

# Independent Assurance Report

ERM Certification & Verification Services Incorporated ("ERM CVS") was engaged by Vertex Pharmaceuticals Inc ("Vertex") to provide limited and reasonable assurance in relation to the selected information set out below and presented in the Vertex 2024 Corporate Responsibility Report (the "Report").

## ENGAGEMENT SUMMARY

### Scope of our assurance engagement

Whether the 2024 data for the following key performance indicators are fairly presented in the Report, in all material respects, in accordance with the reporting criteria.

#### **Environmental Indicators**

Greenhouse gas emissions:

- Scope 1 GHG emissions (from direct energy use) from the Fan Pier facility [MT CO<sub>2</sub>e]
- Scope 2 (location-based) emissions from the Fan Pier facility [MT CO<sub>2</sub>e]
- Scope 2 (market-based) emissions from the Fan Pier facility [MT CO<sub>2</sub>e]
- Total Scope 1 GHG emissions (from direct energy use) [MT CO<sub>2</sub>e]
- Total Scope 2 GHG emissions (location-based) [MT CO<sub>2</sub>e]
- Total Scope 2 GHG emissions (market-based) [MT CO<sub>2</sub>e]
- Total GHG Emissions (Scope 1 and Scope 2 (market-based)) [MT CO<sub>2</sub>e]
- Energy from renewable sources [%]

Waste:

- Non-hazardous waste [tons]
- Non-hazardous waste diverted from landfill (through recycling or composting) [tons]
- Non-hazardous waste recycled or composted [%]
- Waste diverted from landfill [%]
- Hazardous waste [tons]
- Laboratory and manufacturing waste recycled [tons]

#### **Safety Indicators**

- Total Recordable Incident Rate (TRIR) (number of injuries/illnesses per 200,000 hours)
- Days Away, Restricted or Transferred (DART) (number of cases per 200,000 hours)

#### **Prior year restatements: Restatement of the metrics for 2022 baseline and 2023 data**

- Total Scope 1 GHG emissions (from direct energy use) [MT CO<sub>2</sub>e]
- Total GHG Emissions (Scope 1 and Scope 2 (market-based)) [MT CO<sub>2</sub>e]

Our assurance engagement does not extend to information in respect of earlier periods or to any other information included in the Report.

### Reporting period

1st January 2024 to 31st December 2024  
1st January 2022 to 31st December 2022 (restated data for baseline)  
1st January 2023 to 31st December 2023 (restated data)

<b>Reporting criteria</b>	<ul style="list-style-type: none"> <li>• Vertex's Basis of Reporting: Environmental and Safety Data as published in the 'Responsibility' section of Vertex's website</li> <li>• The GHG Protocol Corporate Accounting and Reporting Standard (WBCSD/WRI Revised Edition 2015) for Scope 1 and Scope 2 GHG emissions</li> <li>• GHG Protocol Scope 2 Guidance (An amendment to the GHG Protocol Corporate Standard (WRI 2015) for Scope 2 GHG emissions</li> <li>• OSHA Injury and Illness Recordkeeping and Reporting definitions</li> </ul>
<b>Assurance standard and level of assurance</b>	<p>We performed a limited and reasonable 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><b>Reasonable assurance</b></p> <ul style="list-style-type: none"> <li>• Scope 1 and Scope 2 (location- and market-based) emissions from the Fan Pier facility [MT CO<sub>2</sub>e]</li> </ul> <p><b>Limited assurance</b></p> <ul style="list-style-type: none"> <li>• All other scopes set out under 'Scope of our assurance engagement', above.</li> </ul>
<b>Respective responsibilities</b>	<p>Vertex is responsible for the preparation, collection and presentation of the Reports in accordance with the reporting criteria, and for determining that the reporting criteria are suitable for the legitimate information needs of its stakeholders. Furthermore, Vertex is responsible for designing, implementing and maintaining governance oversight and internal controls to enable reporting that is free from material misstatement.</p> <p>ERM CVS' responsibility is to provide an opinion to the Directors of Vertex on the agreed scope based on our engagement terms with Vertex, the assurance activities performed and exercising our professional judgement. Our procedures aimed at obtaining reasonable assurance have been performed with a high, but not absolute, level of assurance which means we may not detect all material errors.</p>

## OUR OPINION

In our opinion, total Scope 1 and Scope 2 (location- and market-based) emissions from the Fan Pier facility are prepared, in all material respects, in accordance with the reporting criteria.

## OUR CONCLUSION

Based on our activities, as described below, nothing has come to our attention to indicate that the key performance indicators, as listed under 'Scope of our assurance engagement' above, except for total Scope 1 and Scope 2 (location- and market-based) emissions from the Fan Pier facility, are not fairly presented in the Disclosure, in all material respects, with the reporting criteria.

## OUR ASSURANCE ACTIVITIES

Considering the risk of material misstatement in the Reports 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 used for the Reports;
- Interviewing senior management representatives responsible for managing the selected issues;
- Evaluating relevant reporting systems and processes (including internal control processes);

- Reviewing a sample of qualitative and quantitative evidence supporting the reported information at corporate level;
- Performing an analytical review of the year-end data submitted by all locations included in the consolidated 2024 group data for the Selected Information which included testing the completeness and mathematical accuracy of conversions and calculations, and consolidation in line with the stated reporting boundary;
- Evaluating the conversion and emission factors and assumptions used;
- Conducting one in-person site visit to Fan Pier, Boston site to review systems and source data;
- Reviewing the restated totals for 2022 and 2023 metrics to ascertain completeness and accuracy of the data;
- Reviewing the presentation of the assured information to ensure consistency with our findings.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

## 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 Vertex in any respect.

April, 14 2025

Malvern, PA

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## **Basis of Reporting: Environmental and Safety Data**

1. Overview
2. Reporting Criteria
3. Revision History

### **1. Overview**

This Basis of Reporting document provides detail on the scope of reporting and the reporting criteria against which Vertex Pharmaceuticals, Inc prepares and reports environmental data for the annual Corporate Responsibility report, the corporate website, and other public disclosures. Reported figures includes estimates where actual data is unavailable. Estimates are based on historical data, spend data or other proxies.

We aim to update this document on a periodic basis alongside our annual Corporate Responsibility Report to reflect any changes in methodology. This document was last updated April 2025.

Vertex reports the following environmental and safety metrics:

- Greenhouse Gas (GHG) Emissions
  - Scope 1
    - Combustion of Fuels (including natural gas, diesel, propane gas, liquified petroleum gas, and gasoline)
    - Transportation of materials, products, and employees (internal fleet and vehicles/ shuttles)
    - Fugitive and Process Emissions
  - Scope 2
    - Generation of Purchased Electricity
  - Scope 3
    - Category 1: Purchased Goods and Services
    - Category 2: Capital Goods
    - Category 3: Fuel and Energy Activities
    - Category 4: Upstream Transportation and Distribution
    - Category 5: Waste Operations
    - Category 6: Business Travel
    - Category 7: Employee Commuting
    - Category 9: Downstream Transportation and Distribution
    - Category 12: End of Life
    - Category 13: Downstream Leased Assets

- Waste:
  - Total Waste
  - Total Hazardous Waste
  - Total Non-hazardous Waste
  - Nonhazardous Waste Diverted from Landfill
  - % Nonhazardous waste Recycled or Composted
  - Laboratory and Manufacturing Waste Recycled
  - % Total Waste Diverted from Landfill
- Total Water Withdrawn
- % Square Feet of Buildings Operated That are Green Certified
- % Energy from Renewable Resources
- % Vertex-Operated Facilities with Water Stewardship Assessments Completed
- Safety
  - Total Recordable Incident Rate (TRIR)
  - Days Away, Restricted or Transferred (DART)

The reported metrics cover the previous calendar year (January 1st – December 31st).

Acquisitions, as aligned with the reporting boundary, are included as soon as the data becomes available but no later than 12 months after acquisition, unless otherwise stated. Divestments are removed from the data from date of divestment and retrospectively where a full business is divested. In alignment with the GHG Protocol, organic site closures are not retrospectively removed from the data.

The measuring and reporting of environmental performance data involves a degree of estimation and the use of assumptions. Significant is defined as greater than 5% of company emissions. Historic data is restated where material changes are made due to data improvements (e.g., refined estimation or calculation methodologies). Narrative is provided in the Corporate Responsibility report to explain adjustments to prior year numbers.

## 2. Reporting Criteria

### 2.1 Scope and Scope2 GHG Emissions:

**2.1.1 Scope 1 and Scope 2 GHG Emissions Inventory:** Environmental data is collected and calculated at our operationally controlled sites using the Persefoni Climate Management and Accounting Platform. This includes stationary fuel combustions (natural gas usage, biogas usage, diesel usage, and propane gas usage); mobile fuel combustions (internal fleet), fugitive emissions (refrigerant usage and process gas usage) and purchased electricity. In cases of office facilities where Vertex is a partial occupant, emissions factors are used in the calculations based on the square footage occupied.

#### 2.1.2 Scope 1 GHG Emissions Factors and Global Warming Potential (GWP):

- Fuel Emissions Factors associated to emissions factors for natural gas and other fuels, used for generators and US vehicles, are taken from Environmental Protection Agency (EPA) *Emissions Factors for Greenhouse Gas Inventories* for the current year. Fuel Emissions Factors associated to emissions factors for biogas and other fuels used for generators at United Kingdom are taken from *UK Government GHG Conversion Factors for the Company Reporting* for the current year.
- Natural gas emission factors for international Commercial Offices are taken from country specific emission factor set or the *International Energy Agency (IEA) Emission Factors* database for the current year when any country specific set is not available. Natural Gas Intensities for commercial offices associated with each individual location are taken from the most current US Energy Information Administration Commercial Buildings Energy Consumption Survey. Fuel Emissions Factors associated to fuels used for sales fleet in America are taken from Environmental Protection Agency (EPA) *Emissions Factors for Greenhouse Gas Inventories* for the current year. Fuel Emissions Factors associated to emissions factors to fuel used for international sales fleet, outside from America, are taken from *UK Government GHG Conversion Factors for the Company Reporting* for the current year.
- GWP values used for fugitive emissions calculations are taken from *IPCC Fifth Assessment Report, 2014 (AR5)*.

#### 2.1.2 Scope 2 GHG Emissions Factors (Location-Based and Market-Based):

- Scope 2 Location-Based GHG Emissions: Electricity emissions factors for our Research and Development (R&D), and manufacturing sites are taken from *EPA e-Grid Subregions* and *UK Government GHG Conversion Factors for the Company Reporting*. Electricity emissions factors for all international Commercial Offices are taken from country specific emission factor set for the current year or the *International Energy Agency (IEA) Emission Factors* database for the current year when any country specific set is not available. Electricity intensities for all commercial offices are taken from the most current US Energy Information Administration Commercial Buildings Energy Consumption Survey.
- Scope 2 Market-Based GHG Emissions: Electricity emission factors for our Research and Development (R&D), and manufacturing sites are taken from Renewable Energy Certificates (RECs), Renewable Energy Guarantees of Origin (REGOs), Power Purchase Agreements

(PPAs), from renewable energy supplier, or country specific residual mix factors is applied when available. If data is not available, Location-Based EPA e-GRID emissions factors is used as the source of current year for US sites and UK Government GHG Conversion Factors for the Company Reporting as the source of current year for UK sites. International Commercial Offices apply location-based IEA factors and electricity intensities from the most current US Energy Information Administration Commercial Buildings Energy Consumption Survey if country residual mix factors data is not available..

## 2.2 Scope 3 GHG Emissions:

2.2.1 *Scope 3 GHG Emissions Inventory*: Supply Chain and environmental data is collected and calculated at our operationally controlled regions from Scope 3 categories that are considered relevant and material for our operations using the Persefoni Climate Management and Accounting Platform.

2.2.2 *Scope 3 GHG Emissions Factors and Global Warming Potential (GWP)*: The following emission factors set and GWP are used to calculate Scope 3 GHG Emissions:

- Exiobase- Monetary 3.8.2
- UK DEFRA Conversion Factors
- US EPA - EEIO Factors 2.0.1-411 AR5
- US EPA Emission Factor Hub
- Australian National Greenhouse Accounts (NGA) Factors
- Canada NIR- Generation Factor
- US EPA- eGRID Sub Region

## 2.3 Waste Metrics:

2.3.1 Waste metrics represent waste associated with our operations. This includes small scale renovations but excludes expansions and new building construction. All waste metrics for all our sites are calculated by the EHSS team. Emissions associated to waste operations are calculated using the Persefoni Climate Management and Accounting Platform.

2.3.2 Hazardous waste is defined by the country, region, or state where the Vertex facility is located.

2.3.3 Waste diverted from landfill includes both hazardous and non-hazardous waste via recycling, composting, fuel blending and incineration for repurposing or energy recovery. Waste data is a combination of actual data and some estimates.

## 2.4 Safety Metrics:

2.4.1 Safety Metrics are obtained in accordance with OSHA 29 CFR Part 1904, “*Recording and Reporting Occupational Injuries and Illness*” Safety information is collected globally, and injury metrics are calculated by the occupational health team.

2.4.2 TRIR is defined as the percentage of employees injured per year (assuming 2000-hours work year).

2.4.3 DART is defined as the number of Days Away, Restricted, or Transferred as a result of injuries or illnesses on the job (assuming 2000-hours work year). Lost Workday Rate is defined as the number of lost workdays per 100 full-time employees in any given time frame.

2.4.4 Total Hours Worked is defined as total of hours that the employee is working but excluding two shutdowns period.

2.5 Total Water Withdrawn:

2.5.1 Water Withdrawn metrics represent water associated with all facilities where we have operational control, including our research and development sites in the United States (MA, CA, RI) and the U.K. (Oxford), and our manufacturing site in Boston, MA. These facilities account for approximately 91% of Vertex's operations based on square footage. All water metrics are calculated by the EHSS team.

2.6 Percentage (%) of Energy from Renewable Resources:

2.6.1 Percentage of energy from renewable resources is defined as the proportion of total energy consumption derived from renewable sources compared to all energy sources for the reporting period.

2.6.2 Renewable Energy data is collected and calculated at our operationally controlled sites using the Persefoni Climate Management and Accounting Platform using a customized renewable energy emission factor set as an identifier. Sources of renewable energy collected include:

- Bioethanol fuel used for mobile combustion (Scope 1 Emissions)
- Biomethane gas for stationary fuel combustion (Scope 1 Emissions)
- Solar, wind, hydro, or renewable energy mix used for purchased electricity (Scope 2 Market-Based Emissions).

2.6.3 The metric is calculated by dividing the consumption of energy from renewable sources, using applicable renewable energy emission factor set, by the total energy consumption, and then multiplying by 100 to express it as a percentage.

2.6.4 The following emission factors set and GWP are used to represent energy data that is sourced from renewable energy, per applicable Green Tariff schemes, fleet lease, PPAs, REGOS, and/or RECs:

- NPCC New England Region Market-Based
- WECC California Region Market-Based
- UK Electricity Government GHG Conversion Factors
- Biomethane Emission Factor (UK DEFRA)
- Bioethanol Emission Factor (UK DEFRA)

2.7 Assurance and Verification:

2.7.1 All data and reports collected for metrics are reviewed by Vertex's Corporate Environmental, Health, Safety and Sustainability team for accuracy and transparency prior to internal and external data assurance.

2.7.2 GHG Scope 1 and Scope 2 emissions, Waste metrics (excluding Scope 3 waste emissions), and Safety metrics are audited externally by a third-party firm annually. The data is reported in our annual Corporate Responsibility report and to CDP Climate Change and Water.

### 3.0 Revision History

Name of Author	Version/Date	Description of Revisions
J. Isaac	3.0/04APR2025	<p><b>Section 1, 2.5:</b> Replace water consumption with water withdrawn to align with CDP Water.</p> <p><b>Section 2.1.2:</b> Updated Scope 2 Market-Based Emissions to include country specific residual mix application.</p> <p><b>Section 2.4.4:</b> Added new step to include definition for Total Hours Worked.</p> <p><b>Section 2.6</b> Section added to include definition, methodology, and calculation for % Energy from Renewable Resources.</p> <p><b>Step 2.7.1.:</b> Step added for internal verification prior to internal and external assurance.</p>
J. Isaac	2.0/31MAR2024	<p><b>Section 1.0:</b></p> <ul style="list-style-type: none"> <li>• Scope 1 updated to include additional subcategories added to GHG footprint.</li> <li>• Scope 3 updated to remove category 8. Upstream leased assets are not applicable for GHG footprint. Related assets are reporting under Scope 1 and Scope 2 emissions.</li> <li>• Removed Employees Commuting from Key Performance Indicators</li> <li>• Added % Energy from Renewable Resources as new Key Performance Indicator</li> <li>• Moved Waste and Safety overview to Section 2.0 for clarity.</li> </ul> <p><b>Section 2.0:</b></p> <ul style="list-style-type: none"> <li>• Re-ordered section for clarity and to include reporting criteria for Scope 1, 2, and 3 GHG emissions.</li> <li>• Added Waste and Safety sections removed from section 1.</li> <li>• Added water reporting criteria.</li> </ul>
J. Isaac	1.0 / 01JUN2023	New Document