

# Independent Limited Assurance Report 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 2023/2024 Environmental, Social & Governance (ESG) Progress Report (the “Report”).

| Engagement summary                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|--------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Scope of our assurance engagement</b>         | <p>Whether the 2023 data for the following selected indicators are fairly presented in the Report, in all material respects, in accordance with the reporting criteria.</p> <p><b>GHG Emissions</b></p> <ul style="list-style-type: none"> <li>• Total Scope 1 GHG emissions [metric tonnes CO2e]</li> <li>• Total Scope 2 GHG emissions – location-based method [metric tonnes CO2e]</li> <li>• Total Scope 2 GHG emissions – market-based method [metric tonnes CO2e]</li> <li>• Total Scopes 1 &amp; 2 GHGs (market-based) emissions [metric tonnes CO2e]</li> <li>• Scope 3 GHG emissions [metric tonnes CO2e] comprised of the following categories:               <ul style="list-style-type: none"> <li>○ Category 3 - Fuel- and-energy-related activities not included in Scope 1 or Scope 2</li> <li>○ Category 6 - Business travel</li> <li>○ Category 11 - Use of sold products</li> </ul> </li> </ul> <p><b>Water Indicators</b></p> <ul style="list-style-type: none"> <li>• Total global water withdrawal [million cubic meters]</li> <li>• Total third-party water withdrawal [million cubic meters]</li> <li>• Total pumped water withdrawal (Groundwater and Surface water) [million cubic meters]</li> <li>• Total global water discharge [million cubic meters]</li> </ul> <p>Our assurance engagement does not extend to information in respect of earlier periods or to any other information included in the Report.</p> |
| <b>Reporting period</b>                          | 1 January 2023 to 31 December 2023                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Reporting criteria</b>                        | <ul style="list-style-type: none"> <li>• Merck’s 2023 Basis of Reporting (reporting criteria and definitions);</li> <li>• WBCSD/WRI GHG Protocol A Corporate Accounting and Reporting Standard (2004, as updated in 2015 with the Scope 2 Guidance);</li> <li>• WBCSD/WRI GHG Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Assurance standard and level of assurance</b> | <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 Assurance 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>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Respective responsibilities</b>               | <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 a conclusion to Merck on the agreed scope based on our engagement terms with Merck, the assurance activities performed and exercising our professional judgement.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

## Our conclusion

Based on our activities, as described below, nothing has come to our attention to indicate that the 2023 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:

- Evaluating the appropriateness of the reporting criteria for the selected information;
- Interviewing relevant staff to understand and evaluate the management systems and processes (including internal review and control processes) used for collecting and reporting the selected disclosures;
- Reviewing of a sample of qualitative and quantitative evidence supporting the reported information at a corporate level;
- Performing an analytical review of the year-end data submitted by all locations included in the consolidated 2023 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;
- Conducting a sample of site-level reviews, including an in-person visit to Merck's operations in North Carolina, United States and virtual visit to Boxmeer, Netherlands to review source data and local reporting systems and controls;
- Evaluating the 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 the IESBA Code relating to assurance engagements.

ERM CVS 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.

### **Our Observations**

We have provided Merck with a separate management report with our detailed (non-material) findings and recommendations. Without affecting the conclusion presented above, we have the following key observation(s):

- The scope of this assurance engagement does not include all categories of Total Scope 3 GHG emissions, of which Categories 1 – Purchased Goods and Services and Category 2 – Capital Goods are material contributors.



Andrea Duque  
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July 10, 2024

On behalf of:

ERM Certification & Verification Services Incorporated  
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