

Attachment B Verification Statement

1. Introduction

Air Products and Chemicals Inc. (Air Products) retained GHD Limited (GHD) to conduct a verification of the 2021 greenhouse gas (GHG) emissions inventory (Emissions Inventory) for Air Products' global operations.

Air Products has prepared their Emissions Inventory for 2021 in accordance with the requirements of The Greenhouse Gas Protocol Corporate Accounting and Reporting Standard (Revised Edition) (GHG Protocol).

GHD understands that Air Products is preparing the GHG Report as part of its annual sustainability report, which is published on Air Products' website, and is also reported to multiple sustainability surveying agencies, including the Carbon Disclosure Project (CDP). As part of this submission, Air Products requires verification of its GHG Report.

The Emissions Inventory is a component of Air Products' annual Sustainability Report. This report is published annually on Air Products' website for stakeholders and investors, as part of Air Products' long-term sustainability and climate change mitigation policies. A verification statement, prepared by an accredited Verification Body (VB), is included as part of the Sustainability Report.

2. Verification Objective, Standards and Criteria

The objective of the verification was for GHD to provide Air Products with an opinion on whether the Emissions Inventory contained no material discrepancies and was prepared in general accordance with ISO 14064.

GHD applied the following criteria for this verification:

- ISO 14064 Greenhouse gases - Part 1: Specification with guidance at the organization level for quantification and reporting of greenhouse gas emissions and removals, ISO, March 2006 (ISO 14064-1)
- ISO 14064 Greenhouse gases - Part 3: Specification with guidance for the greenhouse gas assertions, ISO, March 2006 (ISO 14064-3 Specification)*
- The Greenhouse Gas Protocol – A Corporate Accounting and Reporting Standard, World Resources Institute/World Business Council for Sustainable Development (the GHG Protocol)

* GHD expects to be fully accredited to ISO 14064-3:2019 in 2022 as per the ANAB accreditation schedule.

The verification was conducted to a limited level of assurance.

The quantitative materiality for this verification is set at plus or minus five percent of the reported 2021 emissions as per general industry practice and recommended by the GHG Protocol. In addition, a series of discrete errors, omissions or misrepresentations or individual or a series of qualitative factors, when aggregated may be considered material.

3. GHD Accreditation

GHD is accredited by the ANSI National Accreditation Board (ANAB) under ISO 14065 as a Greenhouse Gas Validation and Verification Body. Our ANAB accreditation can be viewed at the ANAB GHG Accreditation Services website.

(<https://www.ansi.org/Accreditation/environmental/greenhouse-gas-validation-verification/AllDirectoryDetails?&prgID=200&OrgId=1735&statusID=4>)

4. Verification Scope

The verification included emissions from Scopes 1 (Direct) and 2 (Indirect) across Air Products' global operations.

A GHG Emission Estimation Protocol has been prepared for each distinct operational activity of the company. In each protocol, the anticipated Direct and Indirect emissions sources are identified (as well as the necessary input data, key assumptions, and calculation algorithms to be employed).

Direct Emission Source types include:

- Hydrogen/Carbon Monoxide (HYCO) Production Protocol – Fuel Combustion (CO₂, CH₄, and N₂O), HYCO Process Emissions (CO₂)
- HYCO – Partial Oxidation – Fuel Combustion (CO₂, CH₄, and N₂O), HYCO Process Emissions (CO₂)
- HYCO Syngas Purification – Fuel Combustion (CO₂, CH₄, and N₂O) and Process Emissions (CO₂) [Process Vents]
- HYCO – Carbon Monoxide Sales (CO₂)
- HYCO – CO₂ Capture and Sales (CO₂)
- HYCO – PHG (Prism Hydrogen Generator) Hydrogen Production
- Air Separation Unit (ASU) Production – Fuel Combustion (CO₂, CH₄, and N₂O), [Scope – Fuel-fired Vaporizer and AC units]
- Steam Production Protocol – Fuel Combustion (CO₂, CH₄, and N₂O) [Scope – Boiler]
- Corporate Transportation – Fuel Consumption (CO₂, CH₄, and N₂O) [Scope – Truck Fleet, Auto Fleet, and Jet Fuel consumption]
- General Manufacturing, Warehouse and Offices – Fuel Combustion (CO₂, CH₄, and N₂O)
- Miscellaneous Diesel Equipment – temporary, intermittent, and portable sources (CO₂, CH₄, and N₂O)
- Hydrofluorocarbons (HFCs), Perfluorocarbons (PFCs) and Sulphur Hexafluoride (SF₆) – estimated emissions across applicable sources

For Scope 2 (Indirect) emissions, as per the provided 2020 CDP report and GHG Inventory Management Plan, the Indirect Emission Sources (energy import/export) include the following:

- Hydrogen/Carbon Monoxide (HYCO) Production Protocol – Electricity Consumption (CO₂, CH₄, and N₂O)
- HYCO – Partial Oxidation Protocol – Electricity Consumption (CO₂, CH₄, and N₂O)
- HYCO Syngas Purification Protocol – Electricity Consumption (CO₂, CH₄, and N₂O)
- Air Separation Unit (ASU) Production Protocol – Electricity Consumption (CO₂, CH₄, and N₂O)
- Helium Production Protocol – Electricity Consumption (CO₂, CH₄, and N₂O)
- Steam Production Protocol – Electricity Consumption (CO₂, CH₄, and N₂O)
- General Manufacturing, Warehouse and Offices Protocol – Electricity Consumption (CO₂, CH₄, and N₂O)

- Steam Import (CO₂, CH₄, and N₂O based upon BTUs of steam energy consumed and default efficiency of steam boiler. Steam boiler fuel sources include natural gas, blast furnace off-gas and coal)

The verification included emission sources from the facilities listed in Appendix A.

The reporting period is between January 1, 2021 and December 31, 2021.

5. Verification Methodologies

GHD used the verification procedures detailed in the Verification Plan to assess the following:

1. Accuracy and completeness of annual GHG emissions
2. Uncertainty of external data sources used
3. Emission assumptions
4. Accuracy of emission calculations
5. Potential magnitude of errors and omissions

To sustain a risk-based assessment, the GHD Project Team identified and determined risks related to annual GHG emissions during both the desk reviews and the follow-up interviews. The GHD Project Team particularly focused on the accuracy and completeness of provided information. The components of the document review and follow-up interviews were:

- Document Review:
 - Review of data and information to confirm the correctness and completeness of presented information.
 - Cross-checks between information provided in the Emissions Inventory and information from independent background investigations.
 - Determine sensitivity and magnitude analysis for parameters that may be the largest sources of error.
 - Comparison of emissions from 2021 with emissions from previous reporting year(s).
- Follow-up Interviews:
 - Via telephone
 - Via email

Through the document review GHD established to what degree the presented Emissions Inventory documentation met the verification standards and criteria.

The GHD Project Team's document review during the review process comprised an evaluation of whether or not:

- The documentation is complete and comprehensive and follows the structure and criteria given in ISO 14064 and/or other supporting guidance.
- The methodologies are justified and appropriate.
- The assumptions behind the inventory are conservative and appropriate.
- The GHG emission calculations are appropriate and use conservative assumptions for estimating GHG emissions.
- The GHG information system and its controls are sufficiently robust to minimize the potential for errors, omissions, or misrepresentations.

The GHD Project Team interviewed Facility personnel to:

- Cross-check information provided
- Test the correctness of critical formulae and calculations
- Review data management and recording procedures

6. Site Assessment

As the verification of the global operations' Scope 1 and 2 emissions are to be performed to a limited level of assurance, a site visit is not required by either the CDP or ISO 14064-3.

7. Verification Findings

Emissions Boundary & Year-over-Year Check

Based on GHD's review the organizational boundary for the Emissions Inventory is appropriate and includes all relevant Scope 1 and Scope 2 emissions. GHD determined the change in emissions from the previous reporting period are consistent with changes in operations and calculation methodologies.

Scope 1, Scope 2 Emissions

GHD reviewed reported Scope 1 and 2 emissions for the reporting period. GHD completed a detailed review of the reported emissions from Samsung Xian, Nanjing, PECE, Botlek Boilers, Rotterdam HYCO4, Granite City, Baytown 3, Butler, Norco, Port Arthur 1, Port Arthur 2, and as well as reviewing calculation methodologies from all other Sites. GHD verified the methodologies used for calculating emissions are reasonable and appropriate and were determined to be reasonable and accurate. GHD did not identify any errors, omissions, or discrepancies that exceeded the materiality threshold. Based on GHD's review the reported emissions are materially correct.

8. Statement of Verification

Air Products reported the following as their emissions assertion for the 2021 reporting year:

- Scope 1 Emissions: 14.8 million tonnes carbon dioxide equivalent (CO₂e)
- Scope 2 Emissions: 9.4 million tonnes CO₂e

Based on the procedures undertaken, it is our opinion that the Air Products 2021 Scope 1 and Scope 2 Emissions Inventory is supported by appropriate underlying evidence and is free of material misstatements.

All of Which is Respectfully Submitted,

GHD

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Lead Verifier

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Encl.