



GE HealthCare

Greenhouse Gas Emissions Accounting Methodology

Updated August 2023

Methodology

The GE HealthCare Greenhouse Gas (GHG) Inventory follows the World Resources Institute/ World Business Council for Sustainable Development (WRI/WBCSD) Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard, Revised Edition (the Protocol). GE HealthCare utilizes the Protocol for all definitions, assumptions, and calculations discussed in this document unless explicitly stated otherwise.

GE HealthCare reports under the “control” approach for emissions in Scopes 1 and 2, as defined in the Protocol, from sources over which it has operational control. At a high level, the Protocol defines Scope 1 emissions as direct GHG emissions from sources that are owned or controlled by the company, Scope 2 emissions as emissions from the use of purchased energy consumed by the company, and Scope 3 emissions as emissions that are a consequence of the activities of the company but occur from sources not owned or controlled by the company. GE HealthCare reports this data with the unit of CO₂-equivalent, which is the universal unit of measurement to indicate global warming potential of GHG emissions.

Inventory scope

The GHG Inventory includes data from individual facilities (primarily manufacturing facilities), additional rooftops (primarily offices, warehouses, and small service /repair shops), and the fleets that GE HealthCare operates. The inventory scope is adjusted annually as a result of divestiture, closure, or consolidation with other facilities, acquisitions, newly established facilities, or when there is a change that affects the reporting criteria of an existing facility.

GE HealthCare’s worldwide operational Scope 1 and 2 GHG emissions are the total of three categories:

- Data from the largest facilities in the Company (Large Sites)
- Estimates for smaller facilities (Small Sites)
- Data from fleet, comprising of vehicles operated by GE HealthCare.

Emission factors and global warming potentials

GE HealthCare uses emission factors to determine the GHG emissions from units of activity data such as fuel combustion, electricity consumption, and direct releases of green house gases to the atmosphere. Emissions factors from the U.S. Environmental Protection Agency (EPA) Mandatory GHG Reporting Rule (40 CFR part 98) are used to calculate GHG emissions for combustion of fuel. The 100-year global warming potential (GWP) for CH₄, N₂O, HFCs, SF₆ and PFCs are also taken from the U.S. EPA Mandatory GHG Reporting Rule (40 CFR part 98). Emissions of CH₄ and N₂O from the combustion of fuels are calculated using emissions factors obtained from EPA Climate Leaders program documents. Other direct emission factors are obtained from WRI and Intergovernmental Panel on Climate Change (IPCC) documents when U.S. EPA factors are not available.

For both location-based and market-based Scope 2 calculations, GE HealthCare uses U.S. EPA eGRID sub-regional average emission factors to calculate indirect emissions resulting from the purchase of electricity in the United States, while indirect emissions resulting from the purchase of electricity outside of the U.S. are calculated using countrywide average factors obtained from the International Energy Agency (IEA). Electricity emissions for the base year were calculated using EPA eGRID and IEA factors available at the time of calculation. Electricity emissions for the current reporting year are calculated using the most recent grid emissions factors available from the EPA and IEA as of the time GHG emissions calculations are run for the reporting year.

Large Sites

GE HealthCare maintains a GHG Inventory database run by a cloud-based environmental management system. This database is used to collect the necessary detailed inventory data from the following types of facilities:

- Industrial facilities, together referred to as “Large Sites” (manufacturing sites, refurbishment centers)
- Service/repair centers with greater than 50 employees
- Offices with greater than 200 employees
- Warehouses larger than 100,000 sq. ft

The GHG Inventory database allows each Large Site enter the quantity of electricity and fuel used by fuel type and the unit of measure based on its own electricity and fuel purchase and/or combustion records as well as data on direct emissions of GHGs. The software system calculates emissions, in CO₂ equivalents, for each emission category and also computes the total for all emission categories.

The software system calculates GHG emissions by multiplying the quantity of fuels or electricity consumed by the appropriate emission factor. Direct emissions resulting from any on-site generation of electricity for export off-site are included in the organization’s direct emissions.

The Inventory includes sites in Europe and Asia that import steam or hot water from third-party cogeneration plants or district heating plants. Each of these sites determine the quantity and type of fuel used by the third-party plant to generate the steam or hot water purchased by the site. This quantity of fuel is then multiplied by the appropriate emission factor to determine the indirect emissions from steam or hot water purchases. Where the fuel quantity or thermal efficiency is not available from utility vendors, a default thermal efficiency of 80% is used to calculate the quantity of fuel needed to generate the steam or hot water that was purchased based on guidance provided in the WRI/WBCSD Emission Calculation Tool.

Direct-process emissions of GHGs (e.g. CO₂, CH₄, N₂O, HFCs, SF₆, PFCs and other GHGs) are entered directly in units of mass and converted to metric tons of CO₂ equivalent using the EPA’s published 100-year GWP coefficients. For certain processes, site-specific knowledge of the process and/or emissions rates are used to determine actual emissions. Alternatively emissions are based on the quantities documented in purchase records.

GE HealthCare quantifies biomass-related emissions but, as prescribed by the protocol, does not include CO₂ emissions from biomass combustion as part of the Scope 1 emission numbers. Rather this is reported separately.

Large Sites are responsible for at least 70% of the organization's Scope 1 and 2 GHG emissions. To ensure adequate monitoring of footprint data from Large Sites, GE HealthCare collects all data from this group of facilities at least quarterly.

Facilities that do not meet the criteria defined above for Large Sites are categorized as Small Sites. GE HealthCare Small Sites comprise primarily of small offices.

Small Sites

GE HealthCare does not collect detailed emissions data for Small Sites due to the difficulty and expense that would be associated with such an effort in comparison to the relative significance of the emissions in GE HealthCare's overall GHG emissions inventory.

Emissions for these Small Sites are calculated based on the Commercial Buildings Energy Consumption Survey (CBECS) estimates, published by the U.S. Energy Information Administration. Using these estimates, GE HealthCare estimates the electricity and natural gas usage for a facility based on the type, location, and square footage of the facility. GHG emissions are calculated using this estimate of energy usage and the appropriate emission factor as described above.

Mobile sources

GE HealthCare calculates emissions from motor vehicles operated by GE HealthCare that may be:

- Centrally managed by third-party contractors globally
- Leased or rented from third parties; or
- Owned by GE HealthCare businesses

The scope for Mobile Sources also includes any emissions from any aircraft that the company owns. Mobile source emissions are calculated by obtaining fuel use and/or battery power consumption data which is translated back into electricity consumption data, and applying appropriate emission factors. Where fuel supply for a vehicle is carried out at a GE HealthCare Large Site, the emissions resulting from the fuels dispensed are included in the emissions data for the Large Site in question.

Sources not included

The following GHG emission sources are not included in the Inventory because GE HealthCare does not have operational control:

- Minority-owned joint ventures
- Majority-owned joint ventures where GE HealthCare does not have operational control
- Any aircraft, motor vehicles that may be owned by GE HealthCare, but leased to and controlled by others

The following operational emission sources are not included in GE HealthCare's GHG Inventory because contributions from these sources have been estimated to be very small:

- Motor vehicles controlled by GE HealthCare but not centrally managed through a third-party fleet contractor
- Motor vehicles owned by GE HealthCare businesses outside the United States, Canada, and Puerto Rico that are not refueled at GE HealthCare properties
- Remedial activities operationally controlled by GE HealthCare.

Base year adjustment

GE HealthCare established 2019 as the base year for measuring progress toward achieving our current GHG emissions-reduction goals/commitments. As outlined in the Protocol, base year GHG- emissions data are adjusted to reflect the changes in GE HealthCare structure and determine the real change in emissions and energy use of the current portfolio of operations however, mobile sources are not base year adjusted and interim years are not necessarily adjusted.

Quality assurance

For Scope 1 and 2, GE HealthCare is continuing to work toward increasing the accuracy of its GHG Inventory. It has modified its GHG Inventory collection database to simplify it, developed numerous guidance documents and an internal guidance website, and has provided extensive training for internal users on the Inventory. As an added measure, GE HealthCare performs data-quality reviews on its GHG Inventories, including quarterly side-by-side comparisons of GHG emissions across years for Large Sites, to identify and understand the reasons for significant differences (e.g. changes in production, fuel, manufacturing processes, etc.). Small Sites and Fleet footprint data is computed once a year and extensive data quality reviews are done before numbers are published. When data-quality issues are identified, they are analyzed and gaps are corrected where necessary. Internal Audit resources audit the appropriateness of source data, verifiability of the data, data quality and methodology(ies) used to process and report GHG data according to industry standard frameworks such as TCFD.

Please see our independent audit report available in the Appendix of our Sustainability Report.

GHG and energy efficiency projects

GE HealthCare is focused on generating value and outcomes for our customers, the Company, people, and the planet. One way the organization measures this is to track energy efficiency and GHG reduction projects. Each project logged includes descriptive information, projected costs, and estimated GHG and cost savings.

