



Report of Independent Accountants

To the Management of Merck & Co., Inc., Rahway, NJ, USA

We have reviewed the accompanying management assertion of Merck & Co., Inc., Rahway, NJ, USA (the "Company") that the greenhouse gas (GHG) emissions metrics (the "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. The Company'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, performed tests of mathematical accuracy of computations on a sample basis, read relevant policies to understand terms related to relevant information about the metrics, 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.

As discussed in management's assertion, the Company has estimated 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 the Company's management assertion in order for it to be fairly stated.

A handwritten signature in black ink that reads "PricewaterhouseCoopers LLP". The signature is written in a cursive, flowing style.

Florham Park, New Jersey
August 18, 2025

Merck & Co., Inc. Management Assertion

Overview

With respect to the greenhouse gas (GHG) emissions metrics (the "metrics") reported by Merck & Co., Inc., Rahway, NJ, USA, which is known as MSD outside the United States (U.S.) and Canada (the "Company"), for the year ended December 31, 2024 (fiscal year 2024), management asserts that such metrics are presented in accordance with the assessment criteria set forth below.

Management is responsible for the completeness, accuracy, and validity of the metrics and for the selection of the criteria, which management believes provide an objective basis for measuring and reporting on the metrics.

Our Company uses the operational control approach as outlined in 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*, and *Corporate Value Chain (Scope 3) Accounting and Reporting Standard: Supplement to the GHG Protocol Corporate Accounting and Reporting Standard* (from hereon referred to as the "GHG Protocol") to report direct and indirect GHG emissions. This includes emissions from our offices, warehouses, laboratories, and utility and manufacturing/production facilities incorporated in the Environmental Data Collection (EDC) program (collectively referred to as "EDC Sites") as well as our vehicle fleet and aircraft. Our reporting also includes estimated emissions from all other Company facilities which do not report actual direct or indirect emissions which are known as "Non-EDC" sites.

Actual or estimated emissions from sites acquired during the fiscal year are included for the full year regardless of the date of acquisition.

The following sources of emissions are excluded from our reporting as they are each estimated to be less than 0.5% of total reported Scope 1 and 2 GHG emissions:

- Acetylene
- Thermal oxidizers
- Dry ice
- Process emissions

Our Company considers the principles and guidance of the GHG Protocol to guide the criteria to assess, calculate, and report direct and indirect GHG emissions. Carbon dioxide equivalent emissions are determined by multiplying actual or estimated activity data by relevant emission factors and global warming potentials (GWPs) from the Intergovernmental Panel on Climate Change's (IPCC) Sixth (AR6) Assessment Report.

Fiscal 2024 Metric and Metric Value (for the year ended December 31)

Management Assessment Criteria

Scope 1 GHG Emissions

Fiscal 2024 Metric and Metric Value (for the year ended December 31)

Scope 1 GHG Emissions (Metric tons of carbon dioxide equivalent emissions (Mt of CO_{2e})) 721,200

Management Assessment Criteria

Direct GHG emissions from mobile combustion of fossil fuels used by our on-site vehicle fleet are quantified based on usage obtained from meter readings, use logs or bills issued to each site.

Direct GHG emissions from mobile combustion of fossil fuels used by our off-site vehicle fleet are quantified based on total miles driven obtained from fuel card data, expense reports, or reports from external fleet management companies. It is assumed that all vehicles are fueled with gasoline and operate at the fuel efficiency of 23 miles per gallon based on the average miles traveled per gallon of fuel consumed for passenger vehicles per the U.S. Department of Transportation Federal Highway Administration.

Direct GHG emissions from stationary combustion of fossil fuels used by our sites (natural gas, fuel oil, and biofuel) are quantified based on usage obtained from meter readings, use logs or bills issued to each site.

Direct GHG emissions from fugitive sources (refrigerants) used by our sites are quantified based on release data obtained from internal refrigerant replacement records.

Direct GHG emissions from mobile combustion of fossil fuels used by our aircraft are quantified based on gallons of jet fuel consumed obtained from the fuel use reported in internal flight logs.

GHGs included as part of the reported Scope 1 GHG emissions are carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF₆), and nitrogen trifluoride (NF₃). Emissions by individual gas is not disclosed as a majority of CO_{2e} relates to CO₂.

Our emission factors and estimation methodology are described in the “Emission Factors” and “Estimation Methodology” sections.

Fiscal 2024 Metric and Metric Value (for the year ended December 31)

Management Assessment Criteria

Scope 2 GHG Emissions (Location-Based)

Scope 2 GHG Emissions (Location-Based) 323,800
(Mt of CO₂e)

Indirect GHG emissions from the generation of purchased electricity, steam, and cooling water.

Indirect GHG emissions from purchased electricity, which includes electricity used by our on-site electric vehicle fleet, and steam used by our sites are quantified based on usage obtained from meter readings or bills issued to each site.

Indirect GHG emissions from purchased cooling water used by our sites are quantified based on usage obtained from meter readings or bills issued to each site.

GHGs included as part of the reported Scope 2 GHG emissions are CO₂, CH₄, and N₂O. Emissions by individual gas is not disclosed as a majority of CO₂e relates to CO₂.

Our emission factors and estimation methodology are described in the “Emission Factors” and “Estimation Methodology” sections.

Scope 2 GHG Emissions (Market-Based)

Scope 2 GHG Emissions (Market-Based) 163,000
(Mt of CO₂e)

Indirect GHG emissions from the sources listed in the “Scope 2 GHG Emissions (Location-Based)” metric above.

Renewable electricity from off-site renewable electricity generation (utility contracts) and renewable electricity associated with energy attribute certificates (EACs) secured by power purchase agreements (PPA) or virtual power purchase agreements (VPPA) were accounted for as zero emissions. Any remaining electricity usage not associated with a utility contract or EAC was converted to emissions using the market-based emission factors (or location-based emission factors if market-

Fiscal 2024 Metric and Metric Value (for the year ended December 31)

Management Assessment Criteria

based do not exist). The EACs applied to fiscal year 2024 have been retired by our Company.

Our emission factors and estimation methodology are described in the “Emission Factors” and “Estimation Methodology” sections.

Total Reported Scope 1 and 2 GHG Emissions (Market-Based)

Total Reported Scope 1 and 2 GHG Emissions (Market-Based) (Mt of CO₂e) 884,200

Calculated as follows: (Scope 1 GHG Emissions + Scope 2 GHG Emissions (Market-Based)).

Scope 3 GHG Emissions

Category 3, Fuel and energy-related activities not included in Scopes 1 & 2 (Mt of CO₂e) 170,400

Indirect GHG emissions from fuels consumed and energy purchased by our Company (market-based). This includes:

- Upstream emissions (well-to-tank (WTT)) from purchased fuels consumed (i.e., mobile and stationary combustion of fossil fuels)
- Upstream emissions (WTT) from the generation of purchased electricity and steam
- Transmission and distribution (T&D) losses from the generation of purchased electricity and steam

Upstream emissions (WTT) are quantified based on activity data for purchased fuels consumed (natural gas, fuel oil, biofuel, and fleet fuel) from Scope 1 GHG emissions and activity data for purchased electricity and steam from Scope 2 GHG emissions. T&D losses are quantified based on activity data for purchased electricity and steam from Scope 2 GHG emissions. Activity data for purchased cooling water is excluded. GHGs included as part of the reported Scope 3, Category 3 GHG emissions are CO₂, CH₄, and N₂O. Emissions by individual gas is not disclosed as a majority of CO₂e relates to CO₂.

Fiscal 2024 Metric and Metric Value (for the year ended December 31)

Category 6, Employee business travel (Mt of CO₂e) 197,200

Management Assessment Criteria

Our emission factors are described in the “Emission Factors” section.

Indirect GHG emissions from air, car rental, and rail transportation for business-related activities of our employees are quantified in CO₂e by inputting travel data provided by American Express (AMEX) Global Business Travel into a third-party calculator (Thrust Carbon Ltd, Thrust Calculator as of January 1, 2025).

Indirect GHG emissions from reimbursable car travel are quantified based on reported mileage obtained from employees.

GHGs included as part of the reported Scope 3, Category 6 GHG emissions are CO₂, CH₄, and N₂O. Emissions by individual gas is not disclosed as a majority of CO₂e relates to CO₂.

Our emission factors are described in the “Emission Factors” section.

Emission Factors

The table below outlines the emission factor sources used in the fiscal year 2024 GHG emissions calculations. If applicable, the month and/or year in parentheses indicates the publication date of the emission factors.

Metric	Emissions Source Type	Emissions Factor Employed
Scope 1 GHG Emissions	Combustion of fossil fuels, which includes fuel oil (fuel oil, gasoline, diesel fuel, kerosene, propane gas, and liquefied petroleum gas), natural gas, fleet fuel (jet fuel and gasoline), and biofuels (CH ₄ and N ₂ O only) Fugitive sources (refrigerants)	Combustion of fossil fuels: U.S. Environmental Protection Agency (EPA), Center for Corporate Climate Leadership, Emission Factors for Greenhouse Gas Inventories (January 2025) Fugitive sources (refrigerants): GWPs obtained from IPCC GWP values, manufacturer specification sheets, or percent calculation based on IPCC GWP for refrigerant blends
Scope 2 GHG Emissions (Location-	Purchased steam and cooling water (All countries)	Supplier-specific emission factors or emissions factors obtained from the U.S. EPA, Center for Corporate Climate Leadership, Emission Factors for Greenhouse Gas Inventories (January 2025)

Metric	Emissions Source Type	Emissions Factor Employed
Based and Market-Based)		
Scope 2 GHG Emissions (Location-Based and Market-Based)	Purchased electricity (U.S.)	U.S. EPA, Emissions & Generation Resource Integrated Database (eGRID) with 2023 data (January 2025)
Scope 2 GHG Emissions (Location-Based)	Purchased electricity (All other countries)	<p>United Kingdom (U.K.): Department for Energy Security and Net Zero, 2024 U.K. Government GHG Conversion Factors for Company Reporting, version 1.1 (October 2024)</p> <p>Canada: Environment and Climate Change Canada, National Inventory Report 1990-2023: Greenhouse Gas Sources and Sinks in Canada (2025)</p> <p>All other countries: International Energy Agency (IEA), Emissions Factors 2024 (September 2024)</p>
Scope 2 GHG Emissions (Market-Based)	Purchased electricity (All other countries)	<p>Europe: Association of Issuing Bodies, 2023 European Residual Mixes, Version 1.0 (May 2024)</p> <p>Australia: Australian Government Department of Climate Change, Energy, the Environment and Water, Australian National Greenhouse Accounts Factors 2024 (2024)</p> <p>All other countries: Same as the “Purchased electricity (All other countries)” location-based emission factors</p>
Scope 3 GHG Emissions - Category 3, Fuel and energy-related activities not included in Scopes 1 & 2	Purchased fuels consumed (Scope 1) and purchased electricity and steam (Scope 2)	<p>Upstream emissions WTT from purchased fuels consumed (Scope 1) and steam (Scope 2): DESNZ, 2024 UK Government GHG Conversion Factors for Company Reporting, version 1.1 (October 2024)</p> <p>Upstream emissions WTT from purchased electricity (Scope 2) and T&D losses from purchased electricity and steam: IEA, Emissions Factors 2024 (September 2024)</p>

Metric	Emissions Source Type	Emissions Factor Employed
Scope 3 GHG Emissions - Category 6, Employee business travel	Air, car rental, rail, and reimbursable car travel	Air, car rental, and rail travel: Utilized emission factors embedded within the Thrust Carbon Ltd, Thrust Calculator as of January 1, 2025 Reimbursable car travel: U.S. EPA, Center for Corporate Climate Leadership, Emission Factors for Greenhouse Gas Inventories (January 2025)

Estimation Methodology

For Non-EDC sites, estimation was used to determine activity data where activity data is not readily available as noted in the table below. These estimates account for approximately 1% of reported Scope 1 GHG emissions, approximately 8% of reported Scope 2 GHG emissions (Location-Based), and approximately 17% of reported Scope 2 GHG emissions (Market-Based, representative of emissions after contractual agreements have been applied). No estimates were necessary for EDC sites, vehicle fleet, or aircraft.

Metric & Emissions Source Type	Estimation Methodology
Scope 1 GHG Emissions (natural gas) and Scope 2 GHG Emissions (purchased electricity)	Estimated by multiplying the square footage for each Non-EDC site by the site energy use intensity from the Energy Star U.S. Energy Use Intensity by Property Type (August 2024). This energy is assumed to be split with 67% dedicated to electricity consumption and 33% dedicated to natural gas consumption for heating based on guidance published by the U.S. Energy Information Administration in the 2018 Commercial Buildings Energy Consumption Survey. Where square footage was not available or unknown, an average square footage was applied based on the actual square footage of Non-EDC sites of similar site type (e.g., warehouse, office).

Uncertainty

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.