



NRG Energy, Inc.
Greenhouse Gas Emissions and Water Use Report
For the year ended December 31, 2018



KPMG LLP
1601 Market Street
Philadelphia, PA 19103-2499

Independent Accountants' Review Report

Board of Directors and Management
NRG Energy, Inc.:

We have reviewed the accompanying Statements of Greenhouse Gas (GHG) Emissions and Water Use presented in NRG Energy, Inc.'s (NRG) 2018 Greenhouse Gas Emissions and Water Use Report (the Report) for the year ended December 31, 2018. NRG management is responsible for presenting the metrics in accordance with the corresponding reporting criteria as set forth in Notes 2 and 3 to the Report (the Criteria). Our responsibility is to express a conclusion on the Statements of GHG Emissions and Water Use based on our review.

Our review was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants. Those standards require that we plan and perform the review to obtain limited assurance about whether any material modifications should be made to the Statements of GHG Emissions and Water Use in order for them to be presented in conformity with the Criteria. A review is substantially less in scope than an examination, the objective of which is to obtain reasonable assurance about whether the Statements of GHG Emissions and Water Use are in conformity with the Criteria, in all material respects, in order to express an opinion. Accordingly, we do not express such an opinion. We believe that our review provides a reasonable basis for our conclusion.

Greenhouse gas emissions and water data are subject to measurement uncertainties resulting from limitations inherent in the nature and methods of determining such data. The selection of different but acceptable measurement techniques can result in materially different measurements. The precision of different measurement techniques may also vary.

Based on our review, we are not aware of any material modifications that should be made to the Statements of GHG Emissions and Water Use in order for them to be presented in conformity with the corresponding Criteria as set forth in Notes 2 and 3 for the year ended December 31, 2018.

KPMG LLP

Philadelphia, Pennsylvania
April 23, 2019

NRG Energy, Inc.
For the year ended December 31, 2018

Statement of Greenhouse Gas Emissions

Metric Description	Metric tons CO_{2e}
Total Scope 1	46,000,000
Total Scope 2	189,000
Total Scope 3 (business travel only)	<u>13,000</u>
Total Greenhouse Gas Emissions	<u>46,202,000</u>

Statement of Water Use

Metric Description	Million m³
Total Water Withdrawals	4,575
Total Water Discharges	<u>4,390</u>
Total Water Consumption	<u>185</u>

See accompanying Independent Accountants' Review Report and notes to Statements of Greenhouse Gas Emissions and Water Use.

NRG Energy, Inc.
Notes to Statements of Greenhouse Gas Emissions and Water Use
For the year ended December 31, 2018

Note 1: The Company

Organization

NRG Energy, Inc., or NRG or the Company, is an energy company built on dynamic retail brands with diverse generation assets. NRG brings the power of energy to consumers by producing, selling and delivering electricity and related products and services in major competitive power markets in the U.S. in a manner that delivers value to all of NRG's stakeholders. NRG is perfecting the integrated model by balancing retail load with generation supply within its deregulated markets, while evolving to a customer-driven business. The Company sells energy, services, and innovative, sustainable products and services directly to retail customers under the names "NRG" and "Reliant" and other brand names owned by NRG supported by approximately 23,000 MW of generation as of December 31, 2018.

Basis of Presentation

The Statements of Greenhouse Gas ("GHG") Emissions and Water Use has been prepared based on a calendar reporting year that is the same as NRG's financial reporting period.

Organizational Boundaries

Reported greenhouse gas and water metrics include emission and consumption data from all facilities located in the United States under operational control as of December 31, 2018. Emissions and consumption data from jointly owned electric generating facilities are allocated based on the Company's equity share of ownership at the plant level. Water use metrics include equity ownership percentage of international generating units. Operational control and equity share accounting are defined in the *World Resources Institute/World Business Council for Sustainable Development Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard, Revised Edition* (the "GHG Protocol").

Estimation Uncertainties

Environmental and energy use data included in the Statements of GHG Emissions and Water Use are subject to measurement uncertainties resulting from limitations inherent in the nature and the methods used for determining such data. The selection of different but acceptable measurement techniques can result in materially different measurements. The precision of different measurement techniques may also vary.

Note 2: GHG Emissions Reporting

Greenhouse gases

All GHG emissions figures are presented in metric tons of carbon dioxide equivalents (CO₂e). The Statement of GHG Emissions include the following greenhouse gases: carbon dioxide (CO₂), methane (CH₄), and nitrous oxide (N₂O). 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.

Scope 1 GHG Emissions

Scope 1 GHG emissions represent GHG emissions that occur from fuel combustion in boilers, turbines and engines used for the production of wholesale electric power at facilities owned or controlled by the Company. The Scope 1 GHG emissions were determined by using methods specified by the Environmental Protection Agency ("EPA") within *Title 40, Chapter I, Subchapter C, Part 98, Subparts A, C and D of the Code of Federal Regulations*.

GHG emissions from combustion of fossil fuels used for other activities or equipment, such as auxiliary boilers, starter engines, mobile sources and offices are not included because they are not material sources of emissions.

Scope 2 GHG Emissions

Scope 2 GHG emissions represent the generation of purchased electricity consumed by the Company and are determined using the guidance of the GHG Protocol Scope 2 Guidance, An amendment to the GHG Protocol Corporate Standard, 2015. Metered electricity purchases from United States based electricity distribution utilities are multiplied by appropriate regional United States EPA's eGRID2016 emissions factors. These factors were sourced from the EPA Center for Corporate Climate Leadership and used factors published in 2018¹.

Emissions factors used to calculate market based emissions, including both utility specific factors and residual mix, are not widely available in the United States therefore only location based factors are used which may result in double counting between electricity consumers.

Where utility metering and invoices are not available, some facility estimates of electricity usages were made using average electricity usage per square foot by region observed at other NRG facilities of similar type or provided by building owner/operator. Estimates for plants are made using available historical values and applying linear adjustment for Net Capacity Factor (NCF). If there is no historical information, then values are estimated based off of 1) fuel type, 2) size of plant and 3) technology of the plant.

Scope 3 GHG Emissions (business travel only)

Scope 3 GHG emissions were compiled by NRG's primary travel agency for air travel, hotel, car and train travel. NRG's travel policy requires all business related travel to be booked through Adelman Travel Group (Adelman). However, business does not include international travel, or domestic travel booked outside of the Adelman agency. Additionally, NRG has made recent acquisitions where employees used legacy travel agencies for business travel. Business travel booked through legacy travel agencies is not included in the report Scope 3 emissions. Due to the electronic tracking of nights booked, some room stays may be included

Adelman used the Carbonfund.org Foundation's calculator² to determine the GHG emissions for air travel and car rental emissions booked through the travel agency. Hotel stays reported by Adelman also use the Carbonfund.org Foundation's methodology for hospitality assuming the upscale hotel emission rate of 33.38 CO₂ per room day.

¹ EPA Center for Corporate Climate Leadership. (2018, Feb). Emission Factors for Greenhouse Gas Inventories. Retrieved March 2019, from https://www.epa.gov/sites/production/files/2018-02/documents/egrid2016_summarytables.pdf.

² How We Calculate - Carbonfund.org. (n.d.). Retrieved May, 2016, from <https://carbonfund.org/how-we-calculate/>

Global Warming Potentials

GHG emissions were calculated using the Global Warming Potentials from the International Panel on Climate Change Fourth Assessment Report for CO₂, CH₄ and N₂O.

Note 3: Water Use Reporting

Total Water Withdrawals

Total water withdrawals include withdrawals from surface water (lakes, rivers or oceans), ground water and municipal water utilities. Withdrawals from surface water and ground water is determined by company owned metering devices, pump operating characteristics with pump operating logs, water balance engineering estimates, rainfall data applied to surface areas with run-off coefficients or a combination all or some of these measurement techniques. Large un-metered pumps use the manufacturer's pump curve. Withdrawals from municipal water utilities are determined from utility invoices.

Total Water Discharges

Total water discharges is the total of all water discharge 1) reported by each facility in its monthly Discharge Monitoring Report to maintain compliance with the National Pollution Discharge Elimination System permits and 2) to publically owned water treatment facilities as determined by volumes indicated on water/sewer invoices including sanitation/septic wastewater.