Environmental Data Calculation Standards

GHG emissions quantification is subject to uncertainty when measuring activity data, determining emission factors, and considering scientific uncertainty inherent in the Global Warming Potentials.
Hence, the selection of a different but acceptable measurement method, activity data, emission factors, and relevant assumptions or parameters could have resulted in materially different amounts being reported.

GHG emissions

	Items regarding environmental data such as the calculation methods, etc.
Scope1	Sum of (CO2 emissions derived from fuel consumption and GHG emissions other than CO2 emissions derived from fuel consumption (CO2 equivalent)) in each site *1-1、1-2、1-3
Scope2 (Location-based)	Sum of (Purchased volume of electricity and heat) in each site x (CO_2 emission factor) (Location-based) *1-1、1-2、1-4、1-6
Scope2 (Market-based)	Sum of (Purchased volume of electricity and heat) in each site x (CO2 emission factor) (Market-based) *1-1、1-2、1-4、1-5、1-6
Carbon offset by credits	Sum of (GHG offset volume by carbon credit retirement) in each site *1-7

*1-1: (Respective energy consumption) x (CO_2 emission factor per energy)
*1-2: For all global regions we used emission factors based on GHG Emissions Accounting and Reporting Manual (Ver. 5.0) by MOE.
For city gas, we used emission factors published by gas suppliers. Where necessary, we used replacement figures based on Emission Factors per Gas Supplier - FY2026 Supply Results by MOE.
In China, we used a steam emission factor based on GB/T 32150-2025 General Guidelines of the Greenhouse Gas Emissions Accounting and Reporting for Industrial Enterprises.
*1-3: Scope of GHGs and Global Warming Potentials (GWPs) used to determine CO_2 emissions were based on the Order for Partial Revision of the Order for Enforcement of the Act on Promotion of Global Warming Countermeasures (Cabinet Order No. 20 of 2026).
*1-4: A unit of electrical energy was used for electricity. Emission factors for each country were set by the Panasonic Group based on factors listed in CO_2 Emissions from Fuel Combustion published by the International Energy Agency (IEA). For fiscal 2026, IEA Emissions Factors 2025 was used.
*1-5: Using the emission factors for each country listed in 1-4, for purchased electricity in Japan in fiscal 2026, we used Emission Factors per Electric Utility - FY2026 Supply Results by MOE.
*1-6: Heat includes steam and hot water.
*1-7: Carbon credits based on the certification system such as J-Credits, Verified Carbon Standard (VCS), and Clean Development Mechanism (CDM) are used.

Decarbonization Efforts

Avoided CO_2 emissions ~~for society~~	Sum of avoided emissions per product group, calculated according to Panasonic group's own avoided-emissions categories ① to ④. For details of each category, please refer to the Panasonic Group Sustainability Data Book. (https://holdings.panasonic/global/corporate/sustainability/data-book.html) ① Electrification: Difference in CO_2 emissions between fossil-fuel-driven products and our electrical products *2-1 that deliver the equivalent effects. {(Lifetime CO_2 emissions per fossil-fuel-driven product) − (Lifetime CO_2 emissions per our electrical product)} x (Annual sales units) ② Replacement: Difference in CO_2 emissions between old and new electrical products that deliver the equivalent effects (Lifetime CO_2 emissions from an existing product on the market − Lifetime CO_2 emissions from our product) x (Annual sales units) ③ Solution: Difference in CO_2 emissions between the case when our product or service *2-2 is introduced and when it is not. (CO_2 emissions reduced over the lifetime by introduction of our product or service) x (Annual sales units) ④ Others: Difference in CO_2 emissions between the case when our product or service*2-3 is introduced and when it is not. (CO_2 emissions reduced over the lifetime by introduction of our product or service) x (Annual sales units)
Number of Net-zero CO_2 emission factories	Number of sites where the sum of Scope 1, Scope 2 (Market-based), and carbon offset by credits is zero.

*2-1: Lithium-ion batteries for in-vehicle, Electrically-assisted bicycles
*2-2:Storage battery systems for data centers
*2-3: Ethical packaging, Alkali dry batteries

Energy Consumption

Energy Consumption (Electricity from renewable energy)	Sum of (100% Renewable energy-sourced electricity consumption) in each site *3-1、3-2、3-3
Energy Consumption (Fuel consumption from renewable energy sources (biofuel, etc.))	Sum of (Renewable energy-sourced fuel consumption) in each site *3-4
Energy Consumption (Electricity from non-renewable energy)	Subtract sum of (Purchased renewable energy-sourced electricity certificates) in each site from sum of (Purchased general electricity consumption) *3-3
Energy Consumption (Fuel consumption from non-renewable energy sources (fuel, heat, steam, etc.))	Sum of (Non-renewable energy-sourced fuel consumption) in each site *3-4

*3-1: The calculation includes offsite renewable PPA (solar, onshore wind, geothermal) procurement.
*3-2:100% renewable energy-sourced electricity includes deemed 100% renewable energy contracts that use a renewable energy certificate.
*3-3: Electricity certificates such as Non-Fossil Certificates (NFC), International RECs (I-REC) and Green Electricity Certificates (GEC) are used.
*3-4: Electricity is calculated in kWh. Fuel is converted to a unit of electrical energy, which is 1 kWh = 3.6 MJ. The figures are then combined.

Recycling / Waste

Wastes (Total)	Sum of (wastes including revenue-generating waste) in each site

Water Consumption

Water withdrawal (Total)	Sum of (water withdrawal (total water withdrawal from municipal water/industrial water, groundwater, rivers/lakes)) in each site

Environmental Management

Release/transfer of substances requiring management	Sum of chemical substance releases and transfers as defined in the "Panasonic Group Chemical Substance Management Ranking Guidelines (Factory Version)" in each site. *4-1

*4-1: https://holdings.panasonic/global/corporate/sustainability/environment/chemical.html