


ASSURANCE LETTERS


**VERIFICATION OPINION DECLARATION
GREENHOUSE GAS EMISSIONS**

To: The Stakeholders of MasterCard

Apex Companies, LLC (Apex) was engaged to conduct an independent verification of the greenhouse gas (GHG) emissions reported by MasterCard for the period stated below. This verification opinion declaration applies to the related information included within the scope of work described below.

The determination of the GHG emissions is the sole responsibility of MasterCard. MasterCard is responsible for the preparation and fair presentation of the GHG statement in accordance with the criteria. Apex's sole responsibility was to provide independent verification on the accuracy of the GHG emissions reported, and on the underlying systems and processes used to collect, analyze, and review the information. Apex is responsible for expressing an opinion on the GHG statement based on the verification. Verification activities applied in a limited level of assurance verification and less extensive in nature, timing, and extent than in a reasonable level of assurance verification.

Boundaries of the reporting company GHG emissions covered by the verification:

- Operational Control
- Global

Types of GHGs: CO₂, N₂O, CH₄, HFCs

GHG Emissions Statement:

- Scope 1:** 3,321 metric tons of CO₂ equivalent
- Scope 2 (Location-Based):** 52,538 metric tons of CO₂ equivalent
- Scope 2 (Market-Based):** 268 metric tons of CO₂ equivalent
- Scope 3:**
 - Purchased Goods & Services, Capital Goods, and Upstream Transportation and Distribution: 344,076 metric tons of CO₂ equivalent
 - Fuel and Energy-Related Activities: 6,485 metric tons of CO₂ equivalent
 - Waste Generated in Operations: 466 metric tons of CO₂ equivalent
 - Business Travel (air and rail travel): 7,373 metric tons of CO₂ equivalent
 - Employee Commuting: 7,723 metric tons of CO₂ equivalent

Data and information supporting the Scope 1 and Scope 2 GHG emissions assertion were in most cases historical in nature and in some cases were estimated.

Data and information supporting the Scope 3 GHG emissions statement were in some cases estimated rather than historical in nature.


Period covered by GHG emissions verification:

- January 1, 2020 to December 31, 2020

Criteria against which verification was conducted:

- World Resources Institute (WRI)/World Business Council for Sustainable Development (WBCSD) Greenhouse Gas (GHG) Protocol Corporate Accounting and Reporting Standard (Scope 1 and 2)

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- WRI/WBCSD Greenhouse Gas Protocol Corporate Value Chain (Scope 3) Accounting and Reporting Standard (Scope 3)

Reference Standard:

- ISO 14064-3:2019 - Greenhouse gases – Part 3: Specification with guidance for the validation and verification of greenhouse gas statements.

Level of Assurance and Qualifications:

- Limited
- This verification used a materiality threshold of 5% for aggregate errors in sampled data for each of the above indicators.

GHG Verification Methodology:

Evidence-gathering procedures included, but were not limited to:

- Interviews with relevant personnel of MasterCard and their consultant;
- Review of documentary evidence produced by MasterCard;
- Review of MasterCard data and information systems and methodology for collection, aggregation, analysis and review of information used to determine GHG emissions; and
- Audit of samples of data used by MasterCard to determine GHG emissions.

Verification Opinion:

Based on the process and procedures conducted, there is no evidence that the GHG emissions statement shown above:

- is not materially correct and is not a fair representation of the GHG emissions data and information; and
- has not been prepared in accordance with the WRI/WBCSD GHG Protocol Corporate Accounting and Reporting Standard (Scope 1 and 2) and WRI/WBCSD Greenhouse Gas Protocol Corporate Value Chain Accounting and Reporting Standard (Scope 3).

It is our opinion that MasterCard has established appropriate systems for the collection, aggregation and analysis of quantitative data for determination of these GHG emissions for the stated period and boundaries.

Statement of independence, impartiality and competence


Apex is an independent professional services company that specializes in Health, Safety, Social and Environmental management services including assurance with over 30 years history in providing these services.

No member of the verification team has a business relationship with MasterCard, its Directors or Managers beyond that required of the assignment. We conducted this verification independently and to our knowledge there has been no conflict of interest.


Apex has implemented a Code of Ethics across the business to maintain high ethical standards among staff in their day-to-day business activities.


The verification team has extensive experience in conducting assurance over environmental, social, ethical and health and safety information, systems and processes, has over 20 years combined experience in this field and an excellent understanding of Apex's standard methodology for the verification of greenhouse gas emissions data.

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Attestation:


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Cleveland, Ohio


David Reilly, Technical Reviewer
Principal Consultant
Apex Companies, LLC,
Santa Ana, California

March 11, 2021

This verification statement, including the opinion expressed herein, is provided to MasterCard and is solely for the benefit of MasterCard in accordance with the terms of our agreement. We consent to the release of this statement by you to CDP in order to satisfy the terms of CDP disclosure requirements but without accepting or assuming any responsibility or liability on our part to CDP or to any other party who may have access to this statement.

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