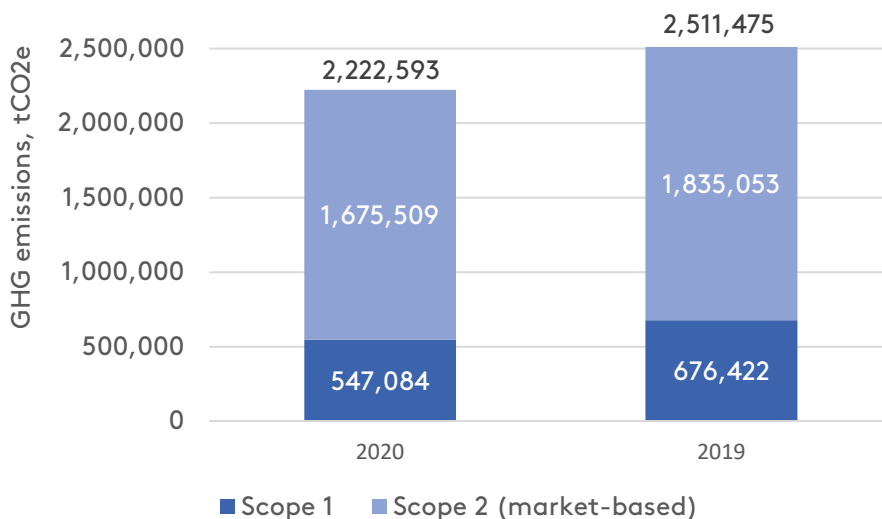


Comcast Corporation – 2021 Carbon Footprint Data Report

This Report includes data from calendar years 2019 and 2020. Learn more about our environmental commitments, goals and impact on the [Environment](#) page of our website.

Scope 1 and Scope 2 Market-Based Greenhouse Gas Emissions Data



During 2020, our businesses were impacted due to the novel coronavirus disease 2019 (“COVID-19”), which along with continued efforts to reduce our greenhouse gas emissions and increase our use of renewable energy, caused our global emissions in 2020 to decrease by 11.5% compared to 2019.

Organizational Boundaries

The energy and greenhouse gas (“GHG”) reporting boundary for the information in this report is for Comcast Corporation and its consolidated subsidiaries, including Comcast Cable Communications, NBCUniversal Media and Sky (collectively “Comcast”).

To establish the activities and relevant assets for purposes of its GHG inventory, Comcast used the Operational Control approach, as defined by the World Resource Institute (“WRI”) and World Business Council for Sustainable Development (“WBCSD”) Greenhouse Gas Protocol’s Corporate Accounting and Reporting Standard – Revised Edition (“GHG Protocol”). Per the GHG Protocol, Operational Control over an operation exists where a company has full authority to introduce and implement operating policies at the operation. Included within this scope are joint ventures where Comcast has greater than 50% ownership and also has operational control.

Data

The emission data in this report includes certain estimates that are based on a combination of measured and estimated emissions data using the best available information at the time, as described in additional detail in the table below. As with any projections or estimates, actual results or numbers may vary based upon factors such as variations in processes and operations, availability and quality of data and methodologies used for measurement and estimation. Changes to emission estimates may occur if updated data or emission methodologies become available.

Key performance indicator	Unit	2020	2019
Greenhouse gas emissions^{1,2}			
Scope 1 ^{3,4,5}	tCO ₂ e	547,084	676,422
Scope 2 (market-based) ^{5,6,7}	tCO ₂ e	1,675,509	1,835,053
Scope 2 (location-based) ^{5,6,8}	tCO ₂ e	1,743,564	1,863,480
Total Scope 1 and Scope 2 market-based	tCO ₂ e	2,222,593	2,511,475
Total Scope 1 and Scope 2 location-based	tCO ₂ e	2,290,648	2,539,902
Carbon intensity			
Revenue	\$ million	103,564	108,942
Carbon emissions per \$ million revenue ⁹	tCO ₂ e/\$ million	21.5	23.1
Energy			
Energy from fuel consumption ¹⁰	MWh	2,062,394	2,381,976
Grid electricity	MWh	4,434,339	4,740,096
On site renewable generation consumed and renewable attributes not sold	MWh	6,362	6,119
On site renewable generation consumed and renewable attributes sold	MWh	1,667	1,178
Total energy consumed ^{11,12}	MWh	6,504,762	7,129,369
Percent grid electricity ¹¹	%	68.2	66.5
Energy intensity			
Energy intensity per \$ million revenue	MWh/\$ million	62.8	65.4
Renewable energy¹³			
Energy attribute certificates (e.g., Renewable Energy Credit)	MWh	2,408	1,218
Supplier-specific renewable rates (e.g., Green Utility Tariff)	MWh	246,088	139,487
On site renewable generation consumed and renewable attributes not sold	MWh	6,362	6,119
Total renewable energy	MWh	254,858	146,824
Percent renewable energy ¹¹	%	3.9	2.1
Percent renewable electricity ¹¹	%	5.7	3.1

¹ During 2020, Comcast undertook meaningful efforts to improve the quality and accuracy of Scope 1 and Scope 2 emissions reporting, including emissions reported in 2019. Select historical data have been restated due to the addition of international facilities, joint ventures and certain other entities, as well as improvements to data collection and estimation methodologies utilized when actual data is not available.

² Comcast calculates its GHG emissions inventory based on the WRI/WBSCD GHG Protocol and the WRI/WBSCD GHG Protocol Scope 2 Guidance – an amendment to the GHG Protocol Corporate Standard. Comcast includes carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O) and hydrofluorocarbons (HFCs) for Scope 1 and CO₂, CH₄ and N₂O for Scope 2. Sulfur hexafluoride (SF₆) is not present in Comcast’s operations. Biogenic emissions are not reported in either Scope 1 or Scope 2 emissions. To calculate GHG emissions in CO₂ equivalents (CO₂e) for Scope 1 and Scope 2 emissions, Comcast uses the Global Warming Potentials (“GWP”) from the IPCC Fourth Assessment Report (“AR4”).

³ Scope 1 emissions include GHG emissions from stationary combustion sources such as from heating, emergency generators and cooking operations, mobile combustion sources from fleet, and fugitive and refrigerant emissions. For stationary combustion, fugitive and refrigerant emissions, actual data from invoices or similar records are used to calculate the respective GHG emissions. When actual data is not available for certain sources or locations, Comcast uses actual data available from other sites or assets as a proxy for estimations. For mobile combustion, direct fuel consumption data obtained through various mechanisms (e.g., fuel cards, fuel logs) is used to calculate GHG emissions. For vehicles, when actual fuel usage data is not available, Comcast estimates the usage using proxy data primarily based on actual data from similar fleet.

⁴ Emission factors used in the Scope 1 emissions calculations include U.S. EPA Climate Leaders, Emissions Factors for Greenhouse Gas Inventories (March 2020), UK Government (DEFRA/BEIS) Greenhouse Gas Conversion Factors for Company Reporting (June 2020), and the GHG Protocol’s Emission Factors from Cross-Sector Tools (March 2017).

⁵ Informed by the recommendations of the Task Force on Climate-related Financial Disclosures (“TCFD”).

⁶ Scope 2 emissions include GHG emissions from purchased electricity, heat, steam and cooling. For purchased electricity, heat, steam, and cooling, Comcast uses usage specified in invoices, when available, to calculate GHG emissions. Similar to Scope 1 emissions, when actual data is not available, Comcast estimates the usage using proxy data primarily based on actual data from similar facilities, or by utilizing industry standards such as the U.S. Energy Information Administration’s (“EIA”) Commercial Buildings Energy Consumption Survey (“CBECS”). Purchased electricity is also used for power supplies to power the cable network. Emissions from power supplies are calculated or estimated based on real-time monitoring data. Emissions from network or other equipment managed by third parties, or in facilities managed by third parties, is excluded.

⁷ For Scope 2 market-based emissions, Comcast follows the hierarchy outlined in Table 6.3 of the WRI/WBSCD GHG Protocol Scope 2 Guidance for selecting appropriate emission factors. In countries where reliable residual mix factors are not available, Comcast uses the regional grid averages to calculate market-based emissions. Emission factors used in Scope 2 market-based calculations include Association of Issuing Bodies: European Residual Mixes 2019 (August 2019) and applicable factors used in the location-based method.

⁸ To calculate Scope 2 location-based emissions, only regional and national grid mixes are utilized. Calculations do not reflect any renewable energy purchasing choices made by Comcast. Emission factors used in Scope 2 location-based method calculations include U.S. EPA's 2018 Emissions & Generation Resource Integrated Database ("eGRID2018"), U.S. EPA Climate Leaders, Emissions Factors for Greenhouse Gas Inventories (March 2020), IEA Statistics Data Service: 2017 Emission Factors (September 2020), UK Government (DEFRA/BEIS) Greenhouse Gas Conversion Factors for Company Reporting (June 2020).

⁹ Carbon intensity is calculated based on Scope 1 and Scope 2 market-based emissions.

¹⁰ Includes energy use related to natural gas, propane, diesel, gasoline, biodiesel, butane, kerosene, liquefied petroleum gas, liquefied natural gas, aviation gasoline, compressed natural gas, ethanol, jet fuel, heating, cooling and steam. Where applicable, fuel use is converted to MWh using high heating values.

¹¹ Comcast calculates these metrics in alignment with Sustainability Accounting Standards Board ("SASB") metric TC-TL-130a.1. For the renewable energy percentage, the numerator excludes grid-supplied renewable energy, which is outside of the control or influence of Comcast. The denominator is total energy consumption, inclusive of energy from direct fuel usage as well as purchased electricity, steam, heat and cooling. An alternate calculation of total renewable electricity using only total electricity consumption in the denominator is also presented.

¹² Total energy consumed converted to GJ is 23,417,144 GJ in 2020 and 25,665,729 GJ in 2019.

¹³ Comcast utilizes SASB's definition of renewable energy, which is "energy from sources that are replenished at a rate greater or equal to their rate of depletion, such as geothermal, wind, solar, hydro and biomass."