



NTT Ltd Basis of Reporting

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The purpose of this document is to outline the process for greenhouse gas (GHG) emissions data collection which is aligned to the GHG Protocol Corporate Accounting and Reporting Standard.

Organizational boundary

NTT Ltd follows the Operational Control approach to defining the organizational boundary for sustainability reporting. This approach covers any operation which NTT Ltd has full authority to introduce or implement its operating policies.

In line with NTT Financial Accounting, in FY21 this includes:

Our Regions:

- Europe
- Americas
- Middle East and Africa (MEA)
- Asia-Pacific (APAC)

Our Service Divisions and Functions:

- Managed Cloud and Infrastructure Services (MCIS)
- Managed Network and Collaboration Services (MNCS)
- Central Functions
- Data Centers and Infrastructure (DCI)
- Chief Digital Office (CDO)
- NTT Security

Reporting period

The reporting period for our GHG data is aligned with our financial reporting period, 1 April to 31 March, with a base year of FY21.

Greenhouse Gas Emissions

Under the GHG Protocol Corporate Accounting and Reporting Standard, greenhouse gas emissions are classified into three categories: Scope 1, Scope 2 and Scope 3 with all emissions reported in units of carbon dioxide equivalent (CO₂e).

For non-CO2 GHGs (CH4, N2O, HFCs, PFCs and SF6), conversions were made using the AR5 published International Panel on Climate Change (IPCC) global warming potentials (GWP) for a 100-year period without climate carbon feedbacks.

Scope 1

Scope 1 emissions are direct emissions from operationally controlled sources. They are further broken down into three categories:

- Stationary combustions: Onsite combustion for generating electricity, steam or heat.
- Mobile combustions: Combustion of fuels for use of company vehicles.
- Fugitive emissions: Direct emissions of GHGs from refrigeration and air conditioning systems, fire suppression systems, and the purchase and release of industrial gases.

Scope 2

Scope 2 emissions are indirect emissions from the generation of purchased energy. This includes:

- Purchased electricity
- Purchased heat
- Purchased cooling
- Purchased steam

Scope 3

Scope 3 emissions are all indirect emissions (not included in Scope 1 or 2) that occur in the value chain of the reporting company, including both upstream and downstream emissions. There are 15 emission categories under this scope:

Category	Category description
Cat. 1: Purchased goods and services	Extraction, production, and transportation of goods and services purchased or acquired
Cat. 2: Capital goods	Extraction, production, and transportation of capital goods purchased or acquired
Cat. 3: Fuel and energy related activities (not included in Scope 1 or 2)	Extraction, production, and transportation of fuels and energy purchased or acquired by the reporting company, not already accounted for in scope 1 or scope 2

Category	Category description
Cat. 4: Upstream transport and distribution	Transportation and distribution of products and services purchased by the reporting company between a company's tier 1 suppliers and its own operations (in vehicles and facilities not owned or controlled by the reporting company)
Cat. 5: Waste generated in operations	Disposal and treatment of waste generated in the reporting company's operations
Cat. 6: Business travel	Transportation of employees for business-related activities
Cat. 7: Employee commuting	Transportation of employees between their homes and their worksites
Cat. 8: Upstream leased assets	Operation of assets leased by the reporting company (lessee)
Cat. 9: Downstream transport and distribution	Transportation and distribution of products sold
Cat. 10: Processing of sold products	Processing of intermediate products sold
Cat. 11: Use of sold products	End use of goods and services sold
Cat. 12: End-of-life treatment of sold products	Waste disposal and treatment of products sold
Cat. 13: Downstream leased assets	Operation of assets owned by the reporting company (lessor) and leased to other entities
Cat. 14: Franchises	Operation of franchises
Cat. 15: Investments	Operation of investments (including equity and debt investments and project finance)

For NTT Ltd., the relevant categories are 1-9, 11, 12 and 15, with the most material being categories 1,2,3 and 11.

Methodology

Scope 1

Fuel and gas amount used for both stationary and mobile combustions are collected in Litres or cubic meters (m³) from company assets directly. These amounts are then multiplied by the respective energy source emission factor gathered from the GHG Protocol Calculation Tool.

Fugitive emissions data is calculated by collecting the amount of refrigerant leaked in kg and multiplying it with its respective Global Warming Potential.

Scope 2

Purchased heat, steam and cooling emissions are calculated by collecting the amount of heat, steam and cooling purchased and multiplying it with the emission factor from the GHG Protocol Calculation Tool.

For purchased electricity, there are two methods of reporting emissions.

1. Location-based method

This method calculates the emissions based on the emissions intensity of the local grid area where the electricity usage occurs. The amount of electricity purchased in kWh is multiplied against the grid emission factor for the respective location obtained from the International Energy Agency (IEA) Emission Factors list.

2. Market-based method

This method calculated the specific emissions the company is responsible for through its purchasing decisions. This method considers renewable energy purchased and generated as zero emissions provided suitable evidence (contractual or otherwise) is available. The remaining non-renewable energy purchased in kWh is multiplied with the supplying company's emission factor*.

* Grid emission factors from the International Energy Agency (IEA) are used when data is unavailable.

Both methods are used for reporting according to the GHG Protocol and Science Based Targets initiative (SBTi). However, the more reliable method and best practice method is the market-based method, and that is the one we have used to report GHG emissions in our annual reporting.

Scope 3

Category	Methodology
Cat. 1: Purchased goods and services	Purchase Order spend data obtained from NTT Ltd. Finance function is categorized into Industry Category and inputted in the Quantis Scope 3 Screening Tool. The Tool applies the average global factors to produce emissions estimate. Transportation and distribution services that are included in the overall purchase of goods from suppliers remain in this category. See Cat. 4 for further explanation.
Cat. 2: Capital goods	Purchase Order spend and Capital Expenditure data obtained from NTT Ltd. Finance function is categorized into Industry Category and inputted in the Quantis Scope 3 Screening Tool. The Tool applies the average global factors to produce emissions estimate.
Cat. 3: Fuel and energy related activities (not included in Scope 1 or 2)	<p>For well-to-tank (WTT) emissions, purchased fuels and energies provided by assets are multiplied with their respective WTT emission factors obtained from DEFRA conversion factors 2021 or IEA Emission Factors.</p> <p>For transmission and distribution (T&D), purchased energy for electricity provided by assets are multiplied with their respective T&D loss emission factor obtained from DEFRA conversion factors 2017.</p>
Cat. 4: Upstream transport and distribution	Logistics suppliers are identified in the Purchase Order spend. These are classified as upstream transport and distribution as opposed to Purchased goods and services because it is captured as a separate service spend. Data is then inputted into Quantis Scope 3 Screening Tool to obtain an emissions estimate.
Cat. 5: Waste generated in operations	Total spend on waste from the Purchase Order extract is inputted into the Quantis Scope 3 Screening tool to obtain an emissions estimate.
Cat. 6: Business travel	Data provided by Global Procurement function on business travel by mode of transport was collected from partner travel agencies. Based on previous year expenditures, this does not represent the full total, therefore Total business travel expenditure by mode of transport is extrapolated to estimate total.
Cat. 7: Employee commuting	The maximum number of employees (>10,000) is inputted into the Quantis Scope 3 Screening Tool to obtain an emissions estimate (estimating that average employee emits 1700 kgCO ₂ e/year).
Cat. 8: Upstream leased assets	Scope 1 and 2 emissions from leased assets are included in Scope 1 and 2 due to operational control of such assets, and therefore not included here.

Category	Methodology
Cat. 9: Downstream transport and distribution	Transport and distribution services are primarily upstream and therefore relevant spend is categorized in Cat. 4.
Cat. 11: Use of sold products	Because NTT Ltd. re-sell products from suppliers, primary product-level emissions data from main supplier is utilized. Estimates indicate this data represents 70% of all hardware products. This is extrapolated to remaining 30% in order to obtain an estimate of the total.
Cat. 12: End-of-life treatment of sold products	Because NTT Ltd. re-sell products from suppliers, primary product-level emissions data from main supplier is utilized. Estimates indicate this data represents 70% of all hardware products. This is extrapolated to remaining 30% in order to obtain an estimate of the total.
Cat. 13: Downstream leased assets	Emissions from the operation of assets that are owned by the reporting company (acting as lessor) and leased to other entities in the reporting year that are not already included in scope 1 or scope 2. For IT load, purchased electricity dedicated to client IT load in our data centers is multiplied with the market-based emission factor.
Cat. 15: Investments	Relevant investment, based on screening conducted based on FY21 consolidated accounts, is inputted into the Quantis Scope 3 Screening Tool.

Power Consumption Data

Power consumption refers to the electricity consumed by NTT Ltd.’s offices and data centers. For data centers, power consumption is classified into IT and non-IT loads. IT loads represents the power used by the servers and racks in the data hall, whereas non-IT loads represent the power used by all the auxiliary systems other than the IT equipment in the data hall.

A major proportion of the power consumption for NTT Ltd. is through its data centers. Actual meter readings were used to record the consumption values where available. In other instances, the consumption values were recorded based on the utility bills for the respective facilities.

Renewable Energy

Energy supply from renewable sources such as solar, wind, hydropower, geothermal and bioenergy are considered as Renewable Energy. NTT Ltd. uses GHG Protocol market-based scope 2 data hierarchy for

choosing the emission factors for various types of power supply. Based on that, the following instruments are used to qualify renewable energy:

1. Renewable Energy Certificates (RECs) or Guarantees of Origin (GoOs)
2. Electricity contracts such as Power Purchase Agreements (PPAs) that convey RECs or (GoOs)
3. Contracts that convey attributes to the entity consuming the power where certificates do not exist
4. Green energy tariffs
5. Renewable energy generated at site or near site and directly linked to the site