



**VERIFICATION OPINION DECLARATION
GREENHOUSE GAS EMISSIONS**

To: The Stakeholders of Microsoft Corporation

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

The determination of the GHG emissions is the sole responsibility of Microsoft. Microsoft is responsible for the preparation and fair presentation of the GHG emissions 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 are 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
- Worldwide

Types of GHGs: CO₂, N₂O, CH₄, HFCs, SF₆ (Kyoto Protocol)

Data Verified:

ENERGY	
Total Energy Consumption - Megawatt hours (MWH)	9,227,991
Electricity Consumption – MWH	8,741,807
Purchased and Generated Renewable Energy – MWH	8,741,807
EMISSIONS	
Scope 1 Emissions – Metric tonnes of CO ₂ -equivalent (tCO ₂ e)	113,412
Scope 2 Emissions (Location-Based) - tCO ₂ e	3,556,553
Scope 2 Emissions (Market-Based) - tCO ₂ e	275,375
Scope 3 Emissions – Purchased Goods and Services - tCO ₂ e	4,200,000
Scope 3 Emissions – Capital Goods - tCO ₂ e	2,100,000
Scope 3 Emissions (Location-Based) – Fuel and Energy Related Activities - tCO ₂ e	650,000
Scope 3 Emissions (Market-Based) – Fuel and Energy Related Activities - tCO ₂ e	170,000



Scope 3 Emissions – Upstream Transportation and Distribution- tCO ₂ e	60,000
Scope 3 Emissions – Waste Generated in Operations (Large office campuses) - tCO ₂ e	1,200
Scope 3 Emissions – Business Air Travel - tCO ₂ e	392,557
Scope 3 Emissions – Employee Commuting - tCO ₂ e	395,000
Scope 3 Emissions – Downstream Transportation and Distribution - tCO ₂ e	53,000
Scope 3 Emissions – Use of Sold Products - tCO ₂ e	3,874,000
Scope 3 Emissions – End of Life Treatment of Sold Products- tCO ₂ e	76,000
Scope 3 Emissions – Downstream Leased Assets- tCO ₂ e	770
GHG OFFSETS AND NET EMISSIONS	
Purchased GHG Offsets (tCO ₂ e)	781,344
NET EMISSIONS (tCO ₂ e) Scope 1 + Scope 2 (Market-Based) + Scope 3 (Business Air Travel) – Purchased Offsets	0

Data and information supporting the Scope 1 and Scope 2 GHG emissions, RECs and GHG Offsets assertion were historical in nature and in some cases estimated based on historical data for similar properties in similar locations. Data and information supporting the Scope 3 GHG emissions assertion were in some cases estimated rather than historical in nature.

Period covered by GHG emissions verification:

- July 1, 2018 to June 30, 2019

Criteria against which verification was conducted:

- World Resources Institute (WRI)/World Business Council for Sustainable Development (WBCSD) Greenhouse Gas Protocol, Corporate Accounting and Reporting Standard, revised edition, including Scope 2 Guidance amendment (Scope 1 & 2)
- 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 $\pm 5\%$ 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 Microsoft and their consultant;
- Review of documentary evidence produced by Microsoft;
- Review of Microsoft data and information systems and methodology for collection, aggregation, analysis and review of information used to determine GHG emissions; and
- Audit of sample of data used by Microsoft 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 Microsoft 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 Microsoft, its Directors or Managers beyond that required of this 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, and 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.



Attestation:

A handwritten signature in black ink that reads 'Anisha Malhotra'.

Anisha Malhotra, Lead Verifier
Staff Consultant
Apex Companies, LLC
Lakewood, CO

July 17, 2020

A handwritten signature in blue ink that reads 'Trevor Donagh'.

Trevor Donagh, Technical Reviewer
Program Manager
Apex Companies, LLC
Pleasant Hill, CA

This verification statement, including the opinion expressed herein, is provided to Microsoft and is solely for the benefit of Microsoft 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.