NRG Energy Inc - Climate Change 2023

C0. Introduction

C0.1

(C0.1) Give a general description and introduction to your organization.

NRG Energy, Inc., or NRG or the Company, is a consumer services company built on dynamic retail brands. NRG brings the power of energy to customers by producing and selling energy and related products and services, nation-wide in the U.S. and Canada in a manner that delivers value to all of NRG's stakeholders. NRG sells power, natural gas, and home and power services, and develops innovative, sustainable solutions, predominately under the brand names NRG, Reliant, Direct Energy, Vivint, Green Mountain Energy, Stream, and XOOM Energy. The Company has a customer base that includes approximately 5.4 million Home customers as well as commercial, industrial, and wholesale customers, supported by approximately 16 GW of generation as of December 31, 2022.

NRG was incorporated as a Delaware corporation on May 29, 1992. Certain matters discussed in this survey are forward-looking statements, within the meaning of the Private Securities Litigation Reform Act of 1995, that are subject to risks and uncertainties. Please see statement below about forward-looking statements.

Safe harbor The information presented in this report includes forward-looking statements within the meaning of Section 27A of the Securities Act of 1933 and Section 21E of the Exchange Act. These statements involve estimates, expectations, projections, goals, assumptions, known and unknown risks and uncertainties and can typically be identified by terminology such as “may,” “should,” “could,” “objective,” “projection,” “forecast,” “goal,” “guidance,” “outlook,” “expect,” “intend,” “seek,” “plan,” “think,” “anticipate,” “estimate,” “predict,” “target,” “potential” or “continue” or the negative of these terms or other comparable terminology. Such forwardlooking statements include, but are not limited to, statements about NRG’s future revenues, income, indebtedness, capital structure, plans, expectations, objectives, projected financial performance and/or business results and other future events, and views of economic and market conditions. Although NRG believes that its expectations are reasonable, it can give no assurance that these expectations will prove to be correct, and actual results may vary materially. Factors that could cause actual results to differ materially from those contemplated herein include, among others, general economic conditions, hazards customary in the power industry, weather conditions and extreme weather events, competition in wholesale power and gas markets, the volatility of energy and fuel prices, failure of customers or counterparties to perform under contracts, changes in the wholesale power and gas markets, our ability to execute our market operations strategy, unanticipated outages at our generation facilities, changes in government or market regulations, the condition of capital markets generally, our ability to access capital markets, failure to identify, execute or successfully implement acquisitions or asset sales, our ability to achieve our net debt targets, our ability to achieve or maintain investment grade credit metrics, the potential impact of COVID-19 or any other pandemic on the Company’s operations, financial position, risk exposure and liquidity, data privacy, cyberterrorism and inadequate cybersecurity, adverse results in current and future litigation, our ability to implement value enhancing improvements to plant operations and companywide processes, our ability to proceed with projects under development or the inability to complete the construction of such projects on schedule or within budget, the inability to maintain or create successful partnering relationships, our ability to operate our business efficiently, our ability to retain retail customers, the ability to successfully integrate businesses of acquired companies, including Direct Energy, our ability to realize anticipated benefits of transactions (including expected cost savings and other synergies) or the risk that anticipated benefits may take longer to realize than expected, and our ability to execute our Capital Allocation Plan. NRG undertakes no obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law. The foregoing review of factors that could cause NRG’s actual results to differ materially from those contemplated in the forward-looking statements included in this report should be considered in connection with information regarding risks and uncertainties that may affect NRG’s future results included in NRG’s filings with the Securities and Exchange Commission at www.sec.gov

C0.2

(C0.2) State the start and end date of the year for which you are reporting data and indicate whether you will be providing emissions data for past reporting years.

Reporting year

Start date
January 1 2022

End date
December 31 2022

Indicate if you are providing emissions data for past reporting years
No

Select the number of past reporting years you will be providing Scope 1 emissions data for
<Not Applicable>

Select the number of past reporting years you will be providing Scope 2 emissions data for
<Not Applicable>

Select the number of past reporting years you will be providing Scope 3 emissions data for
<Not Applicable>

C0.3

(C0.3) Select the countries/areas in which you operate.
Australia
Canada
United States of America

C0.4

(C0.4) Select the currency used for all financial information disclosed throughout your response.
USD

C0.5

(C0.5) Select the option that describes the reporting boundary for which climate-related impacts on your business are being reported. Note that this option should align with your chosen approach for consolidating your GHG inventory.
Other, please specify (NRG uses a hybrid methodology of operational and financial control to determine facilities within the organizational boundary. GHG inventory from jointly owned generating facilities are allocated based on equity share of plant ownership.)

C-EU0.7

(C-EU0.7) Which part of the electric utilities value chain does your organization operate in? Select all that apply.

Row 1

Electric utilities value chain
Electricity generation

Other divisions
Smart grids / demand response
Battery storage
Micro grids

C0.8

(C0.8) Does your organization have an ISIN code or another unique identifier (e.g., Ticker, CUSIP, etc.)?

Indicate whether you are able to provide a unique identifier for your organization	Provide your unique identifier
Yes, an ISIN code	US6293775085
Yes, a Ticker symbol	NRG

C1. Governance

C1.1

(C1.1) Is there board-level oversight of climate-related issues within your organization?
Yes

C1.1a

(C1.1a) Identify the position(s) (do not include any names) of the individual(s) on the board with responsibility for climate-related issues.

Position of individual or committee	Responsibilities for climate-related issues
Chief Executive Officer (CEO)	NRG's President and CEO has ultimate accountability for the company's climate change-related issues and management, including creating and approving emissions reduction goals. The CEO reviews all sustainability-related strategies, goals, targets, and metrics, which are then reviewed and approved by the Company's Governance & Nominating (G&N) Committee and the full Board of Directors. The CEO is directly involved with creating and approving NRG's emissions reductions goals. For example, in 2019, the CEO proposed, and the Board approved, the decision to accelerate NRG's emissions reduction goals to be in line with a 1.5 Celsius degree trajectory. The position of Chief Sustainability Officer (CSO) was formalized in 2013 as the strategic importance of sustainability was recognized, as was the need for sustainability to be integrated across the business. NRG's CSO reports to the SVP, Administration and Corporate Affairs, who reports to the Chief Executive Officer. The CSO also maintains a direct line of communication to the CEO through standing one-on-one meetings. The CSO leads the development and implementation of all sustainability-related strategies and programs and is responsible for the development of NRG's climate change policy positions and coordination between policy and commercial initiatives. This includes drafting and publishing NRG's climate-related transition documents, engaging with investors and analysts on integrating ESG factors into reporting practices, and advising on both business-to-business and business-to-consumer low carbon energy solutions.
Board-level committee	NRG's Board of Directors has responsibility for overall risk oversight, which includes understanding the material risks of the business and what steps management is taking or should take to manage those risks, as well as understanding and determining the appropriate risk appetite for the company. Since 2016, the Governance and Nominating (G&N) Committee of NRG's Board of Directors has formally overseen sustainability, including climate-related issues, at the company. The rationale for formalizing Board oversight of climate-related issues is that the Board is ultimately responsible for ensuring that all material risks to the company are mitigated, as well as for guiding the company's pursuit of significant business opportunities. The G&N Committee reviews NRG's strategies and efforts to manage its environmental, economic, and social impacts, including, but not limited to, NRG's environmental, climate change, and sustainability policies and programs. As of 2018, sustainability has been an agenda item at a full Board meeting at least once per annum and, in addition, is discussed separately by the G&N Committee at least once per annum. Our climate goals – including both for NRG and for NRG's customers – and various pathways to meet them are discussed with the Committee and Board of Directors. Sustainability is addressed in every quarterly earnings presentation and is part of project and transaction reviews.

C1.1b

(C1.1b) Provide further details on the board's oversight of climate-related issues.

Frequency with which climate-related issues are a scheduled agenda item	Governance mechanisms into which climate-related issues are integrated	Scope of board-level oversight	Please explain
Scheduled – all meetings	Reviewing and guiding annual budgets Overseeing major capital expenditures Overseeing acquisitions, mergers, and divestitures Reviewing innovation/R&D priorities Overseeing and guiding employee incentives Reviewing and guiding strategy Overseeing the setting of corporate targets Monitoring progress towards corporate targets Overseeing and guiding public policy engagement Reviewing and guiding the risk management process	<Not Applicable>	
Other, please specify (Governance and Nominating Committee meeting, annually)	Reviewing and guiding annual budgets Overseeing major capital expenditures Overseeing acquisitions, mergers, and divestitures Reviewing and guiding strategy Overseeing the setting of corporate targets Monitoring progress towards corporate targets Overseeing and guiding public policy engagement Reviewing and guiding the risk management process	<Not Applicable>	Since 2016, our board's Governance and Nominating (G&N) Committee officially oversees corporate sustainability, including the development of NRG's climate transition plan. The Committee reviews NRG's strategies and efforts to manage its environmental, economic, and social impacts, including, but not limited to, NRG's environmental, climate change and sustainability policies and programs. As of 2018, Sustainability became an annual agenda item at the full Board meeting and is reviewed separately by the G&N Committee, in addition to being part of general review of projects and transactions. The Board has responsibility for overall risk oversight of NRG which includes understanding the material risks of the business and what steps management is taking or should be taking to manage those risks, as well as understanding and determining the appropriate risk appetite for the company. To define NRG's risk appetite, the Board reviews and approves the annual business plan, budget and long-term plan, strategic initiatives, acquisitions and divestitures, and capital allocation plan. For example, the Board may incorporate climate-related issues into relevant strategic decisions, particularly those related to physical generating assets and customer preferences. The CSO presents key strategic priorities to the full Board during scheduled meetings throughout the fiscal year. For example, NRG's science-based targets are monitored and proposals to make significant changes to the goals are presented to the Board for approval.

C1.1d

(C1.1d) Does your organization have at least one board member with competence on climate-related issues?

	Board member(s) have competence on climate-related issues	Criteria used to assess competence of board member(s) on climate-related issues	Primary reason for no board-level competence on climate-related issues	Explain why your organization does not have at least one board member with competence on climate-related issues and any plans to address board-level competence in the future
Row 1	Yes	Our Directors represent a diverse mix of skills, experiences, and viewpoints that are relevant to our company and facilitate effective oversight. Currently, four of our eleven board members (36%) have indicated that competency with Environmental / Sustainability issues, including climate-related issues, is one of their top six competencies.	<Not Applicable>	<Not Applicable>

C1.2

(C1.2) Provide the highest management-level position(s) or committee(s) with responsibility for climate-related issues.

Position or committee

Chief Executive Officer (CEO)

Climate-related responsibilities of this position

Managing annual budgets for climate mitigation activities
Managing major capital and/or operational expenditures related to low-carbon products or services (including R&D)
Managing climate-related acquisitions, mergers, and divestitures
Providing climate-related employee incentives
Integrating climate-related issues into the strategy
Monitoring progress against climate-related corporate targets
Managing public policy engagement that may impact the climate
Assessing climate-related risks and opportunities
Managing climate-related risks and opportunities

Coverage of responsibilities
<Not Applicable>

Reporting line
Reports to the board directly

Frequency of reporting to the board on climate-related issues via this reporting line
Quarterly

Please explain
NRG's President and CEO has overall responsibility for the company's climate change-related issues and management, including creating and approving emissions reduction goals. The CEO reviews all sustainability-related strategies, goals, targets, and metrics, which are then reviewed by the Company's G&N Committee and the full Board of Directors. The CEO is directly involved with creating and approving NRG's emissions reductions goals. For example, in 2019, the CEO proposed, and the Board approved, the decision to accelerate NRG's emissions reduction goals to be in line with a 1.5 Celsius degree trajectory. The CEO manages the annual budgets for all activities including climate mitigation.

Position or committee
Chief Sustainability Officer (CSO)

Climate-related responsibilities of this position
Developing a climate transition plan
Integrating climate-related issues into the strategy
Conducting climate-related scenario analysis
Setting climate-related corporate targets
Monitoring progress against climate-related corporate targets
Managing public policy engagement that may impact the climate
Managing value chain engagement on climate-related issues
Assessing climate-related risks and opportunities
Managing climate-related risks and opportunities

Coverage of responsibilities
<Not Applicable>

Reporting line
CEO reporting line

Frequency of reporting to the board on climate-related issues via this reporting line
Half-yearly

Please explain
The position of Chief Sustainability Officer (CSO) was formalized in 2013 as the strategic importance of sustainability was recognized, as was the need for sustainability to be integrated across the business. NRG's CSO reports to the SVP, Administration and Corporate Affairs, who reports to the Chief Executive Officer. The CSO also maintains a direct line of communication to the CEO through standing one-on-one meetings. The CSO leads the development and implementation of all sustainability-related strategies and programs and is responsible for the development of NRG's climate change policy positions and coordination between policy and commercial initiatives. This includes drafting and publishing NRG's climate-related transition documents, engaging with investors and analysts on integrating ESG factors into reporting practices, and advising on both business-to-business and business-to-consumer low carbon energy solutions.

Position or committee
Environment/ Sustainability manager

Climate-related responsibilities of this position
Developing a climate transition plan
Integrating climate-related issues into the strategy
Conducting climate-related scenario analysis
Monitoring progress against climate-related corporate targets
Managing public policy engagement that may impact the climate
Managing value chain engagement on climate-related issues
Assessing climate-related risks and opportunities
Managing climate-related risks and opportunities

Coverage of responsibilities
<Not Applicable>

Reporting line
Corporate Sustainability/CSR reporting line

Frequency of reporting to the board on climate-related issues via this reporting line
Half-yearly

Please explain
There are 3 directors and 1 analyst in the Sustainability team who focus on environmental sustainability, including climate-related issues. They gather and validate data with consultants and our third-party assurance provider that support all climate reporting. They assist in developing goals that are submitted by the CSO to the Executive Management Team as well as the Board. They monitor policy and regulatory changes that could impact the Company and collaborate with other teams in the Company to educate them on climate issues. They also support the retail teams that are developing and innovating lower carbon intensity products and services to help our customers meet their climate goals.

C1.3

(C1.3) Do you provide incentives for the management of climate-related issues, including the attainment of targets?

	Provide incentives for the management of climate-related issues	Comment
Row 1	Yes	We believe that ESG practices are integral to our success now and in the future. Since 2022, our compensation program has tied a portion of our Named Executive Officers' (NEO) overall compensation to the achievement of targets in these areas. The objectives, categorized as Customers, Environment, and People, can positively or negatively impact our NEO annual incentive bonus by up to 15% based on the company's achievement of these goals. Customers is represented by achievement goals related to our Customer Focus Index; Environment is based both on certain environmental key performance indicators (EKPIs) and on climate-related objectives; and People is a combination of talent development, diversity, equity and inclusion, and well-being.

C1.3a

(C1.3a) Provide further details on the incentives provided for the management of climate-related issues (do not include the names of individuals).

Entitled to incentive
Corporate executive team

Type of incentive
Monetary reward

Incentive(s)
Bonus - % of salary

Performance indicator(s)
Achievement of climate transition plan KPI
Other (please specify) (Developing a carbon intensity of electricity sold metric.)

Incentive plan(s) this incentive is linked to
Short-Term Incentive Plan

Further details of incentive(s)
In 2022, NRG began incorporating an ESG metric into its annual cash incentive plan, directly linking our executive compensation program to our ESG commitments and objectives. Items included in the 2022 ESG metric are customer satisfaction, the Environmental Performance Index (EPI), and various employee recruitment, development, and well-being-related indicators. The ESG metric has a 15% weight in the determination of annual cash incentive plan funding. The EPI is based on existing EKPIs and the development of a Carbon Intensity (CI) measure, each weighted 50%. The EPI is calculated based on the achievement of threshold (41.5), target (28.5), and maximum (21.5) EKPI events. The CI measure is set as incomplete, developed, or developed and communicated internally and to key ESG stakeholders.

This monetary reward is available to part of the Corporate executive team, the Named Executive Officers (NEO), which includes the Chief Executive Officer (CEO), Chief Financial Officer (CFO), Chief Government Relations Officer (CGRO), and Other C-suite Officer.

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan
NRG's climate transition strategy levers include decarbonization of our existing business lines through retiring fossil fuel generation assets when they reach end of life, divestment of select high emissions assets, and diversification into low emissions businesses such as by providing our customers with renewable electricity. Developing carbon intensity measures, as required to achieve part of our ESG incentive, allows NRG to better track (1) the climate impact over time of power generation asset retirements and divestitures and (2) the impact of providing more renewable electricity to our customers over time. In particular, NRG has for several years been pursuing a strategy to secure renewable electricity on behalf of its customers through medium- and long-term renewable power purchase agreements (PPAs). Quantifying the carbon intensity of our electricity sales, inclusive of these renewable PPAs, allows us to track the climate impact of this strategy. Our ESG incentive is backed by the prospect of monetary reward (or, conversely, the forfeiture of monetary reward in the event of failure).

Entitled to incentive
Other, please specify (Power generation employees, including the Management Group)

Type of incentive
Monetary reward

Incentive(s)
Bonus - % of salary

Performance indicator(s)
Implementation of an emissions reduction initiative

Incentive plan(s) this incentive is linked to
Short-Term Incentive Plan

Further details of incentive(s)
Compensation of NRG's power plant personnel is, in part, based on environmental key performance indicator (EKPI) scores. Factors that affect the EKPI are performance, environmental reporting, and the econrg projects that can reduce GHGs in the community or plant. The EKPI score takes into account the accuracy of continuous emissions monitoring systems (CEMS) and whether a plant has complied with regulatory requirements such as the EPA's Mandatory Greenhouse Gas Reporting Rule (40 CFR Part 98).

Explain how this incentive contributes to the implementation of your organization's climate commitments and/or climate transition plan
This incentive provides a powerful and continuous reminder to our Plant Operations team – which is directly responsible for our Scope 1 emissions (the largest constituent of our current climate goals) and other environmental impacts including air emissions, water use, and waste – about the importance of environmental and climate stewardship at NRG. The incentive is backed by the prospect of monetary reward (or, conversely, the forfeiture of monetary reward in the event of failure).

C2. Risks and opportunities

C2.1

(C2.1) Does your organization have a process for identifying, assessing, and responding to climate-related risks and opportunities?

Yes

C2.1a

(C2.1a) How does your organization define short-, medium- and long-term time horizons?

	From (years)	To (years)	Comment
Short-term	0	1	Time horizons are subject to change.
Medium-term	1	3	Time horizons are subject to change.
Long-term	3	10	Time horizons are subject to change.

C2.1b

(C2.1b) How does your organization define substantive financial or strategic impact on your business?

NRG defines substantive financial or strategic impact on the business as a significant matter, such as from climate-related transition developments and/or physical events, that at a corporate level adversely affect NRG's businesses and impact NRG's results of operations, financial condition, cash flows, and/or reputation. NRG does not have a specific, universally-applicable threshold identified which would cause us to take a particular action because the definition of “substantive” is context-dependent and will vary by business segment, brand, geography, and operational area among other factors. For example, NRG operates power plants that provide an essential service to customers and *any* risk of disrupting that service would be substantive, implying a very low impact threshold. For example, hazards customary to the power production industry include the potential for unusual weather conditions, which could affect fuel pricing and availability, NRG's route to market or access to customers, i.e., transmission and distribution lines, or critical plant assets. In addition, the availability of a secure and economic supply of water is essential for the continued operation of NRG's generation plants. NRG monitors water risk carefully. Individual plant operators report to NRG management any changes in water consumption and withdrawal levels above 20%. Moreover, if it is determined that a water supply risk exists that could impact projected generation levels at *any* plant within the subsequent two-year time frame, risk mitigation efforts are identified and economically evaluated for implementation.

C2.2

(C2.2) Describe your process(es) for identifying, assessing and responding to climate-related risks and opportunities.

Value chain stage(s) covered

Direct operations

Risk management process

Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment

More than once a year

Time horizon(s) covered

Short-term
Medium-term
Long-term

Description of process

Climate-related issues are integrated in multi-disciplinary, company-wide opportunity and risk identification, assessment, and management processes. NRG systematically evaluates both opportunities and risks associated with climate change on an ongoing basis, considering short-term, medium-term, and long-term horizons, as well as their potential impact on NRG’s wholesale and retail businesses. Climate-related opportunities and risks include regulatory, commercial, financial, transition, and physical. NRG’s approach and its supporting organizations and processes to manage these risks and opportunities are outlined below:

• The Board has responsibility for overall oversight of the Company and of its performance within defined risk tolerance parameters. Such parameters are considered in the Board’s review and approval of NRG’s annual (i.e. short-term) business plan and budget; 5-year (i.e. medium-term) plan; and beyond 5-year (i.e. long-term) strategy and strategic initiatives including potential acquisitions and divestitures. Moreover, the Board ensures that NRG’s capital allocation strategy is followed in plans associated with all three time horizons.

• The EVP, NRG Home, EVP of NRG Business, and EVP of NRG Services and their respective heads of our retail brands and subsidiaries identify commercial opportunities and risks to all of NRG's retail businesses, including from climate change.

• The EVP & General Counsel and the heads of the Environment, Government Affairs, and Regulatory Affairs teams are responsible for assessing and managing regulatory risks and opportunities at federal, regional, and local agencies.

• NRG's SVP, Operations and SVP Environment are responsible for identifying and managing environmental risks to operations.

• (Moved to upstream, value chain stage covered and for before comma, and downstream to after comma portions.)• Asset Management, Commercial Operations, and Plant Operations identify risks and opportunities for each of our wholesale generation assets arising from weather exposure and other physical risks and directly report these to the CEO. In addition, the Structuring and Fundamentals group uses carbon price scenario analysis both to assess risk for internal financial purposes as well as for

evaluating transition risk.
• Externally, NRG reports material risks to investors and other stakeholders through quarterly earnings calls, quarterly SEC filings, CDP questionnaires, and NRG's annual Sustainability Report among other disclosures. Risks are specifically discussed in Item 1A of NRG's annual 10-K, and the 10-K and other reports include NRG's annual greenhouse gas emission inventories. NRG's Financial Reporting and Analysis function governs the drafting process for Item 1A – Risk Factors in our 10-K as well as for any updates deemed material enough to include in our 10-Q filings throughout the year. NRG's Disclosure Committee ultimately decides how to disclose risks in our filings to the U.S. Securities and Exchange Commission.

NRG's Enterprise Risk Management process enables leadership to address uncertainty, to enhance or preserve enterprise value, and to facilitate the mitigation of risk while pursuing opportunity. NRG's strategy addresses long-, medium-, and short-term risks and opportunities and aims to reduce the company's own GHG risks and those of its customers. As previously discussed, NRG is increasingly focused on providing retail energy solutions to its residential and business customers and this includes various clean energy products and services. These offerings can save money for our customers, increase the reliability and resiliency of the energy they consume, and reduce their carbon footprints. We also have modernized our generation fleet in a manner that reduces CO2 emissions by repowering or retiring older, uneconomic power plants.

Value chain stage(s) covered
Upstream

Risk management process
Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment
More than once a year

Time horizon(s) covered
Short-term
Medium-term
Long-term

Description of process
The Financial Risk Management Committee (FRMC) monitors risks and opportunities on an ongoing basis and meets quarterly to review risks and approve mitigation initiatives. In addition to monitoring climate risk at a high-level, the Committee specifically tracks renewable electricity credit (REC) purchases and retirements required to (1) meet mandatory renewable portfolio standards (RPS) in the states in which NRG operates as well as (2) match the voluntary renewable electricity demand of the customers that have elected to purchase voluntary renewable electricity from us. NRG's CEO and Executive Management Team communicate opportunities, risks, and risk mitigation strategies and activities to NRG's Board of Directors quarterly.

To ensure sufficient RECs for both mandatory and voluntary renewable electricity purposes, the FRMC reviews upstream risks that may impact the availability of low-cost RECs to satisfy our retirement obligations. These risks include the supply of RECs from our operating renewable power purchase agreements (PPAs), those forecast to come from our renewable PPAs that are in the pipeline, and the supply of RECs from non-NRG renewable PPA projects nationwide in the U.S. Supply-side risks include: supply chain issues, particularly in the wake of recovering from the COVID-19 pandemic; international trade regulations that constrain the supply of renewable electricity project components such as the anti-dumping and countervailing duties imposed by the U.S. on Chinese solar panel imports; and extreme weather events that may damage wind and solar equipment, limiting their up-time. Demand-side risks include state mandatory RPS requirements that govern the type and location of allowable renewable resources underpinning certain types of RECs and which in turn impact their prices in the markets in which we operate. To mitigate these risks, NRG's REC trading desk ensures that it has adequate liquid positions in RECs by location, resource type, and retirement timeframe to fulfil existing and potential new customer needs.

Value chain stage(s) covered
Downstream

Risk management process
Integrated into multi-disciplinary company-wide risk management process

Frequency of assessment
More than once a year

Time horizon(s) covered
Short-term
Medium-term
Long-term

Description of process
NRG's SVP, Operations and SVP, Environment are responsible for identifying and managing environmental risks to operations. These risks can include climate change-driven severe weather events, such as more frequent hurricanes, floods, and tornadoes. These weather events can damage power grid structures, such as transmission lines, and prevent the transmission and distribution of the electricity that we generate, negatively impacting our customers and therefore our retail brands' reputations.

To mitigate these reputational risks, when extreme weather is forecast in a particular area our retail brands notify our customers in advance about potential disruptions as well as precautions and actions they can take to mitigate the impact of any disruptions.

C2.2a

(C2.2a) Which risk types are considered in your organization's climate-related risk assessments?

	Relevance & inclusion	Please explain

	Relevance & inclusion	Please explain
Current regulation	Relevant, always included	Current regulation is always considered in assessments by the Financial Risk Management Committee. Monitoring of current regulatory risks occurs on an ongoing basis. The frequency of reporting varies depending on the materiality and type of risk. Internally, the Financial Risk Management Committee meets quarterly to review existing risks and approve mitigation initiatives. The EVP and General Counsel and heads of the Environmental, Government Affairs, and Regulatory Affairs Teams are responsible for assessing regulatory risks and opportunities at federal, regional, and local agencies. NRG operates in different regions in the United States as well as Canada and is subject to regulations. Efforts at the national, regional, and state levels to regulate GHG emissions, as well as mitigate climate change, could adversely impact NRG's results of operations, financial condition, and cash flows. One risk to the business from current regulation is increased costs associated with operating in regions that have a cap-and-trade system for carbon dioxide (CO2). For example, NRG operates generating units in Connecticut, Delaware, Maryland, and New York that are subject to the Regional Greenhouse Gas Initiative, RGGI, which is a regional cap-and-trade system. Intangible assets include RGGI emission credits which NRG began purchasing in 2009. These emission allowances are held-for-use and are amortized to cost of operations, with RGGI credits amortized based on units of production. Similarly, California has a CO2 cap and trade program for electric generating units greater than 25 MW. The impact on NRG depends on the cost of the allowances and the ability to pass these costs through to customers. Current regulation like this is included in risk assessments because it may impact revenue in areas where NRG has power generating operations. The risk assessment process includes potential ranges of costs to participate in these power generation markets.
Emerging regulation	Relevant, always included	Emerging regulation is always considered in assessments by the Financial Risk Management Committee. Monitoring of potential regulatory risks occurs on an ongoing basis. The frequency of reporting varies depending on the materiality and type of risk. Internally, the Financial Risk Management Committee meets quarterly to review existing risks and approve mitigation initiatives. The EVP and General Counsel and Heads of the Environmental, Government Affairs, and Regulatory Affairs team are responsible for assessing regulatory risks and opportunities at federal, regional, and local agencies. GHG regulation could increase the cost of electricity generated by fossil fuels, and such increases could reduce demand for the power NRG generates and markets. Additionally, government regulations providing incentives for renewable generation could change at any time and such changes may impact NRG's business, revenues, margins, results of operations, and cash flows. For example, on September 29, 2017, the Department of Energy issued a proposed rulemaking titled the "Grid Resiliency Pricing Rule." The rulemaking proposed that FERC take action to reform the ISO/RTO markets to value certain reliability and resiliency attributes of electric generation resources. On October 23, 2017, NRG filed comments encouraging FERC to act expeditiously to modernize energy and capacity markets in a manner compatible with robust competitive markets. Emerging regulation is included in risk assessments because it may impact revenue in geographies with power markets (i.e., CAISO, ERCOT, ISO-NE, NYISO, PJM) where NRG has operations.
Technology	Relevant, always included	Technology is always considered in assessments by the Financial Risk Management Committee. Monitoring of technology risks occurs on an ongoing basis. The frequency of reporting varies depending on the materiality and type of risk. Internally, the Financial Risk Management Committee meets quarterly to review existing risks and approve mitigation initiatives. Changes in technology may impair the value of NRG's power plants and the attractiveness of its retail products. Research and development activities are ongoing to provide alternative and more efficient technologies to produce power, including wind, photovoltaic (solar) cells, energy storage, and improvements in traditional technologies and equipment, such as more efficient gas turbines. Advances in these or other technologies could reduce the costs and revenues of power production to a level below what NRG has currently forecasted, which could adversely affect its cash flows, results of operations or competitive position. Technology, including distributed technology or changes in retail rate structures, may also have a material impact on NRG's ability to retain retail customers. Additionally, NRG may potentially be affected by emerging technologies that may over time affect capacity markets and the energy industry overall due to the inclusion of distributed generation and clean technology. Some emerging technologies like distributed renewable energy technologies, broad consumer adoption of electric vehicles, and energy storage devices could affect the price of energy. These emerging technologies may affect the financial viability of utility counterparties and could have significant impacts on wholesale market prices, which could ultimately have an effect on NRG's financial condition, results of operations, and cash flows. Cybersecurity is also a risk for the operation of NRG's businesses. A cyber-attack could cause NRG to incur significant losses of revenues or other substantial liabilities. Technology is included in risk assessments because these emerging technologies may affect the financial viability of utility counterparties and could have significant impacts on wholesale market prices, which could ultimately have an effect on NRG's financial condition, results of operations, and cash flows.
Legal	Relevant, always included	Legal issues, with respect to climate change, are always considered in assessments by the Financial Risk Management Committee. Monitoring of legal risks occurs on an ongoing basis. The frequency of reporting varies depending on the materiality and type of risk. Internally, the Financial Risk Management Committee meets quarterly to review existing risks and approve mitigation initiatives. NRG is subject to legal risks, including climate-related litigation claims, which impose extensive and increasingly stringent requirements on NRG's ongoing operations. These environmental requirements and liabilities could adversely impact NRG's results of operations, financial condition, and cash flows. For example, there is increased awareness of, and action to combat climate change. Moreover, diverse groups of stakeholders are increasingly engaged in efforts to limit global warming in the post-industrial era to well below 2 degrees Celsius. As a result, policymakers and regulators at regional, national, sub-national, and local levels of government, both in the United States and other parts of the world, are increasingly focused on actions to combat climate change. NRG operates in the United States and Canada. In the United States, the current Administration has stated that limiting climate change is one of its top priorities. In its early days, the Administration issued an Executive Order on "Tackling the Climate Crisis at Home and Abroad." This included commitments to reset the United States' greenhouse gas emission reduction targets under the Paris Climate Agreement, integrate environmental justice considerations into all aspects of its climate and environmental policy, consider climate change and conservation in federal permitting decisions and align government procurement strategy and standards with climate goals., and proposed rules,its agenda advanced. NRG actively monitors climate change related policy, regulatory, and legal developments that could impact its business and regularly engages with a diverse set of stakeholders on these issues. Such engagement helps the Company identify and pursue potential opportunities both to decarbonize its business and better serve its customers. NRG is committed to providing transparent disclosures of its climate risks and opportunities to stakeholders.
Market	Relevant, always included	Market risks are always considered in assessments by the Financial Risk Management Committee. Monitoring of market risks occurs on an ongoing basis. The frequency of reporting varies depending on the materiality and type of risk. Internally, the Financial Risk Management Committee meets quarterly to review existing risks and approve mitigation initiatives. NRG's CRO reports to the CFO and monitors commercial risks to revenues from commodity and electric power availability or pricing, carbon and emission trading, and renewable energy certificates. The EVP of Retail and EVP of Business Solutions identify commercial opportunities and risks to all of NRG's retail businesses. Climate change is producing changes in weather and other environmental conditions, including temperature and precipitation levels, and thus may affect consumer demand for electricity. Additionally, demand for NRG's energy-related services could be impacted by consumers' preferences or market factors favoring energy efficiency, low-carbon power sources, or reduced electricity usage. For example, in August 2017 Hurricane Harvey made landfall on the Texas coast where NRG has significant retail and generation operations. During the third quarter of 2017, NRG's Retail business was impacted by Hurricane Harvey by approximately $20 million in part due to regional power outages and disruptions in transmission and distribution. Market risks are always included in risk assessments because they may impact revenue. Further, demand for NRG's energy-related services could be similarly impacted by consumers' preferences or market factors favoring energy efficiency, low-carbon power sources, or reduced electricity usage.

	Relevance & inclusion	Please explain
Reputation	Relevant, always included	Reputational issues are always considered in assessments by the Financial Risk Management Committee. Monitoring of reputational risks occurs on an ongoing basis. The frequency of reporting varies depending on the materiality and type of risk. Internally, the Financial Risk Management Committee meets quarterly to review existing risks and approve mitigation initiatives. Power generation involves hazardous activities, including acquiring, transporting, and unloading fuel, operating large pieces of rotating equipment, and delivering electricity to transmission and distribution systems. In addition to natural risks such as earthquakes, floods, lightning, hurricanes, and wind, other hazards, such as fires, explosions, structural collapses, and machinery failures are inherent risks in NRG's operations. These and other hazards can cause significant personal injury or loss of life, severe damage to and destruction of property, plant, and equipment, contamination of, or damage to, the environment, and suspension of operations. The occurrence of any one of these events may result in NRG being named as a defendant in lawsuits asserting claims for substantial damages, including for environmental clean-up costs, personal injury, property damage, and fines and/or penalties. This may adversely affect the reputation of NRG. For example, during the August 2017 Hurricane Harvey event, NRG successfully mitigated any reputational risks by providing relief to our retail customers including ceasing disconnects and providing payment extensions. Reputational risks are always included in risk assessments because they may impact revenue.
Acute physical	Relevant, always included	Acute physical risks are always considered in assessments by the Financial Risk Management Committee. Monitoring of acute physical risks occurs on an ongoing basis. The frequency of reporting varies depending on the materiality and type of risk. Internally, the Financial Risk Management Committee meets quarterly to review existing risks and approve mitigation initiatives. Climate change is producing changes in weather and other environmental conditions, including temperature and precipitation levels, and thus may affect consumer demand for electricity. In addition, the potential physical effects of climate change, such as increased frequency and severity of storms, floods, and other climatic events, could disrupt NRG's operations and supply chain, and cause them to incur significant costs in preparing for or responding to these effects. These or other meteorological changes could lead to increased operating costs, capital expenses, or power purchase costs. NRG's commercial and residential customers may also experience the potential physical impacts of climate change and may incur significant costs in preparing for or responding to these efforts, including increasing the mix and resiliency of their energy solutions and supply. For example, during August 2017, Hurricane Harvey impacted NRG's Texas retail and Gulf Coast operations. For retail, lower gross margin related to the impact of the hurricane was driven by a reduction in load and the unfavorable impact of selling back excess supply along with providing $7 million of customer relief. (See NRG 2017 10-K pg. 73) Long- and short-term power prices may also fluctuate substantially due to other factors outside of NRG's control, including extreme weather conditions and seasonal weather fluctuations. Such factors and the associated fluctuations in power prices have affected NRG's wholesale power operating results in the past and will likely continue to do so in the future. Acute physical risks are always included in risk assessments because they may impact revenue.
Chronic physical	Relevant, always included	Chronic physical risks are always considered in assessments by the Financial Risk Management Committee. Monitoring of chronic physical risks occurs on an ongoing basis. The frequency of reporting varies depending on the materiality and type of risk. Internally, the Financial Risk Management Committee meets quarterly to review existing risks and approve mitigation initiatives. Climate change is producing changes in weather and other environmental conditions, including temperature and precipitation levels. For example, climate change could affect the availability of a secure and economic supply of water in some locations, which is essential for the continued operation of NRG's generation plants. Water risk is monitored by the risk owners (individual plant operators) and reported to NRG management upon changes with a significance threshold of 20% in water consumption and withdrawal levels. If it is determined that a water supply risk exists that could impact projected generation levels at any plant within the subsequent two-year time frame, risk mitigation efforts are identified and economically evaluated for implementation. Chronic physical risks are always included in risk assessments because they may impact revenue.

C2.3

(C2.3) Have you identified any inherent climate-related risks with the potential to have a substantive financial or strategic impact on your business?

Yes

C2.3a

(C2.3a) Provide details of risks identified with the potential to have a substantive financial or strategic impact on your business.

Identifier

Risk 1

Where in the value chain does the risk driver occur?

Direct operations

Risk type & Primary climate-related risk driver

Emerging regulation	Enhanced emissions-reporting obligations

Primary potential financial impact

Increased indirect (operating) costs

Climate risk type mapped to traditional financial services industry risk classification

<Not Applicable>

Company-specific description

As a member of a highly regulated industry NRG is directly affected by environmental regulations on power generating assets. This includes risks driven by laws, taxation, or disclosure standards, whether focused directly on GHGs or on other issues that affect GHG emissions. NRG has operations in the United States as well as Canada. To the extent that there is variability to regulatory regimes, environmental, corporate sustainability, and risk jobs are more complex and additional headcount is needed to properly monitor and manage potential regulatory risks. We have regional, and in some cases, state-focused regulatory affairs staff, and have recently added more staff to the corporate sustainability team. .

Additionally, in 2022, (and every year prior since 2014) NRG paid its financial auditor to have its emissions inventory voluntarily assured according to generally accepted carbon accounting standards. This cost could potentially increase as emissions calculations become more complex and stakeholder demand for verification increases. Additionally, as NRG's power generating assets diversify (distributed generation, co-generation, wind, solar, etc.) there will be a need for additional calculation protocol training for emissions managers and additional resources including hiring technical expertise.

GHG regulation could increase the cost of electricity generated by fossil fuels, and such increases could reduce demand for the power NRG generates and markets. If carbon pricing were enacted, it would have significant adverse effects on the economics on NRG's coal and natural gas fuelled plants which could impact the decision to own, operate, or sell these assets. Additionally, government regulations providing incentives for renewable generation could change at any time and such changes may adversely impact NRG's business, revenues, margins, results of operations, and cash flows.

Time horizon
Short-term

Likelihood
More likely than not

Magnitude of impact
Medium-high

Are you able to provide a potential financial impact figure?
No, we do not have this figure

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
Financial impact will depend on multiple factors including the precise nature of the emerging regulation(s) and/or emissions-reporting obligations, their geographic and sectoral scope of application, their implementation timeframe, and the period over which compliance must occur, among other variables. Financial impact includes hiring costs of employees as well as consulting and auditing fees.

Cost of response to risk
0

Description of response and explanation of cost calculation
The cost of the response to the risk is estimated at $0. There is no incremental cost to respond to this climate-related risk because maintaining adequate staff to manage regional and state regulation and corporate sustainability is part of the normal cost of doing business.

The EVP and General Counsel and heads of the Environmental, Government, and Regulatory Affairs teams are responsible for assessing regulatory risks at federal, regional, and local agencies. NRG's President and CEO reports to the Board of Directors on any material risks. NRG's SVP Generation and SVP Environmental are responsible for identifying and mitigating environmental risks to operations.

Regarding emerging regulations, an example of managing transition risks related to climate change is evidenced by NRG's policy and regulatory engagement. We actively engaged in discussions with Texas regulators and legislators on ways to mitigate the risks of Winter Storm Uri-like disruptions to the energy system in the future. See https://www.nrg.com/energy-policy.html for a list of our regulatory filings. These include our comments on ERCOT market redesign, our load serving entity reliability obligation proposal to the Public Utility Commission of Texas (PUCT), a third-party analysis we commissioned to evaluate customer exposure to energy price spikes during Winter Storm Uri, comments on establishing ERCOT power outage alerts, comments on critical natural gas facilities and entities, and comments on weather emergency preparedness measures.
Regarding enhanced emissions reporting regulations, in March 2022 the SEC issued proposed climate disclosure rules. In anticipation of the finalized rule and to mitigate the risk of not being able to comply with the eventual final rule, we strengthened our GHG emissions data gathering, methodology documentation, and reporting processes and controls. We asked NRG's Internal Audit team to review our current processes and identify improvement opportunities. We then worked closely with the responsible functional groups – Plant Operations, Environmental, Real Estate, and Supply Chain – to address the Internal Audit findings. We also kept our Board's Audit Committee informed on both the findings and their resolution throughout the process.

Comment
N/A

Identifier
Risk 2

Where in the value chain does the risk driver occur?
Direct operations

Risk type & Primary climate-related risk driver

Acute physical	Other, please specify (Increased severity and frequency of extreme weather events such as cyclones and floods)

Primary potential financial impact
Decreased revenues due to reduced production capacity

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
Extreme weather events can impact NRG's retail electricity providers by causing volatility in energy markets and prolonged customer outages, which lead to lost revenue and increase the likelihood of late bill payments that can impact cash flow. NRG's power generation assets may also be directly impacted by severe weather.

For example, in late August 2017, Hurricane Harvey made landfall on the Texas coast. During the third quarter of 2017, NRG's Retail business was impacted by Hurricane Harvey by approximately $20 million in part by disruptions in transmission and distribution. This figure was disclosed in NRG's 2017 10-K Annual Report page 68. At the peak, approximately 300,000 customers were without power. During the time that these customers did not have power, NRG lost revenue from the transmission disruption.

Additionally, during Hurricane Harvey NRG's Cottonwood generating station was damaged when the Sabine River Authority opened the floodgates of the Toledo Bend reservoir, which resulted in downstream flooding of the Sabine River. NRG's business continuity plan ensured that essential employees remained at their stations to manage the plant through the weather event. Plant personnel worked on the issues until the generating station was returned to service during the fourth quarter of 2017. A retaining wall was also built near the plant to protect against future flooding.

Time horizon
Short-term

Likelihood
About as likely as not

Magnitude of impact
Medium

Are you able to provide a potential financial impact figure?
Yes, a single figure estimate

Potential financial impact figure (currency)
40000000

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
Financial impact is meant to be illustrative. Based on the $20,000,000 cost to our operations business from damage to the facility and additional $20,000,000 in lost revenue to the retail business due to transmission disruptions, there may be additional similar costs for future impacts of extreme weather events. This figure was disclosed in NRG's 2017 10-K Annual Report page 68.

Cost of response to risk
0

Description of response and explanation of cost calculation
The EVP, NRG Home and EVP, NRG Business identify commercial opportunities and risks to all of NRG's retail businesses and oversee the business continuity plan for their departments. NRG's President and CEO reports to the Board of Directors on any material risks. NRG's SVP Generation and SVP Environmental are responsible for identifying and mitigating environmental risks to operations. The Financial Risk Management Committee manages reputational risks to NRG's brand. The Enterprise Risk Management process enables management to manage uncertainty to enhance or preserve enterprise value and facilitates the functional group's management of risk.

For example, during August 2017, NRG's Cottonwood generating station was damaged when the Sabine River Authority opened the floodgates of the Toledo Bend reservoir, which resulted in downstream flooding of the Sabine River. NRG's business continuity plan ensured that essential employees remained at their stations to manage the plant through the weather event. Plant personnel worked on the issues until the generating station was returned to service during the fourth quarter of 2017. A retaining wall was also built near the plant to protect against future flooding.

The cost of the response to the risk is estimated at $0.00. There is no incremental cost to respond to this climate-related risk because contingency planning for extreme weather is part of the normal cost of doing business.

Comment
N/A

Identifier
Risk 3

Where in the value chain does the risk driver occur?
Direct operations

Risk type & Primary climate-related risk driver

Market	Changing customer behavior

Primary potential financial impact
Decreased revenues due to reduced demand for products and services

Climate risk type mapped to traditional financial services industry risk classification
<Not Applicable>

Company-specific description
In the United States, the demand for electricity has gradually decreased over the years but varies widely across states. Historically, although the economy has continued to grow, growth rates for electricity demand have slowed as new, more efficient devices and production processes that require less electricity have replaced older, less-efficient appliances, heating, ventilation, cooling units, and capital equipment. NRG's largest business is the retail segment which includes residential as well and commercial and industrial customers. If customers use less of what we sell, this could impact our profitability. If demand for electricity decreased it would have an adverse effect on NRG's revenue for retail sales.

(The U.S. Energy Information Administration forecasts that although near-term electricity demand may fluctuate as a result of year-to-year changes in weather, trends in long-term demand tend to be driven by economic growth offset by increases in energy efficiency. The annual growth in electricity demand averages about 1% throughout the projection period (2019-2050) in the AEO2020 Reference case.)

Time horizon
Medium-term

Likelihood
About as likely as not

Magnitude of impact
Medium-low

Are you able to provide a potential financial impact figure?
No, we do not have this figure

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
A decrease in demand for electricity would result in a decrease in revenue. Decreased revenues will depend on multiple factors including the magnitude of reduced demand, its incidence by geography and customer segment, and the timeframe over which it occurs, among other variables. These factors depend, in turn, on NRG's ability to anticipate potential demand reductions and respond by offering more fit-for-purpose products and services than competitors, as well as on competitor responses to changing markets and customer preferences.

Cost of response to risk
0

Description of response and explanation of cost calculation
Our shift in focus towards customer energy services is helping to reduce our reliance on revenue from direct energy supply to customers. For example, in 2014 NRG acquired Goal Zero, a consumer goods company that specializes in portable power products that enable consumers to generate their own electricity from renewable sources, reducing their dependence on the electric grid. To help customers in this regard, Goal Zero offers a guide for customers on how to obtain the Federal Residential Solar Tax credit when buying solar panels or the Goal Zero Yeti 3000X or the Yeti 6000X portable power stations.

NRG also offers a customized energy solution like Asset-Backed Demand Response (ABDR) and other distributed energy resources, which provide many benefits to customers and utilities. ABDR is designed to capture a stack of retail and wholesale economic benefits while enhancing reliability with on-site electric power generation. The NRG solution can be customized to use the business' existing energy resources, or to deploy new energy resources, like an energy storage system or solar panels.

The cost of the response to the risk is estimated at $0.00 There is no incremental cost to respond to this climate-related risk because NRG's business strategy includes providing a diverse portfolio of customer products and doing so is therefore a normal cost of doing business.

Comment
N/A

C2.4

(C2.4) Have you identified any climate-related opportunities with the potential to have a substantive financial or strategic impact on your business?
Yes

C2.4a

(C2.4a) Provide details of opportunities identified with the potential to have a substantive financial or strategic impact on your business.

Identifier
Opp1

Where in the value chain does the opportunity occur?
Direct operations

Opportunity type
Products and services

Primary climate-related opportunity driver
Other, please specify (Increased demand for products/services)

Primary potential financial impact
Increased revenues resulting from increased demand for products and services

Company-specific description
Weather conditions in the regions of the U.S. and Canada in which NRG does business influence NRG's financial results. Weather conditions can affect the supply and demand for electricity and fuels. Weather may also impact the availability of the NRG's generating assets. Changes in energy supply and demand may impact the price of these energy commodities in both the spot and forward markets, which may affect NRG's results in any given period. Typically, demand for and the price of electricity is higher in the summer and the winter seasons,when temperatures are more extreme. The demand for and price of natural gas is also generally higher in the winter. However, all regions of the U.S. typically do not experience extreme weather conditions at the same time, thus NRG is typically not exposed to the effects of extreme weather in all parts of its business at once.

To the extent that climate change contributes to the frequency and intensity of weather-related events NRG could pick up demand/load in markets where sources are down or offline due to inclement weather. NRG retail operations stand to benefit from any increase in load, for example, during extremely hot summers in Texas, while NRG's wholesale operations could benefit from any increase in pricing associated with extreme temperatures.

Additionally, NRG's Retail group offers a range of products and services that are designed to provide emergency power to our customers when normal distribution is not available. Increasing storms and related electrical service disruptions could increase sales.

For residential and small businesses NRG offers a variety of portable power products. The NRG brand Goal Zero offers portable solar, batteries, outdoor lighting, and chargers. NRG Street Charge is a solar charging station installed in public places for guests to charge their devices free of charge. NRG Go Portable Power allows users to rent an NRG Go Power Pack to keep their devices charged, and then return the Power Pack to a conveniently located NRG Go Station or mail the pack in to an office.

For commercial and industrial customers, NRG offers demand-side management helping businesses reduce their energy usage during times of high demand and distributed energy resources for resiliency.

Finally, NRG strives to lead the low-carbon transition by continuously innovating cleaner energy solutions and offering a broad variety of sustainable products and services to all customer segments.

Time horizon
Medium-term

Likelihood
About as likely as not

Magnitude of impact
Medium-low

Are you able to provide a potential financial impact figure?
No, we do not have this figure

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
Financial impact represents increased sales in a growth product like portable solar products and residential battery storage. To estimate figures more precisely for internal strategic and business planning purposes, we regularly analyze market trends for particular sustainable products and services, the competitive landscape and the differentiation of our offerings relative to competitors, and the investments required to pursue growth in these markets. We see significant opportunity to provide sustainable products and services to our customers, but cannot release specific, forward-looking financial impact figures because these are confidential to NRG.

Increased revenues will depend on multiple factors including the magnitude of increased demand, its incidence by geography and customer segment, and the timeframe over which it occurs, among other variables. These factors depend, in turn, on NRG's ability to anticipate potential demand increases and respond by offering more fit-for-purpose products and services than competitors, as well on as competitor responses to changing markets and customer preferences.

Cost to realize opportunity
0

Strategy to realize opportunity and explanation of cost calculation
NRG retail operations stand to benefit from any increase in load, while NRG's wholesale operations could benefit from any increase in pricing associated with extreme temperatures.

Also, for commercial and industrial customers, NRG offers demand-side management helping businesses reduce their energy usage during times of high demand and distributed energy resources for resiliency. In 2017 NRG and Cummins announced a strategic partnership to deploy a more resilient, cleaner, and cost-effective distributed energy platform for commercial and industrial customers. The platform architecture allows for more capacity to meet expanding market needs. In 2018 this offering entered the market. With NRG's asset-backed distributed energy solution, we combine the reliable, clean power provided by Cummins natural gas generators with the insights, analytics, tools, and expertise from NRG. This solution is designed to produce meaningful savings for participating customers, offering them a guaranteed outcome every month on energy expenditures with assets that can be engineered for specific generation needs. Customers also receive access to our unique Active Management Platform (AMP) dashboard, which can be customized to fit energy concerns and goals. The dashboard offers robust data analytics, including load projections, market summaries, and weather forecasts, that provide a holistic portrait of energy consumption, past and present, so customers can make informed energy decisions.

NRG will own, operate, and maintain the generator and this behind-the-meter asset will produce electricity to offset power consumption from the grid and contribute revenue through demand response market programs. With NRG's load modification that adjusts the usage profile for a lower commodity cost outcome, organizations are able to supplement power from the grid, reap the financial benefits of surplus power, and achieve sustainability goals as they monitor energy consumption. These companies can expect to see a 10-15% savings on energy costs, and as a result, organizations will be empowered to plan for the future, knowing that their energy expenditures have guaranteed outcomes and backed reliability.

The cost of the response for the opportunity is estimated at $0. There is no incremental cost to realize this climate-related opportunity because NRG's business strategy includes providing a diverse portfolio of retail customer products and doing so is therefore a normal cost of doing business.

Comment
N/A

Identifier
Opp2

Where in the value chain does the opportunity occur?
Direct operations

Opportunity type
Markets

Primary climate-related opportunity driver
Access to new markets

Primary potential financial impact
Increased revenues through access to new and emerging markets

Company-specific description
Climate opportunities could arise from legislation or policies that enhance investment in and development of new clean technologies, products, and services; increase customer demand for NRG's products and services; and open up new energy markets for competitive power sales.

NRG supports competitive changes to retail and wholesale energy markets that facilitate more sustainable energy choices and save money for consumers. Because oversight of the electric industry is split between federal and state regulators, the best solutions involve cooperation between both sets of regulators to craft regulations that drive market-based sustainable outcomes.

For example, all our retail brands including Reliant, Green Mountain Energy, Direct Energy, and NRG offer renewable electricity plans. All our retail offerings are regulated by the appropriate state entity. However, those plans are only available to customers in parts of the country that allow retail electricity choice, namely Texas, Illinois, Ohio, Pennsylvania, and New York among other mid-Atlantic states and states in the Northeast. States in other parts of the country would need to enact legislative and regulatory reforms to allow their residents to choose their electricity providers. We also offer certain sustainable products and services to customers in all 50 U.S. states and four

Canadian provinces regardless of whether the locale includes provisions for retail electric choice and increased demand for such products and services arising from increased awareness of, and desire to combat, climate change will result in increased revenues through NRG's access to these new and emerging markets.

Time horizon
Medium-term

Likelihood
About as likely as not

Magnitude of impact
Medium-low

Are you able to provide a potential financial impact figure?
No, we do not have this figure

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
NRG considers such financial impact figures competitively sensitive and therefore proprietary and confidential and is unable to disclose them. Increased revenues will depend on multiple factors including the precise nature of the new and emerging markets (size, location(s), customer segment(s)), the magnitude of increased demand, and the timeframe over which it occurs, among other variables. These factors depend, in turn, on NRG's ability to anticipate potential demand increases and respond by offering more fit-for-purpose products and services than competitors, as well as on competitor responses to changing markets and customer preferences.

Cost to realize opportunity
0

Strategy to realize opportunity and explanation of cost calculation
NRG engages with policy makers and industry groups to support competitive changes to retail and wholesale markets that make it easier to facilitate more sustainable energy choices and save money for consumers. For example, in 2018 NRG's CEO published an Op-Ed about the need for more retail electricity competition. This article supported legislators, regulators, utilities, competitive retailers, and consumer groups joining forces to implement competition for the benefit of consumers. These issues continue to be discussed in policy and regulatory environments. It is anticipated that customers will continue to join NRG in this effort to create a more competitive environment.
To see regulatory filings, white papers, presentations, and other materials that set forth our positions on a variety of critical subjects driving our business and the energy industry please visit: https://www.nrg.com/energy-policy.html

Potential costs to realize this opportunity include the cost of full-time employees to engage policy makers and lobby for opening up energy markets for competitive retail provision as well as typical market start-up costs should additional energy markets successfully be opened to competition. There is no incremental cost to realize this climate-related opportunity because advocating for competitive energy markets is a core part of NRG's business strategy and doing so is therefore a normal cost of doing business.

Comment
N/A

Identifier
Opp3

Where in the value chain does the opportunity occur?
Downstream

Opportunity type
Products and services

Primary climate-related opportunity driver
Shift in consumer preferences

Primary potential financial impact
Increased revenues resulting from increased demand for products and services

Company-specific description
Opportunities in the U.S. are emerging for clean energy technologies and market expansion. NRG retail business provides home energy and related services to consumers through various brands and channels across the U.S. These brands include Reliant, Green Mountain Energy, Direct Energy, and NRG and they offer renewable energy, carbon offsets, and smart energy management products that help businesses and consumers reduce their carbon footprints. NRG's consumer product brand, Goal Zero, includes portable solar panels, lightweight recharger kits and rechargeable lanterns. Retail customers make purchase decisions based on a variety of factors, including price, customer service, brand, product choices, bundles, or value-added features. Customers purchase products through a variety of sales channels including direct sales, call centers, websites, brokers and brick-and-mortar stores. By offering these sustainable products and services to customers, NRG is leveraging a climate opportunity to increase its revenues and profits, while also helping customers achieve their sustainability goals.

Time horizon
Medium-term

Likelihood
About as likely as not

Magnitude of impact
Medium-low

Are you able to provide a potential financial impact figure?
No, we do not have this figure

Potential financial impact figure (currency)
<Not Applicable>

Potential financial impact figure – minimum (currency)
<Not Applicable>

Potential financial impact figure – maximum (currency)
<Not Applicable>

Explanation of financial impact figure
Financial impact includes revenue from new and existing customers that choose NRG low-carbon products and services. Increased revenues will depend on multiple factors including the magnitude of increased demand, its incidence by geography and customer segment, and the timeframe over which it occurs, among other variables. These factors depend, in turn, on NRG's ability to anticipate potential demand increases and respond by offering more fit-for-purpose products and services than competitors, as well as on competitor responses to changing markets and customer preferences.

Cost to realize opportunity
0

Strategy to realize opportunity and explanation of cost calculation
Through its broad range of service offerings and value propositions, NRG's retail business is able to attract, retain, and increase the value of its customer relationships. NRG's retailers are recognized for exemplary customer service, innovative smart energy and technology product offerings, and environmentally friendly solutions.

For example, in 2018 NRG contracted a 25-megawatt solar project for Sysco to power their Texas operations and advance sustainability. Working together with Sysco, NRG is also helping meet the promise of the customer-choice market in Texas, with a truly distinctive, cost-effective solar energy plan – the kind sought by many commercial and industrial customers today. As part of the agreement, three solar garden sites were constructed in the Houston and Dallas areas, which support approximately 10 percent of Sysco's U.S. electricity usage. The environmental benefits of this program include reducing approximately 37,000 tons of CO2 emissions a year, which equates to taking more than 7,000 cars off the road. The solar garden sites support the majority of Sysco's electricity load in Texas, including its corporate headquarters.

Potential cost to realize opportunity is estimated at $0. There is no incremental cost to realize this climate-related opportunity because NRG's business strategy already includes focusing on providing low-carbon products and services to customers and is therefore part of the normal cost of doing business.

Comment
N/A

C3. Business Strategy

C3.1

(C3.1) Does your organization's strategy include a climate transition plan that aligns with a 1.5°C world?

Row 1

Climate transition plan

Yes, we have a climate transition plan which aligns with a 1.5°C world

Publicly available climate transition plan

Yes

Mechanism by which feedback is collected from shareholders on your climate transition plan

We have a different feedback mechanism in place

Description of feedback mechanism

We meet with shareholders and debtholders upon request to discuss our transition plans.

Frequency of feedback collection

More frequently than annually

Attach any relevant documents which detail your climate transition plan (optional)

To meet NRG's 1.5oC-aligned net-zero by 2050 goal, NRG is using multiple transition levers. These transition levers can be grouped into four main categories:
• DECARBONIZATION of existing business lines
• DIVERSIFICATION into low emissions businesses
• DIVESTMENT of select high emissions assets
• DEPLOYMENT of new technologies and innovations
NRG's President and CEO has overall responsibility for the company's climate change-related issues and management, including creating, developing, and approving a transition plan and emissions reduction goals. The CEO oversees, guides, and reviews all sustainability-related strategies, goals, targets, and metrics, which are then reviewed and approved by the Company's G&N Committee and the full Board of Directors. The CEO is directly involved with creating and approving NRG's emissions reductions goals. For example, in 2019, the CEO proposed, and the Board approved, the decision to accelerate NRG's emissions reduction goals to be in line with a 1.5 Celsius degree trajectory.

The position of Chief Sustainability Officer (CSO) was formalized in 2013 as the strategic importance of sustainability was recognized, as was the need for sustainability to be integrated across the business. NRG's CSO reports to the SVP, Administration, Chief Compliance Officer & Chief of Staff, who reports to the Chief Executive Officer. The CSO also maintains a direct line of communication to the CEO through standing one-on-one meetings. The CSO leads the development and implementation of all sustainability-related strategies and programs and is responsible for the development of NRG's climate change policy positions and coordination between policy and commercial initiatives. This includes drafting and publishing NRG's climate-related transition documents, engaging with investors and analysts on integrating ESG factors into reporting practices, and advising on both business-to-business and business-to-consumer low carbon energy solutions. The Chief Sustainability Officer (CSO) presents key strategic priorities to the full Board during scheduled meetings throughout the fiscal year. For example, NRG's science-based targets are monitored and proposals to make significant changes to the goals are presented to the Board for approval.
2020-TCFD.pdf

Explain why your organization does not have a climate transition plan that aligns with a 1.5°C world and any plans to develop one in the future

<Not Applicable>

Explain why climate-related risks and opportunities have not influenced your strategy

<Not Applicable>

C3.2

(C3.2) Does your organization use climate-related scenario analysis to inform its strategy?

	Use of climate-related scenario analysis to inform strategy	Primary reason why your organization does not use climate-related scenario analysis to inform its strategy	Explain why your organization does not use climate-related scenario analysis to inform its strategy and any plans to use it in the future
Row 1	Yes, qualitative and quantitative	<Not Applicable>	<Not Applicable>

C3.2a

(C3.2a) Provide details of your organization's use of climate-related scenario analysis.

Climate-related scenario	Scenario analysis coverage	Temperature alignment of scenario	Parameters, assumptions, analytical choices
Transition scenarios: Customized publicly available transition scenario	Company-wide	1.5ºC	In 2020-2021, NRG conducted a transition risk-based climate scenario analysis. The analysis examines the fuel mix and associated GHG intensity of NRG electricity sales under a U.S. Energy Information Agency (EIA) carbon fee scenario over 2026-2050. Please see https://www.nrg.com/assets/documents/sustainability/2020-TCFD.pdf for detailed parameters, assumptions, and analytical choices and results.
Physical climate scenarios: Bespoke physical scenario	Company-wide	4.1ºC and above	NRG is currently working with a third-party to conduct a physical climate scenario risk assessment for all of our assets.

C3.2b

(C3.2b) Provide details of the focal questions your organization seeks to address by using climate-related scenario analysis, and summarize the results with respect to these questions.

Row 1

Focal questions

What is the impact of an escalating carbon price on the fuel mix of the energy sold to customers, and what is the carbon intensity of the energy sold?

Results of the climate-related scenario analysis with respect to the focal questions

NRG conducted climate-related scenario analysis in its most recent TCFD.

• The fuel mix and carbon intensity of electricity sold by NRG is highly sensitive to a carbon price: At the end of 2025, the last year for which the analysis relies on NRG forecast budget data and the last year prior to the introduction of the modelled carbon price, the share of coal in NRG's electricity sales is 26%, the share of natural gas is 28%, the share of nuclear is 16%, and the share of renewables is 30%.• In 2026, after a carbon price is introduced at a level of $22.78 per metric ton of CO2e, the share of coal in electricity sold falls to near-zero.

• While natural gas initially picks up coal's share of the fuel mix after the carbon price is introduced, its share of electricity sold in 2050 (28%) reverts to a level similar to its 2025 share (26%).• Conversely, during the 2025-2050 period, the share of renewables in electricity sold nearly doubles from 30% to 59%, enabled both by growing NRG renewable PPAs and higher availability of renewables in the market.

• The share of nuclear is relatively flat, beginning the period at 16% and ending the period at 13%.

• The carbon intensity of sold electricity falls by roughly 72%, from 0.39 metric tons of CO2e per MWh in 2025 to 0.11 metric tons of CO2e per MWh in 2050. In the first year of the carbon price alone, carbon intensity falls 41%, from 0.39 to 0.23, driven by the near complete elimination of coal from the fuel mix. Over 2026-2050, the carbon intensity halves again, from 0.23 to 0.11.

Ongoing changes to our portfolio are reducing both the fossil fuel mix and carbon intensity of NRG's electricity sold. Over 2014-2020, we divested 27.5 GW and in 2021 and 2022, a further 6.2 GW.Over that same period, the carbon intensity of NRG's electricity sold fell from 0.66 to 0.37, a decline of 44%. These declines were driven by deliberate company actions which include repowering existing coal-fired generators with more efficient and lower carbon gas-fired generators and retiring older fossil fuel generation assets as they approach their economic end of life Renewables are an increasing part of the electricity NRG sells to customers. Even in the absence of a carbon price, the share of renewables in NRG's electricity sold is expected to rise from 26% in 2020 to 30% in 2025. By the end of 2022, NRG had procured 2.4 GW of renewable power through PPAs and is actively expanding such procurement.

Doing climate risk scenario analysis has reinforced our long-held belief that an economy-wide, technology-neutral price on carbon would decarbonize the economy, including by reducing the carbon intensity of electricity, thereby facilitating achievement of our 2050 net zero climate goal. Within NRG, it has strengthened our resolve to continue to aggressively procure renewable electricity through our renewable PPA strategy, thereby reducing the carbon intensity of the electricity we provide to our customers.

C3.3

(C3.3) Describe where and how climate-related risks and opportunities have influenced your strategy.

	Have climate-related risks and opportunities influenced your strategy in this area?	Description of influence
Products and services	Yes	Extreme weather events can cause volatility in energy markets and prolonged customer outages, which lead to lost revenue and increase the likelihood of late bill payments that can impact cash flow. NRG's strategy with respect to products and services is to meet the need of its customers by providing a variety of energy products and services. To mitigate the short-term risks of extreme weather events and other risks on our customers, NRG develops various products and services that are offered throughout NRG's brands. When considering possible solutions, NRG analyzes how a customer uses electricity and develops a tailored, optimized plan for staying fully operational. Specifically, one product NRG provides is Distributed Energy Resources (DER). As the climate shifts and creates stronger, more dramatic storms, businesses need to be proactive and forward-thinking with how they approach energy. Employing a DER provides the reliability needed to ensure the power stays on during extreme weather. DERs are power generators installed on-site that either produce or store energy for a business customer and/or the grid. So, rather than solely consuming energy and subtracting energy from the grid, on-site generation can produce and add energy to it. This is done through four primary strategies: renewable energy, fossil fuel generators, demand response, and microgrids. Our expertise is leading customers to greater levels of cost stability and resilience, expanding their view of what sustainability can mean in the process. In this way, we're bringing real-world value to businesses and communities, by showing them how to combat extreme climate events with reassurance and forward energy planning. As part of our strategy to provide customers with sustainable products and services, NRG had secured 2.4 GW of renewable power purchase agreements (PPAs) as of December 31, 2022 with 45%operational. In addition to renewable energy subscription plans, NRG also provides other sustainable products and services including certified carbon offsets and renewable electricity credits, certified natural gas, microgrids, energy storage and resilience solutions, demand-side solutions, and sustainability concierge and advisory services.
Supply chain and/or value chain	Yes	Supply chain impacts, including ones related to climate, are important because NRG's costs, results of operations, financial condition and cash flows could be adversely impacted by disruption of its upstream fuel supplies, which may be driven by both physical climate risks and ongoing transition climate risks. NRG relies on natural gas, coal, and oil to fuel a majority of its power generation facilities. Delivery of these fuels to the facilities is dependent upon the continuing financial viability of contractual counter parties as well as upon the infrastructure (including rail lines, rail cars, barge facilities, roadways, riverways and natural gas pipelines) available to serve each generation facility. As a result, NRG is subject to the risks of disruptions or curtailments in the production of power at its generation facilities if no fuel is available at any price, or if a counter party fails to perform, or if there is a disruption in the fuel delivery infrastructure. In order to mitigate this risk NRG continually monitors its fuel suppliers and may decide to pre-purchase fuel and diversify its fuel mix and supplier base. This occurs during extreme cold weather events on the Eastern or Gulf Coast of the U.S. where ice creates safety hazards for unloading barges and sustained cold necessitates operations to close. When the ice melts, the river rises and currents are too swift, further hampering deliveries. The impact of these water risks on barge delivery is evaluated on a daily basis, with contingency plans developed as needed. NRG assets located along the Eastern or Gulf coast of the U.S. that rely on barge fuel delivery may be impacted if there is a disruption. So, decisions may be made to find alternate land-based transportation to avoid shortages.
Investment in R&D	Yes	Deployment of climate-related technologies and innovations is important to our strategy because failure to do so may impair the value of NRG's power plants or retail products. Climate-related technologies include more efficient technologies to produce power, such as wind, photovoltaic (solar) cells, energy storage, and improvements in traditional technologies and equipment, such as more efficient gas turbines. Advances in these or other technologies could reduce the costs of power production to a level below what NRG has currently forecasted, which could adversely affect its cash flows, results of operations or competitive position. NRG may also potentially be affected by emerging technologies that may over time affect change the energy industry overall with the inclusion of distributed generation and clean technology. Some emerging technologies like distributed renewable energy technologies, broad consumer adoption of electric vehicles, and energy storage devices could affect the price of energy. These emerging technologies may affect the financial viability of utility counterparties and could have significant impacts on wholesale market prices, which could ultimately have a material adverse effect on NRG's financial condition, results of operations and cash flows. NRG funds and participates in programs like the NRG COSIA Carbon XPRIZE. The Carbon XPRIZE, started in 2015, was a five-year global competition developed to address rising CO2 emissions by challenging innovators around the world to develop breakthrough technologies that convert the most CO2 into products with the highest net value. The two winners shared a $20 million prize to implement their start-up ventures.
Operations	Yes	NRG's businesses and operations are subject to physical, market, and economic risks relating to the potential effects of climate change. The potential physical effects of climate change, such as increased frequency and severity of storms, floods, and other climatic events, could disrupt NRG's operations and supply chain, and cause them to incur significant costs in preparing for or responding to these effects. These or other meteorological changes could lead to increased operating costs, capital expenses, or power purchase costs. NRG's commercial and residential customers may also experience the potential physical impacts of climate change and may incur significant costs in preparing for or responding to these efforts, During August 2017, NRG's Cottonwood generating station was damaged when the Sabine River Authority opened the floodgates of the Toledo Bend reservoir, which resulted in downstream flooding of the Sabine River. The generating station was returned to service during the fourth quarter of 2017. NRG estimates the impact of the Cottonwood damage and Hurricane Harvey on Gulf Coast Generation to be approximately $20 million. If NRG were to acquire a new generating station, these and other considerations would be factored into the strategic decision. Management considers these risks monthly as part of business strategy and continuity.

C3.4

(C3.4) Describe where and how climate-related risks and opportunities have influenced your financial planning.

	Financial planning elements that have been influenced	Description of influence
Row 1	Revenues Direct costs	Extreme weather events could be a risk and decrease revenue. NRG operates power generating stations which are subject to physical damage if acute weather events occur. During August 2017, NRG's Cottonwood generating station was damaged when the Sabine River Authority opened the floodgates of the Toledo Bend reservoir, which resulted in downstream flooding of the Sabine River. The generating station was returned to service during the fourth quarter of 2017. NRG estimates the impact of the Cottonwood damage and Hurricane Harvey on Gulf Coast Generation to be approximately $20 million. NRG continues to dedicate resources to business continuity plans to ensure plants are able to run when needed and with the highest degree of safety. Alternately, extreme heat in the summers drives up demand for electricity and provides an opportunity for increased revenue from retail sales of power. Additionally, an opportunity to increase revenue may be possible with favorable energy policy. Demand for NRG's energy-related services could be impacted by consumers' preferences or market factors favoring energy efficiency and/or low-carbon power sources.

C3.5

(C3.5) In your organization's financial accounting, do you identify spending/revenue that is aligned with your organization's climate transition?

	Identification of spending/revenue that is aligned with your organization's climate transition	Indicate the level at which you identify the alignment of your spending/revenue with a sustainable finance taxonomy
Row 1	Yes, we identify alignment with our climate transition plan	<Not Applicable>

C3.5a

(C3.5a) Quantify the percentage share of your spending/revenue that is aligned with your organization's climate transition.

Financial Metric
Other, please specify (We don't publicly disclose this for competitive reasons)

Type of alignment being reported for this financial metric
Please select

Taxonomy under which information is being reported
<Not Applicable>

Objective under which alignment is being reported
<Not Applicable>

Amount of selected financial metric that is aligned in the reporting year (unit currency as selected in C0.4)

Percentage share of selected financial metric aligned in the reporting year (%)

Percentage share of selected financial metric planned to align in 2025 (%)

Percentage share of selected financial metric planned to align in 2030 (%)

Describe the methodology used to identify spending/revenue that is aligned
We don't publicly disclose this for competitive reasons

C4. Targets and performance

C4.1

(C4.1) Did you have an emissions target that was active in the reporting year?
Absolute target

C4.1a

(C4.1a) Provide details of your absolute emissions target(s) and progress made against those targets.

Target reference number
Abs 1

Is this a science-based target?
Yes, and this target has been approved by the Science Based Targets initiative

Target ambition
1.5°C aligned

Year target was set
2014

Target coverage
Company-wide

Scope(s)
Scope 1
Scope 2
Scope 3

Scope 2 accounting method
Location-based

Scope 3 category(ies)
Category 6: Business travel

Base year
2014

Base year Scope 1 emissions covered by target (metric tons CO2e)
60000000

Base year Scope 2 emissions covered by target (metric tons CO2e)
254000

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 2: Capital goods emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 4: Upstream transportation and distribution emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 6: Business travel emissions covered by target (metric tons CO2e)
0

Base year Scope 3, Category 7: Employee commuting emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 10: Processing of sold products emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 11: Use of sold products emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 14: Franchises emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 15: Investments emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (upstream) emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (downstream) emissions covered by target (metric tons CO2e)
<Not Applicable>

Base year total Scope 3 emissions covered by target (metric tons CO2e)
0

Total base year emissions covered by target in all selected Scopes (metric tons CO2e)
60254000

Base year Scope 1 emissions covered by target as % of total base year emissions in Scope 1
100

Base year Scope 2 emissions covered by target as % of total base year emissions in Scope 2
100

Base year Scope 3, Category 1: Purchased goods and services emissions covered by target as % of total base year emissions in Scope 3, Category 1: Purchased goods and services (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 2: Capital goods emissions covered by target as % of total base year emissions in Scope 3, Category 2: Capital goods (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions covered by target as % of total base year emissions in Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 4: Upstream transportation and distribution covered by target as % of total base year emissions in Scope 3, Category 4: Upstream transportation and distribution (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 5: Waste generated in operations emissions covered by target as % of total base year emissions in Scope 3, Category 5: Waste generated in operations (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 6: Business travel emissions covered by target as % of total base year emissions in Scope 3, Category 6: Business travel (metric tons CO2e)
100

Base year Scope 3, Category 7: Employee commuting covered by target as % of total base year emissions in Scope 3, Category 7: Employee commuting (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 8: Upstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 8: Upstream leased assets (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 9: Downstream transportation and distribution emissions covered by target as % of total base year emissions in Scope 3, Category 9: Downstream transportation and distribution (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 10: Processing of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 10: Processing of sold products (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 11: Use of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 11: Use of sold products (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 12: End-of-life treatment of sold products emissions covered by target as % of total base year emissions in Scope 3, Category 12: End-of-life treatment of sold products (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 13: Downstream leased assets emissions covered by target as % of total base year emissions in Scope 3, Category 13: Downstream leased assets (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 14: Franchises emissions covered by target as % of total base year emissions in Scope 3, Category 14: Franchises (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Category 15: Investments emissions covered by target as % of total base year emissions in Scope 3, Category 15: Investments (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (upstream) emissions covered by target as % of total base year emissions in Scope 3, Other (upstream) (metric tons CO2e)
<Not Applicable>

Base year Scope 3, Other (downstream) emissions covered by target as % of total base year emissions in Scope 3, Other (downstream) (metric tons CO2e)
<Not Applicable>

Base year total Scope 3 emissions covered by target as % of total base year emissions in Scope 3 (in all Scope 3 categories)
100

Base year emissions covered by target in all selected Scopes as % of total base year emissions in all selected Scopes
100

Target year
2025

Targeted reduction from base year (%)
50

Total emissions in target year covered by target in all selected Scopes (metric tons CO2e) [auto-calculated]

Scope 1 emissions in reporting year covered by target (metric tons CO2e)
35050795

Scope 2 emissions in reporting year covered by target (metric tons CO2e)
141831

Scope 3, Category 1: Purchased goods and services emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 2: Capital goods emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2) emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 4: Upstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 5: Waste generated in operations emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 6: Business travel emissions in reporting year covered by target (metric tons CO2e)
2432

Scope 3, Category 7: Employee commuting emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 8: Upstream leased assets emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 9: Downstream transportation and distribution emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 10: Processing of sold products emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 11: Use of sold products emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 12: End-of-life treatment of sold products emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 13: Downstream leased assets emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 14: Franchises emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Category 15: Investments emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Other (upstream) emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Scope 3, Other (downstream) emissions in reporting year covered by target (metric tons CO2e)
<Not Applicable>

Total Scope 3 emissions in reporting year covered by target (metric tons CO2e)
2432

Total emissions in reporting year covered by target in all selected scopes (metric tons CO2e)
35195058

Does this target cover any land-related emissions?
No, it does not cover any land-related emissions (e.g. non-FLAG SBT)

% of target achieved relative to base year [auto-calculated]

Target status in reporting year
Underway

Please explain target coverage and identify any exclusions
Target coverage includes Scope 1, Scope 2, and Scope 3 category 6. When we set our current climate goals in 2019, our estimated Scope 3 emissions were less than 40% of our total Scope 1, 2, and 3 emissions.

Plan for achieving target, and progress made to the end of the reporting year
NRG's climate goals are to reduce greenhouse gas emissions by 50% by 2025, from its current 2014 baseline, and to achieve net-zero emissions by 2050. Greenhouse gas emissions include directly controlled emissions, emissions from NRG's purchased energy, and emissions from employee business travel. In 2021, NRG's climate goals were certified by the Science Based Targets initiative as aligned with a 1.5 degree Celsius trajectory. From the current 2014 base year to 2022, the Company's CO2e emissions decreased from 60 million metric tons to 35 million metric tons, representing a cumulative 42% reduction. The decrease is attributed to reductions in fleet-wide annual net generation and fleet retirements.
As of December 31, 2022, less than 5% of the Company's consolidated operating revenues were derived from coal-fired operating assets.

List the emissions reduction initiatives which contributed most to achieving this target
<Not Applicable>

C4.2

(C4.2) Did you have any other climate-related targets that were active in the reporting year?
Net-zero target(s)
Other climate-related target(s)

C4.2b

(C4.2b) Provide details of any other climate-related targets, including methane reduction targets.

Target reference number
Oth 1

Year target was set
2021

Target coverage
Company-wide

Target type: absolute or intensity
Absolute

Target type: category & Metric (target numerator if reporting an intensity target)

Low-carbon vehicles	Percentage of battery electric vehicles in company fleet

Target denominator (intensity targets only)
<Not Applicable>

Base year
2021

Figure or percentage in base year
0

Target year
2030

Figure or percentage in target year
100

Figure or percentage in reporting year
0

% of target achieved relative to base year [auto-calculated]

Target status in reporting year
Underway

Is this target part of an emissions target?
It is a target that will help us achieve future Scope 3 target.

Is this target part of an overarching initiative?
EV100

Please explain target coverage and identify any exclusions
Covers all company-owned light duty fleet vehicles.

Plan for achieving target, and progress made to the end of the reporting year
NRG joined the Climate Group's EV100 initiative to share best practices with other organizations electrifying their fleets. NRG has begun purchasing electric vehicles.

List the actions which contributed most to achieving this target
<Not Applicable>

C4.2c

(C4.2c) Provide details of your net-zero target(s).

Target reference number
NZ1

Target coverage
Company-wide

Absolute/intensity emission target(s) linked to this net-zero target
Abs1

Target year for achieving net zero
2050

Is this a science-based target?
Yes, and this target has been approved by the Science Based Targets initiative

Please explain target coverage and identify any exclusions
scope 1, scope 2, and scope 3 business travel

Do you intend to neutralize any unabated emissions with permanent carbon removals at the target year?
Yes

Planned milestones and/or near-term investments for neutralization at target year
Our planned milestone is a 50% reduction of our 2014 base year emissions by 2025 as discussed in section C4.1a.

Planned actions to mitigate emissions beyond your value chain (optional)

C4.3

(C4.3) Did you have emissions reduction initiatives that were active within the reporting year? Note that this can include those in the planning and/or implementation phases.

Yes

C4.3a

(C4.3a) Identify the total number of initiatives at each stage of development, and for those in the implementation stages, the estimated CO2e savings.

	Number of initiatives	Total estimated annual CO2e savings in metric tonnes CO2e (only for rows marked *)
Under investigation	7	0
To be implemented*	2	9000
Implementation commenced*		
Implemented*	1	1760000
Not to be implemented		

C4.3b

(C4.3b) Provide details on the initiatives implemented in the reporting year in the table below.

Initiative category & Initiative type

Please select

Estimated annual CO2e savings (metric tonnes CO2e)

1760000

Scope(s) or Scope 3 category(ies) where emissions savings occur

Scope 3 category 3: Fuel-and-energy-related activities (not included in Scopes 1 or 2)

Voluntary/Mandatory

Voluntary

Annual monetary savings (unit currency – as specified in C0.4)

0

Investment required (unit currency – as specified in C0.4)

0

Payback period

No payback

Estimated lifetime of the initiative

>30 years

Comment

Green Mountain Energy GME celebrated its 25th year of business, making it the nation's longest-serving renewable energy retailer. A carbon-neutral company since 1997, GME provides its customers with only 100% renewable electricity, and these subscriptions have prevented more than 100 billion pounds (amortizes to 1,760,000 million metric tons) of CO2 from entering the Earth's atmosphere.

C4.3c

(C4.3c) What methods do you use to drive investment in emissions reduction activities?

Method	Comment
Employee engagement	'PowerUPmylife' is a web-based and mobile platform where NRG employees can take actions that reflect sustainable choices at work and at home. The program launched at the end of 2014 and continues to be a place where employees engage in topics ranging from water conservation to NRG-specific activities such as wellness programs available to employees. Employees have taken over 15,000 actions including energy efficiency, waste management, and personal awareness of how to reduce emissions reduction – for example, by unplugging chargers and appliances when not in use, recycling, taking the stairs instead of the elevator, and cooking a meat-free meal.
Internal incentives/recognition programs	NRG offers incentives to employees to purchase products that reduce GHG emissions. For example, there is an employee monthly commuter stipend to incentivize using public transportation. Green Mountain Energy has a comprehensive employee engagement program designed to provide employees with options for understanding and taking action to reduce their environmental impact—at work and at home. Program offerings include discounts on renewable energy products, residential solar installations, carbon offsets, and outdoor recreation programs; an employee green team that organizes environmental events and updates internal environmental policies and practices; an incentive-based Green Commuter Program; an office farm food delivery program; and the ability to contribute to environmental non-profits and the Green Mountain EnergyTM Sun ClubTM through paycheck deductions. Please visit the GME website for more detail: http://www.greenmountainenergy.com/our-story/sustainability/employee-sustainability-programs/ Additionally, NRG Employees receive a discount when purchasing portable solar products from Goal Zero. Through econrg, we promote ecological stewardship among our plant employees with initiatives aimed at improving environmental awareness and education.
Dedicated budget for low-carbon product R&D	Goal Zero, an NRG owned company, offers portable solar power products. Low-carbon product development is a key part of Goal Zero's business model. Since 2007, Goal Zero has developed and provided portable equipment to help people all over the world get the power they need.
Dedicated budget for other emissions reduction activities	NRG is partnering with renewable electricity developers to bring new, additional renewable power to the grid through short- and medium-term power purchase agreements (PPAs). At the end of 2022, we had secured 2.4 GW of renewable power through PPAs in support of our customers, with 45% online

C4.5

(C4.5) Do you classify any of your existing goods and/or services as low-carbon products?

Yes

C4.5a

(C4.5a) Provide details of your products and/or services that you classify as low-carbon products.

Level of aggregation
Product or service

Taxonomy used to classify product(s) or service(s) as low-carbon
Other, please specify (NRG uses EPA eGRID sub-region emissions factors to quantify its customers' avoided emissions from consuming renewable electricity provided by NRG based on where each customer lives.)

Type of product(s) or service(s)

Power	Other, please specify (Renewable Electricity Plans)

Description of product(s) or service(s)
NRG provides both residential and commercial & industrial customers with various renewable electricity plan options.

For example, Our Green Mountain Energy (GME) brand is the nation's longest serving company dedicated to providing 100% renewable energy to businesses and residents. Primarily leveraging wind and solar sources, GME brings cleaner, greener energy to customers in Texas and other states allowing customers to choose their electricity provider. Since 1997, GME electricity plans have enabled business and residential customers to avoid over 100 billion pounds of CO2.

Revenue generated from products is proprietary information due to the competitive markets we serve, and as such we are unable to provide specifics.

Have you estimated the avoided emissions of this low-carbon product(s) or service(s)
Yes

Methodology used to calculate avoided emissions
Other, please specify (EPA eGRID)

Life cycle stage(s) covered for the low-carbon product(s) or services(s)
Cradle-to-grave

Functional unit used
Providing 100% renewable energy to businesses and residents for savings of 8.7 billion pounds of CO2 in 2021 vs. use of nonrenewable energy

Reference product/service or baseline scenario used
Grid electricity

Life cycle stage(s) covered for the reference product/service or baseline scenario
Cradle-to-grave

Estimated avoided emissions (metric tons CO2e per functional unit) compared to reference product/service or baseline scenario
4350000

Explain your calculation of avoided emissions, including any assumptions
We multiplied the EPA eGRID sub-region emission factor for each Green Mountain Energy customer based on their location by their electricity consumption. We then summed these figures across all Green Mountain Energy customers to derive a total for all of Green Mountain Energy. The exact revenues from these low-carbon product lines are proprietary and therefore not available.

Revenue generated from low-carbon product(s) or service(s) as % of total revenue in the reporting year
0

C-EU4.6

(C-EU4.6) Describe your organization's efforts to reduce methane emissions from your activities.

NRG's Scope 1 methane emissions from our own operations do not have significant methane emissions, the CO2e emissions from methane being only 0.2% of the total CO2e emissions. Methane emissions from Scope 3 are relevant and calculations are in progress with a third party consultant.

NRG engages with natural gas producers in its supply chain to encourage them to disclose and reduce their methane emissions. For example, to encourage responsible natural gas production, NRG joined with 8 companies that comprise 12% of the market for delivered gas in the U.S. as part of the Natural Gas Supply Collaborative (NGSC). After months of detailed work, the Collaborative issued a report in October 2017 entitled "Environmental and Social Performance Indicators for Natural Gas Production" calling on natural gas producers to disclose information related to methane and air emissions, water, chemicals and community health and safety. NRG is an ongoing member of the NGSC.

Our strategy is to identify business and residential customers that would like to purchase lower carbon intensity natural gas (for example producer-certified natural gas or renewable natural gas) and/or pair purchases of their natural gas with carbon offsets. Then, we identify potential suppliers of such lower carbon intensity natural gas or carbon offsets so that we can act as an intermediary to market these gas solutions to our customers.

C5. Emissions methodology

C5.1

(C5.1) Is this your first year of reporting emissions data to CDP?

No

C5.1a

(C5.1a) Has your organization undergone any structural changes in the reporting year, or are any previous structural changes being accounted for in this disclosure of emissions data?

Row 1

Has there been a structural change?

Yes, a divestment

Yes, other structural change, please specify (retirement)

Name of organization(s) acquired, divested from, or merged with

3 coal-fired generating units were retired, Waukegan 7 and 8 and Will County 4. NRG divested Watson and Petra Nova in 2022

Details of structural change(s), including completion dates

Waukegan 7 and 8 and Will County 4 were retired in 2022 and will be replaced with battery storage at the same sites. Watson was sold on 6/1/2022 and Petra Nova on 9/14/22.

C5.1b

(C5.1b) Has your emissions accounting methodology, boundary, and/or reporting year definition changed in the reporting year?

	Change(s) in methodology, boundary, and/or reporting year definition?	Details of methodology, boundary, and/or reporting year definition change(s)
Row 1	No	<Not Applicable>

C5.1c

(C5.1c) Have your organization's base year emissions and past years' emissions been recalculated as a result of any changes or errors reported in C5.1a and/or C5.1b?

	Base year recalculation	Scope(s) recalculated	Base year emissions recalculation policy, including significance threshold	Past years' recalculation
Row 1	Yes	Scope 1 Scope 2, location-based Scope 3	Base year emissions are retroactively recalculated following divestiture of emissions-producing generation assets in accordance with GHG protocol.	No

C5.2

(C5.2) Provide your base year and base year emissions.

Scope 1

Base year start

January 1 2014

Base year end

December 31 2014

Base year emissions (metric tons CO2e)

60000000

Comment

Emissions from domestic generation only

Scope 2 (location-based)

Base year start

January 1 2014

Base year end

December 31 2014

Base year emissions (metric tons CO2e)

254000

Comment

Scope 2 (market-based)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 1: Purchased goods and services

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 2: Capital goods

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 3: Fuel-and-energy-related activities (not included in Scope 1 or 2)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 4: Upstream transportation and distribution

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 5: Waste generated in operations

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 6: Business travel

Base year start
January 1 2014

Base year end
December 31 2014

Base year emissions (metric tons CO2e)
0

Comment
Very small in magnitude compared to Scope 1 and 2

Scope 3 category 7: Employee commuting

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 8: Upstream leased assets

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 9: Downstream transportation and distribution

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 10: Processing of sold products

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 11: Use of sold products

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 12: End of life treatment of sold products

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 13: Downstream leased assets

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 14: Franchises

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3 category 15: Investments

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3: Other (upstream)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

Scope 3: Other (downstream)

Base year start

Base year end

Base year emissions (metric tons CO2e)

Comment

C5.3

(C5.3) Select the name of the standard, protocol, or methodology you have used to collect activity data and calculate emissions.

The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)
US EPA Mandatory Greenhouse Gas Reporting Rule

C6. Emissions data

C6.1

(C6.1) What were your organization's gross global Scope 1 emissions in metric tons CO2e?

Reporting year

Gross global Scope 1 emissions (metric tons CO2e)
37417583

Start date
<Not Applicable>

End date
<Not Applicable>

Comment
Includes 37.5 % of a 605 MW capacity coal plant in Australia

C6.2

(C6.2) Describe your organization's approach to reporting Scope 2 emissions.

Row 1

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

Scope 2, market-based
We have no operations where we are able to access electricity supplier emission factors or residual emissions factors and are unable to report a Scope 2, market-based figure

Comment

C6.3

(C6.3) What were your organization's gross global Scope 2 emissions in metric tons CO2e?

Reporting year

Scope 2, location-based
141831

Scope 2, market-based (if applicable)
<Not Applicable>

Start date
<Not Applicable>

End date
<Not Applicable>

Comment

C6.4

(C6.4) Are there any sources (e.g. facilities, specific GHGs, activities, geographies, etc.) of Scope 1, Scope 2 or Scope 3 emissions that are within your selected reporting boundary which are not included in your disclosure?
Yes

C6.4a

(C6.4a) Provide details of the sources of Scope 1, Scope 2, or Scope 3 emissions that are within your selected reporting boundary which are not included in your disclosure.

Source of excluded emissions
Mobile refrigerated emissions in the U.S. and Australia and scope 2 purchased electricity in Australia

Scope(s) or Scope 3 category(ies)
Scope 1
Scope 2 (location-based)

Relevance of Scope 1 emissions from this source
Emissions are not relevant

Relevance of location-based Scope 2 emissions from this source
Emissions are not relevant

Relevance of market-based Scope 2 emissions from this source
<Not Applicable>

Relevance of Scope 3 emissions from this source
<Not Applicable>

Date of completion of acquisition or merger
<Not Applicable>

Estimated percentage of total Scope 1+2 emissions this excluded source represents
0

Estimated percentage of total Scope 3 emissions this excluded source represents
<Not Applicable>

Explain why this source is excluded
The emissions from excluded sources are insignificant when compared to Scope 1 and 2 emissions from US domestic generation. The effort to calculate these emissions on an annual basis is disproportionately large compared to the small amount of additional but immaterial information. In addition, per NRG's independent third-party Greenhouse Gas assurance report: Hydrofluorocarbons (HFCs), Perfluorocarbons (PFCs), Sulphur Hexafluoride (SF6), and Nitrogen trifluoride (NF3) emissions have been omitted as they are not material sources of greenhouse gases for the Company.

Explain how you estimated the percentage of emissions this excluded source represents
Per NRG's independent third-party Greenhouse Gas assurance report: Hydrofluorocarbons (HFCs), Perfluorocarbons (PFCs), Sulphur Hexafluoride (SF6), and Nitrogen trifluoride (NF3) emissions have been omitted as they are not material sources of greenhouse gases for the Company.

C6.5

(C6.5) Account for your organization's gross global Scope 3 emissions, disclosing and explaining any exclusions.

Purchased goods and services

Evaluation status
Relevant, not yet calculated

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
We are currently in the process of evaluating all relevant U.S. scope 3 emissions and will provide updated information in a subsequent reporting cycle.

Capital goods

Evaluation status
Relevant, not yet calculated

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
We are currently in the process of evaluating all relevant U.S. scope 3 emissions and will provide updated information in a subsequent reporting cycle.

Fuel-and-energy-related activities (not included in Scope 1 or 2)

Evaluation status
Relevant, not yet calculated

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
We are currently in the process of evaluating all relevant U.S. scope 3 emissions and will provide updated information in a subsequent reporting cycle.

Upstream transportation and distribution

Evaluation status
Relevant, not yet calculated

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
We are currently in the process of evaluating all relevant U.S. scope 3 emissions and will provide updated information in a subsequent reporting cycle.

Waste generated in operations

Evaluation status
Relevant, not yet calculated

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
Calculation in progress with third party consultant and estimated to be <0.1% of Scope 3 emissions. NRG defines waste generated in operations as waste handled by waste management and disposal companies.

Business travel

Evaluation status
Relevant, calculated

Emissions in reporting year (metric tons CO2e)
2432

Emissions calculation methodology
Fuel-based method
Distance-based method
Other, please specify (Emissions are determined using the Carbonfund.org Foundation's transportation calculator. Data are obtained through Adelman, NRG's travel agent provider.)

Percentage of emissions calculated using data obtained from suppliers or value chain partners
100

Please explain
Business travel emissions include hotel stays, car rentals, and air travel incurred by United States- and Canada-based company employees and booked through NRG's primary travel agent. Emissions are determined using the Carbonfund.org Foundation's transportation calculator. Data are obtained through Adelman, NRG's travel agent provider.

Employee commuting

Evaluation status
Relevant, not yet calculated

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
We are currently in the process of evaluating all relevant U.S. scope 3 emissions and will provide updated information in a subsequent reporting cycle.
NRG has calculated employee commuting in the past from an internal survey of employees. In prior years, NRG has estimated GHG emissions from employee commuting based on internal surveys and dollars spent on public transportation through a company subsidized program. It is not a material source of emissions compared to Scope 1.

Upstream leased assets

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
NRG uses an operational and equity boundary, so all leased facilities are in the existing Scope 1 and 2 footprint. There are no additional leased assets and therefore this category is not relevant.

Downstream transportation and distribution

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
NRG does not own any transmission or distribution lines or transport or distribute sold products, so this category is not relevant.

Processing of sold products

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
NRG does not sell intermediate products and therefore this category is not relevant.

Use of sold products

Evaluation status
Relevant, not yet calculated

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
We are currently in the process of evaluating all relevant U.S. scope 3 emissions and will provide updated information in a subsequent reporting cycle.

End of life treatment of sold products

Evaluation status
Relevant, not yet calculated

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
We are currently in the process of evaluating all relevant U.S. scope 3 emissions and will provide updated information in a subsequent reporting cycle.

Downstream leased assets

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
NRG does not lease assets and therefore this category is not relevant.

Franchises

Evaluation status
Not relevant, explanation provided

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
NRG does not have any franchises and therefore this category is not relevant.

Investments

Evaluation status
Relevant, not yet calculated

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain
Calculation in progress with third party consultant and estimated to be <0.01% of Scope 3 emissions.

Other (upstream)

Evaluation status
Not evaluated

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain

Other (downstream)

Evaluation status
Not evaluated

Emissions in reporting year (metric tons CO2e)
<Not Applicable>

Emissions calculation methodology
<Not Applicable>

Percentage of emissions calculated using data obtained from suppliers or value chain partners
<Not Applicable>

Please explain

C6.7

(C6.7) Are carbon dioxide emissions from biogenic carbon relevant to your organization?
No

C6.10

(C6.10) Describe your gross global combined Scope 1 and 2 emissions for the reporting year in metric tons CO2e per unit currency total revenue and provide any additional intensity metrics that are appropriate to your business operations.

Intensity figure
0.0012

Metric numerator (Gross global combined Scope 1 and 2 emissions, metric tons CO2e)
37559414

Metric denominator
unit total revenue

Metric denominator: Unit total
31543000000

Scope 2 figure used
Location-based

% change from previous year
14

Direction of change
Decreased

Reason(s) for change
Other, please specify (Retirement)

Please explain
The Direct Energy acquisition in 2021 delivered a revenue increase without associated Scope 1 and 2 emissions, and this continues to be the primary factor leading to decreased emissions intensity in 2022. Incorporating Direct Energy nearly doubled NRG's customer base, thereby allowing NRG to offer its lower carbon energy products and services to more customers in an asset light manner. NRG has also retired 3 coal-fired power plant units, Waukegan 7 and 8, and Will County 4, which will result in fewer emissions in the years to come.

(Assets included based on equity ownership as of Dec. 31, 2022)

C7. Emissions breakdowns

C7.1

(C7.1) Does your organization break down its Scope 1 emissions by greenhouse gas type?
Yes

C7.1a

(C7.1a) Break down your total gross global Scope 1 emissions by greenhouse gas type and provide the source of each used greenhouse warming potential (GWP).

Greenhouse gas	Scope 1 emissions (metric tons of CO2e)	GWP Reference
CO2	37181124	Other, please specify (Mandatory GHG Reporting Rule 40 CFR Part C)
CH4	87047	Other, please specify (Mandatory GHG Reporting Rule 40 CFR Part C)
N2O	148876	Other, please specify (Mandatory GHG Reporting Rule 40 CFR Part C)

C-EU7.1b

(C-EU7.1b) Break down your total gross global Scope 1 emissions from electric utilities value chain activities by greenhouse gas type.

	Gross Scope 1 CO2 emissions (metric tons CO2)	Gross Scope 1 methane emissions (metric tons CH4)	Gross Scope 1 SF6 emissions (metric tons SF6)	Total gross Scope 1 emissions (metric tons CO2e)	Comment
Fugitives	0	0	0	0	N/A
Combustion (Electric utilities)	37181124	87047	0	37417583	N/A
Combustion (Gas utilities)	0	0	0	0	N/A
Combustion (Other)	0	0	0	0	N/A
Emissions not elsewhere classified	0	0	0	0	N/A

C7.2

(C7.2) Break down your total gross global Scope 1 emissions by country/area/region.

Country/area/region	Scope 1 emissions (metric tons CO2e)
North America *Values have been rounded*	35050795
Australia *Values have been rounded*	2366788

C7.3

(C7.3) Indicate which gross global Scope 1 emissions breakdowns you are able to provide.

By activity

C7.3c

(C7.3c) Break down your total gross global Scope 1 emissions by business activity.

Activity	Scope 1 emissions (metric tons CO2e)
Combustion	37417583

C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4

(C-CE7.4/C-CH7.4/C-CO7.4/C-EU7.4/C-MM7.4/C-OG7.4/C-ST7.4/C-TO7.4/C-TS7.4) Break down your organization's total gross global Scope 1 emissions by sector production activity in metric tons CO2e.

	Gross Scope 1 emissions, metric tons CO2e	Net Scope 1 emissions , metric tons CO2e	Comment
Cement production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Chemicals production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Coal production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Electric utility activities	37417583	<Not Applicable>	
Metals and mining production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (upstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (midstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Oil and gas production activities (downstream)	<Not Applicable>	<Not Applicable>	<Not Applicable>
Steel production activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport OEM activities	<Not Applicable>	<Not Applicable>	<Not Applicable>
Transport services activities	<Not Applicable>	<Not Applicable>	<Not Applicable>

C7.7

(C7.7) Is your organization able to break down your emissions data for any of the subsidiaries included in your CDP response?

No

C7.9

(C7.9) How do your gross global emissions (Scope 1 and 2 combined) for the reporting year compare to those of the previous reporting year?

Increased

C7.9a

(C7.9a) 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.

	Change in emissions (metric tons CO2e)	Direction of change in emissions	Emissions value (percentage)	Please explain calculation
Change in renewable energy consumption	0	No change	0	
Other emissions reduction activities	0	No change	0	
Divestment	0	No change	0	
Acquisitions	0	No change	0	
Mergers	0	No change	0	
Change in output	947214	Increased	2.6	The primary factor leading to the increased emissions was an increase in coal generation due to higher natural gas costs across the industry due to the Ukraine-Russia war.
Change in methodology	0	No change	0	
Change in boundary	0	No change	0	
Change in physical operating conditions	0	No change	0	
Unidentified	0	No change	0	
Other	0	No change	0	

C7.9b

(C7.9b) Are your emissions performance calculations in C7.9 and C7.9a based on a location-based Scope 2 emissions figure or a market-based Scope 2 emissions figure?

Location-based

C8. Energy

C8.1

(C8.1) What percentage of your total operational spend in the reporting year was on energy?

Don't know

C8.2

(C8.2) Select which energy-related activities your organization has undertaken.

	Indicate whether your organization undertook this energy-related activity in the reporting year
Consumption of fuel (excluding feedstocks)	Yes
Consumption of purchased or acquired electricity	Yes
Consumption of purchased or acquired heat	No
Consumption of purchased or acquired steam	No
Consumption of purchased or acquired cooling	No
Generation of electricity, heat, steam, or cooling	Yes

C8.2a

(C8.2a) Report your organization's energy consumption totals (excluding feedstocks) in MWh.

	Heating value	MWh from renewable sources	MWh from non-renewable sources	Total (renewable and non-renewable) MWh
Consumption of fuel (excluding feedstock)	HHV (higher heating value)	0	176250296	176250296
Consumption of purchased or acquired electricity	<Not Applicable>	0	321516	321516
Consumption of purchased or acquired heat	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired steam	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of purchased or acquired cooling	<Not Applicable>	<Not Applicable>	<Not Applicable>	<Not Applicable>
Consumption of self-generated non-fuel renewable energy	<Not Applicable>	0	<Not Applicable>	0
Total energy consumption	<Not Applicable>	0	176571812	176571812

C8.2b

(C8.2b) Select the applications of your organization's consumption of fuel.

	Indicate whether your organization undertakes this fuel application
Consumption of fuel for the generation of electricity	Yes
Consumption of fuel for the generation of heat	No
Consumption of fuel for the generation of steam	No
Consumption of fuel for the generation of cooling	No
Consumption of fuel for co-generation or tri-generation	No

C8.2c

(C8.2c) State how much fuel in MWh your organization has consumed (excluding feedstocks) by fuel type.

Sustainable biomass

Heating value
Unable to confirm heating value

Total fuel MWh consumed by the organization
0

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

Comment

Other biomass

Heating value
Unable to confirm heating value

Total fuel MWh consumed by the organization
0

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

Comment

Other renewable fuels (e.g. renewable hydrogen)

Heating value
Unable to confirm heating value

Total fuel MWh consumed by the organization
0

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

Comment

Coal

Heating value
HHV

Total fuel MWh consumed by the organization
100752947

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

Comment
N/A

Oil

Heating value
HHV

Total fuel MWh consumed by the organization
85936

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

Comment
N/A

Gas

Heating value
HHV

Total fuel MWh consumed by the organization
47171226

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

Comment
N/A

Other non-renewable fuels (e.g. non-renewable hydrogen)

Heating value
HHV

Total fuel MWh consumed by the organization
28240187

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

Comment
Nuclear: We weren't sure where to include this, so included in non-renewable fuels

Total fuel

Heating value
HHV

Total fuel MWh consumed by the organization
176250296

MWh fuel consumed for self-generation of electricity
0

MWh fuel consumed for self-generation of heat
0

MWh fuel consumed for self-generation of steam
<Not Applicable>

MWh fuel consumed for self-generation of cooling
<Not Applicable>

MWh fuel consumed for self- cogeneration or self-trigeneration
<Not Applicable>

Comment
N/A

C-EU8.2d

(C-EU8.2d) For your electric utility activities, provide a breakdown of your total power plant capacity, generation, and related emissions during the reporting year by source.

Coal – hard

Nameplate capacity (MW)
7920

Gross electricity generation (GWh)
30226

Net electricity generation (GWh)
27795

Absolute scope 1 emissions (metric tons CO2e)
29232352

Scope 1 emissions intensity (metric tons CO2e per GWh)
967

Comment
Capacity provided is not Nameplate Capacity; it is year-round Net Maximum Capacity. Scope 1 emissions intensity is calculated based on gross electricity generation.

Lignite

Nameplate capacity (MW)
0

Gross electricity generation (GWh)
0

Net electricity generation (GWh)
0

Absolute scope 1 emissions (metric tons CO2e)
0

Scope 1 emissions intensity (metric tons CO2e per GWh)
0

Comment
N/A

Oil

Nameplate capacity (MW)
535

Gross electricity generation (GWh)
17

Net electricity generation (GWh)
8

Absolute scope 1 emissions (metric tons CO2e)
22494

Scope 1 emissions intensity (metric tons CO2e per GWh)
1327

Comment
Capacity provided is not Nameplate Capacity; it is year-round Net Maximum Capacity. Scope 1 emissions intensity is calculated based on gross electricity generation.

Gas

Nameplate capacity (MW)
8901

Gross electricity generation (GWh)
16639

Net electricity generation (GWh)
15997

Absolute scope 1 emissions (metric tons CO2e)
8162737

Scope 1 emissions intensity (metric tons CO2e per GWh)
491

Comment
Capacity provided is not Nameplate Capacity; it is year-round Net Maximum Capacity. Scope 1 emissions intensity is calculated based on gross electricity generation.

Sustainable biomass

Nameplate capacity (MW)
0

Gross electricity generation (GWh)
0

Net electricity generation (GWh)
0

Absolute scope 1 emissions (metric tons CO2e)
0

Scope 1 emissions intensity (metric tons CO2e per GWh)
0

Comment
N/A

Other biomass

Nameplate capacity (MW)
0

Gross electricity generation (GWh)
0

Net electricity generation (GWh)
0

Absolute scope 1 emissions (metric tons CO2e)
0

Scope 1 emissions intensity (metric tons CO2e per GWh)
0

Comment
N/A

Waste (non-biomass)

Nameplate capacity (MW)
0

Gross electricity generation (GWh)
0

Net electricity generation (GWh)
0

Absolute scope 1 emissions (metric tons CO2e)
0

Scope 1 emissions intensity (metric tons CO2e per GWh)
0

Comment
N/A

Nuclear

Nameplate capacity (MW)
1132

Gross electricity generation (GWh)
10118

Net electricity generation (GWh)
9663

Absolute scope 1 emissions (metric tons CO2e)
0

Scope 1 emissions intensity (metric tons CO2e per GWh)
0

Comment
Capacity provided is not Nameplate Capacity; it is year-round Net Maximum Capacity. Scope 1 emissions intensity is calculated based on gross electricity generation.

Fossil-fuel plants fitted with CCS

Nameplate capacity (MW)
0

Gross electricity generation (GWh)
0

Net electricity generation (GWh)
0

Absolute scope 1 emissions (metric tons CO2e)
0

Scope 1 emissions intensity (metric tons CO2e per GWh)
0

Comment
N/A

Geothermal

Nameplate capacity (MW)
0

Gross electricity generation (GWh)
0

Net electricity generation (GWh)
0

Absolute scope 1 emissions (metric tons CO2e)
0

Scope 1 emissions intensity (metric tons CO2e per GWh)
0

Comment
N/A

Hydropower

Nameplate capacity (MW)
0

Gross electricity generation (GWh)
0

Net electricity generation (GWh)
0

Absolute scope 1 emissions (metric tons CO2e)
0

Scope 1 emissions intensity (metric tons CO2e per GWh)
0

Comment
N/A

Wind

Nameplate capacity (MW)
0

Gross electricity generation (GWh)
0

Net electricity generation (GWh)
0

Absolute scope 1 emissions (metric tons CO2e)
0

Scope 1 emissions intensity (metric tons CO2e per GWh)
0

Comment
N/A

Solar

Nameplate capacity (MW)
214

Gross electricity generation (GWh)
769

Net electricity generation (GWh)
769

Absolute scope 1 emissions (metric tons CO2e)
0

Scope 1 emissions intensity (metric tons CO2e per GWh)
0

Comment
Capacity provided is not Nameplate Capacity; it is year-round Net Maximum Capacity. Scope 1 emissions intensity is calculated based on gross electricity generation.

Marine

Nameplate capacity (MW)
0

Gross electricity generation (GWh)
0

Net electricity generation (GWh)
0

Absolute scope 1 emissions (metric tons CO2e)
0

Scope 1 emissions intensity (metric tons CO2e per GWh)
0

Comment
N/A

Other renewable

Nameplate capacity (MW)
2

Gross electricity generation (GWh)
0

Net electricity generation (GWh)
0

Absolute scope 1 emissions (metric tons CO2e)
0

Scope 1 emissions intensity (metric tons CO2e per GWh)
0

Comment
Battery storage, capacity provided is not Nameplate Capacity; it is year-round Net Maximum Capacity. Scope 1 emissions intensity is calculated based on gross electricity generation.

Other non-renewable

Nameplate capacity (MW)
0

Gross electricity generation (GWh)
0

Net electricity generation (GWh)
0

Absolute scope 1 emissions (metric tons CO2e)
0

Scope 1 emissions intensity (metric tons CO2e per GWh)
0

Comment
N/A

Total

Nameplate capacity (MW)
18704

Gross electricity generation (GWh)
57769

Net electricity generation (GWh)
54222

Absolute scope 1 emissions (metric tons CO2e)
37417583

Scope 1 emissions intensity (metric tons CO2e per GWh)
648

Comment
Capacity provided is not Nameplate Capacity; it is year-round Net Maximum Capacity. Scope 1 emissions intensity is calculated based on gross electricity generation.

C8.2g

(C8.2g) Provide a breakdown by country/area of your non-fuel energy consumption in the reporting year.

Country/area
United States of America

Consumption of purchased electricity (MWh)
321221

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]

Country/area
Canada

Consumption of purchased electricity (MWh)
295

Consumption of self-generated electricity (MWh)
0

Is this electricity consumption excluded from your RE100 commitment?
<Not Applicable>

Consumption of purchased heat, steam, and cooling (MWh)
0

Consumption of self-generated heat, steam, and cooling (MWh)
0

Total non-fuel energy consumption (MWh) [Auto-calculated]

C-EU8.4

(C-EU8.4) Does your electric utility organization have a transmission and distribution business?
No

C9. Additional metrics

C9.1

(C9.1) Provide any additional climate-related metrics relevant to your business.

C-EU9.5a

(C-EU9.5a) Break down, by source, your organization's CAPEX in the reporting year and CAPEX planned over the next 5 years.

Coal – hard

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

Most recent year in which a new power plant using this source was approved for development
<Not Applicable>

Explain your CAPEX calculations, including any assumptions

Lignite

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

Most recent year in which a new power plant using this source was approved for development
<Not Applicable>

Explain your CAPEX calculations, including any assumptions

Oil

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

Most recent year in which a new power plant using this source was approved for development
<Not Applicable>

Explain your CAPEX calculations, including any assumptions

Gas

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

Most recent year in which a new power plant using this source was approved for development
<Not Applicable>

Explain your CAPEX calculations, including any assumptions

Sustainable biomass

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

Most recent year in which a new power plant using this source was approved for development
<Not Applicable>

Explain your CAPEX calculations, including any assumptions

Other biomass

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

Most recent year in which a new power plant using this source was approved for development
<Not Applicable>

Explain your CAPEX calculations, including any assumptions

Waste (non-biomass)

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

Most recent year in which a new power plant using this source was approved for development
<Not Applicable>

Explain your CAPEX calculations, including any assumptions

Nuclear

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

Most recent year in which a new power plant using this source was approved for development
<Not Applicable>

Explain your CAPEX calculations, including any assumptions

Geothermal

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

Most recent year in which a new power plant using this source was approved for development
<Not Applicable>

Explain your CAPEX calculations, including any assumptions

Hydropower

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

Most recent year in which a new power plant using this source was approved for development
<Not Applicable>

Explain your CAPEX calculations, including any assumptions

Wind

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

Most recent year in which a new power plant using this source was approved for development
<Not Applicable>

Explain your CAPEX calculations, including any assumptions

Solar

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

Most recent year in which a new power plant using this source was approved for development
<Not Applicable>

Explain your CAPEX calculations, including any assumptions

Marine

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

Most recent year in which a new power plant using this source was approved for development
<Not Applicable>

Explain your CAPEX calculations, including any assumptions

Fossil-fuel plants fitted with CCS

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

Most recent year in which a new power plant using this source was approved for development
<Not Applicable>

Explain your CAPEX calculations, including any assumptions

Other renewable (e.g. renewable hydrogen)

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

Most recent year in which a new power plant using this source was approved for development
<Not Applicable>

Explain your CAPEX calculations, including any assumptions

Other non-renewable (e.g. non-renewable hydrogen)

CAPEX in the reporting year for power generation from this source (unit currency as selected in C0.4)

CAPEX in the reporting year for power generation from this source as % of total CAPEX for power generation in the reporting year

CAPEX planned over the next 5 years for power generation from this source as % of total CAPEX planned for power generation over the next 5 years

Most recent year in which a new power plant using this source was approved for development
<Not Applicable>

Explain your CAPEX calculations, including any assumptions

C-EU9.5b

(C-EU9.5b) Break down your total planned CAPEX in your current CAPEX plan for products and services (e.g. smart grids, digitalization, etc.).

Products and services	Description of product/service	CAPEX planned for product/service	Percentage of total CAPEX planned products and services	End of year CAPEX plan
Distributed generation	As an integrated provider of supply and distributed energy resources (DER), NRG's Business Solutions group focuses on distributed products and services as businesses seek greater reliability, cleaner power or other benefits that they cannot obtain from the electric grid. These solutions include system power, distributed generation, solar and wind products, carbon management and specialty custom products. For competitive reasons (i.e. given that we operate only in competitive markets and are NOT a regulated utility which is required to publish an integrated resource plan), we are unable to disclose CAPEX-related figures.	0	0	2023

C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6

(C-CE9.6/C-CG9.6/C-CH9.6/C-CN9.6/C-CO9.6/C-EU9.6/C-MM9.6/C-OG9.6/C-RE9.6/C-ST9.6/C-TO9.6/C-TS9.6) Does your organization invest in research and development (R&D) of low-carbon products or services related to your sector activities?

	Investment in low-carbon R&D	Comment
Row 1	Yes	NRG does not do "research and development" in the way a technology company would. Rather, we develop new and innovative sustainable products and services for our customers, which help them reduce their carbon footprints. Typically, this innovation involves developing new offerings to reduce the carbon intensity of the energy we supply to customers (e.g. renewable electricity plans, enabling rooftop solar, producer-certified low methane intensity natural gas, and renewable natural gas); new offerings to reduce energy demand (e.g. demand response, energy efficiency); and new offerings to shift the time of electricity consumption to lower carbon intensity periods on the grid (e.g. new electricity plans based on time of use such as for charging electric vehicles overnight).

C-CO9.6a/C-EU9.6a/C-OG9.6a

(C-CO9.6a/C-EU9.6a/C-OG9.6a) Provide details of your organization's investments in low-carbon R&D for your sector activities over the last three years.

Technology area	Stage of development in the reporting year	Average % of total R&D investment over the last 3 years	R&D investment figure in the reporting year (unit currency as selected in C0.4) (optional)	Average % of total R&D investment planned over the next 5 years	Explain how your R&D investment in this technology area is aligned with your climate commitments and/or climate transition plan
Carbon capture, utilization, and storage (CCUS)	Applied research and development	3		3	NRG supports the COSIA Carbon X-PRIZE. The $20 million NRG COSIA Carbon XPRIZE is a global competition to develop breakthrough technologies that will convert CO_2 emissions from power plants and industrial facilities into valuable products like building materials, alternative fuels and other every day items. The NRG COSIA Carbon XPRIZE inspires development of new and emerging CO_2 conversion technologies to help solve climate change. NRG partnered with Canadian Oil Sands Innovation Alliance (COSIA) and XPRIZE in 2015 to create a five-year global competition to address rising CO2 emissions by challenging innovators around the world to develop breakthrough technologies that convert as much CO2 as possible into products with the highest net value. Through partnerships like these, we are supporting the creation of climate technology and more sustainable solutions. The competition winners – CarbonCure Technologies and CarbonBuilt – were chosen by an independent panel of judges and announced in April 2021. Both companies developed technologies that use CO2 in the production of concrete, thereby reducing its carbon footprint. of the Carbon-to-Value Initiative, an invitation-only group of corporate, non-profit, and government thought leaders who foster commercialization opportunities and identify avenues for technology validation, testing, and demonstration of the beneficial use of carbon and carbon dioxide. The CLC is creating a technology roadmap for the future of the carbontech industry and also works closely with the highly selective cohorts of start-ups participating in the C2V Initiative. In 2022, the C2V competition winners, included Molecule Works (direct air capture), Osmoses (polymers for enabling membrane-based carbon capture applications), and Aluminum Technologies (carbon capture).

C10. Verification

C10.1

(C10.1) Indicate the verification/assurance status that applies to your reported emissions.

	Verification/assurance status
Scope 1	Third-party verification or assurance process in place
Scope 2 (location-based or market-based)	Third-party verification or assurance process in place
Scope 3	Third-party verification or assurance process in place

C10.1a

(C10.1a) Provide further details of the verification/assurance undertaken for your Scope 1 emissions, and attach the relevant statements.

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Limited assurance

Attach the statement
NRG-2022-GHG-Emissions-Report (1).pdf

Page/ section reference
2

Relevant standard
Attestation standards established by AICPA (AT105)

Proportion of reported emissions verified (%)
100

C10.1b

(C10.1b) Provide further details of the verification/assurance undertaken for your Scope 2 emissions and attach the relevant statements.

Scope 2 approach
Scope 2 location-based

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Limited assurance

Attach the statement
NRG-2022-GHG-Emissions-Report (1).pdf

Page/ section reference
2

Relevant standard
Attestation standards established by AICPA (AT105)

Proportion of reported emissions verified (%)
100

C10.1c

(C10.1c) Provide further details of the verification/assurance undertaken for your Scope 3 emissions and attach the relevant statements.

Scope 3 category
Scope 3: Business travel

Verification or assurance cycle in place
Annual process

Status in the current reporting year
Complete

Type of verification or assurance
Limited assurance

Attach the statement
NRG-2022-GHG-Emissions-Report (1).pdf

Page/section reference
2

Relevant standard
Attestation standards established by AICPA (AT105)

Proportion of reported emissions verified (%)
100

C10.2

(C10.2) Do you verify any climate-related information reported in your CDP disclosure other than the emissions figures reported in C6.1, C6.3, and C6.5?
Yes

C10.2a

(C10.2a) Which data points within your CDP disclosure have been verified, and which verification standards were used?

Disclosure module verification relates to	Data verified	Verification standard	Please explain
C2. Risks and opportunities	Renewable energy products	Green-e certification	Green Mountain Energy products that are Green-e certified submit to an independent third-party audit and Green-e verification and certification by the Center for Resource Solutions.

C11. Carbon pricing

C11.1

(C11.1) Are any of your operations or activities regulated by a carbon pricing system (i.e. ETS, Cap & Trade or Carbon Tax)?
Yes

C11.1a

(C11.1a) Select the carbon pricing regulation(s) which impacts your operations.
California CaT - ETS
RGGI - ETS

C11.1b

(C11.1b) Complete the following table for each of the emissions trading schemes you are regulated by.

California CaT - ETS

% of Scope 1 emissions covered by the ETS
0.05

% of Scope 2 emissions covered by the ETS
0

Period start date
January 1 2022

Period end date
December 31 2022

Allowances allocated
0

Allowances purchased
17893

Verified Scope 1 emissions in metric tons CO2e
17893

Verified Scope 2 emissions in metric tons CO2e
0

Details of ownership
Facilities we own and operate

Comment
Includes emissions from California assets owned and operated as of Dec. 31, 2022. Total U.S. based 2022 scope 1 emissions were 35,050,795 metric tons CO2e.

RGGI - ETS

% of Scope 1 emissions covered by the ETS
0.1

% of Scope 2 emissions covered by the ETS
0

Period start date
January 1 2022

Period end date
December 31 2022

Allowances allocated
0

Allowances purchased
208103

Verified Scope 1 emissions in metric tons CO2e
208103

Verified Scope 2 emissions in metric tons CO2e
0

Details of ownership
Facilities we own and operate

Comment
Includes emissions from assets owned and operated as of Dec. 31, 2022. Total U.S. based 2022 scope 1 emissions were 35,050,795 metric tons CO2e.

C11.1d

(C11.1d) What is your strategy for complying with the systems you are regulated by or anticipate being regulated by?

NRG's strategy is to ensure we have sufficient emissions allowances as required by regulation. In cases where we receive allocations of allowances, we rely on those. If additional allowances are required beyond any allocation we receive, we purchase those.

The strategy manifests as follows in the markets in which we operate:

California has a CO2 cap-and-trade program governed by California Assembly Bill 32 (AB32). This program applies to electric generating units greater than 25 MW. The impact of this program on NRG depends on the cost of the allowances and our ability to pass these costs through to customers. In 2022 in the California AB32 market, we were not allocated any allowances, so we purchased 17,893 to comply with the rule.

In the Regional Greenhouse Gas Initiative (RGGI) markets in which NRG operates generating units – namely Connecticut, Delaware, Maryland, and New York – there is a regional cap and trade system for CO2. In 2013, each of these states finalized a rule that reduced and will continue to reduce the number of allowances through 2020. The nine RGGI states have since re-evaluated the program and published a model rule to further reduce the number of allowances. The revisions currently being contemplated could adversely impact NRG's results of operations, financial condition, and cash flows. In 2022 in the RGGI market, NRG purchased 208,103allowances to comply with the rule.

Our strategy was successful as evidenced by NRG being in compliance with the aforementioned CO2 cap and trade regimes in 2022.

C11.2

(C11.2) Has your organization canceled any project-based carbon credits within the reporting year?

No

C11.3

(C11.3) Does your organization use an internal price on carbon?

Yes

C11.3a

(C11.3a) Provide details of how your organization uses an internal price on carbon.

Type of internal carbon price
Implicit price

How the price is determined
Cost of required measures to achieve emissions reduction targets

Objective(s) for implementing this internal carbon price
Change internal behavior
Drive low-carbon investment
Identify and seize low-carbon opportunities
Stress test investments

Scope(s) covered
Scope 1

Pricing approach used – spatial variance
Uniform

Pricing approach used – temporal variance
Evolutionary

Indicate how you expect the price to change over time
We expect the price to fall over time as decarbonization technologies become economic at scale.

Actual price(s) used – minimum (currency as specified in C0.4 per metric ton CO2e)
10

Actual price(s) used – maximum (currency as specified in C0.4 per metric ton CO2e)
100

Business decision-making processes this internal carbon price is applied to
Capital expenditure
Operations
Procurement

Mandatory enforcement of this internal carbon price within these business decision-making processes
Yes, for all decision-making processes

Explain how this internal carbon price has contributed to the implementation of your organization's climate commitments and/or climate transition plan
NRG uses internal carbon prices for two applications, both of which contribute to meeting our climate commitments and/or implementing our climate transition plan.

First, NRG derives implicit carbon prices by calculating the net present value of the incremental cash flow per metric ton of CO2e that would be reduced by pursuing various decarbonization pathways. Because this figure is calculated (rather than set), it varies by decarbonization pathway. Such pathways include potential coal-to-gas switching; carbon capture, use, and storage; and carbon offset purchases. As such, this metric – alongside other criteria including safety, reliability, and profitability – informs capital and operating expenditures. Knowing this metric allows us to rank order potential investments, and all else equal, choose decarbonization pathways that maximize CO2e reductions at lowest cost. In addition, we compare this metric with statutory carbon prices in the jurisdictions in which we operate to determine when it would be economic to make an investment to reduce our carbon footprint.

Second, NRG uses carbon price scenario analysis both to assess risk for internal financial purposes as well as for evaluating transition risk for Task Force on Climate-related Financial Disclosures (TCFD) reporting. Using carbon pricing scenario analysis allows us to understand the impact of potential carbon pricing on our business. In the short-term, our scenario analysis indicates that the main impact is the financial cost of paying a carbon price when running our power plants. Over the medium and long-term, the impact is reducing the carbon intensity of the power we provide to customers through reducing the carbon intensity of the fuel mix of our power plant portfolio. This impact has reinforced our strategy to increase the renewable electricity we provide to our customers through medium- and long-term renewable power purchase agreements.

C12. Engagement

C12.1

(C12.1) Do you engage with your value chain on climate-related issues?
Yes, our suppliers
Yes, our customers/clients

C12.1a

(C12.1a) Provide details of your climate-related supplier engagement strategy.

Type of engagement
Other, please specify

Details of engagement

% of suppliers by number
25

% total procurement spend (direct and indirect)
90

% of supplier-related Scope 3 emissions as reported in C6.5
0

Rationale for the coverage of your engagement
NRG's supply chain consists of a wide range of procurement activities, including fuel purchases, operations and maintenance, renewables, capital projects and services. In 2017, we broadened our reporting efforts by becoming the first U.S. power producer to participate in the CDP Supply Chain Program. As part of this initiative, we encouraged more than 300 suppliers representing 90% of supply chain spend to disclose information about their climate change performance. In 2017 the suppliers were elected based on those representing 90% of supply chain spend.

In 2022 we continued this engagement using the same filter of 90% of supply chain spend. We chose to use 90% of spend because that accounts for the majority of our suppliers and the most material environmental impacts.

Impact of engagement, including measures of success
A desired outcome of this engagement activity is that we hope to see more responsible emissions management and climate stewardship from suppliers. Success of this engagement will be measured by the quality of responses from the suppliers that we requested to submit CDP Climate Change Questionnaires. We initiated the process of asking our Suppliers to submit CDP Climate Change Questionnaires during 2021. An increase in the quality of responses would be deemed to indicate success, specifically the percentage that reported renewable energy usage, had emissions reductions projects, and/or reported their operational emissions.

For the 2022 disclosure cycle, of the suppliers that submitted a Climate Change Response:

89% reported their operational emissions,
86% reported emission reduction projects and
71% reported renewable energy usage.

Comment
N/A

C12.1b

(C12.1b) Give details of your climate-related engagement strategy with your customers.

Type of engagement & Details of engagement

Education/information sharing	Run an engagement campaign to education customers about your climate change performance and strategy

% of customers by number
100

% of customer - related Scope 3 emissions as reported in C6.5
0

Please explain the rationale for selecting this group of customers and scope of engagement
A core part of our strategy is to help our customers achieve their sustainability goals. Therefore, we offer lower carbon products and services to all customers that wish to reduce their carbon footprints.

NRG's customers for these engagements include large commercial and industrial customers and residential customers and small businesses. NRG Business and Home brands provide energy and related services to residential, industrial, and commercial consumers through various brands and sales channels across the U.S. The scope of the engagements varies from the publication of white papers and blogs on the NRG website, to speaking at conferences and consulting services on energy management. There are ongoing engagements across multiple businesses directed at customers. For details visit: https://www.nrg.com/insights/sustainability.html

Residential and small commercial (Mass Market) consumers make purchase decisions based on a variety of factors, including price, customer service, brand, product choices and value-added features. These consumers purchase products through a variety of sales channels, including direct sales, call centers, websites, brokers, and brick-and-mortar stores. Through its broad range of service offerings and value propositions, NRG Home brands are able to attract, retain, and increase the value of customer relationships.
'NRG's retail brands are recognized for exemplary customer service, innovative smart energy and technology product offerings and environmentally friendly solutions.

NRG's Business Solutions group offers demand response, commodity sales, energy efficiency and energy management solutions for large commercial customers. An integrated provider of supply and distributed energy resources, Business Solutions focuses on distributed products and services as businesses seek greater reliability, cleaner power, or other benefits that they cannot obtain from the grid. These solutions include system power, distributed generation, solar and wind products, carbon management and specialty services, backup generation, storage and distributed solar, demand response, and energy efficiency and advisory services. In providing on-site energy solutions, NRG often benefits from its ability to supply energy products from its wholesale generation portfolio to commercial and industrial retail customers.

Impact of engagement, including measures of success
Engagement and measurement of success includes gathering and summarizing customer testimonials and case studies about their experiences with our products and services including our sustainable products and services. In the Customers chapter of our 2022 "Year in Review", https://www.nrg.com/assets/documents/sustainability/2022-nrg-year-in-review.pdf (pages 34-49), we provide a list and description of our sustainable products and services for both residential customers (page 38-45) and business customers (page 46-49).

In 2020, the Compensation Committee of NRG's Board added Net Promoter Score (NPS) as a key performance indicator governing annual incentive compensation for Named Executive Officers (see page 64, footnote (5)(a) of the 2023 Proxy Statement, https://investors.nrg.com/static-files/214c188e-76aa-4a4f-bb55-be665e292736). Called "Customer Focus Index", NPS measures the overall satisfaction of a customer with NRG's products and services as well as a customer's loyalty to NRG's brand, as determined through a customer survey. The NPS is an index ranging from negative 100 to positive 100. To calculate the NPS, detractors (those that assign a score 6 or less out of 10) are subtracted from promoters (those that assign a score of 10 or 9). For example, if 50% of respondents to the survey are promoters and 10% are detractors, the NPS is 40%. The Company uses an external company to assess NPS scores, thereby ensuring objective, measurable results. As reported in NRG's 2023 Investor Day, its Business electricity and gas segments respectively enjoy 82% and 86% renewal win rates and 7- and 9-year average customer relationships (page 44).

Moreover, for our Business customers, we have a product called Renewable Select, which allows businesses to deploy renewable energy without the need for onsite solar panels of their own or complicated and often risky contract structures (please see page 46-47 of 2020 Sustainability Report). We have found that our contracts with such customers have an average duration of 9 years compared to the 7 years for power customers overall mentioned above (please see pages 55-56 of our 2021 Investor Day presentation at https://investors.nrg.com/static-files/c40972f6-622c-437f-b625-111ab807e2ea for the 9-year reference). Differentially higher customer retention in renewable energy is a measure of success in competitive energy markets.

C12.2

(C12.2) Do your suppliers have to meet climate-related requirements as part of your organization's purchasing process?
No, and we do not plan to introduce climate-related requirements within the next two years

C12.3

(C12.3) Does your organization engage in activities that could either directly or indirectly influence policy, law, or regulation that may impact the climate?

Row 1

External engagement activities that could directly or indirectly influence policy, law, or regulation that may impact the climate

Yes, we engage directly with policy makers

Yes, our membership of/engagement with trade associations could influence policy, law, or regulation that may impact the climate

Does your organization have a public commitment or position statement to conduct your engagement activities in line with the goals of the Paris Agreement?

Yes

Attach commitment or position statement(s)

See attached 2022 Industry Association Climate Review and NRG's Climate Change Principles. Furthermore, please visit https://www.nrg.com/energy-policy.html for regulatory filings, white papers, presentations, and other materials we have prepared and submitted that set forth our positions on a variety of critical subjects driving our business and the industry including those that may impact the climate.

2022 Industry Association Climate Review 02152023_updated.pdf

Describe the process(es) your organization has in place to ensure that your external engagement activities are consistent with your climate commitments and/or climate transition plan

As an energy and services provider that primarily operates in competitive markets, public policy can significantly affect our business and industry. Accordingly, NRG, like most businesses, belongs to organizations and trade associations that may engage in lobbying activities. While we annually review our membership in such organizations and our corporate political contributions, 2021 was the first time that we conducted detailed analysis of these organizations' climate positions, as they relate to NRG's.

To ensure that the trade associations to which we contributed in 2022 align with NRG's Climate Change Principles, which in turn include alignment with the ambitions of the 2015 Paris Climate Agreement as noted above, we followed the process below:

• Determined scope of the review through cross-functional discussions among NRG's Legal, Government Affairs, Regulatory Affairs, Sustainability, and Investor Relations teams.

• Reviewed NRG's internal records and held discussions with senior management to compile a list of membership organizations, trade associations and social welfare organizations to which (1) we paid annual dues in 2021 of $25,000 or more; and (2) which were registered to lobby at the state or federal levels or who did, in fact, engage in such lobbying.

• For the resulting list, reviewed current policy statements and publicly available information such as reports, websites, policy submissions or other media sources to determine each trade association's climate positions.

• Compared each trade association's climate positions against NRG's Climate Change Principles to determine whether sufficient alignment exists.

o Decisions on alignment were made by the same internal multi-department team including representatives of Legal, Regulatory and Governmental Affairs, Investor Relations, and Sustainability.

• Reviewed output of this process with members of our executive team and the Board's Governance and Nominating Committee, which has oversight responsibility for sustainability at NRG

Primary reason for not engaging in activities that could directly or indirectly influence policy, law, or regulation that may impact the climate

<Not Applicable>

Explain why your organization does not engage in activities that could directly or indirectly influence policy, law, or regulation that may impact the climate

<Not Applicable>

C12.3a

(C12.3a) On what policy, law, or regulation that may impact the climate has your organization been engaging directly with policy makers in the reporting year?

Specify the policy, law, or regulation on which your organization is engaging with policy makers
Arizona's Energy Competition Act (ECA).

Green Mountain Energy (GME) submitted an application on August 4, 2021 to the Arizona Corporation Commission to provide regulated competitive retail electric services in accordance with Arizona's longstanding Energy Competition Act (ECA). If approved, Green Mountain would be the first and only Arizona electricity provider to exclusively offer clean renewable energy to its customers, meeting the Arizona Corporation Commission's recent 100 percent clean energy requirement nearly 50 years ahead of the 2070 deadline.

Under the ECA, energy providers have the right to petition the Commission for issuance of a certificate to provide regulated competitive retail electric services in Arizona. This was confirmed in 2020 by an Arizona Supreme Court decision and paves the way for this application. Green Mountain, winner of 'best solar provider' in 2020 by the Houston Chronicle, was the first company to apply to do so under the ECA.

Category of policy, law, or regulation that may impact the climate
Low-carbon products and services

Focus area of policy, law, or regulation that may impact the climate
Green electricity tariffs/renewable energy PPAs

Policy, law, or regulation geographic coverage
Sub-national

Country/area/region the policy, law, or regulation applies to
United States of America

Your organization's position on the policy, law, or regulation
Support with no exceptions

Description of engagement with policy makers
After GME applied to provide competitive retail electric service in Arizona, the Arizona Corporation Commission lobbied for the passage of Senate Bill 1631 which would prevent retail electric competition in the state). NRG testified before the Arizona Senate Committee of Natural Resources, Energy and Water in opposition to SB 1631 as detailed here: https://www.nrg.com/assets/documents/energy-policy/_2022/travis-kavulla-nrg-green-mountain-testimony-in-opposition-feb-16-2022.pdf

Subsequently, Arizona passed House Bill 2101, supported by the Arizona Corporation Commission, which effectively repealed the opportunity for Arizona customers to access competitive retail electricity markets.

Following the Arizona House and Senate's passage of House Bill 2101, Mark Parsons, Vice President and General Manager of Green Mountain Energy, released the following statement:
Green Mountain filed a license with the Arizona Corporation Commission last summer to serve customers in Arizona. Since that time, we have executed a Letter of Intent to purchase new, locally constructed solar energy. And we have patiently waited for the Arizona Corporation Commission to conduct a hearing on the merits of our application, where all parties could ask us questions about our
business model. We were disappointed that Arizona's utilities have aggressively maneuvered to deny their customers options for alternative providers by introducing HB 2101, which repeals the statutory basis for us to receive a license to operate in the state, but we were not surprised: Monopolies do not like competition. HB 2101 would close down our opportunity to receive a license to operate under state law without even a hearing in Arizona. We regret that outcome. We look forward to continuing this conversation, and we are frustrated that utilities have rejected any attempt to compromise on this legislation, instead favoring an absolute position that would deny customers innovative, clean, and affordable options in energy supply. We urge Governor Ducey to avoid an outcome that would take away choices from Arizona homeowners and businesses when it comes to their energy supply.

Details of exceptions (if applicable) and your organization's proposed alternative approach to the policy, law or regulation
<Not Applicable>

Have you evaluated whether your organization's engagement on this policy, law, or regulation is aligned with the goals of the Paris Agreement?
Yes, we have evaluated, and it is aligned

Please explain whether this policy, law or regulation is central to the achievement of your climate transition plan and, if so, how?
While Arizona laws specifically are not central, leveraging consumer demand from competitive energy marketplaces to drive development for low carbon energy supply and make progress in the transition to a decarbonized energy economy is central to the achievement of NRG's climate transition plan.

C12.3b

(C12.3b) Provide details of the trade associations your organization is a member of, or engages with, which are likely to take a position on any policy, law or regulation that may impact the climate.

Trade association
Other, please specify (Electric Power Supply Association (EPSA))

Is your organization's position on climate change policy consistent with theirs?
Consistent

Has your organization attempted to influence their position in the reporting year?
Yes, we publicly promoted their current position

Describe how your organization's position is consistent with or differs from the trade association's position, and any actions taken to influence their position
EPSA members support policies that give all electricity suppliers an equal opportunity to compete in the market and give all customers an equal opportunity to reap the benefits of such competition. EPSA is committed to the reduction of carbon dioxide and other harmful emissions. NRG's climate position is aligned with EPSA's climate position, so we are not attempting to further influence it.

Funding figure your organization provided to this trade association in the reporting year (currency as selected in C0.4)

Describe the aim of your organization's funding
<Not Applicable>

Have you evaluated whether your organization's engagement with this trade association is aligned with the goals of the Paris Agreement?
Yes, we have evaluated, and it is aligned

C12.4

(C12.4) 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
In mainstream reports

Status
Complete

Attach the document
2022-nrg-year-in-review.pdf
2022_esg_data_download.xlsx
10K year ending 2022.pdf
2022-SR-SASB.pdf
2020-TCFD.pdf
2023 Proxy.pdf

Page/Section reference
Proxy (p. 22), 10K (p. 45), SASB table, ESG data download (Emissions tab), Year in Review

Content elements
Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics

Comment

Publication
In voluntary sustainability report

Status
Complete

Attach the document
2022-nrg-year-in-review.pdf

Page/Section reference
Year in Review: All

Content elements
Governance
Strategy
Risks & opportunities
Emissions figures
Emission targets
Other metrics

Comment

C12.5

(C12.5) Indicate the collaborative frameworks, initiatives and/or commitments related to environmental issues for which you are a signatory/member.

	Environmental collaborative framework, initiative and/or commitment	Describe your organization's role within each framework, initiative and/or commitment
Row 1	Task Force on Climate-related Financial Disclosures (TCFD) Other, please specify (Gulf Coast Carbon Collaborative)	TCFD: NRG has a longstanding commitment to sustainability transparency and disclosure. We follow the leading globally accepted frameworks and standards to provide decision-useful information to our stakeholders. In 2017, we were one of the first companies to publicly support the TCFD recommendations and, in late 2018, we engaged a third-party to improve our future thinking capability, including qualitative climate scenario analysis. We published our inaugural TCFD report in December 2021 and are currently working on an update that will address the TCFD recommendations for two major acquisitions we have subsequently made. Gulf Coast Carbon Collaborative (GCCC): NRG is a founding member of the GCCC, which is part of the U.S. Business Council for Sustainable Development (USBCSD), which in turn is part of the World Business Council for Sustainable Development (WBCSD). The GCCC convenes working groups on the energy transition, nature-based solutions, CCUS, and hydrogen. It is a cross-industry group designed to mobilize the collective energy and motivation of businesses in the Gulf Coast to create measurable, long-term impact in reducing carbon emissions in the region while enhancing economic vitality.

C15. Biodiversity

C15.1

(C15.1) Is there board-level oversight and/or executive management-level responsibility for biodiversity-related issues within your organization?

	Board-level oversight and/or executive management-level responsibility for biodiversity-related issues	Description of oversight and objectives relating to biodiversity	Scope of board-level oversight
Row 1	Yes, executive management-level responsibility	NRG has a Senior Vice President of Environment and a Senior Vice President of Generation who jointly oversee biodiversity-related issues as defined in section 1.7.4 of NRG's Environmental Policy & Procedures Manual.	<Not Applicable>

C15.2

(C15.2) Has your organization made a public commitment and/or endorsed any initiatives related to biodiversity?

	Indicate whether your organization made a public commitment or endorsed any initiatives related to biodiversity	Biodiversity-related public commitments	Initiatives endorsed
Row 1	Yes, we have made public commitments only	Adoption of the mitigation hierarchy approach Commitment to respect legally designated protected areas	<Not Applicable>

C15.3

(C15.3) Does your organization assess the impacts and dependencies of its value chain on biodiversity?

Impacts on biodiversity

Indicate whether your organization undertakes this type of assessment
Yes

Value chain stage(s) covered
Direct operations
Upstream
Downstream

Portfolio activity
<Not Applicable>

Tools and methods to assess impacts and/or dependencies on biodiversity
Other, please specify (Environmental planning commitments for permitting purposes)

Please explain how the tools and methods are implemented and provide an indication of the associated outcome(s)

Dependencies on biodiversity

Indicate whether your organization undertakes this type of assessment
Yes

Value chain stage(s) covered
Upstream
Downstream

Portfolio activity
<Not Applicable>

Tools and methods to assess impacts and/or dependencies on biodiversity
Please select

Please explain how the tools and methods are implemented and provide an indication of the associated outcome(s)
<Not Applicable>

C15.4

(C15.4) Does your organization have activities located in or near to biodiversity- sensitive areas in the reporting year?
Yes

C15.4a

(C15.4a) Provide details of your organization's activities in the reporting year located in or near to biodiversity -sensitive areas.

Classification of biodiversity -sensitive area
Please select

Country/area
Please select

Name of the biodiversity-sensitive area

Proximity
Please select

Briefly describe your organization's activities in the reporting year located in or near to the selected area

Indicate whether any of your organization's activities located in or near to the selected area could negatively affect biodiversity
Please select

Mitigation measures implemented within the selected area
<Not Applicable>

Explain how your organization's activities located in or near to the selected area could negatively affect biodiversity, how this was assessed, and describe any mitigation measures implemented
<Not Applicable>

C15.5

(C15.5) What actions has your organization taken in the reporting year to progress your biodiversity-related commitments?

	Have you taken any actions in the reporting period to progress your biodiversity-related commitments?	Type of action taken to progress biodiversity- related commitments
Row 1	Yes, we are taking actions to progress our biodiversity-related commitments	Land/water management Species management Education & awareness Livelihood, economic & other incentives

C15.6

(C15.6) Does your organization use biodiversity indicators to monitor performance across its activities?

	Does your organization use indicators to monitor biodiversity performance?	Indicators used to monitor biodiversity performance
Row 1	Yes, we use indicators	State and benefit indicators Pressure indicators Response indicators

C15.7

(C15.7) Have you published information about your organization's response to biodiversity-related issues for this reporting year in places other than in your CDP response? If so, please attach the publication(s).

Report type	Content elements	Attach the document and indicate where in the document the relevant biodiversity information is located
In voluntary sustainability report or other voluntary communications	Content of biodiversity-related policies or commitments Biodiversity strategy	Year in Review, p. 98 2022-nrg-year-in-review.pdf

C16. Signoff

C-FI

(C-FI) Use this field to provide any additional information or context that you feel is relevant to your organization's response. Please note that this field is optional and is not scored.

C16.1

(C16.1) Provide details for the person that has signed off (approved) your CDP climate change response.

	Job title	Corresponding job category
Row 1	Chief Executive Officer	Chief Executive Officer (CEO)

SC. Supply chain module

SC0.0

(SC0.0) If you would like to do so, please provide a separate introduction to this module.

SC0.1

(SC0.1) What is your company's annual revenue for the stated reporting period?

	Annual Revenue
Row 1	31543000000

SC1.1

(SC1.1) Allocate your emissions to your customers listed below according to the goods or services you have sold them in this reporting period.

SC1.2

(SC1.2) Where published information has been used in completing SC1.1, please provide a reference(s).

SC1.3

(SC1.3) What are the challenges in allocating emissions to different customers, and what would help you to overcome these challenges?

Allocation challenges	Please explain what would help you overcome these challenges

SC1.4

(SC1.4) Do you plan to develop your capabilities to allocate emissions to your customers in the future?
Yes

SC1.4a

(SC1.4a) Describe how you plan to develop your capabilities.

We are currently developing our scope 3 emissions inventory including the total emissions associated with the production and consumption of the electricity and natural gas we provide to customers. Once we've done that, we will investigate the practicality of segmenting these total emissions by customer

SC2.1

(SC2.1) Please propose any mutually beneficial climate-related projects you could collaborate on with specific CDP Supply Chain members.

SC2.2

(SC2.2) Have requests or initiatives by CDP Supply Chain members prompted your organization to take organizational-level emissions reduction initiatives?

No

SC4.1

(SC4.1) Are you providing product level data for your organization's goods or services?

No, I am not providing data

Submit your response

In which language are you submitting your response?

English

Please confirm how your response should be handled by CDP

	I understand that my response will be shared with all requesting stakeholders	Response permission
Please select your submission options	Yes	Public

Please confirm below

I have read and accept the applicable Terms