## Independent Assurance Statement to Merck and Co Inc.

ERM Certification and Verification Services Inc. ('ERM CVS') was engaged by Merck and Co Inc. ('Merck') to provide assurance in relation to the indicators set out below and presented in its 2021 CDP Climate Change Questionnaire (the 'CDP Questionnaire') for the year ending 31st December 2020.

Engagement summary	
Scope of our assurance engagement	Whether the 2020 selected GHG emissions data are fairly presented, in all material respects, with the reporting criteria:  Scope 1 GHG emissions [metric tons CO <sub>2</sub> e]  Scope 2 GHG emissions [metric tons CO <sub>2</sub> e] – location and market-based methods  Scope 3 GHG emissions [metric tons CO <sub>2</sub> e] for the following categories:  Category 3: Fuel and energy-related activities not included in Scope 1 or Scope 2  Category 6: Business travel (primary travel vendor and reimbursable mileage only)  Category 11: Use of sold products
Reporting criteria	WBCSD/WRI GHG Protocol (including the Corporate Accounting and Reporting Standard, and the Corporate Value Chain (Scope 3) Accounting and Reporting Standard) for the Scope 1, 2 and 3 GHG emissions, and Merck's internal reporting criteria and definitions (where relevant).
Assurance standard	ERM CVS' assurance methodology, based on the International Standard on Assurance Engagements ISAE 3000 (Revised).
Assurance level	Limited assurance.
Respective responsibilities	Merck is responsible for preparing the CDP Questionnaire and for the collection and presentation of the information within it.  ERM CVS' responsibility is to provide a conclusion on the agreed scope based on the assurance activities performed and exercising our professional judgement.

## **Our conclusion**

Based on our activities, as described below, nothing has come to our attention to indicate that the 2020 selected GHG emissions data listed under 'Scope' above and stated below, are not fairly presented, in all material respects, with the reporting criteria.

Scope 1 GHG emissions:

738,400 metric tons CO<sub>2</sub>e
Scope 2 GHG emissions (location based method):
392,400 metric tons CO<sub>2</sub>e
Scope 2 GHG emissions (market based method):
255,400 metric tons CO<sub>2</sub>e
Scope 3 GHG emissions – Category 3:
203,250 metric tons CO<sub>2</sub>e
Scope 3 GHG emissions – Category 6
(primary travel vendor and reimbursable mileage only):
33,494 metric tons CO<sub>2</sub>e
Scope 3 GHG emissions – Category 11:
205,500 metric tons CO<sub>2</sub>e

## Our assurance activities

A multi-disciplinary team of sustainability and assurance specialists performed a range of assurance procedures which varied across the indicators covered by our assurance engagement, as follows:

- Virtual interviews with relevant Merck staff and subject matter experts to understand and evaluate the relevant data collection and reporting processes, as well as internal review procedures used for the selected disclosures;
- Walkthrough of the GHG emissions data management systems with relevant personnel;
- A review at corporate level of a GHG emissions calculation outputs;
- A review of systems and processes for reporting and consolidating Scope 3 GHG emissions including activity data underlying the calculations and emission factors applied;
- Virtual site visits to 4 operational sites (Ireland; Australia; United States; and Puerto Rico) to evaluate consistency of reported
  annual data through interviews with site-specific contacts and a detailed review of evidence for the activity data underlying the
  calculations of the Scope 1 and Scope 2 GHG emissions;
- An analytical review of data and a check on the completeness and accuracy of the corporate data consolidation, including conversion factors and emission factors used; and
- Reviewing the presentation of information relevant to the scope of our work in the CDP Questionnaire to ensure consistency with our findings.

## The limitations of our engagement

The reliability of the assured information is subject to inherent uncertainties, given the available methods for determining, calculating or estimating the underlying information. It is important to understand our assurance conclusion in this context.

Due to COVID-19 travel restrictions, we planned our assurance engagement to include virtual site visits. While we believe this approach does not affect our limited assurance conclusion above, we draw attention to the possibility that if we had undertaken in person visits we may have identified errors and omissions in the assured information that we did not discover through the alternative assurance program.

Beth C.B. hyle

Beth Wyke, Partner, Head of Corporate Assurance 27 July 2021

ERM Certification and Verification Services, Inc. <a href="https://www.ermcvs.com">www.ermcvs.com</a>
<a href="mailto:post@ermcvs.com">post@ermcvs.com</a>



ERM CVS is a member of the ERM Group. The work that ERM CVS conducts for clients is solely related to independent assurance activities and auditor training. Our processes are designed and implemented to ensure that the work we undertake with clients is free from bias and conflict of interest. ERM CVS and the staff that have undertaken work on this assurance engagement provide no consultancy related services to Merck and Co Inc in any respect.