

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 more than 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 \$11 billion and approximately 14,000 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

Tue 01 Jan 2013 - Tue 31 Dec 2013

CC0.3

Country list configuration

Please select the countries for which you will be supplying data. 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 sectors, companies in the oil and gas industry, companies in the information technology and telecommunications sectors and companies in the food, beverage and tobacco sectors should complete supplementary questions in addition to the main questionnaire.

If you are in these sectors (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?

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 direct 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 Chcuk 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 participating in this process 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
Corporate executive team	Monetary reward	<p>Entergy's compensation programs for Named Executive Officers are based on a philosophy of pay-for-performance which is embodied in the design of our annual and long-term monetary incentive plans. Our annual monetary incentive plan incentivizes and rewards the achievement of operational and financial 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. There are several climate related performance indicators linked to this incentive plan. During 2013, significant achievements related to executing climate strategy and achieving Entergy's voluntary 10-yr GHG emissions reduction target, -20% below 2000 levels by 2020 were reflected in the 2013 incentive awards. Entergy continued construction of a 550 MW natural gas fired CCGT, Nine Mile 6, increased the efficiency of its natural gas fired power plant fleet, obtained LPSC approval for a 20 year contract to purchase 28 MW of capacity and energy from a renewable heat recovery project and continued to execute its energy efficiency and DSM plan which calls for 990 MW of peak load reduction through 2031. Other climate change-linked items include execution of Entergy's portfolio management strategy adding highly efficient Combined Cycle Gas Turbine (CCGT) capacity while reducing utilization of less efficient legacy gas capacity, maintaining continued Nuclear energy production through license renewals; acquisition of Hinds and Hot Spring CCGT plants and self-build of an additional CCGT) and overall sustainability performance/recognition of sustainability leadership and recognition of climate protection efforts. Achievement of corporate objectives is recognized via compensation in the Non-Equity Incentive Plan. Entergy's various business functions integrate indicators that impact Entergy's overall Scope 1 and Scope 2 emissions. As an example, Entergy's Utility Operations business has specific CO2 (and other GHG) reduction targets associated with mobile fleet operation, transmission equipment (SF6) and facility operations (energy use).</p>
Other: Environment/sustainability managers	Monetary reward	<p>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 climate change-related goals, objectives and measurable targets, including our 10-year GHG emissions reduction target, -20% below 2000 levels by 2020. 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</p>

Who is entitled to benefit from these incentives?	The type of incentives	Incentivized performance indicator
		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
All employees	Recognition (non-monetary)	Entergy recognizes employees for participation in climate-related activities including climate/adaptation issue advocacy, communicating climate change issues and participation in climate-related volunteerism.
All employees	Monetary reward	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/2014/53/5653/Investor CDP 2014/Shared Documents/Attachments/InvestorCDP2014/CC1.Governance/2013_integrated_report.pdf](https://www.cdp.net/sites/2014/53/5653/Investor%20CDP%202014/Shared%20Documents/Attachments/InvestorCDP2014/CC1.Governance/2013_integrated_report.pdf)
[https://www.cdp.net/sites/2014/53/5653/Investor CDP 2014/Shared Documents/Attachments/InvestorCDP2014/CC1.Governance/2014_Proxy_Statement.pdf](https://www.cdp.net/sites/2014/53/5653/Investor%20CDP%202014/Shared%20Documents/Attachments/InvestorCDP2014/CC1.Governance/2014_Proxy_Statement.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	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) - Internal Audit facilitates an integrated company-wide process for all businesses to analyse risks for their area, including climate change. The risks are described, evaluated and scored based on probability of occurrence and severity of outcome. Based on this evaluation, controls are established for priority items and testing conducted to ensure that priority items are adequately 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 CO2 projections.

(ii) Asset Level Risk Assessment and Monitoring. Entergy assesses risks consistent with the ERM and IAP processes. 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, testing conducted to ensure that priority items are adequately addressed. Asset level investment decisions incorporate scenarios on the cost of carbon regulation/legislation. Physical impacts to facilities in sensitive areas 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.

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, 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.

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. These thresholds are set by the company's External Reporting/Accounting 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
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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. Decisions on investments include scenarios reflecting the impacts (costs and/or benefits) of carbon regulation utilizing the company's CO2 projections. Internal subject matter experts and teams 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 includes stabilization of carbon emissions and adaptation to climate change impacts into its business strategy. 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: - Aspects of this issue that have influenced Entergy's strategy include the need for adaptation, this aspect affects sourcing and impacts to Entergy's customer base due to changes in the physical environment; and regulatory changes that issue's impact on energy prices, both short and long term. Both aspects, impacts to decisions regarding energy production and sourcing and impacts to Entergy's customer base due to changes in the physical environment. Substantive business decisions have resulted from this influence, including portfolio management activities, acquisition of more efficient generation sources, purchased power buying decisions and our adaptation strategy. Details of these substantive business decisions are provided below.

(iii) Short-term strategy influence — The most important components of Entergy's short term strategy (2012-2014) influenced by climate change are portfolio management of electric generation, 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 short-term planned construction and capital investments in clean energy combined-cycle gas and nuclear generation. (2014-2065), \$1.9 billion. (see Entergy's 2013 Integrated Report, pg. 37, 57)

(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.

(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 (2014-2065), inclusion of a carbon price into investment decisions, 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.

(vi) Substantive Business Decisions during the Reporting Year (2013) Portfolio Management

Proposed carbon regulations have reinforced Entergy's Utility has embarked on an efforts to transform its generation portfolio. During 2013, the company updated its IRP and progressed construction on the 550 MW Ninemile Unit 6 CCGT power plant. During 2012, Entergy invested \$253 million to purchase the Hot Spring Energy Facility, a highly efficient, 620 MW natural gas fired combined cycle gas turbine (CCGT) power plant, invested \$206 million to purchase the 450 MW Hinds CCGT power plant, completed the \$874 million, 178 MW capacity uprate at the Grand Gulf Nuclear Station. , and began construction on the 550 MW Ninemile Unit 6 CCGT power plant. The Entergy utility operating companies reported plans to invest \$1.9 billion over the 2014 - 2016 period, which includes the Ninemile Unit 6 CCGT, final spending on the Waterford 3 nuclear plant steam generator replacement project and environmental compliance spending at Entergy's generating plants. Over the past eleven years, the Utility Operating Companies and Entergy Wholesale Commodities (EWC) have together added 3,928 MW of clean, efficient, natural gas fired CCGT generation resources and nearly 700 MW of new, non-emitting nuclear capacity.

Stabilization of Carbon Emissions - 2001 to 2013

In 2013 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 2013, Entergy was 59.3 million short tons CO2 below its 2001 through 2013 stabilization goals on a cumulative basis.

Climate Change Physical Risks and Adaptation

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

In 2013, Entergy worked with DOE, NOAA, DOI, EPA, USGCRP 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 U.S. Gulf Coast.

CC2.2b

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

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

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 distortionary 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 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	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

Focus of legislation	Corporate Position	Details of engagement	Proposed legislative solution
		<p>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 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. In 2013 Entergy's Senior Manager, Climate Consulting was appointed by the Secretary of Interior to serve on her newly formed 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.</p>	<p>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.</p>
Other: Retrofit CCS Technology	Support	<p>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</p>	<p>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</p>

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
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. Please find attached papers that C2ES recently published titled "Weathering the Storm:	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).

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?
		Building Resilience to Climate Change” and “Climate Solutions: The Role of Nuclear”. Entergy contributed to both these reports.	
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 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	Entergy is a Clean Energy Group member company and actively participates in shaping Clean Entergy Group strategy energy and environmental policy.
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 publically 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

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

Further Information

Attachments

[https://www.cdp.net/sites/2014/53/5653/Investor CDP 2014/Shared Documents/Attachments/InvestorCDP2014/CC2.Strategy/C2ES business-resilience-report-07-2013-final.pdf](https://www.cdp.net/sites/2014/53/5653/Investor%20CDP%202014/Shared%20Documents/Attachments/InvestorCDP2014/CC2.Strategy/C2ES%20business-resilience-report-07-2013-final.pdf)

[https://www.cdp.net/sites/2014/53/5653/Investor CDP 2014/Shared Documents/Attachments/InvestorCDP2014/CC2.Strategy/2013_integrated_report.pdf](https://www.cdp.net/sites/2014/53/5653/Investor%20CDP%202014/Shared%20Documents/Attachments/InvestorCDP2014/CC2.Strategy/2013_integrated_report.pdf)

[https://www.cdp.net/sites/2014/53/5653/Investor CDP 2014/Shared Documents/Attachments/InvestorCDP2014/CC2.Strategy/2012 System IRP Report - Final 02Oct2012.pdf](https://www.cdp.net/sites/2014/53/5653/Investor%20CDP%202014/Shared%20Documents/Attachments/InvestorCDP2014/CC2.Strategy/2012%20System%20IRP%20Report%20-%20Final%20Oct2012.pdf)

[https://www.cdp.net/sites/2014/53/5653/Investor CDP 2014/Shared Documents/Attachments/InvestorCDP2014/CC2.Strategy/C2ES nuclear-energy-brief-04-14-final.pdf](https://www.cdp.net/sites/2014/53/5653/Investor%20CDP%202014/Shared%20Documents/Attachments/InvestorCDP2014/CC2.Strategy/C2ES%20nuclear-energy-brief-04-14-final.pdf)

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. Additionally, Entergy secured a significant portfolio of carbon offsets (see www.americancarbonregistry.org for details)
Abs1	Scope 1	63%	0%	2000	48260000	2006	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. Additionally, Entergy has secured a significant portfolio of carbon offsets (see www.americancarbonregistry.org for details)

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
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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	30%	32%	During 2013 Entergy was 9% over the annual target. However, since inception in 2001, the cumulative actual emissions 2001 - 2013 are 9.8% below the cumulative 2001 - 2013 stabilization budgets with actual emissions of 547.2 million tons of CO2 compared to the cumulative stabilization target of 606.5 million tons.
Abs2	100%	97%	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	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. These efforts focus on 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 has the added benefit of reducing customer's electric bills. Entergy has active DSM programs in Texas, Arkansas and New Orleans that includes 32 DSM programs for all customer classes (residential, commercial and industrial).

(ii) Estimate of avoided emissions:

Entergy estimates that the reduction in MWhs from energy efficiency during 2013 avoided approximately 93,802 metric tons of CO₂. In 2013 approximately \$56 million was invested in DSM programs creating 32 MWs and 234,885 MWh of annual energy savings. A total of \$176 million was invested over the period of 2002-2013 to create a total of 270 MWs and 752,000 MWh of energy savings.

(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). GWP for carbon dioxide of 1 was used.

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

In 2013, Entergy helped weatherize over 9,000 homes and distributed more than 42,000 fluorescent bulbs, helping low income homeowners reduce their energy use and costs. In 2013, Entergy also continued its participation with Energy Star to help businesses and individuals save money through improved energy efficiency.

Over 119,000 customers visited Entergy's Save Money web page (www.entergy.com/savemoney). In an effort to enhance the online experience and customer value of Entergy's Save Money page, Entergy launched a Customer Experience program in 2011 designed to help customers save money by expanding educational material on energy efficiency.

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. As a result of this strategy the Utility's electric generation from highly efficient Combined Cycle Gas Turbines (CCGT) increased by 21% in 2013 compared to 2012 while generation from older, less efficient Legacy Gas turbine units decreased by 13%. In 2012 Entergy acquired Hot Spring (620 MW) and Hinds (450 MW). Both plants are highly efficient, natural gas fired combined cycle gas turbines (CCGT). Entergy's operating companies have procured 3,928 megawatts of highly efficient natural gas fired CCGT capacity since 2005. The heat rate for utility operating companies' CCGT fleet was 7,354 btu/KWh in 2013 compared to a heat rate of 11,807 btu/KWh for Legacy Gas Units. In 2010, 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 41% in 2013. Increased electric energy production by the CCGT units emit ~40% less CO2 than if that electrical generated by Entergy's older Legacy Natural Gas units.

In addition, Scope 2 emissions for Entergy's customers are reduced as a result of nuclear capacity uprates. In 2012, Grand Gulf Nuclear Station completed a 178 MW capacity uprate adding nearly emission free energy supply. This resulted in a 48% increase in generation from Grand Gulf during 2013 compared to 2012. Over the last decade, Entergy has increased the output of its EWC and Utility nuclear fleet by nearly 700 megawatts - the equivalent of adding a new reactor - through power upgrades, turbine replacements and cooling-tower modifications.

(ii) Estimate of avoided emissions: Entergy estimates that avoided CO2 emissions from investments in highly efficient, natural gas fired CCGT and the 178 MW nuclear uprate at Grand Gulf avoided 3,483,000 metric tons of CO2 in 2013. 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. 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 .

CC3.3

Did you have emissions reduction initiatives that were active within the reporting year (this can include those in the planning and 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	1	0
To be implemented*	9	759826
Implementation commenced*	7	166193
Implemented*	11	6563800

Stage of development	Number of projects	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Not to be implemented	0	0

CC3.3b

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

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	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, years	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) In 2012, Entergy invested \$253 million for the 620 MW Hot Spring Energy Facility, \$206 million for the 450 MW Hinds Power Plant. 2013 was the first full year of operation for these units. Both units are highly efficient, natural gas fired CCGT units. In 2012 Entergy also expanded its virtually emission-free nuclear generation by completing the \$874 million, 178 MW uprate at the Grand Gulf Nuclear Station. 2013 is the first full year of operation for this expanded capacity. (ii) In 2013 Entergy estimates that direct, Scope 1 emissions avoided from the addition of 1,070 MW of CCGT capacity and the 178 MW nuclear uprate avoided 3.5 million metric tons CO2 per year. (iii) This is a voluntary activity driven by a business opportunity with fuel cost savings passed on to	3483167	0	1213000000	4-10 years	60	

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	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, years	Comment
	<p>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 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 continue in the near term (5 years) and the lifetime of these efforts are 20+ years. (i) Additionally, Entergy continues its portfolio management activities, adding newer, more efficient generation (CCGT and CT) and deactivating legacy units as it is able (see Entergy's 2012 Integrated Resource Plans). (ii) These investments are reducing both Scope 1 and Scope 3 emissions for the company, the scopes included in the company's voluntary commitment. (iii) This is a voluntary activity, ongoing and (iv) expected to continue over the next five years and the lifetime of these efforts is 20+ years. Investment shown is for 2012. Entergy estimates spending \$1.9 billion during 2014 - 2016 on utility generation assets</p>						
Low carbon energy purchase	<p>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'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) In 2013 Entergy estimates that controllable purchases avoided 3.0 million metric tons of Scope 3 CO2 emissions for the company. (iii) This is a voluntary activity and (iv) is expected to continue into the near future (5 years). Additionally, Entergy purchases</p>	3020688	0	1554332000	<1 year	1	

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	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, years	Comment
	renewable energy credits (RECs) required by the State of Texas.						
Energy efficiency: Processes	<p>The activities described here are in the same scope as Entergy's 3rd target, its Scope 1+2+3 voluntary emission stabilization goal. (i) In 2013 Entergy invested approximately \$56 million in DSM programs creating 32 MWs and 234,885 MWHs of annual energy savings. Entergy currently has active DSM programs in Entergy Texas, Inc., Entergy Arkansas, Inc. and Entergy New Orleans, Inc. that include 32 DSM programs for all customer classes (residential, commercial and industrial). Entergy recovers its investment in EE/DSM projects on an annual basis through various rate mechanisms. Cost savings are realized by Entergy's customers. (ii) Emission reductions resulting from 2013 energy savings are estimated to have avoided 93,802 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, EGSL/ELL Quick Start Energy Efficiency program offerings begin 4Q2014 and EMI's Quick Start Energy Efficiency Program offerings begin 4Q2014 subject to final regulatory approvals. (iv) This activity is expected to continue both near and long term. (Estimated 1-10 years).</p>	93802	0	56000000	<1 year	10	
Transportation: fleet	<p>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's utility operating companies operate a fleet of vehicles, resulting in GHG emissions. Since 2009, the Utility Operations group set a goal to reduce vehicle emissions through various initiatives including mileage reduction, weight reduction and fleet turnover, including some hybrid vehicles. (ii) Emissions reductions during 2013 are estimated at 230 metric tons - these are direct, Scope 1</p>	230	0		1-3 years	5	

Activity type	Description of activity	Estimated annual CO2e savings (metric tonnes CO2e)	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, years	Comment
	emission reductions. (iii) This is a voluntary activity and (iv) is expected to continue in the near term (5 years).						
Other	The activities described here are in the same scope as Entergy's 3rd target, its Scope 1+2+3 voluntary emission stabilization goal (i) Since 2001, Entergy has invested in equipment upgrades, carbon sequestration projects and carbon offsets to lower CO2 emissions. An Environmental Initiatives Fund was created in 2001 to purchase high quality, external offsets and to help fund internal equipment upgrades such as neural network control systems to improve generation plant efficiency. (ii) Entergy invested approximately \$33 million from 2001 to 2013 in these projects and has established a portfolio of over 2.7 million metric tons of offsets (registered at www.americancarbonregistry.org). In 2012, Entergy funded a 3,000 acre bottomland hardwood reforestation project that will remove over 460,000 metric tons of CO2 from the atmosphere over the next 40 years. These investments can offset the company's Scope 1 emissions to help meet our voluntary commitment. (iii) This is a voluntary effort (iv) that we expect to continue through 2020.	5300000		33000000	4-10 years	7	

CC3.3c

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.
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/2014/53/5653/Investor CDP 2014/Shared Documents/Attachments/InvestorCDP2014/CC3.TargetsandInitiatives/2013_integrated_report.pdf](https://www.cdp.net/sites/2014/53/5653/Investor%20CDP%202014/Shared%20Documents/Attachments/InvestorCDP2014/CC3.TargetsandInitiatives/2013_integrated_report.pdf)
[https://www.cdp.net/sites/2014/53/5653/Investor CDP 2014/Shared Documents/Attachments/InvestorCDP2014/CC3.TargetsandInitiatives/2013_Entergy_Form_10K.pdf](https://www.cdp.net/sites/2014/53/5653/Investor%20CDP%202014/Shared%20Documents/Attachments/InvestorCDP2014/CC3.TargetsandInitiatives/2013_Entergy_Form_10K.pdf)
[https://www.cdp.net/sites/2014/53/5653/Investor CDP 2014/Shared Documents/Attachments/InvestorCDP2014/CC3.TargetsandInitiatives/2012 System IRP Report - Final 02Oct2012.pdf](https://www.cdp.net/sites/2014/53/5653/Investor%20CDP%202014/Shared%20Documents/Attachments/InvestorCDP2014/CC3.TargetsandInitiatives/2012%20System%20IRP%20Report%20-%20Final%2002Oct2012.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	Page/Section reference	Attach the document
In mainstream financial reports (complete)	pg 272-275 Risk; pg 229 Sources of Generation; pg 225 - 228 Utility generating capacity; pg 237 - 238 EWC capacity	https://www.cdp.net/sites/2014/53/5653/Investor CDP 2014/Shared Documents/Attachments/CC4.1/2013_Entergy_Form_10K.pdf
In mainstream financial reports (complete)	pg 33 Risk Management; pg 37, 40 Operating Performance; pg 45 - 51 Env Performance	https://www.cdp.net/sites/2014/53/5653/Investor CDP 2014/Shared Documents/Attachments/CC4.1/2013_integrated_report.pdf
In mainstream financial reports (underway) – previous year attached	pg 36 - 57 Sources of Energy and emissions	https://www.cdp.net/sites/2014/53/5653/Investor CDP 2014/Shared Documents/Attachments/CC4.1/2012_Investor_Guide.pdf
In voluntary communications (complete)		https://www.cdp.net/sites/2014/53/5653/Investor CDP 2014/Shared Documents/Attachments/CC4.1/Entergy_GHG_Inventory_2013.pdf
In voluntary communications (complete)		https://www.cdp.net/sites/2014/53/5653/Investor CDP 2014/Shared Documents/Attachments/CC4.1/performance_data_table.pdf

Publication	Page/Section reference	Attach the document
In voluntary communications (complete)		https://www.cdp.net/sites/2014/53/5653/Investor CDP 2014/Shared Documents/Attachments/CC4.1/C2ES business-resilience-report-07-2013-final.pdf
In voluntary communications (complete)		https://www.cdp.net/sites/2014/53/5653/Investor CDP 2014/Shared Documents/Attachments/CC4.1/JWforutilhard060413.ppt
In voluntary communications (complete)		https://www.cdp.net/sites/2014/53/5653/Investor CDP 2014/Shared Documents/Attachments/CC4.1/JeffWilliamsforC2ES7-17-13.pptx
In voluntary communications (complete)		https://www.cdp.net/sites/2014/53/5653/Investor CDP 2014/Shared Documents/Attachments/CC4.1/Canadian Electric Association 10-02-13.pptx
In voluntary communications (complete)		https://www.cdp.net/sites/2014/53/5653/Investor CDP 2014/Shared Documents/Attachments/CC4.1/JeffWilliamsfor2013CLC.pptx
In voluntary communications (complete)		https://www.cdp.net/sites/2014/53/5653/Investor CDP 2014/Shared Documents/Attachments/CC4.1/JWforNRDC082213v2.ppt
In voluntary communications (complete)		https://www.cdp.net/sites/2014/53/5653/Investor CDP 2014/Shared Documents/Attachments/CC4.1/JeffWilliamsforAMS.pptx
In voluntary communications (complete)		https://www.cdp.net/sites/2014/53/5653/Investor CDP 2014/Shared Documents/Attachments/CC4.1/JeffWilliams for Exec Forum Bus and Climate 11-04-13.pptx
In voluntary communications (complete)		https://www.cdp.net/sites/2014/53/5653/Investor CDP 2014/Shared Documents/Attachments/CC4.1/JeffWilliams for FAU 10-17-13.pptx

Further Information

Module: Risks and Opportunities

Page: CC5. Climate Change Risks

CC5.1

Have you identified any 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 risks 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	<p>Entergy may be affected by operational restrictions of fossil-fuel power plants and/or emissions control requirements as a result of International agreements that impact U.S. policy on climate change if ratified by Congress. This could result in additional restrictions on the operation of fossil-fuel power plants and or requirements to control emissions. This 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.</p>	Increased operational cost	>6 years	Direct	More likely than not	Medium-high	<p>A EPA GHG new source performance standards proposal may increase costs from \$0 to negligible for new CCGT units. A cap and trade program or carbon tax would add costs. One a scenario starts in 2018 with</p>	<p>The methods that Entergy uses to manage this risk includes integrated resource planning (IRP), portfolio management, purchase power agreements, nuclear uprates/maintaining the nuclear option, energy efficiency and demand response programs the voluntary GHG stabilization commitments the company has</p>	<p>Costs in 2013 include staff time to conduct the IRP process in the range of \$100 - \$200 thousand; generation construction work in progress of \$1.5 billion; \$56 million in Energy Efficiency and \$1 million in Entergy's Environmental Initiatives Fund (\$33 million+ over the last decade) to invest in</p>

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
							<p>CO2 allowance price of \$25.41/U.S. ton, and 2012-2031 levelized cost in 2011\$ of \$16.65/U.S. ton. A scenario of green growth, high gas price, 2018 start for cap and trade results in \$23.7 billion net present value of revenue required in excess of a case with no CO2 costs.</p>	<p>made over the last decade, and hedging techniques to mitigate market risks. Activities in 2013 include updating the IRP, first full year of 1,070 MW of highly efficient natural gas fired CCGT plants in Arkansas and Mississippi, and first full year of a 178 MW capacity up-rate at Grand Gulf Nuclear Station. Also, construction began on the 550 MW Nine Mile 6 CCGT unit in 2012 that is estimated to cost approximately \$721 million to complete. Cumulatively, this is allowing Entergy to reduce utilization and in some cases deactivate older,</p>	<p>efficiency improvements and high-quality offset projects. \$1.9 billion is forecast for clean generation 2014 -2016.</p>

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								less efficient legacy gas/oil fired steam electric units. These methods/activities 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.	
Air pollution limits	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	Increased capital cost	Up to 1 year	Direct	Virtually certain	High	An EPA GHG new source performance standard proposal for new units may increase costs from \$0 to negligible for new CCGT	The methods that Entergy uses to manage this risk includes integrated resource planning (IRP), portfolio management, purchase power agreements, nuclear uprates/maintaining the nuclear	Costs in 2013 include staff time to conduct the IRP process in the range of \$100 - \$200 thousand; generation construction work in progress of \$1.5 billion; \$56 million in Energy

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>(NSPS) for new electric generating units and Existing Source Performance Standards (ESPS) for 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.</p>						units.	<p>option, energy efficiency and demand response programs the voluntary GHG stabilization commitments the company has made over the last decade, and hedging techniques to mitigate market risks. Activities in 2013 include updating the IRP, first full year of 1,070 MW of highly efficient natural gas fired CCGT plants in Arkansas and Mississippi, and first full year of a 178 MW capacity up-rate at Grand Gulf Nuclear Station. Also, construction began on the 550 MW Nine Mile 6 CCGT unit in 2012 that is estimated to cost</p>	<p>Efficiency and \$1 million in Entergy's Environmental Initiatives Fund (\$33 million+ over the last decade) to invest in efficiency improvements and high-quality offset projects. \$1.9 billion is forecast for clean generation 2014 -2016.</p>

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								approximately \$721 million to complete. Cumulatively, this is allowing Entergy to reduce utilization and in some cases deactivate older, less efficient legacy gas/oil fired steam electric units. These methods/activities 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.	
Cap and trade schemes	A cap and trade scheme, even though unlikely in the next 5 years may result in increased operating costs to Entergy. Entergy believes that this type	Increased operational cost	>6 years	Direct	More likely than not	Medium	A cap and trade program or carbon tax would add	The methods that Entergy uses to manage this risk includes integrated	Costs in 2013 include staff time to conduct the IRP process in the range of

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>of 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.</p>						<p>costs; a scenario starting in 2018 with CO2 allowance price of \$25.41/U.S. ton, with a 2012-2031 levelized cost in 2011\$ of \$16.65/U.S. ton. A scenario of green growth, high gas price, 2018 start for cap and trade results in \$23.7 billion net present value of revenue required in excess of a case with no CO2 costs.</p>	<p>resource planning (IRP), portfolio management, purchase power agreements, nuclear uprates/maintaining the nuclear option, energy efficiency and demand response programs the voluntary GHG stabilization commitments the company has made over the last decade, and hedging techniques to mitigate market risks. Activities in 2013 include updating the IRP, first full year of 1,070 MW of highly efficient natural gas fired CCGT plants in Arkansas and Mississippi, and first full year of a 178 MW capacity</p>	<p>\$100 - \$200 thousand; generation construction work in progress of \$1.5 billion; \$56 million in Energy Efficiency and \$1 million in Entergy's Environmental Initiatives Fund (\$33 million+ over the last decade) to invest in efficiency improvements and high-quality offset projects. \$1.9 billion is forecast for clean generation 2014 -2016.</p>

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								<p>up-rate at Grand Gulf Nuclear Station. Also, construction began on the 550 MW Nine Mile 6 CCGT unit in 2012 that is estimated to cost approximately \$721 million to complete. Cumulatively, this is allowing Entergy to reduce utilization and in some cases deactivate older, less efficient legacy gas/oil fired steam electric units. These methods/activities reduce both the likelihood and magnitude of the risk occurring 2014-2031 by informing Entergy's planning, rate negotiation process and pace of electric</p>	

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								generation portfolio 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	Up to 1 year	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	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 2012, activities included third party verification of Scope 1+2+3 emissions, and reporting to the American Carbon Registry. These methods/activities reduce the likelihood and magnitude of the risk now and into the mid-term by providing the company	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
							FTE, \$75k/year	assurance that its GHG data is accurate for compliance and planning purposes. Entergy's early action on GHG accounting and reporting has minimized the incremental costs associated with additional reporting requirements - in many cases; the same data can be used for multiple reports as required.	
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	Up to 1 year	Direct	Virtually certain	Medium	A fuel/energy tax would add costs. An example of the financial implications from a cost of carbon from Entergy's 2012 IRP	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),	Costs in 2013 include staff time to conduct the IRP process in the range of \$100 - \$200 thousand; generation construction work in progress of \$1.5 billion; \$56 million in

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
							<p>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.</p>	<p>portfolio management, purchase power agreements, nuclear uprates/maintaining the nuclear option, energy efficiency and demand response programs the voluntary GHG stabilization commitments the company has made over the last decade, and hedging techniques to mitigate market risks. Activities in 2013 include updating the IRP, first full year of 1,070 MW of highly efficient natural gas fired CCGT plants in Arkansas and Mississippi, and first full year of a 178 MW capacity up-rate at Grand Gulf Nuclear</p>	<p>Energy Efficiency and \$1 million in Entergy's Environmental Initiatives Fund (\$33 million+ over the last decade) to invest in efficiency improvements and high-quality offset projects. \$1.9 billion is forecast for clean generation 2014 -2016.</p>

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								<p>Station. Also, construction began on the 550 MW Nine Mile 6 CCGT unit in 2012 that is estimated to cost approximately \$721 million to complete. Cumulatively, this is allowing Entergy to reduce utilization and in some cases deactivate older, less efficient legacy gas/oil fired steam electric units. These methods/activities 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</p>	

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								management.	
Product efficiency regulations and standards	<p>Entergy may experience reduced demand for goods and services due to new product efficiency regulations and standards. While, Entergy already has active EE/DSM goals and targets for our utility business, this does reduce demand for electricity. 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. Additionally, Entergy is planning for increased demand due to new commercial and economic development in the utility area and greater utilization of electrification technologies like electric irrigation pumps and electric vehicles.</p>	Reduced demand for goods/services	Up to 1 year	Indirect (Client)	Virtually certain	Low-medium	<p>Financial implications include loss of revenue associated with demand side management (DSM) programs; Entergy's 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</p>	<p>Entergy uses Integrated Resource Planning to manage for the level and timing of customers' energy use over long term planning horizons. Entergy also works with the utility commissions on alternative cost recovery mechanisms for energy efficiency/demand side management (EE/DSM) activities and advocates for similar EE/DSM programs in the other states that we serve. These methods reduce both the likelihood and magnitude of this</p>	<p>The cost of producing IRP is estimated to be \$100 - 200k per year; there is no incremental annual cost, \$0, in negotiating DSM lost revenue mechanisms. A total of \$176 million was invested over the period of 2002-2013 to create a total of 230 MWs and 752,000 MWHs of DSM energy savings. In 2013 alone approximately \$52 million was invested in DSM programs creating 32 MWs and 235,000 MWHs 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>assumes reduced electric generation of ~100-900Mw per year over 2014-2031.</p>	<p>risk 2014-2031 by integrating various resource scenarios into Entergy's long term financial planning process. In 2013, activities included implementation of DSM programs with appropriate cost recovery mechanisms. Entergy offered various products and/or services to help customers use electricity more efficiently. Known broadly as demand side management or energy efficiency programs, these efforts focus on efficient use of electricity through a host of outreach programs, low-income assistance initiatives and grant offerings.</p>	

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								<p>Reducing energy consumption eliminates emissions associated with electric generation, reduces the amount of new generation that needs to be built to meet the growth in demand and has the added benefit of reducing customer's electric bills helping all customers, but is especially important for our low income customers. Entergy currently has active DSM programs in Texas, Arkansas and New Orleans that include 32 DSM programs for all customer classes (residential, commercial and</p>	

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								industrial)	
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 obligation may prove uneconomic, This could lead to increased operations 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.	Increased operational cost	Up to 1 year	Direct	Virtually certain	Low	Financial implications depend on the 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	The methods that Entergy uses to manage this risk 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 2013, activities included an issues management process, continued advocacy for regulatory certainty, preferring regulation of	Existing staff perform regulatory monitoring and advocacy at \$0 additional cost per year; capital costs of \$1.9 billion '14 - '16 for clean generation. 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.

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
							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.	carbon emissions through a cap and trade scheme or a carbon fee/tax.	
Lack of regulation	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 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. Continued uncertainty and lack of regulation of GHGs delays this benefit.	Reduced stock price (market valuation)	Up to 1 year	Direct	Virtually certain	Medium-high	Financial implications depend on the regulatory framework adopted. Entergy's 2012 integrated resource plan evaluated a scenario of green growth,	The methods that Entergy uses to manage this risk include: electric generation portfolio management towards cleaner, lower-emitting facilities and continuous monitoring of the regulatory environment. Entergy's generation	Existing staff perform regulatory monitoring and advocacy at \$0 additional cost per year; capital costs of \$1.9 billion '14 - '16 for clean generation. These methods/activities reduce both the likelihood and magnitude

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
							<p>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.</p>	<p>portfolio is one of the cleanest in the United States among large electric generators. In 2013, activities included continued advocacy for regulatory certainty, preferring regulation of carbon emissions through a cap and trade scheme or a carbon fee/tax.</p>	<p>of the risk occurring by informing Entergy's planning, rate negotiation process and pace of electric generation portfolio management.</p>

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
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	1 to 3 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	The methods that Entergy uses to manage this risk includes integrated resource planning (IRP), portfolio management, nuclear uprates/maintaining the nuclear option, the voluntary GHG stabilization commitments the company has made over the last decade, and hedging techniques to mitigate market risks. Activities in 2013 include updating the IRP, first full year of operation of 1,070 MW of highly efficient natural gas fired CCGT plants in Arkansas and Mississippi, and first full year of operation of a	Existing staff perform regulatory monitoring and advocacy at \$0 additional cost per year; capital costs of \$1.9 billion '14 - '16 for clean generation. 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.

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
							<p>results in \$23.7 billion net present value of revenue required in excess of a case with no CO2 costs.</p>	<p>178 MW capacity up-rate at Grand Gulf Nuclear Station. Also, construction began on the 550 MW Nine Mile 6 CCGT unit in 2012 that is estimated to cost approximately \$721 million to complete. Cumulatively, this is allowing Entergy to reduce utilization and in some cases deactivate older, less efficient legacy gas/oil fired steam electric units. These methods/activities reduce both the likelihood and magnitude of the risk occurring 2014-2031 by informing Entergy's planning, rate negotiation process and pace</p>	

Risk driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								of electric generation portfolio management.	

CC5.1b

Please describe your 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 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	Increased operational cost	Up to 1 year	Direct	Very likely	High	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	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, use of securitization bonds to recover restoration costs, establishment of reserve funds, regulatory recovery mechanisms, investment in	Costs are in staff time, est. 5 FTEs, \$375 k/yr. Est. \$1 bn in storm hardening '08 – '13. 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

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>level rise and storm surge are increasing damage to U.S. infrastructure</p> <p>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 which many energy systems, markets, and consumers depend.</p> <p>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</p>						<p>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.</p>	<p>emergency preparedness, and research into adaptation. Entergy has studied scenarios of future climate change to better understand the challenges and identify cost effective ways to avoid loss and has reached out to our communities to identify cooperative actions to build resilience. 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 the aim to cover damage costs. Activities Entergy initiated in 2012 included conducting two Technical Conferences with customers to identify cost effective measures to avoid losses from wind damage, floods and storm surge. In 2011 and 2012 Entergy and America's</p>	<p>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.</p>

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	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 and South Louisiana.							WETLAND Foundation engaged 1,100 stakeholders in eleven different Gulf Coast communities in a dialogue on the region's vulnerability to future scenarios of climate change in Blue Ribbon Resilient Community (BBRC) Leadership Forums. Cost effective investments to build greater resilience to these hazards were discussed and a course of for cooperative action put in place.	
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	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	Entergy manages risk through storm hardening of facilities, technical conferences with customers to build greater resilience, Blue Ribbon Resilient Community Leadership Forums (BRRC), property insurance, use of securitization bonds to recover restoration costs, establishment of reserve funds, regulatory recovery mechanisms,	Costs are in staff time, est. 5 FTEs, \$375 k/yr. Est. \$1 bn in storm hardening '08 – '13. Entergy funded the \$4.2 million Gulf Coast Adaptation Study that identified \$49 billion in investments over 20 years that will avert

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>may change, and that flooding may intensify. Entergy could experience infrastructure damage and loss of sales during power outages associated with hurricanes.. In recent years, hurricanes Katrina, Rita, Gustav and Ike have provided a glimpse into what increased frequency and severity of tropical cyclones will be like under some of the climate change scenario predictions.</p>						<p>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.</p>	<p>investment in emergency preparedness, and research into adaptation. Entergy has studied scenarios of future climate change to better understand the challenges and identify cost effective ways to avoid loss and has reached out to our communities to identify cooperative actions to build resilience. 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 the aim to cover damage costs. Activities Entergy initiated in 2012 included conducting two Technical Conferences with customers to identify cost effective measures to avoid losses from wind damage, floods and storm surge. In 2011 and 2012 Entergy</p>	<p>\$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.</p>

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								and America's WETLAND Foundation engaged 1,100 stakeholders in eleven different Gulf Coast communities in a dialogue on the region's vulnerability to future scenarios of climate change in Blue Ribbon Resilient Community (BBRC) Leadership Forums. Cost effective investments to build greater resilience to these hazards were discussed and a course of for cooperative action put in place.	
Induced changes in natural resources	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. Louisiana's coastline is being impacted	Increased operational cost	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 \$1.5	Entergy manages risk through storm hardening of facilities, technical conferences with customers to build greater resilience, Blue Ribbon Resilient Community Leadership Forums (BRRRC), property insurance, use of securitization bonds to recover restoration costs, establishment of reserve funds, regulatory recovery mechanisms,	Costs are in staff time, est. 5 FTEs, \$375 k/yr. Est. \$1 bn in storm hardening '08 – '13. Entergy funded the \$4.2 million Gulf Coast Adaptation Study that identified \$49 billion in investments over 20 years that will avert

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>today by coastal erosion, sea level rise and subsidence. These factors are impacting Entergy's customers and in some cases, Entergy's assets.</p>						<p>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.</p>	<p>investment in emergency preparedness, and research into adaptation. Entergy has studied scenarios of future climate change to better understand the challenges and identify cost effective ways to avoid loss and has reached out to our communities to identify cooperative actions to build resilience. 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 the aim to cover damage costs. Activities Entergy initiated in 2012 included conducting two Technical Conferences with customers to identify cost effective measures to avoid losses from wind damage, floods and storm surge. In 2011 and 2012 Entergy</p>	<p>\$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.</p>

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								and America's WETLAND Foundation engaged 1,100 stakeholders in eleven different Gulf Coast communities in a dialogue on the region's vulnerability to future scenarios of climate change in Blue Ribbon Resilient Community (BBRC) Leadership Forums. Cost effective investments to build greater resilience to these hazards were discussed and a course of for cooperative action put in place.	
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. Changes to precipitation patterns can	Increased operational cost	1 to 3 years	Direct	More likely than not	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 \$1.5	Entergy manages risk through storm hardening of facilities, technical conferences with customers to build greater resilience, Blue Ribbon Resilient Community Leadership Forums (BRRRC), property insurance, use of securitization bonds to recover restoration costs, establishment of reserve funds, regulatory recovery mechanisms,	Costs are in staff time, est. 5 FTEs, \$375 k/yr. Est. \$1 bn in storm hardening '08 – '13. Entergy funded the \$4.2 million Gulf Coast Adaptation Study that identified \$49 billion in investments over 20 years that will avert

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>impact where cooling water is available and can impact our ability to operate due to flooding events.</p>						<p>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.</p>	<p>investment in emergency preparedness, and research into adaptation. Entergy has studied scenarios of future climate change to better understand the challenges and identify cost effective ways to avoid loss and has reached out to our communities to identify cooperative actions to build resilience. 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 the aim to cover damage costs. Activities Entergy initiated in 2012 included conducting two Technical Conferences with customers to identify cost effective measures to avoid losses from wind damage, floods and storm surge. In 2011 and 2012 Entergy</p>	<p>\$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.</p>

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								and America's WETLAND Foundation engaged 1,100 stakeholders in eleven different Gulf Coast communities in a dialogue on the region's vulnerability to future scenarios of climate change in Blue Ribbon Resilient Community (BBRC) Leadership Forums. Cost effective investments to build greater resilience to these hazards were discussed and a course of for cooperative action put in place.	
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 resource	Increased operational cost	>6 years	Direct	More likely than not	Medium-high	Entergy undergoes an extensive resource planning exercise on a regular, periodic basis. This plan includes inputs on plant retirements, new builds, uprates and resource requirement scenarios. Uncertainty	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 meaningful stakeholder engagement - this will	In the near term, we have attractive, cost-effective actions that can increase resiliency, assist the growth of our economy and restore our environment. Examples include improved building codes, wetland

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	planning. The time horizon for this planning is 30+ years - uncertainty regarding population density and location causes uncertainty in our modelling.						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 implications difficult to quantify	help us move closer toward consensus on the need for action and alignment on the measures to employ	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.
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 states net energy demand	Increased operational cost	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 is plausible that financial implications are similar to those experienced in 2012, ~\$50 -	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,	The costs of these methods are \$1.3 billion capital cost in new capacity, \$52 million for energy efficiency, \$2.2 million in Power to Care Funds, \$100 -200 thousand for Integrated Resource Plans,

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>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.</p>						<p>\$80 million decrease in net revenue due to effect of milder weather 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 impact on low income families</p>	<p>insurance policies, and emergency preparedness; these methods reduce the likelihood and magnitude of risks now and into the longer term, >10 years. Activities in 2013 include updating the IRP, first full year of 1,070 MW of highly efficient natural gas fired CCGT plants in Arkansas and Mississippi, and first full year of a 178 MW capacity up-rate at Grand Gulf Nuclear Station. Also, construction began on the 550 MW Nine Mile 6 CCGT unit in 2012 that is estimated to cost approximately \$721 million to complete. Entergy helped weatherize low income homes and; raised \$2.2 million in Power to Care Funds and distributed those funds to low-income customers to help them pay their energy bills; advocated for federally funded Low Income</p>	<p>costs for low income advocacy, emergency planning and managing restoration are embedded in many existing departments, including working with PSCs on restoration funding.</p>

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								Home Energy Assistance Program (LIHEAP) grants to assist customers in need.	

CC5.1c

Please describe your 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 weather events.	Reduced stock price (market valuation)	Up to 1 year	Direct	Very 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 and overall valuation. Entergy has long been recognized as being a good corporate	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	Since Entergy's success depends on our customers using our product efficiently and being able to pay their electric bill, the costs associated with low-income programs are recovered - both in revenue and in the long term success and sustainability of the economy as

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated Financial Implications	Management method	Cost of management
							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.	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.	a whole.
Induced changes in human and cultural environment	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	Wider social disadvantages	Up to 1 year	Indirect (Client)	Very likely	Medium	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	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	Costs include staff time and 100,000 hours volunteer time, \$0 incremental cost; corporate philanthropy invested \$3.8 million on community improvement and \$5.1 million for poverty solutions. Entergy donated \$15 million in 2013 to non profit groups to

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated Financial Implications	Management method	Cost of management
	and other cultures in South Louisiana are at risk and are already being impacted by coastal erosion, subsidence and sea level rise.						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.	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	help rebuild the physical and cultural resources in communities. Entergy worked with partners to provide tax assistance that returned \$25 million in Earned Income Tax Credits (EITC and advocated for LIHEAP funds that contributed \$228 million.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated Financial Implications	Management method	Cost of management
								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.	
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 negative changes	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;	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	Costs include staff time and 100,000 hours volunteer time, \$0 incremental cost; corporate philanthropy invested \$3.8 million on community improvement and \$5.1 million

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated Financial Implications	Management method	Cost of management
	<p>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 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</p>						<p>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.</p>	<p>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</p>	<p>for poverty solutions. Entergy donated \$15 million in 2013 to non profit groups to help rebuild the physical and cultural resources in communities. Entergy worked with partners to provide tax assistance that returned \$25 million in Earned Income Tax Credits (EITC and advocated for LIHEAP funds that contributed \$228 million.</p>

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated Financial Implications	Management method	Cost of management
	<p>following recent hurricanes was disproportionately felt by low-income individuals and families. The predicted impacts of climate change, including potential increases in the cost of electricity, impact to local environments will have the most impact on these same individuals and families. One of our guiding principles regarding the needed response to climate change is to build in permanent low-income protection similar to the earned income tax credit or other rebate. In addition, the company advocates for continued provision of low income home energy assistance programs.</p>							<p>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 community investment and job creation; facilitating increased government assistance for low-income customer assistance.</p>	
Increasing humanitarian	Entergy's customers are	Wider social disadvantages	1 to 3 years	Indirect (Client)	More likely than not	Medium	Lost revenue from lower	Entergy is managing this	Costs include staff time and

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated Financial Implications	Management method	Cost of management
demands	being affected by physical climate impacts and these may increase in the future leading to increased humanitarian demands on 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.						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. 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.	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	100,000 hours volunteer time, \$0 incremental cost; corporate philanthropy invested \$3.8 million on community improvement and \$5.1 million for poverty solutions. Entergy donated \$15 million in 2013 to non profit groups to help rebuild the physical and cultural resources in communities. Entergy worked with partners to provide tax assistance that returned \$25 million in Earned Income Tax Credits (EITC and advocated for LIHEAP funds that contributed \$228 million.

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated Financial Implications	Management method	Cost of management
								<p>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 community investment and job creation; facilitating increased government assistance for</p>	

Risk driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated Financial Implications	Management method	Cost of management
								low-income customer assistance.	

CC5.1d

Please explain why you do not consider your company to be exposed to 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 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 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**Attachments**

[https://www.cdp.net/sites/2014/53/5653/Investor CDP 2014/Shared Documents/Attachments/InvestorCDP2014/CC5.ClimateChangeRisks/2013_Entergy_Form_10K.pdf](https://www.cdp.net/sites/2014/53/5653/Investor%20CDP%202014/Shared%20Documents/Attachments/InvestorCDP2014/CC5.ClimateChangeRisks/2013_Entergy_Form_10K.pdf)
[https://www.cdp.net/sites/2014/53/5653/Investor CDP 2014/Shared Documents/Attachments/InvestorCDP2014/CC5.ClimateChangeRisks/2012 System IRP Report - Final 02Oct2012.pdf](https://www.cdp.net/sites/2014/53/5653/Investor%20CDP%202014/Shared%20Documents/Attachments/InvestorCDP2014/CC5.ClimateChangeRisks/2012%20System%20IRP%20Report%20-%20Final%2002Oct2012.pdf)
[https://www.cdp.net/sites/2014/53/5653/Investor CDP 2014/Shared Documents/Attachments/InvestorCDP2014/CC5.ClimateChangeRisks/2013_integrated_report.pdf](https://www.cdp.net/sites/2014/53/5653/Investor%20CDP%202014/Shared%20Documents/Attachments/InvestorCDP2014/CC5.ClimateChangeRisks/2013_integrated_report.pdf)
[https://www.cdp.net/sites/2014/53/5653/Investor CDP 2014/Shared Documents/Attachments/InvestorCDP2014/CC5.ClimateChangeRisks/RWESTEPKeynoteFINALFINAL31MAR143PM.pptx](https://www.cdp.net/sites/2014/53/5653/Investor%20CDP%202014/Shared%20Documents/Attachments/InvestorCDP2014/CC5.ClimateChangeRisks/RWESTEPKeynoteFINALFINAL31MAR143PM.pptx)
[https://www.cdp.net/sites/2014/53/5653/Investor CDP 2014/Shared Documents/Attachments/InvestorCDP2014/CC5.ClimateChangeRisks/ETR_2013_AR_FINAL.pdf](https://www.cdp.net/sites/2014/53/5653/Investor%20CDP%202014/Shared%20Documents/Attachments/InvestorCDP2014/CC5.ClimateChangeRisks/ETR_2013_AR_FINAL.pdf)

Page: CC6. Climate Change Opportunities

CC6.1

Have you identified any 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 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
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Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
International agreements	International agreements may hasten US policy on climate change, if ratified by Congress, and carbon regulation may benefit Entergy by driving demand for lower-carbon energy. Compared to the top 100 largest utilities in the US, Entergy ranks in top quartile for lowest CO2 emission rates for all generating sources, therefore the company may have a competitive advantage under any regulatory scenario that places a price	Increased demand for existing products/services	Up to 1 year	Direct	Likely	Medium-high	Entergy's investments in low-emitting generation and early action to reduce emissions resulted in 41% reduction in CO2 emission rates to .59 lbs. CO2/kWh, ~47% lower than the national average. 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.	The methods that Entergy uses to manage these opportunities include developing an integrated resource plan, electric generation portfolio management, and voluntary reduction of GHG emissions. The activities Entergy used to manage these opportunities in 2013 included development of an integrated resource plan, first full year of operating with expanded CCGT and nuclear capacity resulting in a cleaner generation portfolio, and	Costs in 2013 include staff time to conduct the IRP process in the range of \$100 - \$200 thousand; generation construction work in progress of \$1.5 billion; \$56 million in Energy Efficiency and \$1 million in Entergy's Environmental Initiatives Fund (\$33 million+ over the last decade) to invest in efficiency improvements and high-quality offset projects. \$1.9 billion is forecast for clean generation 2014 -2016.

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>on carbon or results in CO2 emission limits. Entergy has long advocated for action on climate change, so any international action on this front will increase pressure for the US to take action. take action.</p>							<p>implementation of projects to reduce GHG emissions and create offsets. These methods affect the likelihood and magnitude of the opportunity now and into the longer term, >5 years. Entergy's current focus is on the United States; however, international action on climate change, air pollution limits, carbon taxes and cap & trade schemes will hasten action, recognize early action by leaders such as Entergy and create markets through which Entergy can leverage our</p>	

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								position. Entergy is moving on these opportunities now and has a portfolio of nearly 4 million tons of carbon offsets.	
Air pollution limits	Entergy's recent investments in CCGT and nuclear uprates result in top quartile, low CO2 emission rates (compared to the largest 100 electric generators in the US), therefore the company may have an advantage as the USEPA currently is requiring analysis of the best available	Increased stock price (market valuation)	Up to 1 year	Direct	Very likely	Medium-high	Entergy's investments in low-emitting generation and early action to reduce emissions resulted in 41% reduction in CO2 emission rates to .59 lbs. CO2/kWh, ~47% lower than the national average. 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%	The methods that Entergy uses to manage these opportunities include developing an integrated resource plan, electric generation portfolio management, and voluntary reduction of GHG emissions. The activities Entergy used to manage these opportunities in 2013 included development of an integrated	Costs in 2013 include staff time to conduct the IRP process in the range of \$100 - \$200 thousand; generation construction work in progress of \$1.5 billion; \$56 million in Energy Efficiency and \$1 million in Entergy's Environmental Initiatives Fund (\$33 million+ over the last decade) to invest in efficiency

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>control technology (BACT) for new and/or upgraded power generation facilities. Additionally, EPA has proposed a new source performance standard for new power plants of 1000 pounds CO2 per MWh. EPA has indicated it will propose GHG New Source Performance Standards for existing units. All of these actions are based on the determination (and case law) that CO2 can be a regulated pollutant under the Clean Air Act.</p>						<p>lower) vs the national average estimated at ~ \$850 mm/yr. for a generation fleet of the same size.</p>	<p>resource plan, first full year of operating with expanded CCGT and nuclear capacity resulting in a cleaner generation portfolio, and implementation of projects to reduce GHG emissions and create offsets. These methods affect the likelihood and magnitude of the opportunity now and into the longer term, >5 years. Entergy's current focus is on the United States; however, international action on climate change, air pollution limits, carbon taxes and cap &</p>	<p>improvements and high-quality offset projects. \$1.9 billion is forecast for clean generation 2014 -2016.</p>

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	While Entergy has long advocated for action on climate change, regulation of carbon dioxide through the Clean Air Act is not the most efficient method.							trade schemes will hasten action, recognize early action by leaders such as Entergy and create markets through which Entergy can leverage our position. Entergy is moving on these opportunities now and has a portfolio of nearly 4 million tons of carbon offsets.	
Cap and trade schemes	Entergy's electric generation portfolio management strategy anticipated carbon regulation. The company now only operates clean CCGT or non-CO2 emitting	Increased stock price (market valuation)	Up to 1 year	Direct	Unlikely	Medium-high	Entergy's investments in low-emitting generation and early action to reduce emissions resulted in 41% reduction in CO2 emission rates to .59 lbs. CO2/kWh, ~47% lower than the national average. The potential financial impact in	The methods that Entergy uses to manage these opportunities include developing an integrated resource plan, electric generation portfolio management, and voluntary reduction of	Costs in 2013 include staff time to conduct the IRP process in the range of \$100 - \$200 thousand; generation construction work in progress of \$1.5 billion; \$56 million in Energy

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>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, and our natural gas CCGT plant is low-emitting when compared to the national average. Even though a national cap and trade</p>						<p>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>GHG emissions. The activities Entergy used to manage these opportunities in 2013 included development of an integrated resource plan, first full year of operating with expanded CCGT and nuclear capacity resulting in a cleaner generation portfolio, and implementation of projects to reduce GHG emissions and create offsets. These methods affect the likelihood and magnitude of the opportunity now and into the longer term, >5 years. Entergy's</p>	<p>Efficiency and \$1 million in Entergy's Environmental Initiatives Fund (\$33 million+ over the last decade) to invest in efficiency improvements and high-quality offset projects. \$1.9 billion is forecast for clean generation 2014 -2016.</p>

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	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.							current focus is on the United States; however, international action on climate change, air pollution limits, carbon taxes and cap & trade schemes will hasten action, recognize early action by leaders such as Entergy and create markets through which Entergy can leverage our position. Entergy is moving on these opportunities now and has a portfolio of nearly 4 million tons of carbon offsets.	
Product efficiency regulations and	Entergy earns a financial incentive for achieving its	New products/business services	Up to 1 year	Direct	Virtually certain	Medium-high	Entergy Operating Companies receive cost	The methods that Entergy uses to manage these	Existing Entergy staff implements EE/DSM

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
standards	<p>energy efficiency / demand side management (EE/DSM) goals and targets for our utility business in Texas, Arkansas and New Orleans while we advocate for similar programs in Louisiana and Mississippi. The Public Service Commissions in Texas and Arkansas and allow recovery of DSM and EE investments. While this does reduce demand for electricity (thereby reducing revenue), Entergy is building capacity to</p>						<p>recovery and financial incentives for meeting energy efficiency/demand side management goals based on the net benefits achieved; incentives range from \$1 - \$2 million per year. In 2013, Entergy Texas was named Energy STAR Partner of the Year in energy efficiency program delivery by the U.S. EPA. In Texas, Entergy earned \$1.4 million for meeting goals and passing financial tests. Similar financial incentive programs exist in Arkansas and New Orleans.</p>	<p>opportunities include offering various EE/DSM programs, products and/or services to help customers use electricity more efficiently and negotiation of lost revenue mechanisms with its regulators. The activities that Entergy used in 2013 were negotiation of lost revenue mechanisms with regulators in Texas, Arkansas and New Orleans, and implementing demand side management or energy efficiency programs in those areas, these efforts included focusing on</p>	<p>programs at ~\$0 additional cost. Entergy has 32 DSM programs in Entergy Texas, Inc., Entergy Arkansas, Inc. and Entergy New Orleans, Inc. for all customer classes (residential, commercial and industrial). In 2013 alone approximately \$56 million was invested creating 32 MWs and 235,000 MWHs of annual energy savings. A total of \$176 million was invested over the period of 2002-2013 to create a total of 237 MWs and 752,000 MWHs of</p>

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>operate profitably in an economy where energy efficiency may become mainstream and may benefit commercially by offering energy efficiency 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</p>							<p>efficient use of electricity through a host of outreach programs, low-income assistance initiatives and even grant offerings. Reducing energy consumption eliminates emissions associated with electric generation, reduces the amount of new generation that needs to be built to meet the growth in demand and has the added benefit of reducing customer's electric bills helping all customers, but is especially important for our low income customers. These</p>	<p>energy savings.</p>

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	wasteful use of energy by our customers. Entergy strongly advocates the efficient use of electricity and understands that this is a technology that can be cost effectively deployed today to reduce GHG emissions economy-wide.							methods affect the likelihood and magnitude of the opportunity now and into the longer term, >5 years.	
Voluntary agreements	Entergy has voluntarily committed to reduce its GHG emissions for the last decade resulting in the company being positioned in the top quartile of low	Increased stock price (market valuation)	Up to 1 year	Direct	Very likely	Medium-high	Entergy's investments in low-emitting generation and early action to reduce emissions resulted in 41% reduction in CO2 emission rates to .59 lbs. CO2/kWh, ~47% lower than the national average. The potential	The methods that Entergy uses to manage these opportunities includes developing an integrated resource plan, electric generation portfolio management, and voluntary	Costs in 2013 include staff time to conduct the IRP process in the range of \$100 - \$200 thousand; generation construction work in progress of \$1.5 billion; \$56 million in

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>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 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</p>						<p>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>reduction of GHG emissions. The activities Entergy used to manage these opportunities in 2013 included development of an integrated resource plan, investments in CCGT technology resulting in a cleaner generation portfolio, and implementation of projects to reduce GHG emissions and create offsets. These methods affect the likelihood and magnitude of the opportunity now and into the longer term, >5 years. Entergy's current focus is on the United</p>	<p>Energy Efficiency and \$1 million in Entergy's Environmental Initiatives Fund (\$33 million+ over the last decade) to invest in efficiency improvements and high-quality offset projects. \$1.9 billion is forecast for clean generation 2014 -2016.</p>

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	controllable purchased power) by 3%, both on a cumulative basis. After successful completion of these commitments, Entergy announced a third voluntary CO2 commitment - stabilization at 20% below year 2000 levels through 2020, taking into account all three commitment periods.							States; however, international action on climate change, air pollution limits, carbon taxes and cap & trade schemes will hasten action, recognize early action by leaders such as Entergy and create markets through which Entergy can leverage our position. Entergy is moving on these opportunities now and has a portfolio of nearly 4 million tons of carbon offsets.	
Carbon taxes	Entergy ranks in top quartile for lowest CO2 emission rates for all	Increased stock price (market valuation)	Up to 1 year	Direct	About as likely as not	Medium-high	Entergy's investments in low-emitting generation and early action to reduce emissions	The methods that Entergy uses to manage these opportunities include	Costs in 2013 include staff time to conduct the IRP process in the range of

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	generating 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.						resulted in 41% reduction in CO2 emission rates to .59 lbs CO2/kWh, ~47% lower than the national average. The potential financial impact in a scenario when a price on CO2 starts in 2018 at \$25.41/U.S. ton (2012-2031) leveled 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.	developing an integrated resource plan, electric generation portfolio management, and voluntary reduction of GHG emissions. The activities Entergy used to manage these opportunities in 2013 included development of an integrated resource plan, investments in CCGT technology resulting in a cleaner generation portfolio, and implementation of projects to reduce GHG emissions and create offsets. These methods affect the likelihood and magnitude	\$100 - \$200 thousand; generation construction work in progress of \$1.5 billion; \$56 million in Energy Efficiency and \$1 million in Entergy's Environmental Initiatives Fund (\$33 million+ over the last decade) to invest in efficiency improvements and high-quality offset projects. \$1.9 billion is forecast for clean generation 2014 -2016.

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								<p>of the opportunity now and into the longer term, >5 years. Entergy's current focus is on the United States; however, international action on climate change, air pollution limits, carbon taxes and cap & trade schemes will hasten action, recognize early action by leaders such as Entergy and create markets through which Entergy can leverage our position. Entergy is moving on these opportunities now and has a portfolio of nearly 4 million tons of carbon</p>	

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								offsets.	
Other regulatory drivers	<p>Entergy's customers are exposed to less risk 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</p>	Increased stock price (market valuation)	Up to 1 year	Direct	Very likely	Medium-high	<p>Entergy's investments in low-emitting generation and early action to reduce emissions resulted in 41% reduction in CO2 emission rates to .59 lbs. CO2/kWh, ~47% lower than the national average. 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>The methods that Entergy uses to manage these opportunities include developing an integrated resource plan, electric generation portfolio management, and voluntary reduction of GHG emissions. The activities Entergy used to manage these opportunities in 2013 included development of an integrated resource plan, investments in CCGT technology resulting in a cleaner generation portfolio, and implementation</p>	<p>Costs in 2013 include staff time to conduct the IRP process in the range of \$100 - \$200 thousand; generation construction work in progress of \$1.5 billion; \$56 million in Energy Efficiency and \$1 million in Entergy's Environmental Initiatives Fund (\$33 million+ over the last decade) to invest in efficiency improvements and high-quality offset projects. \$1.9 billion is forecast for clean generation 2014 -2016.</p>

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>fee/tax, or a cap and trade scheme. Because of this, Entergy stands to benefit from increased investor interest and market valuation in a carbon constrained economy.</p>							<p>of projects to reduce GHG emissions and create offsets. These methods affect the likelihood and magnitude of the opportunity now and into the longer term, >5 years. Entergy's current focus is on the United States; however, international action on climate change, air pollution limits, carbon taxes and cap & trade schemes will hasten action, recognize early action by leaders such as Entergy and create markets through which Entergy can leverage our position.</p>	

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								Entergy is moving on these opportunities now and has a portfolio of nearly 4 million tons of carbon offsets.	

CC6.1b

Please describe the 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 is strengthening its Gulf Coast physical infrastructure, valued at \$74 billion and working with customers and stakeholders to build greater resilience to extreme weather events	The methods that Entergy uses to manage this opportunity include partnering with government, business, economic development and scientific research entities to approach	Entergy is investing \$66 million hardening transmission lines serving Port Fourchon, vital infrastructure serving 90% of deep off shore oil production in the Gulf of Mexico. Since

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>reducing exposure to economic losses to our 2.8 million customer base. 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.</p>	<p>environmental adaptation as a community-wide strategy, advocating for action, funding research and developing offset protocols and holding technical and community outreach forums. Activities Entergy used to manage this opportunity includes funding for the America's 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</p>	<p>2008 Entergy has spent over \$1 billion in focused hardening of its coastal T&D system. Spent \$200,000 conducting regional resilience forums. Existing staff advocate for action, and participate in technical and community outreach forums at no, \$0, additional cost. \$1.9 billion is forecast for T&D for 2014 - 2016</p>

Opportunity driver	Description	Potential impact	Timeframe	Direct/Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								<p>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 economic loss from hurricanes, storm surge and flooding for every dollar invested. Entergy supported development of a carbon offset protocol through the American Carbon Registry and Tierra Resources.</p>	

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								These methods increase the likelihood and magnitude of the opportunity now and into the longer term, 5+ years.	
Induced changes in natural resources	<p>Entergy may benefit from the commercialization of carbon offset opportunities for 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.</p>	Wider social benefits	Up to 1 year	Direct	Very likely	Medium	<p>Entergy is strengthening its Gulf Coast physical infrastructure, valued at \$74 billion and working with customers and stakeholders to build greater resilience to extreme weather events reducing exposure to economic losses to our 2.8 million customer base. Financial implications may be similar to past hurricane restoration costs of \$370 million to \$1.5</p>	<p>The methods that Entergy uses to manage this opportunity 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.</p>	<p>Costs include funding an America Wetland Foundation study, \$200,000, for research in deltaic wetlands; funding Tierra Resources \$150,000 to develop the a methodology to establish carbon offsets for deltaic wetlands restoration. We have cost-effective actions that can increase resiliency, assist the growth of our economy and</p>

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
							billion. These steps can help protect livelihoods of 12 million people, \$634 billion in annual GDP, and more than \$2 trillion in assets.	Activities Entergy used to manage this opportunity includes funding for the America's 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	restore our environment.

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								adaptation investments that achieves \$4.3 to \$5.9 of avoided economic loss from hurricanes, storm surge and flooding for every dollar invested. 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	Increased demand for existing products/services	Up to 1 year	Direct	Likely	Medium	Based on the National Climate Assessment, it is plausible that	The method that Entergy uses to manage this opportunity is through	Costs include the planning process which is a function of Entergy's

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	<p>in mean temperature. The 2014 National Climate 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</p>						<p>an increase of 40C in temperature could lead to a 10% increase in residential energy consumption due to increased air conditioning. Based on 2013 Residential Operating Revenues for Entergy's Utilities, a 10% increase in Residential energy consumption could lead to \$340 million in additional revenue. Weather variances between 2009 and 2010, resulted in a revenue increase of \$231 million.</p>	<p>integrated resource planning assuring it has sufficient generation resources to meet increased demand - the planning process includes load forecasts through 2031. Activities in 2012 and 2013 included updates of integrated resource plans for the system and for business units such as Entergy Arkansas and Entergy Mississippi. These methods increase the likelihood and magnitude of the opportunity now and into the longer term, 5+ years.</p>	<p>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 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
	conditioning.								

CC6.1c

Please describe the 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 increase in exposure and	Increased stock price (market valuation)	1 to 3 years	Direct	Very likely	Medium-high	We grow by providing customers with low-emission, reliable energy at reasonable cost; superior service; a strict focus on safety; operational excellence and engaged employees. The financial implications of doing this well for 2010 through 2014, as stated in	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. In 2013, activities that Entergy engaged in included: numerous presentations on its climate change position and thought-leadership work on adaptation, publishing articles on	These activities are performed by existing Entergy functions; therefore the incremental costs are small. The cost of sponsoring the 2013 Benchmarking report was \$30 thousand.

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	importance in the social conscience, Entergy will be viewed as a leader.						our Integrated Report, include deploying \$4 billion to shareholders through dividends and share repurchases. This result will be facilitated in part by maintaining a positive reputation that can manifest in terms of "goodwill".	its climate change position our CEO 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 and including a cost of carbon in its 2012 and 2013 integrated resource planning update. Entergy also participated in and sponsored a 2013 report on Benchmarking Air Emissions in the Electric Utility Sector.	
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	Increased demand for existing products/services	Up to 1 year	Direct	Very likely	Medium-high	We grow by providing customers with low-emission, reliable energy at reasonable cost; superior service; a strict focus on safety; operational excellence and engaged	The methods that Entergy uses to manage this opportunity are to engage with its regulators and customers to determine the types of products and/or services that may help customers use electricity more efficiently. The activities that Entergy used in 2013 include	These activities are performed by existing Entergy functions; therefore the incremental costs are small. The cost of sponsoring the 2013 Benchmarking report was \$30

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
	Entergy customers may evaluate and take action to reduce their energy/carbon footprint thereby leading to new products and business services.						employees. The financial implications of doing this well for 2010 through 2014, as stated in our Integrated Report, include deploying \$4 billion to shareholders through dividends and share repurchases. This result will be facilitated in part by maintaining a positive reputation that can manifest in terms of "goodwill".	engagement with regulators and customers on EE/DSM mechanisms, and implementing EE/DSM programs in those areas, these efforts included focusing on efficient use of electricity through a host of outreach programs, low-income assistance initiatives and even grant offerings. Each year the company seeks to learn from these activities and tailor its EE/DSM offer accordingly. These methods affect the likelihood and magnitude of the opportunity now and into the longer term, >5 years.	thousand.
Changing consumer behaviour	Entergy may benefit from increased sales of electricity due to electrification of transportation sector.	Increased demand for existing products/services	1 to 3 years	Direct	Likely	Medium-high	The financial implications of electric vehicles include increase revenue from additional	Entergy manages this opportunity through an extensive planning and forecasting effort regarding the market for electric vehicles and through	These planning and forecasting activities are performed by existing Entergy functions and

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
							<p>electricity sales. In 2011, Entergy collected \$8.7 billion from utility sales. Increased electric energy demand due to use of electric 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, <\$1million.</p>	<p>implementing pilot programs. Through Entergy's Environmental Initiatives Fund, 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 behavior 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</p>	<p>using existing external research resources, therefore the incremental costs are \$0 to minimal. The installation of 17 Level 2 Charging Stations cost \$170 thousand.</p>

Opportunity driver	Description	Potential impact	Timeframe	Direct/ Indirect	Likelihood	Magnitude of impact	Estimated financial implications	Management method	Cost of management
								have been added to the Entergy fleet and plans are pending for adding additional EVs during upcoming vehicle replacement cycles.	

CC6.1d

Please explain why you do not consider your company to be exposed to 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 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 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**Attachments**

[https://www.cdp.net/sites/2014/53/5653/Investor_CDP_2014/Shared Documents/Attachments/InvestorCDP2014/CC6.ClimateChangeOpportunities/2013_integrated_report.pdf](https://www.cdp.net/sites/2014/53/5653/Investor_CDP_2014/Shared_Documents/Attachments/InvestorCDP2014/CC6.ClimateChangeOpportunities/2013_integrated_report.pdf)
[https://www.cdp.net/sites/2014/53/5653/Investor_CDP_2014/Shared Documents/Attachments/InvestorCDP2014/CC6.ClimateChangeOpportunities/NCA3_Full_Report_04_Energy_Supply_and_Use_HighRes.pdf](https://www.cdp.net/sites/2014/53/5653/Investor_CDP_2014/Shared_Documents/Attachments/InvestorCDP2014/CC6.ClimateChangeOpportunities/NCA3_Full_Report_04_Energy_Supply_and_Use_HighRes.pdf)
[https://www.cdp.net/sites/2014/53/5653/Investor_CDP_2014/Shared Documents/Attachments/InvestorCDP2014/CC6.ClimateChangeOpportunities/2012 System IRP Report - Final 02Oct2012.pdf](https://www.cdp.net/sites/2014/53/5653/Investor_CDP_2014/Shared_Documents/Attachments/InvestorCDP2014/CC6.ClimateChangeOpportunities/2012_System_IRP_Report_-_Final_02Oct2012.pdf)
[https://www.cdp.net/sites/2014/53/5653/Investor_CDP_2014/Shared Documents/Attachments/InvestorCDP2014/CC6.ClimateChangeOpportunities/2014 Air Benchmarking-Final.pdf](https://www.cdp.net/sites/2014/53/5653/Investor_CDP_2014/Shared_Documents/Attachments/InvestorCDP2014/CC6.ClimateChangeOpportunities/2014_Air_Benchmarking-Final.pdf)

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)

Base year	Scope 1 Base year emissions (metric tonnes CO2e)	Scope 2 Base year emissions (metric tonnes CO2e)
Sat 01 Jan 2000 - Sun 31 Dec 2000	48260000	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
The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)
US EPA Climate Leaders: Direct Emissions from Stationary Combustion
US EPA Climate Leaders: Indirect Emissions from Purchases/Sales of Electricity and Steam
Other

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

ISO 14064 Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals (ISO, 2006).

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)

Gas	Reference
N2O	IPCC Fourth Assessment Report (AR4 - 100 year)
HFCs	IPCC Fourth Assessment Report (AR4 - 50 year)
PFCs	IPCC Second Assessment Report (SAR - 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 CO2 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, October 2004
Coke oven coke	5528.31	lb CO2 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

Fuel/Material/Energy	Emission Factor	Unit	Reference
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 updated the GWPs it used in the attached 2013 GHG Inventory to conform to those in the EPA GHG Reporting Rule.

Attachments

[https://www.cdp.net/sites/2014/53/5653/Investor CDP 2014/Shared Documents/Attachments/InvestorCDP2014/CC7.EmissionsMethodology/ICF_Verification_Statement_and_Report_2013.pdf](https://www.cdp.net/sites/2014/53/5653/Investor%20CDP%202014/Shared%20Documents/Attachments/InvestorCDP2014/CC7.EmissionsMethodology/ICF_Verification_Statement_and_Report_2013.pdf)
[https://www.cdp.net/sites/2014/53/5653/Investor CDP 2014/Shared Documents/Attachments/InvestorCDP2014/CC7.EmissionsMethodology/TC-AR4factsheet.pdf](https://www.cdp.net/sites/2014/53/5653/Investor%20CDP%202014/Shared%20Documents/Attachments/InvestorCDP2014/CC7.EmissionsMethodology/TC-AR4factsheet.pdf)
[https://www.cdp.net/sites/2014/53/5653/Investor CDP 2014/Shared Documents/Attachments/InvestorCDP2014/CC7.EmissionsMethodology/ETR_GHG_Inventory_Mgmt_Plan_and_Reporting_Document_2014.pdf](https://www.cdp.net/sites/2014/53/5653/Investor%20CDP%202014/Shared%20Documents/Attachments/InvestorCDP2014/CC7.EmissionsMethodology/ETR_GHG_Inventory_Mgmt_Plan_and_Reporting_Document_2014.pdf)
[https://www.cdp.net/sites/2014/53/5653/Investor CDP 2014/Shared Documents/Attachments/InvestorCDP2014/CC7.EmissionsMethodology/Entergy_GHG_Inventory_2013.pdf](https://www.cdp.net/sites/2014/53/5653/Investor%20CDP%202014/Shared%20Documents/Attachments/InvestorCDP2014/CC7.EmissionsMethodology/Entergy_GHG_Inventory_2013.pdf)

Page: CC8. Emissions Data - (1 Jan 2013 - 31 Dec 2013)

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

34214242

CC8.3

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

891922

CC8.4

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

No

CC8.4a

Please provide details of the sources of Scope 1 and Scope 2 emissions that are within your selected reporting boundary which are not included in your disclosure

Source	Relevance of Scope 1 emissions from this source	Relevance of 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 1 emissions: Uncertainty range	Scope 1 emissions: Main sources of uncertainty	Scope 1 emissions: Please expand on the uncertainty in your data	Scope 2 emissions: Uncertainty range	Scope 2 emissions: Main sources of uncertainty	Scope 2 emissions: Please expand on the uncertainty in your data
Less than or equal to 2%	Metering/ Measurement Constraints	<p>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 2013 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</p>	More than 2% but less than or equal to 5%	Metering/ Measurement Constraints	<p>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).</p>

Scope 1 emissions: Uncertainty range	Scope 1 emissions: Main sources of uncertainty	Scope 1 emissions: Please expand on the uncertainty in your data	Scope 2 emissions: Uncertainty range	Scope 2 emissions: Main sources of uncertainty	Scope 2 emissions: Please expand on the uncertainty in your data
		<p>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 GHG emissions Inventory Management and Reporting Document (IMPRD). This document (attached) was upgraded during 2011, 2012, 2013 and 2014 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.</p>			

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/2014/53/5653/Investor_CDP_2014/Shared Documents/Attachments/CC8.6a/ICF_Verification_Statement_and_Report_2013.pdf	See pages 3 - 11	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 Scope 2 emissions verified (%)
Limited assurance	https://www.cdp.net/sites/2014/53/5653/Investor_CDP_2014/Shared Documents/Attachments/CC8.7a/ICF_Verification_Statement_and_Report_2013.pdf	see pages 3-11	ISO14064-3	95

CC8.8

Please identify if any data points other than emissions figures have been verified as part of the third party verification work undertaken

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/2014/53/5653/Investor_CDP_2014/Shared_Documents/Attachments/InvestorCDP2014/CC8.EmissionsData\(1Jan2013-31Dec2013\)/ICF_Verification_Statement_and_Report_2013.pdf](https://www.cdp.net/sites/2014/53/5653/Investor_CDP_2014/Shared_Documents/Attachments/InvestorCDP2014/CC8.EmissionsData(1Jan2013-31Dec2013)/ICF_Verification_Statement_and_Report_2013.pdf)

[https://www.cdp.net/sites/2014/53/5653/Investor_CDP_2014/Shared_Documents/Attachments/InvestorCDP2014/CC8.EmissionsData\(1Jan2013-31Dec2013\)/Entergy_GHG_Inventory_2013.pdf](https://www.cdp.net/sites/2014/53/5653/Investor_CDP_2014/Shared_Documents/Attachments/InvestorCDP2014/CC8.EmissionsData(1Jan2013-31Dec2013)/Entergy_GHG_Inventory_2013.pdf)

[https://www.cdp.net/sites/2014/53/5653/Investor_CDP_2014/Shared_Documents/Attachments/InvestorCDP2014/CC8.EmissionsData\(1Jan2013-31Dec2013\)/ETR_GHG_Inventory_Mgmt_Plan_and_Reporting_Document_2014.pdf](https://www.cdp.net/sites/2014/53/5653/Investor_CDP_2014/Shared_Documents/Attachments/InvestorCDP2014/CC8.EmissionsData(1Jan2013-31Dec2013)/ETR_GHG_Inventory_Mgmt_Plan_and_Reporting_Document_2014.pdf)

Page: CC9. Scope 1 Emissions Breakdown - (1 Jan 2013 - 31 Dec 2013)

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)	33891594
Natural Gas and Electric Transmission and Distribution (includes Gas Operations)	313682
Corporate	8966

CC9.2b

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

Facility	Scope 1 emissions (metric tonnes CO2e)	Latitude	Longitude
Acadia	615810		
Attala	725357		
Baxter Wilson	1094292		
Big Cajun 2	1523277		
Calcasieu	214080		
Gerald Andrus	816978		
Hinds Energy Facility	654742		
Hot Spring Energy Facility	681326		
Independence	4683213		
Lake Catherine	318077		
Lewis Creek	921316		
Little Gypsy	992523		
Michoud	898434		
Ninemile Point	2592800		
Ouachita Power	517799		
Peryville	682378		
Rhode Island State Energy	763593		
R S Cogen	806942		
R S Nelson	3688962		
Sabine	2513379		
Sterlington	9259		
Waterford	663372		
White Bluff	6512021		
Willow Glen	375955		
Misc Small Combustion Sources	529484		
Mobile Combustion	52976		

Facility	Scope 1 emissions (metric tonnes CO2e)	Latitude	Longitude
T&D	151044		
Gs Operations	109663		
Corporate/Offices	8966		

CC9.2c

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

GHG type	Scope 1 emissions (metric tonnes CO2e)
CO2	33843907
CH4	122295
N2O	88030
SF6	151044
HFCs	8966

CC9.2d

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

Activity	Scope 1 emissions (metric tonnes CO2e)
Stationary Combustion	33891594

Activity	Scope 1 emissions (metric tonnes CO2e)
Mobile Combustion	52976
Fugitive Emissions	269672

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/2014/53/5653/Investor CDP 2014/Shared Documents/Attachments/InvestorCDP2014/CC9.Scope1EmissionsBreakdown\(1Jan2013-31Dec2013\)/Entergy_GHG_Inventory_2013.pdf](https://www.cdp.net/sites/2014/53/5653/Investor%20CDP%202014/Shared%20Documents/Attachments/InvestorCDP2014/CC9.Scope1EmissionsBreakdown(1Jan2013-31Dec2013)/Entergy_GHG_Inventory_2013.pdf)

[https://www.cdp.net/sites/2014/53/5653/Investor CDP 2014/Shared Documents/Attachments/InvestorCDP2014/CC9.Scope1EmissionsBreakdown\(1Jan2013-31Dec2013\)/ETR_GHG_Inventory_Mgmt_Plan_and_Reporting_Document_2014.pdf](https://www.cdp.net/sites/2014/53/5653/Investor%20CDP%202014/Shared%20Documents/Attachments/InvestorCDP2014/CC9.Scope1EmissionsBreakdown(1Jan2013-31Dec2013)/ETR_GHG_Inventory_Mgmt_Plan_and_Reporting_Document_2014.pdf)

[https://www.cdp.net/sites/2014/53/5653/Investor CDP 2014/Shared Documents/Attachments/InvestorCDP2014/CC9.Scope1EmissionsBreakdown\(1Jan2013-31Dec2013\)/ICF_Verification_Statement_and_Report_2013.pdf](https://www.cdp.net/sites/2014/53/5653/Investor%20CDP%202014/Shared%20Documents/Attachments/InvestorCDP2014/CC9.Scope1EmissionsBreakdown(1Jan2013-31Dec2013)/ICF_Verification_Statement_and_Report_2013.pdf)

Page: CC10. Scope 2 Emissions Breakdown - (1 Jan 2013 - 31 Dec 2013)

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 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 Operations	869423
Entergy Wholesale Commodities	22500

CC10.2b

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

Facility	Scope 2 emissions (metric tonnes CO2e)
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CC10.2c

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

Activity	Scope 2 emissions (metric tonnes CO2e)
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CC10.2d

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

Legal structure	Scope 2 emissions (metric tonnes CO2e)
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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/2014/53/5653/Investor CDP 2014/Shared Documents/Attachments/InvestorCDP2014/CC10.Scope2EmissionsBreakdown\(1Jan2013-31Dec2013\)/ICF_Verification_Statement_and_Report_2013.pdf](https://www.cdp.net/sites/2014/53/5653/Investor%20CDP%202014/Shared%20Documents/Attachments/InvestorCDP2014/CC10.Scope2EmissionsBreakdown(1Jan2013-31Dec2013)/ICF_Verification_Statement_and_Report_2013.pdf)
[https://www.cdp.net/sites/2014/53/5653/Investor CDP 2014/Shared Documents/Attachments/InvestorCDP2014/CC10.Scope2EmissionsBreakdown\(1Jan2013-31Dec2013\)/Entergy_GHG_Inventory_2013.pdf](https://www.cdp.net/sites/2014/53/5653/Investor%20CDP%202014/Shared%20Documents/Attachments/InvestorCDP2014/CC10.Scope2EmissionsBreakdown(1Jan2013-31Dec2013)/Entergy_GHG_Inventory_2013.pdf)
[https://www.cdp.net/sites/2014/53/5653/Investor CDP 2014/Shared Documents/Attachments/InvestorCDP2014/CC10.Scope2EmissionsBreakdown\(1Jan2013-31Dec2013\)/ETR_GHG_Inventory_Mgmt_Plan_and_Reporting_Document_2014.pdf](https://www.cdp.net/sites/2014/53/5653/Investor%20CDP%202014/Shared%20Documents/Attachments/InvestorCDP2014/CC10.Scope2EmissionsBreakdown(1Jan2013-31Dec2013)/ETR_GHG_Inventory_Mgmt_Plan_and_Reporting_Document_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	149118273
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
Natural gas	102171273
Sub bituminous coal	46947257
Diesel/Gas oil	192319
Jet gasoline	56349

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 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

Note, Operational spend for energy in 2013 includes fuel expense and purchased power expense. See 2013 Entergy Form 10K, pg. 50, Consolidated Income Statement for information supporting response to CC11.1. and see pg 259 for a discussion of risk factors related fuel. Entergy's billed electric sales in 2013 were 155,928 GWh. 53% of that energy was supplied by non-emitting nuclear power. 24% of that energy was supplied from purchased power with related emissions accounted for as Scope 3 in Entergy's GHG Inventory. The fuel listed in response to this question is either fuel used to generate electricity that is sold to others or natural gas that is purchased and sold to customers. Emissions from consumption of fossil fuel at power generating stations are accounted for as Scope 1 emissions.

Attachments

[https://www.cdp.net/sites/2014/53/5653/Investor_CDP_2014/Shared Documents/Attachments/InvestorCDP2014/CC11.Energy/Entergy_GHG_Inventory_2013.pdf](https://www.cdp.net/sites/2014/53/5653/Investor_CDP_2014/Shared_Documents/Attachments/InvestorCDP2014/CC11.Energy/Entergy_GHG_Inventory_2013.pdf)
https://www.cdp.net/sites/2014/53/5653/Investor_CDP_2014/Shared Documents/Attachments/InvestorCDP2014/CC11.Energy/ICF_Verification_Statement_and_Report_2013.pdf
[https://www.cdp.net/sites/2014/53/5653/Investor_CDP_2014/Shared Documents/Attachments/InvestorCDP2014/CC11.Energy/2013_Entergy_Form_10K.pdf](https://www.cdp.net/sites/2014/53/5653/Investor_CDP_2014/Shared_Documents/Attachments/InvestorCDP2014/CC11.Energy/2013_Entergy_Form_10K.pdf)
https://www.cdp.net/sites/2014/53/5653/Investor_CDP_2014/Shared Documents/Attachments/InvestorCDP2014/CC11.Energy/ETR_GHG_Inventory_Mgmt_Plan_and_Reporting_Document_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	7.3	Decrease	Scope 1 and 2 GHG emissions decreased 613,138 metric tonnes CO2e in '13 when compared to '12 while Utility generation increased by 10%. Entergy applied emission reduction measures that avoided 1,961,381

Reason	Emissions value (percentage)	Direction of change	Comment
			metric tonnes of CO2e from what its emissions otherwise would have been. These reductions were 1) 2.5% increase in utility nuclear production from a full year of production from Grand Gulf after completing a 178 MW uprate resulting in 733,669 metric tonnes CO2e avoided; 2) 13% increase in highly efficient combined cycle gas turbine production from a full year of generation from 615 MW Hot Spring plant and the 463 MW Hinds plants combined with a 11% decline in generation from older, less efficient Legacy Gas steam electric plants due to retirements and reduced utilization resulting in 725,721 metric tonnes CO2e avoided, 4) a 4% increase purchase power with a lower CO2 emission intensity than energy supplied from Entergy's fossil fleet resulting in 408,189 metric tonnes of CO2e avoided and 5) \$56 million in end use energy efficiency resulting in 93,802 metric tons of CO2e avoided. What would have been a 5.6% increase instead is a 1.7% decrease or 7.3% difference overall.
Divestment	0.0	No change	In November, 2013 Entergy sold its Entergy Solutions District Energy business with two plants providing district cooling to Houston, TX and New Orleans, LA. These two plants contributed 2,600 metric tonnes of GHG emissions. A full year of operation was reported in Entergy's 2013 GHG Inventory
Acquisitions			
Mergers			
Change in output			
Change in methodology	0.0	No change	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	0.0	No change	In 2013, Entergy began reporting a new Scope 2 Emission source. Some Entergy facilities in the north east purchase power from the grid to support operations. Consumption of power from the grid at these facilities added 22,500 metric tons of new Scope 2 emissions not previously reported.
Change in physical operating conditions			
Unidentified			
Other			

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
3081.9	metric tonnes CO2e	unit total revenue	10.9	Decrease	In 2013, Entergy's Financial Intensity metric improved by 10.9% compared to 2012. Entergy's Scope 1 and 2 GHG emissions declined 1.5% compared to 2012. In addition, Entergy's 2013 Operating Revenues increased 10.6% compared to 2012 due largely to Utility Electric revenues. 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
2542.5	metric tonnes CO2e	FTE employee	4.3	Increase	In 2013 Entergy's FTE Intensity metric deteriorated 4.3%. Entergy's Scope 1 and 2 GHG emissions declined 1.5% compared to 2012. However, Entergy redesigned its organization, streamlined the way it does work and in so doing reduced its workforce by over 800 during 2013. In spite of a decrease in Scope 1 and 2 GHG emissions, the 5% decrease in FTE employees in 2013 led to the 4.3% 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
0.275	metric tonnes CO2e	megawatt hour (MWh)	1.1	Decrease	In 2013 Entergy's Product Intensity improved 1.1%. This was brought about by a 1.5% decrease in Scope 1 and 2 GHG emissions compared to 2012 partially offset by a 0.4% decrease in net generation from Entergy power plants. Even though there was a slight decrease in combined generation from Entergy Utility and Entergy Wholesale Commodities (EWC), it's important to note that there actually was a 10% increase in Utility Generation that has a larger share of fossil generation capacity. This emissions increase that otherwise would have occurred from this increase in utility generation was more than offset by increased non-emitting nuclear generation as a result of the \$570 million Grand Gulf nuclear capacity uprate in '12, increased generation from highly efficient natural gas fired CCGT units with the \$459 million acquisition of Hinds and Hot Spring CCGT units in '12 and decreased generation from older less efficient Legacy Gas units. Additional emissions were avoided through \$56 million in Energy Efficiency and demand reduction investments by the Entergy Utility Companies.

Further Information

See Integrated Report, pg. 6 for a snapshot key Entergy metrics See Entergy Form 10K pg. 50 for Consolidated Income Statement with Operating Revenues

Attachments

[https://www.cdp.net/sites/2014/53/5653/Investor_CDP_2014/Shared Documents/Attachments/InvestorCDP2014/CC12.EmissionsPerformance/ETR_GHG_Inventory_Mgmt_Plan_and_Reporting_Document_2014.pdf](https://www.cdp.net/sites/2014/53/5653/Investor_CDP_2014/Shared_Documents/Attachments/InvestorCDP2014/CC12.EmissionsPerformance/ETR_GHG_Inventory_Mgmt_Plan_and_Reporting_Document_2014.pdf)
[https://www.cdp.net/sites/2014/53/5653/Investor_CDP_2014/Shared Documents/Attachments/InvestorCDP2014/CC12.EmissionsPerformance/Entergy_GHG_Inventory_2013.pdf](https://www.cdp.net/sites/2014/53/5653/Investor_CDP_2014/Shared_Documents/Attachments/InvestorCDP2014/CC12.EmissionsPerformance/Entergy_GHG_Inventory_2013.pdf)
[https://www.cdp.net/sites/2014/53/5653/Investor_CDP_2014/Shared Documents/Attachments/InvestorCDP2014/CC12.EmissionsPerformance/2013_Entergy_Form_10K.pdf](https://www.cdp.net/sites/2014/53/5653/Investor_CDP_2014/Shared_Documents/Attachments/InvestorCDP2014/CC12.EmissionsPerformance/2013_Entergy_Form_10K.pdf)
https://www.cdp.net/sites/2014/53/5653/Investor_CDP_2014/Shared

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	Tue 01 Jan 2013 - Tue 31 Dec 2013	0	907000	736593	Facilities we own and 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 recently acquired 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; 907,000 allowances were purchased during 2013 to cover the plants 736,593 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
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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 primary data	Explanation
Purchased goods and services	Not relevant, explanation provided				Purchased goods and services include length, reel, pole, transformers, etc. Our qualitative investigation of these materials suggests that in 2013 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. For example, construction work in progress which includes the 550 MW Ninemile Point 6 power plant as of end of year 2013 was 1,515 million.
Fuel-and-energy-related activities (not included in Scope 1 or 2)	Relevant, calculated	16943341	(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 a) - 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 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. (iii b) Uncontrollable Purchased	100.00%	Seen Entergy 2013 GHG Inventory, Optional Emission Sources.

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using primary data	Explanation
			Power - Entergy calculates this emission category based on actual power purchase data and grid-level emission factors from EPA's eGRID database using US Climate Leaders: Indirect Emissions from Purchases/Sales of Electricity and Steam and further developed using the methodology in ISO 14064-1. Uses an emission factor of 0.59 lbs CO2 /KWh converted to metric tons and GWP for CO2 of 1. "Uncontrollable" power purchases include those for which the generating unit is either unknown or when Entergy is required to take the energy produced (no 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. The company produced 48.9 tons of hazardous waste in 2013. Therefore, the Scope 3 emissions from third-party disposal and treatment of this waste are not material to Entergy.
Business travel	Relevant, calculated	4485	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	100.00%	

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using primary data	Explanation
			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 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	61355	(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 on assumptions about the radius of their commute, method of transportation, and vehicle mileage. (iii) Calculated based upon 15,000 employees, an assumed average commute of 50 miles per day, average vehicle mileage of 25 miles per gallon and carbon content of gasoline at 19.564 lbs CO2/gallon (converted to metric tons) and a GWP for CO2 of 1. It is assumed employees commute to their work locations 50 weeks per year and 5 days per week.	100.00%	This emissions estimate assumes all Entergy employees drive themselves to work, that they live 25 miles from their work location, and there is no tele-commuting, car pooling, van pooling or mass transit.
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 and distribution	Relevant, calculated	869423	i) Transmission and Distribution losses for purchased power are an estimate of CO2e emissions resulting from the electrical energy consumed in delivering energy between the	100.00%	Entergy delivers electrical energy from the power plant to the customers' location through a transmission and distribution system. Entergy calculates transmission and

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using primary data	Explanation
			<p>power plant and the ultimate end use consumer.</p> <p>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.</p>		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. See Entergy 2013 GHG Inventory, Indirect Emissions Sources, T&D losses.
Processing of sold products	Relevant, calculated	93802	<p>i) Entergy investments in customers' end use energy efficiency saved energy and avoided GHG emissions during 2013. ii) Sources of data are Entergy Utility company 2013 Energy Efficiency / Demand Side Management reports and the Entergy Utility CO2 intensity emission rate. iii) The MWhs of energy saved during 2013 was multiplied by the 2013 Entergy Utility emission rate 0.4 metric tonnes/ MWh and a GWP for CO2 of 1 to calculate emissions avoided.</p>		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 2013 alone approximately \$52 million was invested in DSM programs creating 32 MWs and 235,000 MWhs of annual energy savings, Entergy invested in 32 energy efficiency programs that we estimate have avoided 93,802 metric tons of Entergy's Scope 1 and Scope 3 CO2e emissions.
Use of sold products	Not relevant, explanation provided				Entergy primarily sells electrical energy that is consumed by customers. The company's utility business also includes a small natural gas distribution business in New Orleans. The sale of natural gas from this business results in <2% of corporate revenue and therefore this Scope 3 emissions category is

Sources of Scope 3 emissions	Evaluation status	metric tonnes CO2e	Emissions calculation methodology	Percentage of emissions calculated using primary data	Explanation
					deminimus, not material to the business
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/2014/53/5653/Investor_CDP_2014/Shared Documents/Attachments/CC14.2a/ICF_Verification_Statement_and_Report_2013.pdf		ISO14064-3	95

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)	Change in output	16	Increase	Emissions from purchased power energy in 2013 increased compared to 2012 due to market conditions favoring power purchases over self-generation. Emission reduction activities include energy efficiency measures and the retirement of older, less efficient Legacy Gas Units. In 2013, in spite of energy efficiency investments that reduced energy demand by 252,000 MWhs, energy supply to meet customer needs increased 853,630 MWh compared to 2012. Self-generation declined by 507,000 MWhs in 2013 with the retirement of older, less efficient Legacy Gas units. The increase in demand and the reduced self-generation in 2013 was made up by a 1,360,630 MWh increase in purchase power. The purchase power in 2013 had a CO2 intensity of 0.49 metric tonnes CO2e/MWh and displaced Entergy fossil self-generation with a CO2 intensity of 0.78 metric tonnes CO2e/MWh. This shift from Scope 1 emissions to Scope 3 emissions, while increasing Scope 3 emissions, reduced overall Scope 1,2,3 emissions by 408,189 metric tonnes of CO2e. The energy efficiency measures reduced emissions by another 92,802 metric tonnes.

CC14.4

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

Yes, our suppliers
Yes, our customers

CC14.4a

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

(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.

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
32	6.8%	Power purchases are the company's most material Scope 3 emission category. In 2013 nearly one-third of the Utilities' retail electric sales were supplied from purchased power. 45% of purchased power was obtained via controllable purchases from 32 suppliers. [see 2013 Entergy GHG Inventory and 2013 10K, pg. 219 "Select Electric Energy Sales Data"] Purchased power spend in 2013 was \$1,554,332,000 or 15% of Total Operating Expenses of \$10,079,517,000. We estimate that 6.8% of Total Operating Expenses was for controllable purchases from 32 suppliers. [see 2013 Annual Report, pg. 58 "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 2013 Controllable Purchases supplied 14% 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

How you make use of the data	Please give details
	such provides a method to manage GHG emissions for meeting the goal. Entergy accounts for power purchases 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 2013 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/2014/53/5653/Investor_CDP_2014/Shared Documents/Attachments/InvestorCDP2014/CC14.Scope3Emissions/Entergy_GHG_Inventory_2013.pdf](https://www.cdp.net/sites/2014/53/5653/Investor_CDP_2014/Shared_Documents/Attachments/InvestorCDP2014/CC14.Scope3Emissions/Entergy_GHG_Inventory_2013.pdf)
[https://www.cdp.net/sites/2014/53/5653/Investor_CDP_2014/Shared Documents/Attachments/InvestorCDP2014/CC14.Scope3Emissions/CopyofENTCO2EmissionsSummary-2013vs2012.xls](https://www.cdp.net/sites/2014/53/5653/Investor_CDP_2014/Shared_Documents/Attachments/InvestorCDP2014/CC14.Scope3Emissions/CopyofENTCO2EmissionsSummary-2013vs2012.xls)
[https://www.cdp.net/sites/2014/53/5653/Investor_CDP_2014/Shared Documents/Attachments/InvestorCDP2014/CC14.Scope3Emissions/ETR_2013_AR_FINAL.pdf](https://www.cdp.net/sites/2014/53/5653/Investor_CDP_2014/Shared_Documents/Attachments/InvestorCDP2014/CC14.Scope3Emissions/ETR_2013_AR_FINAL.pdf)
[https://www.cdp.net/sites/2014/53/5653/Investor_CDP_2014/Shared Documents/Attachments/InvestorCDP2014/CC14.Scope3Emissions/ETR_GHG_Inventory_Mgmt_Plan_and_Reporting_Document_2014.pdf](https://www.cdp.net/sites/2014/53/5653/Investor_CDP_2014/Shared_Documents/Attachments/InvestorCDP2014/CC14.Scope3Emissions/ETR_GHG_Inventory_Mgmt_Plan_and_Reporting_Document_2014.pdf)
[https://www.cdp.net/sites/2014/53/5653/Investor_CDP_2014/Shared Documents/Attachments/InvestorCDP2014/CC14.Scope3Emissions/2013_Entergy_Form_10K.pdf](https://www.cdp.net/sites/2014/53/5653/Investor_CDP_2014/Shared_Documents/Attachments/InvestorCDP2014/CC14.Scope3Emissions/2013_Entergy_Form_10K.pdf)
[https://www.cdp.net/sites/2014/53/5653/Investor_CDP_2014/Shared Documents/Attachments/InvestorCDP2014/CC14.Scope3Emissions/ICF_Verification_Statement_and_Report_2013.pdf](https://www.cdp.net/sites/2014/53/5653/Investor_CDP_2014/Shared_Documents/Attachments/InvestorCDP2014/CC14.Scope3Emissions/ICF_Verification_Statement_and_Report_2013.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 2018 if possible).

Year ending	Date range
2010	Fri 01 Jan 2010 - Fri 31 Dec 2010
2013	Tue 01 Jan 2013 - Tue 31 Dec 2013
2021	Fri 01 Jan 2021 - Fri 31 Dec 2021
2008	Tue 01 Jan 2008 - Wed

Year ending	Date range
	31 Dec 2008
2015	Thu 01 Jan 2015 - Thu 31 Dec 2015

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)
2008	28429	123372	32349135	0.26
2010	28007	127627	33150308	0.26
2013	27829	127865	33261880	0.26
2015	26758			
2021	27069			

Further Information

See Entergy's 2013 Statistical Report and Investors Guide for additional detail. These numbers combine Entergy's Utility and Entergy Wholesale Commodity businesses. Name plate capacity equals owned and leased capability from the Statistical Report pg 7, 36, 53-54. Projections only provide for nameplate capacity. Projections for other metrics are not available (see notes below) 1. Projected increase in Entergy's Utility capability may be achieved through ownership acquisitions, construction of new units, uprates to existing units and/or capacity added through long-term power purchase agreements. 2. Projections take into account the

retirement of Vermont Yankee and assume Entergy Wholesale Commodity capacity otherwise remains flat through 2020. This assumption may change due to a variety of factors, including Entergy's point of view, market conditions and opportunities available. 3. Deactivations are based on a timeline of long-term capacity replacement for planning purposes only and should not be interpreted as a retirement schedule for existing generation units. 4. The projected generation mix reflects current planning assumptions and may change in the future based on a number of factors, including those listed on page 225 of Entergy's 2013 SEC Form 10-K

Attachments

[https://www.cdp.net/sites/2014/53/5653/Investor CDP 2014/Shared Documents/Attachments/InvestorCDP2014/EU1.GlobalTotalsbyYear/2012 System IRP Report - Final Q2Oct2012.pdf](https://www.cdp.net/sites/2014/53/5653/Investor%20CDP%202014/Shared%20Documents/Attachments/InvestorCDP2014/EU1.GlobalTotalsbyYear/2012%20System%20IRP%20Report%20-%20Final%20Q2Oct2012.pdf)
[https://www.cdp.net/sites/2014/53/5653/Investor CDP 2014/Shared Documents/Attachments/InvestorCDP2014/EU1.GlobalTotalsbyYear/2013_Entergy_Form_10K.pdf](https://www.cdp.net/sites/2014/53/5653/Investor%20CDP%202014/Shared%20Documents/Attachments/InvestorCDP2014/EU1.GlobalTotalsbyYear/2013_Entergy_Form_10K.pdf)
[https://www.cdp.net/sites/2014/53/5653/Investor CDP 2014/Shared Documents/Attachments/InvestorCDP2014/EU1.GlobalTotalsbyYear/Entergy_GHG_Inventory_2013.pdf](https://www.cdp.net/sites/2014/53/5653/Investor%20CDP%202014/Shared%20Documents/Attachments/InvestorCDP2014/EU1.GlobalTotalsbyYear/Entergy_GHG_Inventory_2013.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 CO2e)	Emissions intensity (metric tonnes CO2e/MWh)
2008	2440	16817	16342563	0.97
2010	2442	16725	16424290	0.98
2013	2436	14624	14932356	1.02
2015	2436			
2021	2436			

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 CO2e)	Emissions intensity (metric tonnes CO2e/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 CO2e)	Emissions intensity (metric tonnes CO2e/MWh)
2008	13420	19970	13640224	0.68
2010	13303	21737	14646188	0.69
2013	10839	20042	15027986	0.76
2015	9910			
2021	9573			

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 CO2e)	Emissions intensity (metric tonnes CO2e/MWh)
2008	2090	5134	2366348	0.46
2010	1761	5505	2079830	0.38
2013	3928	12379	3301537	0.27
2015	4478			
2021	5039			

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)
2008	10116	79704
2010	10101	81994
2013	10226	78862
2015	9621	
2021	9621	

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 CO2e)	Emissions intensity (metric tonnes CO2e/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)
2008	70	197
2010	74	160
2013	74	131
2015	74	
2021	74	

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)
2008	80	234
2010	80	185
2013	80	192
2015	80	
2021	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 CO2e)	Emissions intensity (metric tonnes CO2e/MWh)
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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 CO2e)	Emissions intensity (metric tonnes CO2e/MWh)
2008	0	0	0	0
2010	0	0	0	0
2013	0	0	0	0
2015	0	0	0	0
2021	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)
2008	28279	122940	32349135	0.26
2010	27820	127304	33150308	0.26
2013	27675	127542	33261880	0.26
2015	26554			
2021	26915			

EU2.11

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)
2008	28429	123372	32349135	0.26
2010	27974	127627	33150308	0.26
2013	27829	127865	33261880	0.26
2015	26758			
2021	27069			

Further Information

In 2012 Entergy acquired Hot Spring (620 MW) and Hinds (450 MW). Both plants are highly efficient, natural gas fired combine cycle gas turbines (CCGT). Entergy's operating companies and EWC have procured 3,928 MW megawatts of highly efficient natural gas fired CCGT capacity since 2005. The heat rate for Entergy's Utility CCGT fleet was 7,297 Btu/Kwh in 2013. In 2010, 20% of the electric energy produced by natural gas units came from the CCGT units. That percentage

increased to 38% in 2013. Increased electric energy production by the CCGT units emit ~40% less CO2 than if that electrical energy was generated by Entergy's older legacy Natural Gas units. In 2012, Grand Gulf Nuclear Station completed a 178 MW capacity uprate adding nearly emission free energy supply. Over the last decade, Entergy has increased the output of its nuclear fleet by nearly 700 megawatts - the equivalent of adding a new reactor - through power upgrades, turbine replacements and cooling-tower modifications. In 2013 there was a 2.5% increase in Utility nuclear production reflecting the first full year of expanded capacity of Grand Gulf, a 13% increase in CCGT energy production reflecting the first full year of operation of Hinds and Hot Spring and an 11% decline in energy production from Legacy Gas Units.

Attachments

https://www.cdp.net/sites/2014/53/5653/Investor_CDP_2014/Shared_Documents/Attachments/InvestorCDP2014/EU2.IndividualCountryProfiles-UnitedStatesofAmerica/2012_Investor_Guide.pdf

https://www.cdp.net/sites/2014/53/5653/Investor_CDP_2014/Shared_Documents/Attachments/InvestorCDP2014/EU2.IndividualCountryProfiles-UnitedStatesofAmerica/Entergy_GHG_Inventory_2013.pdf

https://www.cdp.net/sites/2014/53/5653/Investor_CDP_2014/Shared_Documents/Attachments/InvestorCDP2014/EU2.IndividualCountryProfiles-UnitedStatesofAmerica/2013_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	1354999000	0%	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. Entergy Arkansas owns 74 MW of Hydro Power. In total, Entergy's renewable resources generated 319 GWh of electric energy in 2012 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	1354999000	0%	2013	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. Entergy Arkansas owns 74 MW of Hydro Power. In total, Entergy's renewable resources generated 323 GWh of electric energy in 2013 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	2315000000	0%	2014	Entergy currently has no capex planned for renewable energy capacity development. Entergy's current activities in renewables include management of our existing wind and hydro assets, purchasing renewable power and credits for the utility portion of our business and compliance with various commission and/or state orders regarding renewable portfolio standards. Additionally, Entergy issued a request for proposal (RFP) for renewable generation sources in 2010. Negotiations with winning bids in the 2010 Renewable RFP seeking up to 233 MW of renewable generation for Entergy Louisiana and Entergy Gulf States continued in 2012. EGSL has received approval from the Louisiana Public Service Commission for one contract (a 20-Year Contract with Rain CII Carbon LLC for the Purchase of 28 MW capacity and energy from the Sulphur, LA heat recovery project) and recently filed a request for certification for a second contract (20-Year Contract with Agrilectric Power Partners, LP for the Purchase of 9 MW capacity and energy from the Lake Charles, LA rice hull-fired biomass facility).

Further Information**Attachments**

[https://www.cdp.net/sites/2014/53/5653/Investor CDP 2014/Shared](https://www.cdp.net/sites/2014/53/5653/Investor%20CDP%202014/Shared)

[Documents/Attachments/InvestorCDP2014/EU4.RenewableElectricityDevelopment/2013_Entergy_Form_10K.pdf](https://www.cdp.net/sites/2014/53/5653/InvestorCDP2014/EU4.RenewableElectricityDevelopment/2013_Entergy_Form_10K.pdf)

[https://www.cdp.net/sites/2014/53/5653/Investor CDP 2014/Shared Documents/Attachments/InvestorCDP2014/EU4.RenewableElectricityDevelopment/2012 System IRP Report - Final 02Oct2012.pdf](https://www.cdp.net/sites/2014/53/5653/Investor%20CDP%202014/Shared%20Documents/Attachments/InvestorCDP2014/EU4.RenewableElectricityDevelopment/2012%20System%20IRP%20Report%20-%20Final%2002Oct2012.pdf)

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