

Independent Limited Assurance Statement to Merck & Co., Inc.

ERM Certification & Verification Services Incorporated (“ERM CVS”) was engaged by Merck & Co., Inc. (“Merck”) to provide limited assurance in relation to the selected information set out below and presented in the Merck 2022/2023 Environmental, Social & Governance (ESG) Progress Report (the “Report”).

Engagement summary	
Scope of our assurance engagement	<p>Whether the 2022 data for the following selected indicators are fairly presented in the Report, in all material respects, in accordance with the reporting criteria.</p> <ul style="list-style-type: none"> • Total Scope 1 GHG emissions [metric tonnesCO2e] • Total Scope 2 (location-based) GHG emissions [metric tonnes CO2e] • Total Scope 2 (market-based) GHG emissions [metric tonnes CO2e] • Total Scope 3 GHG emissions [metric tonnesCO2e] comprised of the following categories: <ul style="list-style-type: none"> ○ Category 3 - Fuel-and-energy-related activities not included in Scope 1 or Scope 2 ○ Category 6 - Business travel ○ Category 11 - Use of sold products • Total Global water withdrawal [million cubic meters] • Total Third Party water withdrawal [million cubic meters] • Total Pumped water withdrawal (Groundwater and Surface water) [million cubic meters] • Total Global water discharge [million cubic meters]
Reporting period	1 January 2022 to 31 December 2022
Reporting criteria	<ul style="list-style-type: none"> • 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 greenhouse gas (GHG) emissions. • Merck’s internal reporting criteria and definitions for water metrics.
Assurance standard and level of assurance	<p>We performed a limited assurance engagement, in accordance with the International Standard on Assurance Engagements ISAE 3000 (Revised) ‘Assurance Engagements other than Audits or Reviews of Historical Financial Information’ issued by the International Auditing and Standards Board.</p> <p>The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for a reasonable assurance engagement and consequently, the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained had a reasonable assurance engagement been performed.</p>
Respective responsibilities	<p>Merck is responsible for preparing the Report and for the collection and presentation of the information within it, and for the designing, implementing and maintaining of internal controls relevant to the preparation and presentation of the Report.</p> <p>ERM CVS’ responsibility is to provide conclusions to Merck on the agreed scope based on our engagement terms with Merck, the assurance activities performed and exercising our professional judgement. We accept no responsibility, and deny any liability, to any party other than Merck for the conclusions we have reached.</p>

Our conclusion

Based on our activities, as described below, nothing has come to our attention to indicate that the 2022 data and information for the disclosures listed under ‘Scope’ above are not fairly presented in the Report, in all material respects, in accordance with the reporting criteria.

Our assurance activities

Considering the level of assurance and our assessment of the risk of material misstatement of the Report a multi-disciplinary team of sustainability and assurance specialists performed a range of procedures that included, but was not restricted to, the following:

- Assessing the appropriateness of the reporting criteria for the Report
- Interviews with management representatives responsible for managing the selected issues.
- Interviews with relevant staff to understand and evaluate the relevant management systems and processes (including internal review and control processes) used for collecting and reporting the selected disclosures.
- A review at corporate level of a sample of qualitative and quantitative evidence supporting the reported information.
- An analytical review of the year-end data submitted by all locations included in the consolidated 2022 group data for the selected disclosures which included testing the completeness and mathematical accuracy of conversions and calculations, and consolidation in line with the stated reporting boundary.
- Visit to Merck's operations in New Jersey, United States and a virtual visit to Merck's facility in Brinny, Ireland to review source data and local reporting systems and control.
- Confirming conversion and emission factors and assumptions used.
- Reviewing the presentation of information relevant to the scope of our work in the Report to ensure consistency with our findings.

The limitations of our engagement

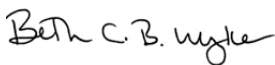
The reliability of the assured information is subject to inherent uncertainties, given the available methods for determining, calculating, or estimating the underlying information. It is important to understand our assurance conclusions in this context.

Our independence, integrity, and quality control

ERM CVS is an independent certification and verification body accredited by UKAS to ISO 17021:2015. Accordingly, we maintain a comprehensive system of quality control, including documented policies and procedures regarding compliance with ethical requirements, professional standards, and applicable legal and regulatory requirements. Our quality management system is at least as demanding as the relevant sections of ISQM-1 and ISQM-2 (2022).

ERM CVS applies a Code of Conduct and related policies to ensure that its employees maintain integrity, objectivity, professional competence, and high ethical standards in their work. Our processes are designed and implemented to ensure that the work we undertake is objective, impartial and free from bias and conflict of interest. Our certified management system covers independence and ethical requirements that are at least as demanding as the relevant sections of Parts A & B of the IESBA Code relating to assurance engagements.

The team that has undertaken this assurance engagement has extensive experience in conducting assurance on environmental, social, ethical and health and safety information, systems and processes, and provides no consultancy related services to Merck in any respect.



Beth Wyke
Head of Corporate Assurance Services
Malvern, PA

June 29, 2023

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