

**NRG Energy, Inc.**  
**Greenhouse Gas Emissions Report**  
**For the Year Ended December 31, 2021**  
**(With Independent Accountants' Review Report Thereon)**



KPMG LLP  
1601 Market Street  
Philadelphia, PA 19103-2499

## **Independent Accountants' Review Report**

To the Board of Directors  
NRG Energy, Inc.:

We have reviewed the accompanying Statement of Greenhouse Gas (GHG) Emissions and the related notes presented in NRG Energy, Inc.'s (the Company) Greenhouse Gas Emissions Report for the year ended December 31, 2021. The Company's management is responsible for presenting the Statement of GHG Emissions and the related notes in accordance with the corresponding reporting criteria set forth in Note 2 (the Criteria). Our responsibility is to express a conclusion on the Statement of GHG Emissions and the related notes 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 Statement of GHG Emissions and the related notes in order for them to be in accordance 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 Statement of GHG Emissions and the related notes are in accordance 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.

The preparation of the Statement of GHG Emissions and the related notes requires management to interpret the Criteria, make determinations as to the relevancy of information to be included, and make estimates and assumptions that affect reported information. The selection of different but acceptable measurement techniques can result in materially different measurements. Different entities may make different but acceptable interpretations and determinations.

Based on our review, we are not aware of any material modifications that should be made to the Statement of GHG Emissions and the related notes in order for them to be in accordance with the Criteria.

**KPMG LLP**

Philadelphia, Pennsylvania  
May 16, 2022

**NRG Energy, Inc.**  
**Statement of Greenhouse Gas Emissions**  
**For the Year Ended December 31, 2021**

<b>Metric Description</b>	<b>Metric tons CO<sub>2</sub>e</b>
Scope 1 greenhouse gas emissions	34,285,442
Scope 2 greenhouse gas emissions	176,859
Scope 3 greenhouse gas emissions from business travel	<u>1,148</u>
Sum of above greenhouse gas emissions	<u>34,463,449</u>

See accompanying Notes to Statement of Greenhouse Gas Emissions.

**NRG Energy, Inc.**  
**Notes to Statement of Greenhouse Gas Emissions**  
**For the Year Ended December 31, 2021**

**Note 1: The Company**

**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. NRG sells power, natural gas, and home and power services, and develops innovative, sustainable solutions, predominately under the brand names NRG, Reliant, Direct Energy, Green Mountain Energy, Stream, and XOOM Energy. The Company has a customer base that includes approximately 6 million residential customers as well as commercial, industrial, and wholesale customers, supported by approximately 18,000 megawatts (MW) of generation as of December 31, 2021.

**Basis of Presentation**

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

**Organizational Boundaries**

Reported greenhouse gas metrics include emission and consumption data from all facilities located in the United States that were owned, controlled, or for which the Company had an equity interest as of December 31, 2021. The Company employs a hybrid methodology of operational and financial control, as 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), to determine facilities within the organizational boundary. 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. Note that tolling agreements are currently excluded from the organizational boundary.

**Estimation Uncertainties**

Emission and consumption data included in the Statement of GHG Emissions 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 equivalent (CO<sub>2</sub>e). The Statement of GHG Emissions includes the following greenhouse gases: carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), and nitrous oxide (N<sub>2</sub>O). Hydrofluorocarbons (HFCs), Perfluorocarbons (PFCs), Sulphur Hexafluoride (SF<sub>6</sub>), and Nitrogen trifluoride (NF<sub>3</sub>) 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 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, generators, and company fleet vehicles are not included in Scope 1 inventory at this time as the associated emissions are immaterial.

## **Scope 2 GHG Emissions**

Scope 2 GHG emissions represent 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 Environmental Protection Agency (EPA) eGRID emissions factors within the EPA's Simplified GHG Emissions Calculator. These factors were sourced from EPA Center for Corporate Climate Leadership and used factors published in 2021<sup>1</sup>.

Where utility metering and invoices are not available, estimates for plants are made using available historical values. If there is no historical information, then values are estimated based on 1) fuel type, 2) size of plant, and 3) technology of the plant. Estimated emissions for plant consumption are multiplied by appropriate regional EPA eGRID emissions factors within the EPA's Simplified GHG Emissions Calculator, consistent with the methodology applied to metered electricity purchases described above. These emission factors vary by geography, time period, and fuel source and are applied accordingly based on the facility in question.

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

## **Scope 3 GHG Emissions (business travel only)**

Scope 3 GHG emissions are determined using the Corporate Value Chain (Scope 3) Standard of the GHG Protocol. Scope 3 GHG emissions were compiled by NRG's primary travel agency for air travel, hotel, and rental car travel. NRG's travel policy requires all business-related travel to be booked through NRG's primary third-party travel agency's booking tool. Reported Scope 3 emissions from business travel do not include travel booked outside the primary travel agency. In addition, train travel, taxi, and ride share services are not currently included as business travel categories. Moreover, due to the advance booking of hotel stays and flights, and the electronic tracking of such bookings, some travel that was scheduled to occur after the current calendar year may be included in current year data. Conversely, some travel that was booked in the current calendar year for the following calendar year may not actually occur due to subsequent cancellation but is nonetheless included in the current year data. The Company is currently not able to separate this information based on the dates of the actual travel.

NRG's travel agency used the GHG Protocol's 2015 tool for mobile combustion<sup>2</sup> to determine the GHG emissions for air travel emissions booked through the travel agency. The default emission factors are sourced from the EPA. The travel agency requests the rental car emissions directly from the Company's preferred rental car vendor. The factors used to calculate rental car emissions were sourced from the EPA Center for Corporate Climate Leadership and used factors published in 2021 for CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O<sup>3</sup>. Hotel stays reported by the travel agency also use the Carbonfund.org Foundation's methodology<sup>4</sup> for hospitality assuming the upscale U.S.-based hotel emission rate of 26.6 kg CO<sub>2</sub> per room day.

## **Global Warming Potentials**

CO<sub>2</sub>e GHG emissions were calculated using the Global Warming Potentials (GWP) for CO<sub>2</sub>, CH<sub>4</sub> and N<sub>2</sub>O from the International Panel on Climate Change (IPCC) *Fifth Assessment Report* for Scopes 1 and 3, and from the IPCC *Fourth Assessment Report* for Scope 2.

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<sup>1</sup> EPA Center for Corporate Climate Leadership. (2021, April). GHG Emission Factors Hub. Retrieved March 2022, from [https://www.epa.gov/sites/default/files/2021-04/documents/emission-factors\\_apr2021.pdf](https://www.epa.gov/sites/default/files/2021-04/documents/emission-factors_apr2021.pdf)

<sup>2</sup> World Resources Institute (2015). GHG Protocol tool for mobile combustion. Version 2.6.t

<sup>3</sup> EPA Center for Corporate Climate Leadership. (2021, April). GHG Emission Factors Hub. Retrieved May 2022, from [https://www.epa.gov/sites/default/files/2021-04/documents/emission-factors\\_apr2021.pdf](https://www.epa.gov/sites/default/files/2021-04/documents/emission-factors_apr2021.pdf). See Table 2 for CO<sub>2</sub> and Table 3 for CH<sub>4</sub> and N<sub>2</sub>O

<sup>4</sup> Carbonfund.org (n.d.) Retrieved May 2022 from <https://carbonfund.org/calculation-methods/#:~:text=Hotel%20Rooms,kg%20CO2e%20per%20room%20day>