 2014 management methods: 1. Manpower cost

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	the ultimate outcome for controlling carbon in the U.S. Currently, Entergy is advocating an economy-wide carbon fee/tax at the federal level. A number of proposals have been considered by Congress and the Administration. One fee rising at a predictable rate over decades would motivate investment in the most promising solutions and reduce carbon emissions. Entergy's electric generation portfolio						company examined four scenarios during this process in order to assess alternative electric generation portfolio strategies. The sensitivity analysis for each of the four scenarios considered the implementation of a CO2 cap and trade or other regulatory program. CO2 costs (\$/short ton) ranged from \$6.70 to \$14.32 (both levelized in 2013\$) and the scenarios evaluated the cap and trade programs starting in 2023.	portfolio management, maintaining the nuclear option, participation in MISO, voluntary GHG stabilization commitments. Entergy is also actively engaged in the rulemaking process, having submitted comments to the EPA in December 2014 . These methods/activities reduce both the likelihood and magnitude of the opportunity occurring 2014-2031 by informing Entergy's planning, rate negotiation process, pace of electric generation portfolio management as well as avoiding/reducing CO2 emissions. 2014 Case studies: 1. Portfolio mgmt. Our Ninemile 6 electric generation plant was	associated with monitoring legislative/regulatory potential operational and cost implications . 2. Entergy has invested a total of \$252.8 million from 2002 to 2014 to deliver approximately 350 MW of load reduction and more than 982,000 MW hours of annual energy savings; > 30 energy efficiency and DSM programs are underway. 3. Ninemile 6 is a 560 MW unit that is expected to cost approximately \$655 million to construct when spending is complete, excluding interconnection and transmission upgrades. 4. In 2014, Entergy Arkansas, Entergy Gulf States

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	management strategy anticipated carbon regulation. The company now only operates clean CCGT or non-CO2 emitting nuclear generation in the US states currently operating under the RGGI cap and trade scheme. In the Northeast U.S. an economic incentive for low or non-emitting generation tends to make these assets more profitable. Five of our six plants in this region will not require CO2 emission allowances,							assessed for future cost of carbon prior to investment approval and placed into service in 2014. We reached agreement to acquire Union Power Station. Both are clean, fuel-efficient natural gas-fired resources that enable Entergy to reduce utilization/deactivate higher emitting generation units. 2. MISO: Entergy completed its 1st year in MISO, achieved increased transmission efficiency, greater reliability, fuel and customer savings. 3. CO2 target: Entergy set a voluntary CO2 emissions limit from generation/controlled purchases at 20 percent below 2000 levels	Louisiana, and Entergy Texas entered into an asset purchase agreement to acquire the Union Power Station, a 1,980 MW power generation facility. The base purchase price is expected to be approximately \$948 million (approximately \$237 million for each power block) subject to adjustments.

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	and our natural gas CCGT plant is low-emitting when compared to the national average. Even though a national cap and trade system is now unlikely in the US in the next five years, Entergy believes that either this type of scheme or a carbon tax will be the ultimate and most economically efficient mechanism for controlling carbon in the US. There are a number of legislative and regulatory initiatives concerning							through 2020. At year-end 2014, cumulative emissions from 2001 are 9.1% below our cumulative 2001-2014 target. 3. DSM: In 2014 Entergy conducted more than 30 energy efficiency programs or pilots across four states.	

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>air emission that are under consideration at the federal, state, and local level. Because of the nature of Entergy's business, the imposition of any of these initiatives could affect Entergy's operations. Entergy continues to monitor these initiatives and activities in order to analyze their potential operational and cost implications. These initiatives include: new legislation or regulations applicable to stationary sources could take the form of market-</p>								

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	based cap-and-trade programs, direct requirements for the installation of air emission controls onto air emission sources, or other or combined regulatory programs; implementation of the Regional Greenhouse Gas Initiative by several states in the north-eastern United States and similar actions in other regions of the United States.								
Product efficiency regulations and standards	Entergy earns a financial incentive for achieving its energy efficiency / demand side	New products/business services	3 to 6 years	Indirect (Client)	Virtually certain	Medium-high	In 2014, Entergy established DSM programs in all of its service territories. The company	The methods that Entergy uses to access this opportunity includes an issues management process to track	Across its six regulated utilities that operate in four states, Entergy has invested a total of \$252.8 million

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	management (EE/DSM) goals and targets across all of our operating companies. The Public Service Commissions allow recovery of DSM and EE investments. While this does reduce demand for electricity (thereby reducing revenue), Entergy is building capacity to operate profitably in an economy where energy efficiency may become mainstream and may benefit commercially by offering energy efficiency						provides DSM services to its residential, commercial and industrial customers. Entergy's business units are eligible for financial incentives for meeting energy efficiency/demand side management goals based on the net benefits achieved; example incentives range from \$1 - \$2 million per year per operating company; approximately \$6 million in 2014 .	and influence the development of regulations, integration of energy efficiency and demand side management into integrated resource planning (IRP), participating in the Midcontinent Independent System Operator (MISO), and implementing energy efficiency and demand response programs in each of its utility operating companies that include recovery mechanisms and developing market opportunities. These methods reduce both the likelihood and magnitude of the opportunity occurring 2014-2031 by informing Entergy's planning, negotiation of cost recovery mechanisms and	from 2002 to 2014 to deliver approximately 350 MW of load reduction and more than 982,000 megawatt hours (MWh) of annual energy savings. Currently, more than 30 energy efficiency and DSM programs are underway across four states.

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>services to residential, industrial or commercial markets. In addition, DSM and EE programs allow Entergy to avoid or defer investments in new capacity to meet customer demand and are part of the company's Integrated Resource Plans. Entergy does not advocate wasteful use of energy by our customers. Entergy strongly advocates the efficient use of electricity and understands that this is a technology</p>							<p>market development activities. 2014 Case studies: 1. Entergy utilities are committed to pursuing cost-effective energy efficiency and DSM programs; the plan includes 990 MW of peak load reduction through 2031. The DSM programs are generally on track to meet long-term goals. The level of energy efficiency and DSM load reductions that the utilities ultimately achieve, however, depends on the level that the utilities' retail regulators agree should be deployed. Additionally, implementation of the programs must be accompanied by reasonable cost recovery mechanisms. 2. Entergy's</p>	

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	that can be cost effectively deployed today to reduce GHG emissions economy-wide. Entergy's efforts in EE/DSM have also led to reputation benefits. The U.S. Environmental Protection Agency recognized Entergy Texas, Inc. with a 2014 ENERGY STAR Partner of the Year — Sustained Excellence Award for continued leadership in protecting our environment through superior energy efficiency.							participation in MISO enables the company to utilize demand response resources that reduce the amount of load that would need to be served by higher cost resources.	

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>The U.S. Environmental Protection Agency also named Entergy New Orleans, Inc. a 2014 ENERGY STAR Partner of the Year Award recipient for outstanding contributions to reducing greenhouse gas emissions by providing energy efficiency education and programs to its customers. In addition, in 2014 Entergy completed its first full year of operation in Midcontinent Independent System Operator (MISO).</p>								

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>MISO enables greater transmission efficiency and reliability, has saved Entergy fuel costs and played a role in lowering our greenhouse gas emissions. Entergy's customers also realized savings, thus validating our decision to make that move and our regulators' decisions to approve it. Although the numbers are still estimates, it now appears that customers across all our utilities will in fact realize significantly</p>								

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	more MISO-driven savings than we had originally expected.								
Voluntary agreements	<p>Entergy has voluntarily committed to reduce its GHG emissions for the last decade resulting in the company being positioned in the top quintile of low CO2 emission rates among the largest 100 electric utilities in the US. The know-how developed from this achievement can be used to develop tools, products and services that</p>	Increased stock price (market valuation)	Up to 1 year	Indirect (Client)	Very likely	Medium-high	<p>Entergy ranks in the top quintile for the lowest CO2 emission rates when compared to the 100 largest electric generating companies in the U.S. in a recently released benchmarking report. The potential financial impact in a scenario when a price on CO2 starts in 2018 at \$25.41/U.S. ton (2012-2031) levelized cost in 2011\$ of \$16.65/U.S. ton) would be ~\$500 mm/yr. in CO2 costs/yr. (~ 47% lower) vs the</p>	<p>The methods that Entergy used to assess this opportunity include: integrated resource planning, portfolio management, maintaining the nuclear option, participation in MISO, voluntary GHG stabilization commitments and use of the Entergy Environmental Initiatives fund to improve environmental performance . These methods/activities reduce both the likelihood and magnitude of the opportunity occurring 2014-2031 by informing Entergy's planning, rate negotiation</p>	<p>Costs associated with some of Entergy's 2014 management methods: 1. Entergy has invested a total of \$252.8 million from 2002 to 2014 to deliver approximately 350 MW of load reduction and more than 982,000 MW hours of annual energy savings. 2. Ninemile 6 is a 560 MW unit that is expected to cost approximately \$655 million to construct when spending is complete. 3. In 2014, Entergy Arkansas, Entergy Gulf States Louisiana, and Entergy Texas</p>

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	will help the business and our customers reduce emissions even further. Entergy beat our first commitment (stabilize at 2000 levels through 2005) by 23% and bettered our second commitment (stabilize at 20% below 2000 levels, including controllable purchased power) by 3%, both on a cumulative basis. After successful completion of these commitments, Entergy announced a third voluntary CO2 commitment -						national average estimated at ~ \$850 mm/yr. for a generation fleet of the same size. The company has made continuous improvement in emission rates since 2000 and by growing its CCGT capacity will have much lower emission rates by 2020. Entergy's goal is to grow its CCGT capacity 33% by 2020.	process, pace of electric generation portfolio management as well as avoiding/reducing CO2 emissions. 2014 Case studies: 1. Portfolio mgmt. Our Ninemile 6 electric generation plant was placed into service and we reached agreement to acquire Union Power Station. Both are clean, fuel-efficient natural gas-fired resources that enable Entergy to reduce utilization/deactivate higher emitting generation units. 2. MISO: Entergy completed its 1st year in MISO, achieved increased transmission efficiency, greater reliability, fuel and customer savings. 3. CO2 target: Entergy set a	entered into an asset purchase agreement to acquire the Union Power Station, a 1,980 MW power generation facility. The base purchase price is expected to be approximately \$948 million (approximately \$237 million for each power block) subject to adjustments. 4. Environmental Initiatives Fund (\$33 million+ over the last decade).

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	stabilization at 20% below year 2000 levels through 2020, taking into account all three commitment periods							voluntary CO2 emissions limit from generation/controlled purchases at 20 percent below 2000 levels through 2020. At year-end 2014, cumulative emissions from 2001 are 9.1% below our cumulative 2001-2014 target. 4. DSM: In 2014 Entergy conducted more than 30 energy efficiency and DSM programs or pilots across four states. 5. The Environmental Initiative fund is used to invest in energy efficiency and high quality offset projects.	
Carbon taxes	Entergy ranks in top quintile for lowest CO2 emission rates for all generating	Increased stock price (market valuation)	Up to 1 year	Direct	About as likely as not	Medium-high	Entergy ranks in the top quintile for the lowest CO2 emission rates when compared to the 100 largest	The methods that Entergy used in 2014 to access this opportunity include: integrated resource planning, portfolio	Costs associated with some management methods include: 1) Ninemile 6 is a 560 MW unit that is expected to cost

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	sources, therefore the company may have a competitive advantage under any regulatory scenario that places a price on carbon. Currently, Entergy is advocating an economy-wide carbon fee/tax at the federal level. One fee rising at a predictable rate over decades would motivate investment in the most promising solutions and reduce carbon emissions. Entergy is well positioned to benefit from a carbon						electric generating companies in the U.S. in a recently released benchmarking report. The potential financial impact in a scenario when a price on CO2 starts in 2018 at \$25.41/U.S. ton (2012-2031) levelized cost in 2011\$ of \$16.65/U.S. ton) would be ~\$500 mm/yr. in CO2 costs/yr. (~ 47% lower) vs the national average estimated at ~ \$850 mm/yr. for a generation fleet of the same size.	management, purchase power agreements, maintaining the nuclear option, demand side management (DSM), participation in the Midcontinent Independent System Operator (MISO), voluntary GHG stabilization commitments; maintaining a portfolio of nearly 4 million tons of carbon credits. These methods reduce both the likelihood and magnitude of the opportunity occurring 2014-2031 by informing Entergy's planning, rate negotiations, pace of electric generation portfolio management and by avoiding/reducing CO2 emissions. 2014 Case studies: 1. Portfolio mgmt. - Our Ninemile 6	approximately \$655 million to construct when spending is complete, excluding interconnection and transmission upgrades. 2 In December 2014, Entergy Arkansas, Entergy Gulf States Louisiana, and Entergy Texas entered into an asset purchase agreement to acquire the Union Power Station, a 1,980 MW power generation facility located near El Dorado, Arkansas. The base purchase price is expected to be approximately \$948 million (approximately \$237 million for each power block) subject to adjustments. 3. Environmental Initiatives Fund (\$33 million+ over the last decade).

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	constrained environment. Over the past 12 years, Entergy's Utility Companies and Entergy Wholesale Commodities (EWC) have invested capital adding approximately 4,458 megawatts of clean, highly efficient combined cycle natural gas generation (CCGT) and 700 megawatts of non-emitting nuclear generation through capacity increases of existing plants. This has allowed the retirement or reduced use of 4,000							electric generation plant was placed into service in 2014. We reached agreement to acquire Union Power Station. Both are clean, fuel-efficient natural gas-fired resources that enable Entergy to reduce utilization/deactivate less efficient generation units. 2. MISO: Entergy completed its 1st year in MISO, achieved increased transmission efficiency, greater reliability, fuel and customer savings. 3. Voluntary CO2 target: Entergy set a voluntary CO2 emissions limit from generation and controlled purchases at 20 percent below 2000 levels through 2020. Through year-end 2014, cumulative	

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	MW's of older, less efficient legacy gas steam units. These investments in clean energy capacity have resulted in a 30% reduction in absolute CO2 emissions since 2000 and a 46% reduction in CO2 emission rates. These reductions in absolute CO2 emissions were accomplished during a period where Entergy's annual electric generation grew by 29%.							emissions from 2001 are 9.1 percent below our cumulative 2001-2014 target. 4. The Environmental Initiative fund is used to invest in energy efficiency and high quality offset projects.	
Other regulatory drivers	Entergy's customers are exposed to less risk	Increased stock price (market valuation)	Up to 1 year	Direct	Very likely	Medium-high	Entergy ranks in the top quintile for the lowest CO2 emission	The methods that Entergy used in 2014 to access this opportunity	Costs associated with some management methods include:

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>from higher energy costs because of Entergy's lower exposure to a price on carbon. Additionally, other EPA rules may reduce GHGs as an indirect co-benefit. Entergy's generation portfolio is one of the cleanest in the United States among large electric generators. The company is a strong advocate of regulation of carbon emissions through either a carbon fee/tax, or a cap and trade scheme. Because of this, Entergy stands to</p>						<p>rates when compared to the 100 largest electric generating companies in the U.S. in a recently released benchmarking report. The potential financial impact in a scenario when a price on CO2 starts in 2018 at \$25.41/U.S. ton (2012-2031) levelized cost in 2011\$ of \$16.65/U.S. ton) would be ~\$500 mm/yr. in CO2 costs/yr. (~ 47% lower) vs the national average estimated at ~ \$850 mm/yr. for a generation fleet of the same size.</p>	<p>include: integrated resource planning, portfolio management, purchase power agreements, maintaining the nuclear option, demand side management (DSM), participation in the Midcontinent Independent System Operator (MISO), voluntary GHG stabilization commitments; maintaining a portfolio of nearly 4 million tons of carbon credits. These methods reduce both the likelihood and magnitude of the opportunity occurring 2014-2031 by informing Entergy's planning, rate negotiations, pace of electric generation portfolio management and by avoiding/reducing CO2 emissions.</p>	<p>1) Ninemile 6 is a 560 MW unit that is expected to cost approximately \$655 million, excluding interconnection and transmission upgrades. 2) In December 2014, Entergy Arkansas, Entergy Gulf States Louisiana, and Entergy Texas entered into an asset purchase agreement to acquire the Union Power Station, a 1,980 MW power generation facility located near El Dorado, Arkansas. The base purchase price is expected to be approximately \$948 million (approximately \$237 million for each power block) subject to adjustments. 3) Environmental Initiatives Fund (\$33 million+ over the last decade)</p>

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	benefit from increased investor interest and market valuation in a carbon constrained economy. Entergy is well positioned to benefit from a carbon constrained environment. Over the past 12 years, Entergy's Utility Companies and Entergy Wholesale Commodities (EWC) have invested capital adding approximately 4,458 megawatts of clean, highly efficient combined cycle natural gas generation (CCGT) and							2014 Case studies: 1. Portfolio mgmt. - Our Ninemile 6 electric generation plant was placed into service in 2014. We reached agreement to acquire Union Power Station. Both are clean, fuel-efficient natural gas-fired resources that enable Entergy to reduce utilization/deactivate less efficient generation units. 2. MISO: Entergy completed its 1st year in MISO, achieved increased transmission efficiency, greater reliability, fuel and customer savings. 3. Voluntary CO2 target: Entergy set a voluntary CO2 emissions limit from generation and controlled purchases at 20 percent below 2000 levels	

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>700 megawatts of non-emitting nuclear generation through capacity increases of existing plants. This has allowed the retirement or reduced use of 4,000 MWs of older, less efficient legacy gas steam units. These investments in clean energy capacity have resulted in a 30% reduction in absolute CO2 emissions since 2000 and a 46% reduction in CO2 emission rates. These reductions in absolute CO2 emissions</p>							<p>through 2020. Through year-end 2014, cumulative emissions from 2001 are 9.1 percent below our cumulative 2001-2014 target. 4. The Environmental Initiative fund is used to invest in energy efficiency and high quality offset projects.</p>	

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	were accomplished during a period where Entergy's annual electric generation grew by 29%.								

CC6.1b

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

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Other physical climate opportunities	Adaptation Investments - Entergy, its customers and the Gulf Coast economy stand to benefit from investments in needed infrastructure improvements to build more resilient communities, reduce losses from	Wider social benefits	Up to 1 year	Direct	Very likely	Medium-high	Entergy has the opportunity to protect its Gulf Coast physical infrastructure, valued at \$74 billion, and 2.8 million customers through proactive adaptation steps. Financial implications may	The methods that Entergy uses include partnering with government, business, economic development and scientific research entities to approach environmental adaptation as a	Costs include: 1. Funding America Wetland Foundation study, \$200,000, for research in deltaic wetlands; \$150,000 for a methodology to establish carbon offsets.

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>floods, storm surge and hurricanes and sustain the economic viability of our customer base. A large portion of Entergy's customer base and the majority of its utility infrastructure are in the Gulf Coast region. Coastal Louisiana suffers one of the fastest rates of wetland loss in the world, with restoration costs estimated in the tens to hundreds of billions of dollars. In such a rapidly changing physical environment, industries and communities must be resilient to survive.</p>						<p>be similar to past hurricane restoration costs of \$370 million to \$1.5 billion. Proactive steps identified in the Gulf Coast Adaptation Study, which includes Entergy's coastal service territory, can help protect livelihoods of 12 million people, \$634 billion in annual GDP, and more than \$2 trillion in assets. In particular, the study shows that there is a set of economically attractive measures that Gulf Coast utilities, and Entergy can pursue to increase resilience, that can avert ~\$900 M of annual expected loss in 2030</p>	<p>community-wide strategy, advocating for action, funding research and developing offset protocols and holding technical and community forums. These methods increase the likelihood and magnitude of the opportunity now and into the longer term, 5+ years. Case studies: 1. Entergy funded the America's WETLAND Foundation, the "Gulf Coast Adaptation Study" that shows communities could suffer ~\$350 billion in losses over the next 20 years due to growing environmental risks. The</p>	<p>The "Gulf Coast Adaptation Study" identified \$49 billion in investments that will cost effectively avert \$137 billion in losses over the lifetime of the measures. Entergy identified \$322 million in hardening adaptation investments that achieves \$4.3 to \$5.9 of avoided economic loss from hurricanes, storm surge and flooding for every dollar invested. 2. Upgrading the Golden Meadow-Leeville line near Port Fourchon, a \$75 million</p>

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								<p>study identified \$49 billion in investments that will avert \$137 billion in losses. Entergy also identified \$322 million in hardening investments that achieves \$4.3 to \$5.9 of avoided economic loss.</p> <p>2. Entergy supported development of a carbon offset protocol through the American Carbon Registry and Tierra Resources.</p> <p>3. Entergy participated in the Rising Seas Conference, 9/2014, to discuss material physical risks; the company engaged</p>	<p>project. Employees enhanced resiliency of the nearby Valentine-Clovelly line. The two projects represent an investment of more than \$100 million toward better service reliability and storm hardening for Lafourche Parish. Entergy's Louisiana companies anticipate investing ~\$850 million in transmission projects through 2017 to enhance reliability and expand the system.</p>

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								communities and customers to prioritize investments to complement what others are doing. 4. Entergy has taken a holistic approach to resiliency, funding research, participating in public education efforts, supporting work to rebuild vanishing wetlands, and investing in a more resilient power grid; these efforts are helping protect our customers and jobs in the Port Fourchon region.	
Induced changes in natural resources	Entergy may benefit from the commercialization of carbon offset opportunities for	Wider social benefits	Up to 1 year	Direct	Very likely	Medium	Entergy has the opportunity to protect its Gulf Coast physical infrastructure,	The methods that Entergy uses to manage this opportunity	Costs include: 1. Funding America Wetland Foundation

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	deltaic wetland restoration, this CO2 sequestration opportunities from wetland restoration activity will help protect Entergy facilities and its customer base in the Gulf of Mexico area from the effects of floods, storm surges and hurricanes.						valued at \$74 billion, and 2.8 million customers through proactive adaptation steps. Financial implications may be similar to past hurricane restoration costs of \$370 million to \$1.5 billion. These steps can help protect livelihoods of 12 million people, \$634 billion in annual GDP, and more than \$2 trillion in assets.	include partnering with government, business, economic development and scientific research entities to approach environmental adaptation as a community-wide strategy, advocating for action, funding research and developing offset protocols and holding technical and community outreach forums. These methods increase the likelihood and magnitude of the opportunity now and into the longer term, 5+ years. Case studies: 1. Entergy provided funding for the America's	study, \$200,000, for research in deltaic wetlands; \$150,000 for a methodology to establish carbon offsets. 2. The "Gulf Coast Adaptation Study" identified \$49 billion in investments that will cost effectively avert \$137 billion in losses over the lifetime of the measures. Entergy identified \$322 million in hardening adaptation investments that achieves \$4.3 to \$5.9 of avoided economic loss from hurricanes, storm surge and flooding

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								WETLAND Foundation, the "Gulf Coast Adaptation Study" that shows communities along the Gulf Coast could suffer nearly \$350 billion in direct asset losses over the next 20 years due to growing environmental risks. The study also identified \$49 billion in investments that will cost effectively avert \$137 billion in losses over the lifetime of the measures. Entergy identified \$322 million in hardening adaptation investments that achieves \$4.3 to \$5.9 of avoided	for every dollar invested.

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								economic loss from hurricanes, storm surge and flooding for every dollar invested. 2. Entergy supported development of a carbon offset protocol through the American Carbon Registry and Tierra Resources. These methods increase the likelihood and magnitude of the opportunity now and into the longer term, 5+ years.	
Change in mean (average) temperature	Entergy may increase its electricity sales, and its revenue, due to an increase in mean temperature. The 2014 National Climate	Increased demand for existing products/services	Up to 1 year	Direct	Likely	Medium	Based on the National Climate Assessment, it is plausible that an increase of 4 degrees Celsius in temperature could lead to a 10% increase in	The method that Entergy uses to manage this opportunity is through integrated resource planning	Costs include the planning process which is a function of Entergy's system planning and operations group, are staff

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>Assessment states that cooling degree days could increase by 43% in the southeast by mid-century. It states further that net energy demand is projected to increase, largely due to higher temperatures and increased use of air conditioning. The company's utility business is located in the southern portion of the US, an area prone to warm weather. Changes in mean temperature and changes to severe weather patterns are predicted impacts of climate change. Weather patterns and temperature have a direct impact on electricity usage due to increased use of air conditioning.</p>						<p>residential energy consumption due to increased air conditioning. Entergy Utility net revenue for 2014 contained a volume/weather change from 2013 of \$36 million primarily due to an increase in billed electricity usage; increased volume was partly due to more favourable weather.</p>	<p>assuring it has sufficient generation resources to meet increased demand - the planning process includes load forecasts through 2031. These methods increase the likelihood and magnitude of the opportunity now and into the longer term, 5+ years. 2014 case study: 1. Entergy updated its Integrated Resource Plan (IRP) for Entergy Louisiana and Gulf States in 2014. The IRP examined four scenarios to assess alternative electric generation</p>	<p>time and acquisition of third-party forecasts of various parameters that feed into the load forecasting process. The cost for IRPs range from \$100 - \$200 thousand dollars.</p>

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								portfolio strategies under varying market conditions.	

CC6.1c

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

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
Reputation	Entergy is viewed as a thought leader in the area of climate change and adaptation and the company stands to benefit from its integrated resource planning that incorporates a cost of carbon into its future electric generation strategy. As these issues	Increased stock price (market valuation)	Up to 1 year	Direct	Very likely	Medium-high	We provide customers with low-emission, reliable energy at reasonable cost; superior service; a strict focus on safety; operational excellence and engaged employees. 2014 financial results include: delivering total shareholder return of 44.8 percent, which	The method that Entergy uses to manage this opportunity include providing extensive external reporting benchmarking, participating in the local, regional and national public policy debates and integrated resource planning and engaging regulators and customers to determine the types of products and/or services that may help	Costs include the planning process which is a function of Entergy's system planning and operations group, are staff time and acquisition of third-party forecasts of various parameters that feed into the load forecasting process. The cost for IRPs

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	increase in exposure and importance in the social conscience, Entergy will be viewed as a leader. In addition, Entergy's efforts in energy efficiency and demand side management have led to reputation benefits. The U.S. Environmental Protection Agency recognized Entergy Texas, Inc. with a 2014 ENERGY STAR Partner of the Year — Sustained Excellence Award for continued leadership in protecting our environment through superior energy efficiency. The U.S.						ranked in the top quartile of our peer group; earnings were \$5.22 per share; total operating revenues of \$12,495 million, as stated in our 2014 Integrated Report.	customers use electricity more efficiently as well as appropriate cost-recovery mechanisms. These methods increase the likelihood and magnitude of the opportunity now and into the longer term, 5+ years. 2014 case studies: 1. In 2014, activities that Entergy engaged in included: numerous presentations on its climate change position and thought-leadership work on adaptation, publishing articles on its climate change position our executives engaged directly with policymakers at all levels to influence policy and establish Entergy as a thought leader on the topic of climate change and energy policy. 2. Entergy updated its Integrated Resource Plan (IRP) for Entergy Louisiana and Gulf States in 2014. The IRP examined four	range from \$100 - \$200 thousand dollars.

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	Environmental Protection Agency also named Entergy New Orleans, Inc. a 2014 ENERGY STAR Partner of the Year Award recipient for outstanding contributions to reducing greenhouse gas emissions by providing energy efficiency education and programs to its customers.							scenarios to assess alternative electric generation portfolio strategies under varying market conditions.	
Changing consumer behaviour	Entergy's skills and capabilities in energy efficiency and demand side management may be leveraged with greater recognition and understanding of climate issues. An increasing number of Entergy customers may	Increased stock price (market valuation)	Up to 1 year	Direct	Very likely	Medium-high	We provide customers with low-emission, reliable energy at reasonable cost; superior service; a strict focus on safety; operational excellence and engaged employees. 2014 financial results include: delivering total shareholder	The method that Entergy uses to manage this opportunity include providing extensive external reporting benchmarking, participating in the local, regional and national public policy debates and integrated resource planning and engaging regulators and customers to determine the types of	Across its six regulated utilities that operate in four states, Entergy has invested a total of \$252.8 million from 2002 to 2014 to deliver approximately 350 MW of load reduction and more than 982,000 megawatt hours (MWh) of annual

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>evaluate and take action to reduce their energy/carbon footprint thereby leading to new products and business services. Entergy has extensive experience and has been recognized for its efforts in this area. The U.S. Environmental Protection Agency recognized Entergy Texas, Inc. with a 2014 ENERGY STAR Partner of the Year — Sustained Excellence Award for continued leadership in protecting our environment through superior energy efficiency. The U.S. Environmental Protection</p>						<p>return of 44.8 percent, which ranked in the top quartile of our peer group; earnings were \$5.22 per share; total operating revenues of \$12,495 million, as stated in our 2014 Integrated Report.</p>	<p>products and/or services that may help customers use electricity more efficiently as well as appropriate cost-recovery mechanisms. These methods increase the likelihood and magnitude of the opportunity now and into the longer term, 5+ years. 2014 Case studies: 1. Entergy utilities are committed to pursuing cost-effective energy efficiency and DSM programs; the plan includes 990 MW of peak load reduction through 2031. The DSM programs are generally on track to meet long-term goals. The level of energy efficiency and DSM load reductions that the utilities ultimately achieve, however, depends on the level that the utilities' retail regulators agree should be deployed. Additionally, implementation of the programs must be</p>	<p>energy savings. Currently, more than 30 energy efficiency and DSM programs are underway across four states.</p>

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	Agency also named Entergy New Orleans, Inc. a 2014 ENERGY STAR Partner of the Year Award recipient for outstanding contributions to reducing greenhouse gas emissions by providing energy efficiency education and programs to its customers.							accompanied by reasonable cost recovery mechanisms. 2. Entergy's participation in MISO enables the company to utilize demand response resources that reduce the amount of load that would need to be served by higher cost resources.	
Changing consumer behaviour	Entergy may benefit from increased sales of electricity due to electrification of transportation sector.	Increased stock price (market valuation)	Up to 1 year	Direct	Likely	Low-medium	The financial implications of electric vehicles include increase revenue from additional electricity sales. In 2014, Entergy collected \$9.6 billion of operating revenues from its electric business. Increased electric energy demand due to use of electric	Entergy manages this opportunity through an extensive planning and forecasting effort regarding the market for electric vehicles and through implementing pilot programs. These methods increase the likelihood and magnitude of the opportunity now and into the longer term, 5+ years. Case study: 1. Through Entergy's Environmental Initiatives Fund,	These planning and forecasting activities are performed by existing Entergy functions and using existing external research resources, therefore the incremental costs are \$0 to minimal. The installation of 17 Level 2 Charging Stations cost

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
							vehicles would correlate into increased sales and revenue for the company. In the near term however, increased sales from electric vehicle usage will likely remain less than 1% of total electric energy sales.	Entergy has partnered with Coulomb Technologies to fund the installation of 17 Level 2 charging stations at college campuses in Entergy's service areas. The charging stations will provide real world operational information and consumer behaviour characteristics for EVSE at these locations. This will assist Entergy and the colleges/universities in future deployment of the technology. Entergy fleet management has closely monitored developments in the EV and EV infrastructure market for several years. As a result of this research, both hybrid work trucks and cars have been added to the Entergy fleet and plans are pending for adding additional EVs during upcoming vehicle replacement cycles.	\$170 thousand.

CC6.1d

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

CC6.1e

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

CC6.1f

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

Further Information

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

Page: CC7. Emissions Methodology

CC7.1

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

Scope	Base year	Base year emissions (metric tonnes CO2e)
Scope 1	Sat 01 Jan 2000 - Sun 31 Dec 2000	48260000
Scope 2	Sat 01 Jan 2000 - Sun 31 Dec 2000	788000

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
<input type="checkbox"/> The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)
<input type="checkbox"/> US EPA Climate Leaders: Direct Emissions from Stationary Combustion
<input type="checkbox"/> US EPA Climate Leaders: Indirect Emissions from Purchases/Sales of Electricity and Steam

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

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)
PFCs	IPCC Fourth Assessment Report (AR4 - 100 year)
SF6	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
Anthracite	5675.30	lb CO2 per short ton	EPA Climate Leaders GHG Inventory Protocol, October 2004
Bituminous coal	5086.36	lb CO2 per short ton	EPA Climate Leaders GHG Inventory Protocol, October 2004
Sub bituminous coal	3656.36	lb CO2e per short ton	EPA Climate Leaders GHG Inventory Protocol, October 2004
Lignite	2991.33	lb CO2 per short ton	EPA Climate Leaders GHG Inventory Protocol,

Fuel/Material/Energy	Emission Factor	Unit	Reference
			October 2004
Coke oven coke	5528.31	lb CO2e per short ton	EPA Climate Leaders GHG Inventory Protocol, October 2004
Natural gas	116.41	lb CO2 per million BTU	EPA Climate Leaders GHG Inventory Protocol, October 2004
Jet gasoline	20.88	lb CO2 per gallon	EPA Climate Leaders GHG Inventory Protocol, October 2004
Motor gasoline	19.38	lb CO2 per gallon	EPA Climate Leaders GHG Inventory Protocol, October 2004
Biodiesels	20.48	lb CO2 per gallon	EPA Climate Leaders GHG Inventory Protocol, October 2004
Distillate fuel oil No 2	22.23	lb CO2 per gallon	EPA Climate Leaders GHG Inventory Protocol, October 2004
Landfill gas	114.24	lb CO2 per million BTU	EPA Climate Leaders GHG Inventory Protocol, October 2004

Further Information

EPA revised its GHG Reporting Rule regulations effective January 1, 2014 to update global warming potentials (GWP) to those reported in the IPCC's Fourth Assessment Report (AR4). see <http://www.gpo.gov/fdsys/pkg/FR-2013-11-29/pdf/2013-27996.pdf> For this reason, Entergy GWPs it used in the attached 2014 GHG Inventory to conform to those in the EPA GHG Reporting Rule during 2014. EPA again revised its GHG Reporting Rule regulations effective January 1, 2015 to update global warming potentials (GWP) to those reported in the IPCC's Fifth Assessment Report (AR5). see <http://www.gpo.gov/fdsys/pkg/FR-2014-12-11/pdf/2014-28444.pdf>. For this reason, Entergy will use the updated the AR5 GWPs in the 2015 GHG Inventory to conform to those in the EPA GHG Reporting Rule that became effective Jan 1, 2015. For emission factors and GWPs, please see attached Entergy GHG Inventory 2014, "Emission Factors" page and GWP page respectively.

Attachments

[https://www.cdp.net/sites/2015/53/5653/Climate Change 2015/Shared Documents/Attachments/ClimateChange2015/CC7.EmissionsMethodology/ETR_GHG_Inventory_Mgmt_Plan_2014.pdf](https://www.cdp.net/sites/2015/53/5653/Climate%20Change%202015/Shared%20Documents/Attachments/ClimateChange2015/CC7.EmissionsMethodology/ETR_GHG_Inventory_Mgmt_Plan_2014.pdf)
[https://www.cdp.net/sites/2015/53/5653/Climate Change 2015/Shared Documents/Attachments/ClimateChange2015/CC7.EmissionsMethodology/Entergy_GHG_Inventory_2014.pdf](https://www.cdp.net/sites/2015/53/5653/Climate%20Change%202015/Shared%20Documents/Attachments/ClimateChange2015/CC7.EmissionsMethodology/Entergy_GHG_Inventory_2014.pdf)
[https://www.cdp.net/sites/2015/53/5653/Climate Change 2015/Shared](https://www.cdp.net/sites/2015/53/5653/Climate%20Change%202015/Shared)

Page: CC8. Emissions Data - (1 Jan 2014 - 31 Dec 2014)

CC8.1

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

Equity share

CC8.2

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

34185327

CC8.3

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

286296

CC8.4

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

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 Scope 2 emissions excluded from this source	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%	Metering/ Measurement Constraints	The primary source of data for Scope 1 emissions is the Continuous Emission Monitoring System (CEMS) at Entergy's fossil-fired power plants. Also, transposition errors are possible during development of the GHG Inventory, as this process is not automated. These sources of error are minimized by data quality assurance checks, substantial internal peer review, as well as the third-party verification audit of the data. As part of the independent third-party evaluation of Entergy's 2014 GHG Inventory, a quantitative assessment of uncertainty was conducted in accordance with the ISO Guide of Uncertainty in Measurement (GUM) and the WRI GHG Protocol Guidance on Uncertainty Assessment in GHG inventories, and calculating statistical parameter uncertainty. For Entergy's GHG emissions inventory data collection/monitoring systems, a combination of actual precision and relative accuracy measurements for CEMS monitoring equipment, along with expert judgment on other related GHG emissions inventory quantification methodologies, were utilized as part of this quantitative uncertainty assessment. The results of this quantitative uncertainty assessment of Entergy's 2013 entity-wide GHG emissions inventory indicated an overall uncertainty of approximately +/- 3.8%. Additionally, during 2010, a third-party conducted a CEMS program compliance audit on behalf of Entergy to ensure the program is meeting all regulatory and internal requirements. Entergy has developed a

Scope	Uncertainty range	Main sources of uncertainty	Please expand on the uncertainty in your data
			GHG emissions Inventory Management and Reporting Document (IMPRD). This document (attached) was upgraded during 2011, 2012, 2013, 2014 and 2015 in accordance with ISO 14064-1 and includes all institutional, managerial and technical arrangements made for the collection of data, preparation of the inventory and implementation of steps to manage the quality of the inventory. As part of this upgrade, an assessment and discussion of uncertainty was included. The IMPRD provides a systematic process for ensuring data quality, and identifies areas where investments will likely lead to the greatest improvements in overall inventory quality and uncertainty reduction. The primary objective of the IMPRD is ensuring the credibility of the company's GHG inventory information.
Scope 2	More than 2% but less than or equal to 5%	Metering/ Measurement Constraints	The primary source of data for Scope 2 emissions is Entergy's measurement of line losses and company usage. Entergy uses power that is generated or purchased by the company for supplemental power and at company service and office locations. Additionally, a small percentage of power is consumed on the T&D system through efficiency losses. These Scope 2 emissions are actually accounted for by the additional generation necessary to make up for the loss/usage. Accordingly these line loss emissions, a component of Entergy's Scope 2 emissions are not added to Entergy's overall emissions inventory, as they already are accounted for within Entergy's Scope 1 emissions (for self-generation) and Scope 3 emissions (for purchased power).

CC8.6

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

Third party verification or assurance complete

CC8.6a

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

Type of verification or assurance	Attach the statement	Page/section reference	Relevant standard	Proportion of reported Scope 1 emissions verified (%)
Limited assurance	https://www.cdp.net/sites/2015/53/5653/Climate Change 2015/Shared Documents/Attachments/CC8.6a/ICF_Final_Verification_Report_2014.pdf	5-17	ISO14064-3	95

CC8.6b

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

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

Please indicate the verification/assurance status that applies to your reported Scope 2 emissions

Third party verification or assurance complete

CC8.7a

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

Type of verification or assurance	Attach the statement	Page/Section reference	Relevant standard	Proportion of reported Scope 2 emissions verified (%)
Limited assurance	https://www.cdp.net/sites/2015/53/5653/Climate Change 2015/Shared Documents/Attachments/CC8.7a/ICF_Final_Verification_Report_2014.pdf	5-17	ISO14064-3	95

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	This ISO limited level of assurance verification effort involved the review of the logic and procedures used to compile the emission estimates, determine completeness and accuracy in calculations, and to assess the validity of the inventory design itself. It also focused on a review of the procedures in place and identified any missing or incorrectly calculated values. Emissions data were reviewed at a high level to detect internal inconsistencies, identify outliers and find potential errors in reporting, and included boundaries' completeness checks. Data in supporting spreadsheets and from corporate Entergy databases were also examined under this verification review. A detailed technical review of the methodologies, approaches, and calculations used in Entergy Corporation's inventory estimates was conducted in this verification effort. This was combined with a sampling of data sources used during the compilation of the GHG emissions inventory by Entergy. Documentation was examined, including reviews of disaggregated data, and the audit trail followed below the business entity level to raw data sources for several Entergy power generation units.

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

Attachments

[https://www.cdp.net/sites/2015/53/5653/Climate Change 2015/Shared Documents/Attachments/ClimateChange2015/CC8.EmissionsData\(1Jan2014-31Dec2014\)/Entergy_GHG_Inventory_2014.pdf](https://www.cdp.net/sites/2015/53/5653/Climate%20Change%202015/Shared%20Documents/Attachments/ClimateChange2015/CC8.EmissionsData(1Jan2014-31Dec2014)/Entergy_GHG_Inventory_2014.pdf)
[https://www.cdp.net/sites/2015/53/5653/Climate Change 2015/Shared Documents/Attachments/ClimateChange2015/CC8.EmissionsData\(1Jan2014-31Dec2014\)/ICF_Final_Verification_Report_2014.pdf](https://www.cdp.net/sites/2015/53/5653/Climate%20Change%202015/Shared%20Documents/Attachments/ClimateChange2015/CC8.EmissionsData(1Jan2014-31Dec2014)/ICF_Final_Verification_Report_2014.pdf)
[https://www.cdp.net/sites/2015/53/5653/Climate Change 2015/Shared Documents/Attachments/ClimateChange2015/CC8.EmissionsData\(1Jan2014-31Dec2014\)/ETR_GHG_Inventory_Mgmt_Plan_2014.pdf](https://www.cdp.net/sites/2015/53/5653/Climate%20Change%202015/Shared%20Documents/Attachments/ClimateChange2015/CC8.EmissionsData(1Jan2014-31Dec2014)/ETR_GHG_Inventory_Mgmt_Plan_2014.pdf)

Page: CC9. Scope 1 Emissions Breakdown - (1 Jan 2014 - 31 Dec 2014)

CC9.1

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

No

CC9.1a

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

Country/Region	Scope 1 metric tonnes CO2e

CC9.2

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

☐ By business division
☐ By facility
☐ By GHG type
☐ By activity

CC9.2a

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

Business division	Scope 1 emissions (metric tonnes CO2e)
Electric Generation (includes Fossil Operations and Nuclear)	33607719
Natural Gas and Electric Transmission and Distribution (includes Gas Operations)	519272
Mobile Fleet	52979
Corporate	5357

CC9.2b

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

Facility	Scope 1 emissions (metric tonnes CO2e)	Latitude	Longitude
Acadia	1052295		
Attala	1041503		
Baxter Wilson	30456		
Big Cajun 2	1566683		
Calcasieu	105956		
Gerald Andrus	38436		
Hinds Energy Facility	1045736		
Hot Spring Energy Facility	505019		
Independence	5002635		
Lake Catherine	55927		
Lewis Creek	893196		
Little Gypsy	901120		
Michoud	1163926		
Ninemile Point	2426321		
Ouachita Power	1324385		
Perryville	1294707		
Rhode Island State Energy	640193		
R S Cogen	770157		
R S Nelson	2944703		
Rex Brown	60581		
Sabine	2751134		
Sterlington	7101		
Waterford	781544		
White Bluff	6191704		
Willow Glen	616702		
Small Combustion Sources	395599		
Mobile Combustion	52492		
T&D	421948		
Gas Operations	97324		

Facility	Scope 1 emissions (metric tonnes CO2e)	Latitude	Longitude
Corporate/Offices	5357		

CC9.2c

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

GHG type	Scope 1 emissions (metric tonnes CO2e)
CO2	33561386
CH4	109951
N2O	86683
SF6	421948
HFCs	5357

CC9.2d

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

Activity	Scope 1 emissions (metric tonnes CO2e)
Stationary Combustion	33607717
Mobile Combustion	52979
Fugitive Emissions	524629

CC9.2e

Please break down your total gross global Scope 1 emissions by legal structure

Legal structure	Scope 1 emissions (metric tonnes CO2e)
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Further Information**Attachments**

[https://www.cdp.net/sites/2015/53/5653/Climate Change 2015/Shared Documents/Attachments/ClimateChange2015/CC9.Scope1EmissionsBreakdown\(1Jan2014-31Dec2014\)/Entergy_GHG_Inventory_2014.pdf](https://www.cdp.net/sites/2015/53/5653/Climate%20Change%202015/Shared%20Documents/Attachments/ClimateChange2015/CC9.Scope1EmissionsBreakdown(1Jan2014-31Dec2014)/Entergy_GHG_Inventory_2014.pdf)
[https://www.cdp.net/sites/2015/53/5653/Climate Change 2015/Shared Documents/Attachments/ClimateChange2015/CC9.Scope1EmissionsBreakdown\(1Jan2014-31Dec2014\)/ETR_GHG_Inventory_Mgmt_Plan_2014.pdf](https://www.cdp.net/sites/2015/53/5653/Climate%20Change%202015/Shared%20Documents/Attachments/ClimateChange2015/CC9.Scope1EmissionsBreakdown(1Jan2014-31Dec2014)/ETR_GHG_Inventory_Mgmt_Plan_2014.pdf)
[https://www.cdp.net/sites/2015/53/5653/Climate Change 2015/Shared Documents/Attachments/ClimateChange2015/CC9.Scope1EmissionsBreakdown\(1Jan2014-31Dec2014\)/ICF_Final_Verification_Report_2014.pdf](https://www.cdp.net/sites/2015/53/5653/Climate%20Change%202015/Shared%20Documents/Attachments/ClimateChange2015/CC9.Scope1EmissionsBreakdown(1Jan2014-31Dec2014)/ICF_Final_Verification_Report_2014.pdf)

Page: CC10. Scope 2 Emissions Breakdown - (1 Jan 2014 - 31 Dec 2014)

CC10.1

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

No

CC10.1a

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

Country/Region	Scope 2 metric tonnes CO2e	Purchased and consumed electricity, heat, steam or cooling (MWh)	Purchased and consumed low carbon electricity, heat, steam or cooling accounted for in CC8.3 (MWh)
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CC10.2

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

By business division

CC10.2a

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

Business division	Scope 2 emissions (metric tonnes CO2e)
Utility Ops	286296
Entergy Wholesale Commodities	23764

CC10.2b

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

Facility	Scope 2 emissions (metric tonnes CO2e)

CC10.2c

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

Activity	Scope 2 emissions (metric tonnes CO2e)

CC10.2d

Please break down your total gross global Scope 2 emissions by legal structure

Legal structure	Scope 2 emissions (metric tonnes CO2e)

Further Information

Note regarding Entergy's Scope 2 emissions - Entergy's Utility Scope 2 emissions is from power consumed on Entergy's Utility T&D system and company usage. Emissions from this loss/usage are already accounted for in Entergy's direct emissions (Scope 1) and/or purchased power emissions (Scope 3) since the additional generation required to make up for this loss/usage is accounted for in these categories. Entergy Wholesale Commodities (EWC) Scope 2 emissions is from power purchased from off-site sources and is not included in Entergy's Scope 1 emissions. See Entergy's GHG Inventory, Inventory Management Plan and Reporting Document 2014 (IMPRD) and the ICF Verification Report for additional detail and description of this note.

Attachments

[https://www.cdp.net/sites/2015/53/5653/Climate Change 2015/Shared Documents/Attachments/ClimateChange2015/CC10.Scope2EmissionsBreakdown\(1Jan2014-31Dec2014\)/Entergy_GHG_Inventory_2014.pdf](https://www.cdp.net/sites/2015/53/5653/Climate%20Change%202015/Shared%20Documents/Attachments/ClimateChange2015/CC10.Scope2EmissionsBreakdown(1Jan2014-31Dec2014)/Entergy_GHG_Inventory_2014.pdf)

[https://www.cdp.net/sites/2015/53/5653/Climate Change 2015/Shared Documents/Attachments/ClimateChange2015/CC10.Scope2EmissionsBreakdown\(1Jan2014-31Dec2014\)/ETR_GHG_Inventory_Mgmt_Plan_2014.pdf](https://www.cdp.net/sites/2015/53/5653/Climate%20Change%202015/Shared%20Documents/Attachments/ClimateChange2015/CC10.Scope2EmissionsBreakdown(1Jan2014-31Dec2014)/ETR_GHG_Inventory_Mgmt_Plan_2014.pdf)

[https://www.cdp.net/sites/2015/53/5653/Climate Change 2015/Shared Documents/Attachments/ClimateChange2015/CC10.Scope2EmissionsBreakdown\(1Jan2014-31Dec2014\)/ICF_Final_Verification_Report_2014.pdf](https://www.cdp.net/sites/2015/53/5653/Climate%20Change%202015/Shared%20Documents/Attachments/ClimateChange2015/CC10.Scope2EmissionsBreakdown(1Jan2014-31Dec2014)/ICF_Final_Verification_Report_2014.pdf)

Page: CC11. Energy

CC11.1

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

More than 40% but less than or equal to 45%

CC11.2

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

Energy type	MWh
Fuel	146667785
Electricity	70097
Heat	0
Steam	0
Cooling	0

CC11.3

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

Fuels	MWh
Sub bituminous coal	46102003
Natural gas	100352271
Diesel/Gas oil	190769
Jet gasoline	22742

CC11.4

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

Basis for applying a low carbon emission factor	MWh associated with low carbon electricity, heat, steam or cooling	Comment
No purchases or generation of low carbon electricity, heat, steam or cooling accounted with a low carbon emissions factor	0	Note regarding Entergy's Scope 2 emissions reported in CC 8.3 and CC10.2a are from two sources - 1) Entergy's Utility Scope 2 emissions from power consumed on Entergy's Utility T&D system and company usage. Emissions from this loss/usage are already accounted for in Entergy's direct emissions (Scope 1) and/or purchased power emissions (Scope 3) since the additional generation required to make up for this loss/usage is accounted for in these categories. 2) Entergy Wholesale Commodities (EWC) Scope 2 emissions are from power purchased from the grid from off-site sources and is not included in Entergy's Scope 1 emissions. See Entergy's GHG Inventory, Inventory Management Plan and Reporting Document 2014 (IMPRD) and the ICF Verification Report for additional detail and description of this note.

Further Information

Attachments

[https://www.cdp.net/sites/2015/53/5653/Climate Change 2015/Shared Documents/Attachments/ClimateChange2015/CC11.Energy/Entergy_GHG_Inventory_2014.pdf](https://www.cdp.net/sites/2015/53/5653/Climate%20Change%202015/Shared%20Documents/Attachments/ClimateChange2015/CC11.Energy/Entergy_GHG_Inventory_2014.pdf)
[https://www.cdp.net/sites/2015/53/5653/Climate Change 2015/Shared Documents/Attachments/ClimateChange2015/CC11.Energy/ETR_GHG_Inventory_Mgmt_Plan_2014.pdf](https://www.cdp.net/sites/2015/53/5653/Climate%20Change%202015/Shared%20Documents/Attachments/ClimateChange2015/CC11.Energy/ETR_GHG_Inventory_Mgmt_Plan_2014.pdf)
[https://www.cdp.net/sites/2015/53/5653/Climate Change 2015/Shared Documents/Attachments/ClimateChange2015/CC11.Energy/ICF_Final_Verification_Report_2014.pdf](https://www.cdp.net/sites/2015/53/5653/Climate%20Change%202015/Shared%20Documents/Attachments/ClimateChange2015/CC11.Energy/ICF_Final_Verification_Report_2014.pdf)

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	Comment
Emissions reduction activities	12.4	Decrease	In 2014 emission reduction measures resulted in a 27,651 metric tonne Scope 1 and Scope 2 CO2e reduction (compared to '13) while electric generation increased 8%; emissions reduction measures also resulted in an additional 4,278,816 metric tonnes of avoided CO2e emissions. We arrived at 12.4% by the following formula $(4306467/34716334) \times 100 = 12.4\%$ Scope 1 and 2 GHG emissions decreased 27,651 metric tonnes CO2e in '14 when compared to '13 while Utility billed electric sales increased by 8.6%. Entergy applied emission reduction measures that avoided 4,278,816 metric tonnes of CO2e from what its emissions otherwise would have been. These reductions were 1).5% increase in nuclear capability factor increasing non emitting nuclear production resulting in 134,713 metric tonnes CO2e avoided; 2) In the first full year of MISO operation, a 43% increase in highly efficient combined cycle gas turbine production combined with a 20% decline in generation from older, less efficient Legacy Gas steam electric plants improved overall gas fleet efficiency 10% resulting in 1,830,520 metric tonnes CO2e avoided, 4) Under MISO, a 10% improvement in purchase power CO2 emission intensity resulted in 2,001,134 metric tonnes of CO2e avoided and 5) investments in end use energy efficiency

Reason	Emissions value (percentage)	Direction of change	Comment
			resulting in 312,449 metric tons of CO2e avoided.
Divestment	0	No change	No divestment during 2014
Acquisitions	0	No change	No acquisitions during 2014
Mergers	0	No change	No mergers during 2014
Change in output	5.7	Increase	Billed electric sales for the Utility increased 8.6% while billed sales for Entergy Wholesale Commodities decreased 1.6% for an overall increase in output of 5.7%
Change in methodology	0	Increase	In 2013 Entergy changed its source for global warming potentials (GWP) to those reported in the IPCC AR4. Previously Entergy used GWPs reported in IPCCs SAR. The change in GWPs resulted in ~72,000 metric tons of additional GHG emissions than what would have been reported using the SAR GWPs
Change in boundary	0	No change	No change during 2014
Change in physical operating conditions	0	No change	MISO Operation: In 2014 Entergy completed its first full year of operation under the Midcontinent Independent System Operator that results in more efficient transmission and greater reliability for our customers. The company achieved \$67 million in capacity savings, \$271 million/yr in energy savings and 3.8 million metric tonne/yr reduction in CO2e. These savings were realized by greater utilization of CCGT capacity, lower utilization of less efficient legacy gas capacity which resulted in a 10% improvement in non-base load generation heat rate when compared to 2013.
Unidentified	0	No change	No change in 2014
Other	0	No change	No change in 2014

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	Metric denominator	% change from previous year	Direction of change from previous year	Reason for change
2810.6	metric tonnes CO2e	unit total revenue	8.8	Decrease	In 2014, Entergy's Financial Intensity metric improved by 8.8% compared to 2013 due to emission reduction measures and other factors. Entergy's Scope 1 and 2 GHG emissions declined 0.1% compared to 2013. In addition, Entergy's 2014 Operating Revenues increased 9.7% compared to 2013 due largely to an increase in Utility billed electric sales. The decrease in Scope 1 and 2 GHG emissions combined with the increase in Operating Revenues led to the improvement in this metric.

CC12.3

Please describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tonnes CO2e per full time equivalent (FTE) employee

Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Reason for change
2622.1	metric tonnes CO2e	FTE employee	3.1	Increase	Despite emission reduction activities Entergy's in 2014 Entergy's FTE Intensity metric deteriorated 3.1% because of a human capital initiative. Emission reduction measures resulted in Entergy's Scope 1 and 2 GHG emissions declining 0.1% compared to 2013. However, Entergy reduced its workforce by over 424 during 2014. In spite of a decrease in Scope 1 and 2 GHG emissions, the 3% decrease in FTE employees in 2013 led to the 3.1% increase in this metric.

CC12.4

Please provide an additional intensity (normalized) metric that is appropriate to your business operations

Intensity figure	Metric numerator	Metric denominator	% change from previous year	Direction of change from previous year	Reason for change
0.268	metric tonnes CO2e	megawatt hour (MWh)	2.6	Decrease	In 2014 Entergy's Product Intensity improved 2.6% due to emission reduction measures among other factors. This was brought about by a 0.1% decrease in Scope 1 and 2 GHG emissions compared to 2013 and a 2.5% increase in net generation from Entergy power plants. This continued improvement in production intensity was brought about by a 5% improvement in non-emitting nuclear fleet capability factor, a 42% increase in production from highly efficient combined cycle gas turbines (CCGT) and a 20% reduction in production from less efficient legacy gas units. Additional emissions were avoided through investments in Energy Efficiency and demand reduction investments by the Entergy Utility Companies.

Further Information

See Integrated Report, pg. 47 - 51 for a snapshot of key Entergy metrics. See Entergy Form 10K pg. 54 for Consolidated Income Statement with Operating Revenues. Fleet Transformation: Entergy's is transforming its generation portfolio towards lower-carbon emitting generation. Over the past 12 years, these capital investment efforts have resulted in the addition of 4,458 MW clean, highly efficient natural gasfired combined cycle gas turbine generation capacity, allowing the retirement or reduced utilization of older, less efficient legacy gas steam electric units. In December 2014 Entergy put in service its new 560 MW, natural gas fired Ninemile 6 CCGT. Since 2002, as the result of this investment, the heat rate for Entergy's gas-fired fleet has improved from 11,275 btus/KWh in 2002 to 9,271 btus/KWh in 2014. This is nearly a 18 percent improvement. Looking at 2014, with 35,135 GWh of gasfired generation; heat rate improvement since 2002 realized a 3.8 million metric tonne/yr reduction in CO2 and \$363.7 million/yr savings in fuel cost. MISO Operation: In 2014 Entergy completed its first full year of operation under the Midcontinent Independent System Operator that results in more efficient transmission and greater reliability for our customers. The company achieved \$67 million in capacity savings, \$271 million/yr in energy savings and 3.8 million metric tonne/yr reduction in CO2e. These savings were realized by greater utilization of CCGT capacity, lower utilization of less efficient legacy gas capacity which resulted in a 10% improvement in non-base load generation heat rate when compared to 2013.

Attachments

[https://www.cdp.net/sites/2015/53/5653/Climate Change 2015/Shared Documents/Attachments/ClimateChange2015/CC12.EmissionsPerformance/2014 Entergy Form 10-K.pdf](https://www.cdp.net/sites/2015/53/5653/Climate%20Change%202015/Shared%20Documents/Attachments/ClimateChange2015/CC12.EmissionsPerformance/2014%20Entergy%20Form%2010-K.pdf)

[https://www.cdp.net/sites/2015/53/5653/Climate Change 2015/Shared Documents/Attachments/ClimateChange2015/CC12.EmissionsPerformance/ICF FINAL Verification Report_Entergy 2014.pdf](https://www.cdp.net/sites/2015/53/5653/Climate%20Change%202015/Shared%20Documents/Attachments/ClimateChange2015/CC12.EmissionsPerformance/ICF%20FINAL%20Verification%20Report_Entergy%202014.pdf)
[https://www.cdp.net/sites/2015/53/5653/Climate Change 2015/Shared Documents/Attachments/ClimateChange2015/CC12.EmissionsPerformance/Entergy GHG Inventory 2014 FINAL and VERIFIED 030915 - REDACTED.pdf](https://www.cdp.net/sites/2015/53/5653/Climate%20Change%202015/Shared%20Documents/Attachments/ClimateChange2015/CC12.EmissionsPerformance/Entergy%20GHG%20Inventory%202014%20FINAL%20and%20VERIFIED%20030915%20-%20REDACTED.pdf)
[https://www.cdp.net/sites/2015/53/5653/Climate Change 2015/Shared Documents/Attachments/ClimateChange2015/CC12.EmissionsPerformance/MISO 2015 ValueProposition.pdf](https://www.cdp.net/sites/2015/53/5653/Climate%20Change%202015/Shared%20Documents/Attachments/ClimateChange2015/CC12.EmissionsPerformance/MISO%202015%20ValueProposition.pdf)

Page: CC13. Emissions Trading

CC13.1

Do you participate in any emissions trading schemes?

Yes

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
Regional Greenhouse Gas Initiative	Wed 01 Jan 2014 - Wed 31 Dec 2014	0	614000	640193	Facilities we own but do not operate

CC13.1b

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

Currently, Entergy participates in the RGGI auction to secure carbon allowances necessary to cover the annual carbon emissions of the Rhode Island State Energy Center (RISEC) generation plant. This approach will be employed as long as the RGGI program continues and the State of Rhode Island remains engaged in the program. This plant was purchased by Entergy in December of 2011; allowances were purchased during 2014 (and/or previous years) to cover the plants 640,193 metric tonnes CO2e emissions. Entergy's Wholesale Commodities business is continually monitoring the RGGI auctions and clearing prices. Based on the company's CO2 projections, EWC evaluates a variety of alternatives, including power uprates, acquisition of low-emitting plants (similar to RISEC) and other capital projects for longer term operation of these facilities. Entergy's overall strategy is to be in full compliance with this cap and trade scheme at the lowest cost. To accomplish this, the company works to generate high quality emissions data and seek third-party verification. Entergy is further preparing for emissions trading in a carbon-constrained economy by: 1. Developing our internal capabilities and methodology for carbon accounting by developing an annual GHG inventory (since 2000); 2. Having this inventory verified to international standards (ISO 14064) by a third-party; 3. Developing the company's point of view on CO2 regulation and ensuring this view is integrated into business decisions; and, 4. Using a third-party to help inform this point of view and to register our emissions inventory and trades.

CC13.2

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

No

CC13.2a

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

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

Further Information

Page: CC14. Scope 3 Emissions

CC14.1

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

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using data obtained from suppliers or value chain partners	Explanation
Purchased goods and services	Not relevant, explanation provided				Purchased goods and services include lines, poles, transformers, etc. Our qualitative investigation of these materials suggests that in 2014 associated emissions from these goods and services are not material for Entergy, <1% of Scope 3 emissions.
Capital goods	Not relevant, explanation provided				The company primarily purchases electric generation facilities that have been built; emissions associated with operation of these facilities are reported as Scope 1 or Scope 2 as appropriate.
Fuel-and-energy-related activities (not included in Scope 1 or 2)	Relevant, calculated	5006403	(i) Purchased Power is electrical energy purchased by Entergy from merchant power plants or from transmission systems as sources of energy for Entergy's electric utility customers (ii) Data is provided by billed electric energy sales per power plant or billed electric energy from the transmission grid supplying the energy and using appropriate E-Grid Database emission factors for the source. (iii) - Controllable Purchased power - Entergy calculates this emission category based on actual power purchase data and unit-specific emission factors from EPA's eGRID database using Climate Leaders: Indirect Emissions from Purchases/Sales of Electricity and Steam and	100.00%	See Entergy 2014 GHG Inventory, Optional Emission Sources.

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
			further developed using the methodology in ISO 14064-1. Uses a GWP for CO2 of 1. This category of power purchases include those for which the generating unit is known and involve a buying decision.		
Upstream transportation and distribution	Not relevant, explanation provided				Emissions from any assets leased and operated by Entergy are incorporated into the company's scope 1 or scope 2 reporting.
Waste generated in operations	Not relevant, explanation provided				Entergy's largest single-type non-hazardous waste stream is coal ash, the majority of coal ash has historically been recycled and used for building materials. Therefore, the Scope 3 emissions from third-party disposal and treatment of this waste are not material to Entergy.
Business travel	Relevant, calculated	4795	i) Business travel reported here encompasses ghg emissions from airline travel by Entergy employees. (ii) Source for this data is from Carlson Wagonlit Travel (CWT) annual report (see attached) to Entergy which reports total passenger air miles flown and calculates the resulting ghg emissions. (iii) CWT Emissions calculations are based on the June 2011 guidelines produced by the Department for Environment, Food and Rural Affairs (DEFRA) and the Department of Energy and Climate Change (DECC) greenhouse gas conversion factors. The total emissions of carbon dioxide equivalent (CO2e) per passenger kilometre (these are the Air Passenger Transport	0.00%	See Entergy 2014 GHG Inventory, Optional Emission Sources

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
			Conversion Factors, provided by DEFRA). Uses an average emission factor of 0.16 kg CO2e/km and a GWP for CO2 of .1		
Employee commuting	Relevant, calculated	46772	(i) Employee commuting is an estimate of ghg emissions from Entergy employees travelling to and from their work locations. (ii) This is an estimate based upon EPA Climate Leaders "Optional Emissions from Commuting, Business Travel and Product Transport methodology (EPA430-R-08-006)". (iii) Calculated based upon 14,000 employees, using individual cars, car pools, van pools, public transportation, bikers and walkers to commute an estimated total of 125,000,000 miles/yr. with individual cars and car pools emitting 0.36 kg CO2/vehicle mile, (GWP for CO2 of 1), 0.031 g CH4/vehicle mile (GWP for CH4 of 28-36), and 0.032 g N2O/vehicle mile (GWP for N2O of 265-298). See Entergy's 2014 GHG Emission Inventory, Employee Commuting for methodology and assumptions.	100.00%	See Entergy 2014 GHG Inventory, Optional Emission Sources.
Upstream leased assets	Not relevant, explanation provided				Upstream leased assets include Entergy operated vehicles; emissions of these vehicles are reported in the company's Scope 1 emissions. Entergy invests in electric generation facilities. The emissions of these facilities are reported in Scope 1 and Scope 2 emissions. Entergy does not provide financial services.
Downstream transportation	Relevant, calculated	286296	i) Transmission and Distribution losses for purchased power are an estimate of CO2e	100.00%	Entergy delivers electrical energy from the power plant to the customers' location through

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
and distribution			emissions resulting from the electrical energy consumed in delivering energy between the power plant and the ultimate end use consumer. ii) Source of the data is a custom loss factor developed using power data from the 5 utilities' FERC Form 1s and the Entergy Utility system CO2e emission intensity (lb. CO2e/Emissions from T&D losses are calculated by applying Entergy's system loss factor to the total amount of power purchased. lii) The purchased energy consumed as a result of system losses is estimated by applying the system loss factor of 5.4% times purchased power. The estimated energy lost is multiplied a system GHG emission rate of 1,029.8 lb. CO2e/MWh (converted to metric tons) and a GWP for CO2 of 1 to calculate emissions from T&D losses.		a transmission and distribution system. Entergy calculates transmission and distribution losses and accounts for them as Scope 2 emissions although they're also included in Scope 1 emissions that are measured at the power plant.
Processing of sold products	Relevant, calculated	92000	i) Entergy investments in customers' end use energy efficiency saved energy and avoided GHG emissions during 2014. ii) Sources of data are Entergy Utility company 2014 Energy Efficiency / Demand Side Management reports and the Entergy Utility CO2 intensity emission rate. iii) The MWhs of energy saved during 2014 was multiplied by the Entergy Utility emission rate 0.4 metric tonnes/ MWh and a GWP for CO2 of 1 to calculate emissions avoided.	100.00%	Entergy has evaluated energy efficiency / demand side management potential for reducing customer energy potential. This information is used in Entergy's Integrated Resource Plans to help determine future resource needs. In 2014 alone approximately \$79 million was invested in DSM programs creating 80 MWhs and 230,000 MWhs of annual energy savings, Entergy invested in 32 energy efficiency programs that we estimate have avoided 92,000 metric tons of Entergy's Scope 1 and Scope 3 CO2e emissions.
Use of sold	Relevant,	933518	i) Product consumption of natural gas by	100.00%	Entergy utility business includes a small

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
products	calculated		residential, commercial and industrial customers that are supplied natural gas by Entergy's gas distribution systems in New Orleans and Baton Rouge. ii) CO2e emissions are calculated based upon Entergy's natural gas throughput data and EPA's system for reporting GHG emissions under the Mandatory Reporting Rule Subpart NN (Suppliers of Natural Gas and Natural Gas Liquids) and a GWP of 16-28 for CH4		natural gas distribution business in New Orleans and Baton Rouge. Methodology for calculating these Scope 3 emissions are shown under Optional Emissions in Entergy's 2014 GHG Emission Inventory under "Product Combustion".
End of life treatment of sold products	Not relevant, explanation provided				Entergy primarily sells electrical energy that is consumed by customers. There are no end of life treatment issues because the product is fully consumed
Downstream leased assets	Not relevant, explanation provided				Entergy does not lease downstream assets.
Franchises	Not relevant, explanation provided				Entergy does not operate any franchises.
Investments	Not relevant, explanation provided				Entergy invests in electric generation facilities. The emissions of these facilities are reported in Scope 1 and Scope 2 emissions. Entergy does not provide financial services.
Other (upstream)	Not relevant, explanation provided				Entergy does not have other upstream Scope 3 emission sources.
Other (downstream)	Not relevant, explanation provided				Entergy does not have other downstream Scope 3 emission sources.

CC14.2

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

Third party verification or assurance complete

CC14.2a

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

Type of verification or assurance	Attach the statement	Page/Section reference	Relevant standard	Proportion of Scope 3 emissions verified (%)
Limited assurance	https://www.cdp.net/sites/2015/53/5653/Climate Change 2015/Shared Documents/Attachments/CC14.2a/ICF_Final_Verification_Report_2014.pdf	5-17	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
Fuel- and energy-related activities (not included in Scopes 1 or 2)	Emissions reduction activities	9.1	Decrease	Scope 1+2+3 voluntary emission stabilization goal. (i) Entergy's 2nd and 3rd voluntary GHG stabilization commitment includes a purchased power component referred to as "controllable purchases". Including this aspect in our GHG commitment has resulted in constant evaluation of the sources of power that the company purchases through long-term agreements and other PPAs. (ii) Through the end of 2014, Entergy estimates that on a cumulative basis, we are 9.1 percent below the overall target taking into account all cumulative emissions since 2001. (iii) This is a voluntary activity and (iv) is expected to continue through 2020. Due to the transition to MISO in late-2013, Entergy did not quantify "non-controllable emissions" due to the potential for double counting. However, controllable purchases were still quantified and included.
Fuel- and energy-related activities (not included in Scopes 1 or 2)	Change in boundary	70	Decrease	In prior years Entergy quantified emissions from both controllable and uncontrollable purchases in it's GHG Inventory. However, with the transfer of functional control of our transmission operation to Mid-continent Independent System Operator (MISO), controllable purchases (those for which we can calculate the emissions) decreased from 45% in 2013 to 28% in 2014 as a percentage of total power generation and were replaced largely by uncontrollable purchases from the MISO system for which it is difficult to calculate emissions. For this reason, Entergy did not quantify uncontrollable emissions in the 2014 GHG Inventory. This makes it difficult to compare 2013 purchase power emissions with purchase power emissions in 2014. Total purchase power increased 3% in absolute terms in 2014 however remained essentially the same as a percentage of Utility Sources of energy (28% in 2013 vs 29% in 2014). See Entergy's 2013 GHG Inventory, Optional Sources, 2014 GHG Inventory, Optional Sources, Entergy's 2014 Investors Guide & Statistical Report, pg 36 and Entergy's 2014 Integrated Report, pg 19.
Business travel	Change in output	7	Increase	The increase in Scope 3 emissions from business travel in 2014 was almost entirely due to an increase in domestic air miles flown. Business travel was added to Entergy's GHG Inventory in 2014 for the first time as a new Scope 3 (Optional Emissions) category
Use of sold products	Change in boundary	100	Increase	Combustion of natural gas by customers - Emissions from the combustion of natural gas by Entergy natural gas customers was estimated for the first time in 2014. Product combustion was added to Entergy's GHG Inventory in 2014 for the first time as a new Scope 3 (Optional Emissions) category.
Downstream	Change in	67	Decrease	Transmission and Distribution losses - In prior years Entergy quantified emissions from

Sources of Scope 3 emissions	Reason for change	Emissions value (percentage)	Direction of change	Comment
transportation and distribution	boundary			line losses realized transmitting both controllable and uncontrollable purchases to the Entergy Utility System. However, with the transfer of functional control of our transmission operation to Mid-continent Independent System Operator (MISO), it became difficult to estimate emissions from uncontrolled purchases and for this reason Entergy for the first time did not calculate line loss emissions associated with transporting this category of purchase power in its 2014 GHG Inventory. This is the reason for the reduced emissions resulting from line losses. 2014 emissions from total purchase power line losses is estimated to be 890,203 metric tons CO2 compared to 869,423 in 2013. The slight increase in emissions is entirely due to the increase in purchase power realized in 2014 to satisfy the growth in customer energy demand.
Employee commuting	Emissions reduction activities	22	Decrease	During 2014, Entergy encouraged employees to "Green Your Ride" by holding events such as a "Bike to Work Day" and raising awareness of the choices made regarding employee commuting. Additionally, a survey regarding employee commuting choices was updated and found that 78 percent of commuting emissions come from individuals commuting alone, while the remaining percentage came from employees commuting via public transportation, carpooling and vanpooling. Furthermore, it was found that roughly 2 percent of employees commute to work via walking or bicycle. To improve this number, in late-2014, Entergy partnered with NuRide, an organization that provides incentives to employees to make greener commuting choices. This three-year project, aims to continue to raise awareness on the individual employee impact and allow the company to track emission reductions from greener choices and other benefits, such as health and wellness.
Employee commuting	Change in methodology	24	Decrease	Entergy changed the methodology it uses for calculating employee commuting EPA Climate Leaders - Optional Emissions from Commuting, Business Travel and Product Transport. This change to a more refined, granular protocol for estimating a wider variety of commuting options resulted in a decrease in estimated emissions. Employee Commuting was added to Entergy's GHG Inventory in 2014 for the first time as a new Scope 3 (Optional Emissions) category.

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

Yes, our suppliers
Yes, our customers

CC14.4a

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

(i) description of methods Entergy uses to engage with the value chain includes: Our management approach to utility integrated resource planning includes issuing requests for proposals to procure supply-side resources for our utilities to meet region-specific needs. In addition, a future cost of carbon is used in any capital investment and/or material energy purchase decision. Future cost of carbon considered in controllable purchase decisions to help ensure Entergy's voluntary GHG stabilization goals are cost effectively achieved and to help ensure there is no leakage employed to meet these goals.

(ii) strategy for prioritizing engagements and how success is measured: Fuel/power purchases are the company's most material Scope 3 emission category, therefore the highest priority. Success is measured in progress against the company's stabilization target; Maintaining Entergy's CO2 Scope1+2+3 emissions levels at 20% below 2000 through 2020.

iii) Examples of engagements and measures of success

Customers - Entergy utilities are committed to pursuing cost-effective energy efficiency and DSM programs; the plan includes 990 MW of peak load reduction through 2031. The DSM programs are generally on track to meet long-term goals. These investments for our customers not only save money but also reduces CO2 emissions.

Across its six regulated utilities that operate in four states, Entergy has invested a total of \$252.8 million from 2002 to 2014 to deliver approximately 350 MW of load reduction and more than 982,000 megawatt hours (MWh) of annual energy savings. Currently, more than 30 energy efficiency and DSM programs are underway across four states.

Suppliers – The Midcontinent Independent System Operator (MISO) provides services that help ensure reliable, least-cost delivered energy for all electricity consumers. Entergy joined MISO in 2014 and as a result was able to realize more efficient dispatch, a reduction in emissions and customer cost savings. In its first full year of operations in MISO, the company achieved \$67 million in capacity savings, \$271 million/yr in energy savings and .3.7 million metric tonne/yr reduction in CO2e. These savings were realized by greater utilization of CCGT capacity, lower utilization of less efficient legacy gas capacity which resulted in a 10% improvement in non-base load generation heat rate when compared to 2013. Before MISO, the average efficiency for power purchased on the market was 10,786 btu/KWh. Last year, operating within MISO, the average efficiency of purchased power was 9,668 btu/ KWh, a 10% improvement. This efficiency improvement reduced CO2 emissions from purchased power we sold to our customers by 2 million metric tons over what it would have been prior to joining MISO. Purchase power is consumed by customers, so this is a Scope 3 emission for Entergy and a Scope 2 emission for customers. Entergy is looking to further increase the efficiency of its generation fleet through its operating arrangement with Mid-Continent Independent System Operator, by putting in service the 560 MW Ninemile 6 natural gas, combined cycle gas turbine at the end of 2014, and with the announced agreement to acquire the 1,980 Union Power Station near El Dorado, Ark., an efficient, natural gas-fired combined cycle generating facility targeted by the end of 2015.

In addition Entergy is also a founding member of the Electric Utility Industry Sustainable Supply Chain Alliance (EUISSCA) focusing its work on several areas

including energy efficiency which lowers air emissions (including GHG emissions). Entergy participates in the Electric Utility Industry Sustainable Supply Chain Alliance (EUISSCA), which is known as the leader in establishing a robust and sustainable electric utility industry supply chain. Entergy is very active in the Alliance, as a member on Executive Committee as well serving on key subcommittees. Focusing on non-fuel suppliers, the Alliance's goal is to work with industry suppliers and other interested parties to improve environmental performance and advance sustainable business practices. By working as a group, member companies expect to more effectively and efficiently engage suppliers to improve impacts on air emissions, water consumption, waste disposal and energy efficiency. Here are few examples showing the type of work we're doing with the EUISSCA Alliance.

EUISSCA has prepared a motivation video urging companies to commit to reducing GHG emissions and to reduce energy usage. (See <https://vimeo.com/34617649>)

EUISSCA prepared a descriptive video demonstrating the Manufacturing Extension Partnership (MEP) review process within a cable manufacturing company. (<https://www.youtube.com/watch?v=MMb9By-5NT8>)

CC14.4b

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

Number of suppliers	% of total spend	Comment
11	8%	Power purchases are the company's most material Scope 3 emission category. In 2014 twenty-eight percent of the Utilities' retail electric sales were supplied from purchased power. Total purchased power was obtained via from 11 suppliers. [see 2014 Entergy GHG Inventory and 2014 10K, pg. 236 "Fuel Supply"] Purchased power expense in 2014 was \$1,915,414,000 or 18% of Total Operating Expenses of \$10,488,032,000. We estimate that 8% of Total Operating Expenses was for controllable purchases from 11 suppliers. [see 2014 10K, pg. 68 "Consolidated Income Statement"] In addition, Entergy is also a founding member of the Electric Utility Industry Sustainable Supply Chain Alliance (EUISSCA) focusing its work on several areas including energy efficiency which lowers air emissions (including GHG emissions). It is difficult to estimate the total number of suppliers that are reached through this initiative.

CC14.4c

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

How you make use of the data	Please give details
Identifying GHG sources to prioritize for reduction actions	Entergy uses supplier's emission profiles as one management tool for helping to attain our Voluntary GHG Stabilization Commitment. Unit contingent purchases, or "controllable purchases" are used to meet Entergy Utility customers' demand for electricity. In 2014 Controllable Purchases supplied 8% of Utility retail sales and supplemented energy supplied by Entergy owned and operated power plants. Controllable Purchases are included within the boundaries of Entergy's Voluntary GHG Emissions Stabilization Target and as Optional Emission Sources (Scope 3) in its annual GHG Inventory. A detailed breakdown of power purchases is provided in a section of the Inventory titled "Power Purchases". This section lists energy supplied by individual unit contingent power purchases and calculates emissions from each of the power plant providing energy by using EPA e-grind emission factors. [see 2014 Entergy GHG Inventory, Power Purchases, Entergy GHG Inventory Management Plan and Reporting Document (IMPRD), pg. 1)

CC14.4d

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

Further Information

Attachments

[https://www.cdp.net/sites/2015/53/5653/Climate Change 2015/Shared Documents/Attachments/ClimateChange2015/CC14.Scope3Emissions/Entergy_2014_Integrated_Report.pdf](https://www.cdp.net/sites/2015/53/5653/Climate%20Change%202015/Shared%20Documents/Attachments/ClimateChange2015/CC14.Scope3Emissions/Entergy_2014_Integrated_Report.pdf)
[https://www.cdp.net/sites/2015/53/5653/Climate Change 2015/Shared Documents/Attachments/ClimateChange2015/CC14.Scope3Emissions/ETR_GHG_Inventory_Mgmt_Plan_2014.pdf](https://www.cdp.net/sites/2015/53/5653/Climate%20Change%202015/Shared%20Documents/Attachments/ClimateChange2015/CC14.Scope3Emissions/ETR_GHG_Inventory_Mgmt_Plan_2014.pdf)
[https://www.cdp.net/sites/2015/53/5653/Climate Change 2015/Shared Documents/Attachments/ClimateChange2015/CC14.Scope3Emissions/Entergy_GHG_Inventory_2013.pdf](https://www.cdp.net/sites/2015/53/5653/Climate%20Change%202015/Shared%20Documents/Attachments/ClimateChange2015/CC14.Scope3Emissions/Entergy_GHG_Inventory_2013.pdf)
[https://www.cdp.net/sites/2015/53/5653/Climate Change 2015/Shared Documents/Attachments/ClimateChange2015/CC14.Scope3Emissions/ICF_Final_Verification_Report_2014.pdf](https://www.cdp.net/sites/2015/53/5653/Climate%20Change%202015/Shared%20Documents/Attachments/ClimateChange2015/CC14.Scope3Emissions/ICF_Final_Verification_Report_2014.pdf)

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
Chuck Barlow	Vice President, Environmental Policy and Strategy	Environment/Sustainability manager

Further Information

Module: Electric utilities

Page: EU0. Reference Dates

EU0.1

Reference dates

Please enter the dates for the periods for which you will be providing data. The years given as column headings in subsequent tables correspond to the "year ending" dates selected below. It is requested that you report emissions for: (i) the current reporting year; (ii) one other year of historical data (i.e. before the current reporting year); and, (iii) one year of forecasted data (beyond 2019 if possible).

Year ending	Date range
2010	Fri 01 Jan 2010 - Fri 31 Dec 2010
2014	Wed 01 Jan 2014 - Wed 31 Dec 2014
2022	Sat 01 Jan 2022 - Sat 31 Dec 2022

Further Information**Page: EU1. Global Totals by Year**

EU1.1

In each column, please give a total figure for all the countries for which you will be providing data for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO2e)	Emission intensity (metric tonnes CO2e/MWh)
2010	28007	127627	33150308	0.26
2014	27462	133680	33113294	0.25
2022	30918			

Further Information**Attachments**

[https://www.cdp.net/sites/2015/53/5653/Climate Change 2015/Shared Documents/Attachments/ClimateChange2015/EU1.GlobalTotalsbyYear/2014_Investor_Guide_17.xls](https://www.cdp.net/sites/2015/53/5653/Climate%20Change%202015/Shared%20Documents/Attachments/ClimateChange2015/EU1.GlobalTotalsbyYear/2014_Investor_Guide_17.xls)
[https://www.cdp.net/sites/2015/53/5653/Climate Change 2015/Shared Documents/Attachments/ClimateChange2015/EU1.GlobalTotalsbyYear/2014_Entergy_Form_10K.pdf](https://www.cdp.net/sites/2015/53/5653/Climate%20Change%202015/Shared%20Documents/Attachments/ClimateChange2015/EU1.GlobalTotalsbyYear/2014_Entergy_Form_10K.pdf)
[https://www.cdp.net/sites/2015/53/5653/Climate Change 2015/Shared Documents/Attachments/ClimateChange2015/EU1.GlobalTotalsbyYear/Entergy_2014_Integrated_Report.pdf](https://www.cdp.net/sites/2015/53/5653/Climate%20Change%202015/Shared%20Documents/Attachments/ClimateChange2015/EU1.GlobalTotalsbyYear/Entergy_2014_Integrated_Report.pdf)
[https://www.cdp.net/sites/2015/53/5653/Climate Change 2015/Shared Documents/Attachments/ClimateChange2015/EU1.GlobalTotalsbyYear/Entergy_GHG_Inventory_2014.pdf](https://www.cdp.net/sites/2015/53/5653/Climate%20Change%202015/Shared%20Documents/Attachments/ClimateChange2015/EU1.GlobalTotalsbyYear/Entergy_GHG_Inventory_2014.pdf)

Page: EU2. Individual Country Profiles - United States of America

EU2.1

Please select the energy sources/fuels that you use to generate electricity in this country

Coal - hard
Oil & gas (excluding CCGT)
CCGT
Nuclear
Hydro
Other renewables

EU2.1a

Coal - hard

Please complete the following table for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO ₂ e)	Emissions intensity (metric tonnes CO ₂ e/MWh)
2010	2442	16725	16424290	0.98
2014	2323	14306	15132688	1.06
2022	2323			

EU2.1b

Lignite

Please complete the following table for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO ₂ e)	Emissions intensity (metric tonnes CO ₂ e/MWh)

EU2.1c

Oil & gas (excluding CCGT)

Please complete the following table for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO ₂ e)	Emissions intensity (metric tonnes CO ₂ e/MWh)
2010	13303	21737	14646188	0.69
2014	10865	16010	12643611	0.79
2022	9881			

EU2.1d

CCGT

Please complete the following table for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO ₂ e)	Emissions intensity (metric tonnes CO ₂ e/MWh)

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO ₂ e)	Emissions intensity (metric tonnes CO ₂ e/MWh)
2010	1761	5505	2079830	0.38
2014	4458	17695	5336996	0.30
2022	8898			

EU2.1e

Nuclear

Please complete the following table for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)
2010	10101	81994
2014	9630	79976
2022	9630	

EU2.1f

Waste

Please complete the following table for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO ₂ e)	Emissions intensity (metric tonnes CO ₂ e/MWh)

EU2.1g

Hydro

Please complete the following table for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)
2010	74	160
2014	73	142
2022	73	

EU2.1h

Other renewables

Please complete the following table for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)
2010	80	185
2014	80	219
2022	80	

EU2.1i**Other**

Please complete the following table for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO ₂ e)	Emissions intensity (metric tonnes CO ₂ e/MWh)

EU2.1j**Solid biomass**

Please complete for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO ₂ e)	Emissions intensity (metric tonnes CO ₂ e/MWh)
2010	0	0	0	0
2014	0	0	0	0
2022	0	0	0	0

EU2.1k

Total thermal including solid biomass

Please complete for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes CO2e)	Emissions intensity (metric tonnes CO2e/MWh)
2010	27853	127304	33150308	0.26
2014	27309	130517	33113295	0.25
2022	30765			

EU2.1I**Total figures for this country**

Please enter total figures for this country for the "year ending" periods that you selected in answer to EU0.1

Year ending	Nameplate capacity (MW)	Production (GWh)	Absolute emissions (metric tonnes in CO2e)	Emissions intensity (metric tonnes CO2e/MWh)
2010	27974	127627	33150308	0.26
2014	27462	131092	33113295	0.25
2022	30918			

Further Information

Entergy places importance on having a diversified energy portfolio with no over-reliance on any one generation source. We invest in long-term generation resources to meet customer demand through our portfolio transformation strategy, which has been in place since 2002. Through acquisitions, long-term power purchases and self-build options, we are developing a more diverse, modern and efficient generation portfolio capable of providing reliable, cost-effective and attractively priced power. Our generation investment decisions are informed by carbon regulation scenarios, renewable portfolio standards and increased energy efficiency and demand-side management programs. Over the past 12 years, the Utility Companies and Entergy Wholesale Commodities (EWC) have added approximately 4,458 megawatts of clean, highly efficient combined cycle natural gas generation (CCGT) and 700 megawatts of non-emitting nuclear generation through capacity increases of existing plants. This has allowed the retirement or reduced use of 4,000 MWs of older, less efficient legacy gas steam units. These investments in clean energy capacity have resulted in a 30% reduction in absolute CO2 emissions since 2000 and a 46% reduction in CO2 emission rates. These reductions in absolute CO2 emissions were accomplished during a period where Entergy's annual electric generation grew by 29%. As a result, Entergy ranks in the top quintile for the lowest CO2 emission rates when compared to the 100 largest electric generating companies in the U.S. in a recently released benchmarking report. We took action again in 2014 to enhance our generation fleet. Ninemile Point Unit 6, a newly built 560-megawatt natural gas unit in Westwego, La., was placed in service in December 2014, ahead of schedule and under budget. The unit's combined-cycle technology uses 30 percent less fuel than older natural gas-fired units, which helps us keep customer prices and emissions low. Ninemile 6 also employs modern pollution controls, which helps us lower our costs of compliance with increasing environmental regulation. We announced an agreement to acquire Union Power Station near El Dorado, Ark., an efficient, natural gas-fired 1,980-megawatt generating facility, a significant step in the ongoing modernization of our fleet and its ability to meet increased demand at prices favorable to our customers and with low emission rates. During the first full year of operation within the Midcontinent Independent System Operator, Inc. (MISO), 76% of Entergy companies' generation was from non-emitting nuclear, renewables, highly efficient, low emitting CCGT, and Combined Heat and Power (CHP). The Entergy Utility non-baseload generating fleet realized an 817 btu/ KWh heat rate improvement, reducing cost to customers and reducing emissions. Entergy Mississippi received approval from the Mississippi Public Service Commission to install thin-film solar panels on three five-acre sites in a pilot program to study solar energy in the utility's fuel-source mix. The panels should be operating by year-end 2015, generating up to 500 kilowatts of electricity per site. Looking to the future, the projected generating capacity trend between 2014 and 2022 shows Entergy retiring an additional 984 MW of older, less efficient natural gas steam electric capacity while adding an estimated 4,440 MW of new, highly efficient natural gas fired CCGT capacity (including Union Power Station). Entergy Arkansas has announced an agreement to purchase solar power from an 81 MW solar power to be built in Arkansas. ENOI has announced an agreement to purchase solar power from a 1 MW solar facility to be built in Louisiana and Entergy Mississippi has announced plans to build 3 - 500 MW solar power facilities to be built in Mississippi. Taking into consideration, the continued investment in energy efficiency and demand side management, the capacity reserve margin benefits of operating within MISO, and assumptions around sales growth, Entergy projects it will need to add 13% to existing generating capacity.

Attachments

[https://www.cdp.net/sites/2015/53/5653/Climate Change 2015/Shared Documents/Attachments/ClimateChange2015/EU2.IndividualCountryProfiles-UnitedStatesofAmerica/2014-05-05_ELLIRP.pdf](https://www.cdp.net/sites/2015/53/5653/Climate%20Change%202015/Shared%20Documents/Attachments/ClimateChange2015/EU2.IndividualCountryProfiles-UnitedStatesofAmerica/2014-05-05_ELLIRP.pdf)
[https://www.cdp.net/sites/2015/53/5653/Climate Change 2015/Shared Documents/Attachments/ClimateChange2015/EU2.IndividualCountryProfiles-UnitedStatesofAmerica/Entergy_GHG_Inventory_2014.pdf](https://www.cdp.net/sites/2015/53/5653/Climate%20Change%202015/Shared%20Documents/Attachments/ClimateChange2015/EU2.IndividualCountryProfiles-UnitedStatesofAmerica/Entergy_GHG_Inventory_2014.pdf)
[https://www.cdp.net/sites/2015/53/5653/Climate Change 2015/Shared Documents/Attachments/ClimateChange2015/EU2.IndividualCountryProfiles-UnitedStatesofAmerica/2014_Investor_Guide_17.xls](https://www.cdp.net/sites/2015/53/5653/Climate%20Change%202015/Shared%20Documents/Attachments/ClimateChange2015/EU2.IndividualCountryProfiles-UnitedStatesofAmerica/2014_Investor_Guide_17.xls)
[https://www.cdp.net/sites/2015/53/5653/Climate Change 2015/Shared Documents/Attachments/ClimateChange2015/EU2.IndividualCountryProfiles-UnitedStatesofAmerica/ENO_2015_IRP_Renewable_Technology_Assessment_5Sep14.pdf](https://www.cdp.net/sites/2015/53/5653/Climate%20Change%202015/Shared%20Documents/Attachments/ClimateChange2015/EU2.IndividualCountryProfiles-UnitedStatesofAmerica/ENO_2015_IRP_Renewable_Technology_Assessment_5Sep14.pdf)
[https://www.cdp.net/sites/2015/53/5653/Climate Change 2015/Shared Documents/Attachments/ClimateChange2015/EU2.IndividualCountryProfiles-UnitedStatesofAmerica/Entergy_2014_Integrated_Report.pdf](https://www.cdp.net/sites/2015/53/5653/Climate%20Change%202015/Shared%20Documents/Attachments/ClimateChange2015/EU2.IndividualCountryProfiles-UnitedStatesofAmerica/Entergy_2014_Integrated_Report.pdf)
[https://www.cdp.net/sites/2015/53/5653/Climate Change 2015/Shared Documents/Attachments/ClimateChange2015/EU2.IndividualCountryProfiles-UnitedStatesofAmerica/2014_Entergy_Form_10K.pdf](https://www.cdp.net/sites/2015/53/5653/Climate%20Change%202015/Shared%20Documents/Attachments/ClimateChange2015/EU2.IndividualCountryProfiles-UnitedStatesofAmerica/2014_Entergy_Form_10K.pdf)

Page: EU3. Renewable Electricity Sourcing Regulations

EU3.1

In certain countries, e.g. Italy, the UK, the USA, electricity suppliers are required by regulation to incorporate a certain amount of renewable electricity in their energy mix. Is your organization subject to such regulatory requirements?

Yes

EU3.1a

Please provide the scheme name, the regulatory obligation in terms of the percentage of renewable electricity sourced (both current and future obligations) and give your position in relation to meeting the required percentages

Scheme name	Current % obligation	Future % obligation	Date of future obligation	Position in relation to meeting obligations
USA state scheme – Texas			2015	The State of Texas presents its RPS not as a percentage, but rather as a capacity goal. The 2005 Texas Legislature set the state's total renewable energy mandate to 5,550 MW by 2015, 10,000 MW in 2025. Each provider is required to obtain renewable energy capacity based on their market share of energy sales times the renewable capacity goal. In 2013, Entergy secured and retired a sufficient amount of renewable energy credits to comply with this mandate.

Further Information

Page: EU4. Renewable Electricity Development

EU4.1

Please give the contribution of renewable electricity to your organization's EBITDA (Earnings Before Interest, Tax, Depreciation and Amortization) in the current reporting year in either monetary terms or as a percentage

Please give:	Monetary figure	%	Comment
Renewable electricity's contribution to EBITDA	950000000	0.00%	Entergy Wholesale Commodities participates in a Joint Venture with Shell Wind Energy named Top Deer Wind Venture. Entergy owns 50% of the JV - equivalent to 80 megawatts of wind generation capacity. Entergy does not report on the wind JV's financial performance separately, so the EBITDA shown is for all of EWC. Entergy Arkansas owns 74 MW of Hydro Power. In total, Entergy's renewable resources generated 361 GWh of electric energy in 2014 which is <1% of the Company's total generation.

EU4.2

Please give the projected contribution of renewable electricity to your organization's EBITDA at a given point in the future in either monetary terms or as a percentage

Please give:	Monetary figure	%	Year ending	Comment
Renewable electricity's contribution to EBITDA	950000000	0.00%	2014	Entergy Wholesale Commodities participates in a Joint Venture with Shell Wind Energy named Top Deer Wind Venture. Entergy owns 50% of the JV - equivalent to 80 megawatts of wind generation capacity. Entergy does not report on the wind JV's financial performance separately, so the EBITDA shown is for all of EWC. Entergy Arkansas owns 74 MW of Hydro Power. Entergy Arkansas has announced an agreement to purchase solar power from an 81 MW solar power to be built in Arkansas. ENOI has announced an agreement to purchase solar power from a 1 MW solar facility to be built in Louisiana and Entergy Mississippi has announced plans to build 3 - 500 MW solar power facilities to be built in Mississippi. In total, Entergy's renewable resources generated 361 GWh of electric energy in 2014 which is <1% of the Company's total generation.

EU4.3

Please give the capital expenditure (capex) planned for the development of renewable electricity capacity in monetary terms and as a percentage of total capex planned for power generation in the current capex plan

Please give:	Monetary figure	%	End year of capex plan	Comment
Capex planned for renewable electricity development	3265000000	0.00%	2017	Arkansas has announced an agreement to purchase solar power from an 81 MW solar power to be built in Arkansas. ENOI has announced an agreement to purchase solar power from a 1 MW solar facility to be built in Louisiana and Entergy Mississippi has announced plans to build 3 - 500 MW solar power facilities to be built in Mississippi. The feasibility of bringing more renewable energy on-line is evaluated in each of the Utility OPCO Integrated Resource Plans, the most recent of which were prepared for Entergy New Orleans and Entergy Louisiana. In December 2010 on behalf of Entergy Gulf States Louisiana and Entergy Louisiana, Entergy Services issued the 2010 RFP for Long-Term Renewable Energy Resources seeking up to 233 MW of renewable generation resources to meet the requirements of an LPSC general order issued on December 9, 2010. In September 2012, Entergy Gulf States Louisiana executed a 20-year contract for 28 MW, with the potential to purchase an additional 9 megawatts when available, from Rain CII Carbon LLC's pet coke calcining facility in Sulphur, Louisiana. The facility began commercial operation in May 2013. In March 2013, Entergy Gulf States Louisiana executed a 20-year contract for 8.5 MW from Agrielectric Power Partners, LP's refurbished rice hull-fueled electric generation facility located in Lake Charles, Louisiana. In September 2013, Entergy Louisiana executed a 10-year contract with TX LFG Energy, LP, a wholly-owned subsidiary of Montauk Energy Holdings, LLC, to purchase approximately 3 MW from its landfill gas fueled power generation facility located in Cleveland, Texas. LPSC certification of these three contracts has been received.

Further Information

Attachments

[https://www.cdp.net/sites/2015/53/5653/Climate Change 2015/Shared Documents/Attachments/ClimateChange2015/EU4.RenewableElectricityDevelopment/2014-05-05_ELLIRP.pdf](https://www.cdp.net/sites/2015/53/5653/Climate%20Change%202015/Shared%20Documents/Attachments/ClimateChange2015/EU4.RenewableElectricityDevelopment/2014_Entergy_Form_10K.pdf)
[https://www.cdp.net/sites/2015/53/5653/Climate Change 2015/Shared Documents/Attachments/ClimateChange2015/EU4.RenewableElectricityDevelopment/ENO_2015_IRP_Renewable_Technology_Assessment_5Sep14.pdf](https://www.cdp.net/sites/2015/53/5653/Climate%20Change%202015/Shared%20Documents/Attachments/ClimateChange2015/EU4.RenewableElectricityDevelopment/ENO_2015_IRP_Renewable_Technology_Assessment_5Sep14.pdf)

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