2024 Operational GHG Emissions and Electric Power Use

	2024	2023
GHG Emissions (tCO_2e)		
Scope 1 GHG Emissions[i]	**100,024**	**115,294**
Natural gas	49,354	48,232
Propane	50	50
Fuel oil	422	420
Jet fuel	12,414	13,059
Fugitive emissions[ii]	33,121	48,658
Diesel	2,384	2,855
Fleet	1,627	1,892
Other energy use[iv,v]	652	128
Scope 2 GHG Emissions (Location-Based)[i]	**773,852**	**792,479**
Purchased electricity	767,046	788,837
Purchased steam, district heat and chilled water[v]	6,806	3,642
Scope 1 GHG Emissions + Scope 2 GHG Emissions (Location-Based)	**873,876**	**907,773**
GHG emissions intensity[vi]	4.9	5.7
Scope 2 GHG Emissions (Market-Based)[i]	**6,806**	**3,642**
Purchased electricity[vii]	-	-
Purchased steam, district heat and chilled water[v]	6,806	3,642
Scope 1 GHG Emissions + Scope 2 GHG Emissions (Market-Based)[i]	**106,830**	**118,936**
Verified Carbon Offsets[i,viii]	367,311	374,417
Electric Power (MWh)		
Electricity production (on-site solar)	57,420	47,443
Purchased electricity[i]	2,041,374	2,016,262
Purchased renewable electricity[i,iii]	2,041,374	2,016,262

i. We engaged an external third-party to perform a limited assurance engagement over these metrics presented for 2023 and 2024.

ii. 2024 fugitive emissions reflect improved data collection at North American data centers, with figures based on actual refrigerant leak tracking data instead of estimation. For additional detail on our methodology, refer to the attached Management Assertion and the Report of Independent Accountants.

iii. Purchased renewable electricity from unbundled EACs, and contractual instruments which included power purchase agreements, virtual power purchase agreements and renewable electricity supply contracts.

iv. Includes emissions from heavy fuel oils, anthracite coal, biofuels and waste.

v. 2024 includes GHG emissions estimated using revenue-based methodology for acquisitions. Acquisitions completed within 18 months of the reporting year — previously excluded due to data availability — were included in 2024. In addition, data centers used by Neovest, a subsidiary which offers a broker-neutral service, are excluded due to limited availability of data. Joint ventures outside our operational control are excluded.

vi. Includes Scope 1 and Scope 2 (location-based) GHG emissions; tCO_2e/million USD revenue.

vii. Market-based emissions for purchased electricity are reported as zero due to the purchase of renewable electricity through unbundled EACs and contractual instruments, including PPAs, virtual power purchase agreements and renewable electricity supply contracts.

viii. Carbon credits and the market for them are evolving. Although we endeavor to source high-quality carbon credits verified by independent third parties, the use of carbon credits relies on certain assumptions and is subject to debate among experts.

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Report of Independent Accountants

To the Management of JPMorgan Chase & Co.

We have reviewed the accompanying management assertion of JPMorgan Chase & Co. that the greenhouse gas ("GHG") emissions, verified carbon offsets, purchased electricity, and purchased renewable electricity metrics ("metrics") for the year ended December 31, 2024 in management's assertion, are presented in accordance with the assessment criteria set forth in management's assertion. JPMorgan Chase & Co.'s management is responsible for its assertion and for the selection of the criteria, which management believes provide an objective basis for measuring and reporting on the metrics. Our responsibility is to express a conclusion on management's assertion based on our review.

Our review was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants (AICPA) in AT-C section 105, Concepts Common to All Attestation Engagements, and AT-C section 210, Review Engagements. Those standards require that we plan and perform the review to obtain limited assurance about whether any material modifications should be made to management's assertion in order for it to be fairly stated. The procedures performed in a review vary in nature and timing from, and are substantially less in extent than, an examination, the objective of which is to obtain reasonable assurance about whether management's assertion is fairly stated, in all material respects, in order to express an opinion. Accordingly, we do not express such an opinion. Because of the limited nature of the engagement, the level of assurance obtained in a review is substantially lower than the assurance that would have been obtained had an examination been performed. We believe that the review evidence obtained is sufficient and appropriate to provide a reasonable basis for our conclusion.

We are required to be independent and to meet our other ethical responsibilities in accordance with relevant ethical requirements related to the engagement.

The firm applies the Statements on Quality Control Standards established by the AICPA.

The procedures we performed were based on our professional judgment. In performing our review, we performed inquiries, read relevant policies to understand terms related to relevant information about the metrics, performed tests of mathematical accuracy of computations on a sample basis, and reviewed supporting documentation in regard to the completeness and accuracy of the data in the metrics on a sample basis.

GHG emissions quantification is subject to significant inherent measurement uncertainty because of such things as GHG emissions factors that are used in mathematical models to calculate GHG emissions, and the inability of these models, due to incomplete scientific knowledge and other factors, to accurately measure under all circumstances the relationship between various inputs and the resultant GHG emissions. Environmental and energy use data used in GHG emissions calculations are subject to inherent limitations, given the nature and the methods used for measuring such data. The selection by management of different but acceptable measurement techniques could have resulted in materially different amounts or metrics being reported.

Management establishes the criteria, makes determinations as to the relevancy of information to be included, and makes assumptions that affect reported information related to the purchased electricity metric. The selection by management of different but acceptable measurement techniques could have resulted in materially different metrics being reported.

As discussed in management's assertion, JPMorgan Chase & Co. has estimated purchased electricity consumption for certain buildings and GHG emissions for certain emissions sources for which no primary usage data is available.

Based on our review, we are not aware of any material modifications that should be made to JPMorgan Chase & Co.'s management assertion in order for it to be fairly stated.

New York, New York
August 7, 2025

JPMorganChase

Management Assertion

Overview

With respect to the greenhouse gas ("GHG") emissions, verified carbon credits, purchased electricity, and purchased renewable electricity metrics ("metrics") presented in the table below for the year ended December 31, 2024, management of JPMorgan Chase & Co. ("JPMorganChase", "the company", "we" or "our") asserts that these metrics are presented in accordance with the assessment criteria set forth below. Management is responsible for the selection of the criteria, which management believes provide an objective basis for measuring and reporting on the metrics, and for the completeness, accuracy, and validity of the metrics.

We use the operational control approach to establish the organizational boundary for our metrics. The boundary includes: company-owned or leased commercial offices, warehouses, residential buildings, ATMs, data centers, disaster recovery centers, non-JPMorganChase facilities, parking, and miscellaneous facility types for which we control the energy usage (collectively, referred to as "buildings"); company-owned or leased vehicles (collectively, referred to as "vehicles"); and company-owned, leased or chartered aircraft (collectively, referred to as "aircraft"). The metrics presented in the table below exclude data centers used by Neovest, a subsidiary which offers a broker-neutral service, due to limited availability of data.

Companies acquired in the reporting year are included at the time of acquisition, with the exception of emissions associated with joint ventures (< 100% ownership) managed outside of JPMorganChase platforms.

Metric	Metric Quantity	Definition of Metric
Scope 1 GHG Emissions[1,2,3,4,5]	100,024 mtCO2e	Direct emissions from combustion of fossil fuels and fugitive emissions from refrigerants used in buildings, as well as direct emissions from combustion of fossil fuels from vehicles and aircrafts.
Scope 2 GHG Emissions (Location-Based)[1,2,3,4,6]	773,852 mtCO2e	Indirect emissions from purchased electricity used in buildings and electric vehicles, as well as from steam, chilled water cooling, and district heat used in buildings using location-based emission factor(s).
Scope 2 GHG Emissions (Market-Based)[1,2,3,4,6]	6,806 mtCO2e	Indirect emissions from purchased electricity used in buildings and electric vehicles, as well as from steam, chilled water cooling, and district heat used in buildings using market-based emission factor(s).
Scope 1 GHG Emissions + Scope 2 GHG Emissions (Market-Based) [1,2,3,4,5,6]	106,830 mtCO2e	Sum of Scope 1 GHG Emissions and Scope 2 GHG Emissions (market-based).

Verified Carbon Credits[1,2 3,4,7]	367,311 mtCO2e	Purchased verified carbon credits from nature-based, hybrid and engineered removal projects which included improved forest management (IFM), afforestation, blue carbon, biochar, and bio-oil sequestration.
Purchased Electricity[1,4,8]	2,041,374 MWh	Electricity consumed from purchased electricity used in buildings and electric vehicles.
Purchased Renewable Electricity [1,4,8]	2,041,374 MWh	Purchased renewable electricity from unbundled energy attribute certificates ("EACs"), contractual instruments which included long-term power purchase agreements ("PPAs"), virtual power purchase agreements ("vPPAs") and renewable energy supply contracts.

Metric Footnotes

1. JPMC considers the principles and guidance of the World Resources Institute (WRI) and the World Business Council for Sustainable Development's (WBCSD) *The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard, Revised Edition*; *GHG Protocol Scope 2 Guidance: An amendment to the GHG Protocol Corporate Standard (together, the "GHG Protocol")* to guide the criteria to assess, calculate, and report direct and indirect GHG emissions, purchased electricity, and purchased renewable electricity. JPMC additionally considers the principles and guidance of RE100 to guide the criteria for purchased renewable electricity, and the Integrity Council for the Voluntary Carbon Market's (IC-VCM) *Core Carbon Principles,* and the Voluntary Carbon Market Integrity Initiative (VCMI) to guide the criteria for purchasing EACs and verified carbon credits.

2. GHG emissions quantification is subject to significant inherent measurement uncertainty because of such things as GHG emission factors that are used in mathematical models to calculate GHG emissions, and the inability of these models, due to incomplete scientific knowledge and other factors, to accurately measure under all circumstances the relationship between various inputs and the resultant GHG emissions. Environmental and energy use data used in GHG emissions calculations are subject to inherent limitations, given the nature and the methods used for measuring such data. The selection by management of different but acceptable measurement techniques could have resulted in materially different amounts or metrics being reported.

3. Carbon dioxide equivalent ("CO_2e") emissions are inclusive of carbon dioxide ("CO_2"), methane ("CH_4"), nitrous oxide ("N_2O"), hydrofluorocarbons ("HFCs"), perfluorocarbons ("PFCs"), sulfur hexafluoride ("SF_6"), and nitrogen trifluoride ("NF_3"). Emissions data by individual gas is not disclosed as a majority of CO_2e relates to CO_2. These CO_2e emissions utilize Global Warming Potentials ("GWPs") as follows: (i) where the GWP is not embedded in the emission factor, GWPs defined by the Intergovernmental Panel on Climate Change's ("IPCC") Sixth Assessment Report ("AR 6", 100-year horizon) utilizing the fossil origin value for CH4, (ii) where the GWP is embedded in the emission factor but the emission factor by individual gas is not disclosed, the embedded GWP is applied, or (iii)

where the GWP is embedded in the emission factor and the emission factor by individual gas is disclosed, the embedded GWP is converted to AR 6.

4. The following units of measure were used: mtCO2e = metric tons of carbon dioxide equivalent; and MWh = megawatt hour.

5. Scope 1 GHG emissions include the emission sources listed below. Approximately 49% of reported Scope 1 GHG emissions were estimated.

- Buildings
  - Emissions from fossil fuels (natural gas, diesel fuel, propane, coal, oil, and biofuel) used in buildings were calculated using the following approach:
    - Where fuel consumption or spend was available, emissions were calculated based on:
      - For fossil fuel consumption: Monthly fuel consumption was collected from third-party invoices or internal usage records.
      - For spend related to diesel fuel: Spend data was collected from third-party invoices. The industry-level price index data published by the US Bureau of Economic Analysis (BEA) is used to convert spend for application against Comprehensive Environmental Data Archive ("CEDA") v7 emission factors. The numerator is the diesel price index of USD in 2022 whereas the denominator is a 2024 average of Q1 and Q2, since at the time of publication, the 2024 annual inflationary data was not released by the BEA.
    - Where fuel consumption was not available, an estimate was determined using square footage from internal building records multiplied by a fuel mix per square foot assumption (if applicable and as outlined below), and the median fuel energy use intensity ("EUI") by building type from the Department of Energy's ("DOE") Building Performance Database ("BPD"), accessed on April 20, 2023.
      - For buildings located in the US and buildings that are located in countries not covered by the International Energy Agency ("IEA") Energy Efficiency Indicators (2024), we assumed that building heat is provided entirely by natural gas.
      - For buildings located in all other countries (those covered by the IEA), we used the IEA Energy Efficiency Indicators (2024) to calculate fuel mix (i.e., proportion of buildings energy consumption by this fuel type).
  - We used the following emission factor(s) (EFs):
    - Fossil fuels (excluding biofuel):
      - US EPA Emission Factors Hub (June 2024): (category: *US EPA EF fuel type*)
        - Natural gas: *Natural gas*
        - Diesel fuel: *Distillate Fuel Oil No. 2*
        - Propane: *Propane*
        - Coal: *Anthracite*
        - Oil: *Heavy Gas Oils*
      - For Australia January – June 2024: Australian Government Department of Climate Change, Energy, the Environment and Water, Australian National Greenhouse Accounts Factors (February 2023).
      - For Australia July – December 2024: Australian Government Department of Climate Change, Energy, the Environment and Water, Australian National Greenhouse Accounts Factors (August 2024).

        - Ministry for the Environment. 2024. Measuring emissions: A guide for organisations: 2024 detailed guide. Wellington: Ministry for the Environment.
        - Spend: CEDA 7 (2024) diesel emission factor(s) using the IPCC Fifth Assessment Report ("AR5") GWP.
    - Biofuel:
        - CH_4 and N_2O emission factors are sourced from the Department for Energy Security and Net Zero ("DESNZ") UK Government GHG Conversion Factors for Company Reporting (October 2024).
        - For Australia January – June 2024: Australian Government Department of Climate Change, Energy, the Environment and Water Australian National Greenhouse Accounts Factors (February 2023).
        - For Australia July – December 2024 : Australian Government Department of Climate Change, Energy, the Environment and Water Australian National Greenhouse Accounts Factors (August 2024).
        - Following the GHG Protocol, CO_2 emissions from biogenic combustion related to biofuel (heating energy) were not included in our reported Scope 1 GHG emissions.
- Refrigerants
    - Where fugitive emissions data is available, emissions were calculated using the following approach:
        - Fugitive emissions amount (lbs.) and refrigerant type are collected from internal refrigerant tracking records.
    - Where fugitive emissions data is not available:
        - Emissions from refrigerants used in buildings were calculated by inputting building type into the US EPA's *Simplified Screening Approach 1* (October 2016), which provided the refrigerant type (R-410A, R-404A and R-134a) and refrigerant (kg) per square foot. This refrigerant by square foot was multiplied by the square footage collected from internal building records.
    - We used the following GWPs:
        - For R-134a, GWPs from the IPCC's AR6, 100-year horizon.
        - For blended refrigerants (R-404A and R-410A), refrigerant composition was sourced from the US EPA's *Compositions of Refrigerant Blends*, accessed on March 14, 2024, to appropriately apply GWPs from the IPCC's AR6, 100-year horizon.
- Vehicles
    - Emissions from fossil fuels (ethanol, diesel fuel, and motor gasoline) used in vehicles were calculated using the following approach:
        - Where fuel consumption was available, emissions were calculated using fuel consumption (gallons) for each month collected from internal company vehicle records.
        - Where fuel consumption was not available, a distance-based method was used to estimate consumption based on vehicle type, location, and distance traveled collected from internal company vehicle records.
            - Within the UK, the implied fuel economy is calculated using Department for Environment, Food and Rural Affairs ("DEFRA") vehicle type-fuel type combination (using their distance-based EFs by fuel type and their fuel properties data). For all other countries, average fuel economy by vehicle class is taken from the US DOE Alternative Fuels Data Center to calculate fuel economy.
        - Where distance was not available, we use spend based estimations. Spend is collected from the line of business managing operating expense data for acquired companies.
    - The following emission factor(s) were used:
        - Where fuel consumption was available:
            - US EPA Emission Factors Hub (June 2024).

        - For gasoline emissions, US EPA Emission Factors Hub (June 2024) blended EF of E10 Ethanol-Gasoline Blend (10% Ethanol, 90% Motor Gasoline).
        - For diesel emissions, the stationary combustion Distillate Fuel Oil No. 2 emission factor was used as a proxy for mobile combustion.
        - For ethanol emissions, the stationary combustion Ethanol emission factor was used as a proxy for mobile combustion.
        - Following the GHG Protocol, CO_2 emissions from biogenic combustion related to ethanol (car travel) were not included in our reported Scope 1 GHG emissions.
    - Where fuel consumption was not available:
        - DESNZ UK Government GHG Conversion Factors for Company Reporting (October 2024).
        - Spend: CEDA 7 (2024) revenue emission factor(s) using AR5 GWP.
- Aircraft
    - Emissions from jet fuels used in aircraft were calculated using the following approach:
        - Where fuel consumption was available, emissions were calculated based on fuel consumption (gallons) collected from internal records. If fuel consumption was provided in pounds (lb), we assumed 6.7 lb / gallon density of jet fuel per Sustainable Aviation Fuel *Metrics Fact Sheet #13* (2021).
        - Where fuel consumption was not available, fuel consumption was estimated based on flight hours and fuel economy collected from the vendor.
    - We used the following emission factor(s):
        - Kerosene-Type Jet Fuel emission factor from the US EPA Emission Factors Hub (June 2024).
- Acquisitions
    - Emissions from acquisitions where no activity, square footage, or spend data was available were calculated using acquired company revenue, industry type, and headquarters location, which were collected from internal records.
    - We used the following emission factor(s):
        - Revenue: CEDA 7 (2024) revenue emission factor(s) using AR5 GWP.

6. Scope 2 GHG emissions include the emission sources listed below. Approximately 15% of reported Scope 2 GHG emissions were estimated.

- Purchased electricity used in buildings were calculated using the following approach:
    - Where electricity consumption was available, emissions were calculated based on monthly consumption collected from third-party invoices.
    - Where electricity consumption was not available, an estimate was determined as follows:
        - For primary-use data centers (buildings where data centers are the primary use), electricity consumption in kWh was estimated by multiplying load capacity in kW by the number of hours, assuming the building is running at maximum capacity 24 hours a day throughout the entire month. Load capacity was collected from internal records.
            - Where load capacity in kW is unavailable, contracted load capacity in kVA was converted to kW using a power factor of 0.9.
        - For secondary- or tertiary- use data centers (buildings where data centers are not the primary use), we considered the primary use of the building and applied the same methodology as “all other buildings” noted below.

- For ATM locations, electricity consumption was estimated based on the total number of ATMs obtained from internal company records and average kWh of electricity consumption, which was calculated based on electricity consumption available for ATMs of a similar type.
- For all other buildings, electricity consumption was estimated based on square footage from internal building records and the median electricity EUI by building type from the DOE's BPD, accessed on April 20, 2023.

- For locations where actual sub metered consumption does not include landlord overhead, utility invoices were treated as actuals without the inclusion of landlord overhead. In the absence of sub metered consumption, we did not estimate for landlord overhead.
- Emissions from device locations (JPMorganChase's owned devices at non-JPMorganChase's facilities) were excluded from the footprint due to limited availability of electricity consumption data.
- We used the following emission factor(s):
  - Market-based emission factor(s):
    - JPMC follows and applies the market-based data hierarchy outlined in the GHG Protocol Scope 2 Guidance (Table 6.3) (from highest to lowest precision):
      - Unbundled EACs purchased and retired by JPMorganChase.
        - Sourcing and retirement of EACs considered the guidelines on geography, vintage, certification, and retirement established by the GHG Protocol Scope 2 Guidance and RE100.
        - The EACs applied to the 2024 reporting year have been contracted for and will be retired before November 30, 2025.
        - JPMC was unable to source certain EACs from within the same market boundary where the electricity consumption occurred due to limited availability of EACs within those market boundaries. These EACs make up 41,979 MWh of purchased renewable electricity. The exclusion of the use of these EACs from would result in Scope 2 market-based GHG emissions of 16,115 $mTCO_2e$. In these cases, JPMorganChase sourced the EACs from outside market boundaries. These EACs therefore do not follow the application and retirement guidelines on geography established by the GHG Protocol Scope 2 Guidance and RE100.
      - Contractual instruments for electricity which included PPAs and vPPAs and which allow JPMorganChase to consume renewable electricity or purchase EACs.
      - Renewable supply contracts which included green tariffs (i.e., JPMorganChase buildings signed up for a local clean energy program).
  - Location-based emission factor(s):
    - US EPA eGRID subregions with 2023 data (January 2025).
    - DESNZ UK Government GHG Conversion Factors for Company Reporting (October 2024) using AR5 GWP.
    - For Australia January – June 2024: Australian Government Department of Climate Change, Energy, the Environment and Water Australian National Greenhouse Accounts Factors (February 2023).
    - For Australia July – December 2024 : Australian Government Department of Climate Change, Energy, the Environment and Water Australian National Greenhouse Accounts Factors (August 2024).

        - Ministry for the Environment. 2024. Measuring emissions: A guide for organisations: 2024 detailed guide. Wellington: Ministry for the Environment.
        - Environment and Climate Change Canada National Inventory Report 1990 – 2022: Greenhouse Gas Sources and Sinks in Canada (2024).
        - Ecoinvent Emission factor(s) for available Brazil grids (Ecoinvent 3.10) using AR5 GWP.
        - Other countries included in IEA's data set: IEA Emission factor(s), 1990-2022, for each country's grid (September 2024).
        - All other countries: IEA "Rest of World (RoW)" Emission factor, 1990-2022 (September 2024)
- Purchased electricity used in electric vehicles were calculated using the following approach:
    - Emissions were calculated based on distance traveled collected from internal records. Distance was converted into electricity consumption based on a kWh per mile traveled efficiency per the AFLEET Tool 2024 from the Argonne National Laboratory (January 2024).
    - We used the following emission factor(s) (market-based and location-based):
        - Same as the emission factor(s) applied in calculating Scope 2 location-based purchased electricity used in buildings.
- Steam, chilled water cooling, and district heat used in buildings were calculated using the following approach:
    - Where steam, chilled water cooling, or district heat consumption was available, emissions were calculated based on consumption data collected from third-party invoices.
    - Where steam, chilled water cooling, and district heat consumption was not available, an estimate was determined using square footage from internal building records multiplied by a fuel mix per square foot assumption (if applicable and as outlined below), and the median fuel EUI by building type from the DOE's BPD, accessed on April 20, 2023.
        - For buildings located in the US and buildings that are located in countries not covered by the IEA Energy Efficiency Indicators (2024), we assumed that building heat is provided entirely by natural gas, and therefore, no emissions were estimated for steam, chilled water cooling, and district heat.
        - For buildings located in all other countries (those covered by the IEA), we used the IEA Energy Efficiency Indicators (2024) to calculate fuel mix (i.e., proportion of buildings energy consumption by this fuel type).
    - We used the following emission factor(s) (market-based and location-based):
        - For steam:
            - US EPA Emission Factor Hub (June 2024).
        - For chilled water cooling:
            - Denmark and other EU-27 countries (countries in the European Union as defined by the European Commission): Johansen & Werner (2022) EFs (data from 2017) for CO_2, with the EFs for CH_4 and N_2O from the DESNZ and Department for Business, Energy & Industrial Strategy ("BEIS") UK Government GHG Conversion Factors for Company Reporting (June 2022).
            - US EPA Emission Factor Hub (June 2024) using AR5 GWP.
        - For district heat:
            - DESNZ UK Government GHG Conversion Factors for Company Reporting (October 2024) using AR5 GWP.

        - EU-27 countries (countries in the European Union as defined by the European Commission): Johansen & Werner (2022) EFs (data from 2017) for CO_2, with the EFs for CH_4 and N_2O from the DESNZ and BEIS UK Government GHG Conversion Factors for Company Reporting (June 2022).
        - All other countries: Ecoinvent Emission factor(s) for Heat - district or industrial – other than natural gas (Ecoinvent 3.10) using AR5 GWP.
- Acquisitions
    - Emissions from acquisitions where no activity, square footage, or spend data was available were calculated using acquired company revenue, industry type, and headquarters location, which were collected from internal records.
    - We used the following emission factor(s):
        - Revenue: CEDA 7 (2024) revenue emission factor(s) using AR5 GWP.

7. Verified Carbon Credits

- Carbon credits are sourced directly through carbon suppliers.
- JPMorganChase entered into purchase agreements with suppliers to address Scope 1 and 2 (non-electricity) GHG emissions. The purchased credits were verified by a third-party validation and verification body (VVB) and issued by one of the following registries: Carbon Registry, Verra - Verified Carbon Standard, Isometric, Climate Action Reserve, Carbon Sink, and Puro. Once verified and validated, suppliers retired credits in JPMorganChase's name and provided the retirement certificates as evidence. All carbon credits purchased have been retired.

8. Purchased electricity and purchased renewable electricity

- Purchased electricity
    - Calculated based on the actual and estimated consumption data from purchased electricity used in buildings and electric vehicles as described in Footnote 6.
    - Approximately 15% of reported purchased electricity was estimated.
    - Purchased electricity does not include energy consumption for two acquired companies; due to data limitations, emissions for these companies were estimated related to calculations using a revenue- and location-based approach.
- Purchased renewable electricity
    - Calculated based on the (1) renewable electricity purchased through renewable supply contracts and (2) application of unbundled EACs and contractual instruments which included PPAs and vPPAs as described in Footnote 6.