

## **Verification Statement Alphabet – Global CY2018 GHG Inventory**

### **Background**

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Cameron-Cole, LLC (“Cameron-Cole”) was retained by Alphabet to perform an independent verification of its Global Greenhouse Gas (GHG) Emissions Inventory for Calendar Year 2018 (CY2018), which was developed according to the World Resources Institute (WRI)/World Business Council for Sustainable Development (WBCSD) Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard, 2004 revised edition (“The GHG Protocol”). Our opinion on the results of the Inventory, with respect to the verification objectives and criteria, is provided in this statement.

### **Responsibility of Alphabet & Independence of Verification Provider**

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Alphabet has sole responsibility for the content of its GHG Inventory. Cameron-Cole accepts no responsibility for any changes that may have occurred to the GHG emissions results since they were submitted to us for review. Based on internationally accepted norms for impartiality, we believe our review represents an independent assessment of Alphabet’s Global CY2018 GHG Emissions Inventory. Finally, the opinion expressed in this verification statement should not be relied upon as the basis for any financial or investment decisions.

### **Level of Assurance**

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The level of assurance is used to determine the depth of detail that a Verification Body designs into the Verification Plan to determine if there are material errors, omissions or misstatements in a company’s GHG assertions. Although Absolute Assurance may provide the highest level of confidence that an emissions assertion is materially correct, it is often not practical for complex verification assignments. The two remaining levels of assurance that are generally recognized – reasonable and limited – are routinely provided by Verification Bodies. Reasonable Assurance generates the highest level of confidence that an emissions report is materially correct, while Limited Assurance provides less confidence, and involves less detailed examination of GHG data and supporting documentation. Limited Assurance statements assert that there is no evidence that an emissions report is not materially correct. Cameron-Cole’s verification of Alphabet’s Global GHG Emissions Inventory for CY2018 was constructed to provide a Limited Level of Assurance.

### **Objectives**

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The primary objectives of this verification assignment were as follows:

- Determine whether the GHG emissions assertions meet/exceed the 95% threshold for accuracy; and,
- Evaluate the conformance of Alphabet’s accounting and calculation methodologies, processes and systems to The GHG Protocol.

### **Verification Criteria**

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Cameron-Cole conducted verification activities in alignment with the principles of ISO-14064-3:2006(E) Specifications with Guidance for the Validation and Verification of Greenhouse Gas Assertions. The Alphabet GHG Inventory was prepared using, and verified against, The GHG Protocol.

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### Verification Scope & Assertions

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The scope of this verification assignment covers Alphabet’s Global CY2018 GHG Emissions Inventory, which includes carbon dioxide (CO<sub>2</sub>) emissions from Scope 1, Scope 2, Scope 3, and biogenic sources.

- Scope 1 and Scope 2 emissions totaled 747,757 metric tons (MT) CO<sub>2</sub>: 684,236 MT are Scope 2 (indirect) CO<sub>2</sub> emissions from market-based electricity purchases and 63,521 MT are Scope 1 (direct) CO<sub>2</sub> emissions from combustion.
- Location-based Scope 2 emissions are 4,344,686 MT CO<sub>2</sub>, with total emissions of 4,408,207 MT CO<sub>2</sub> for both Scope 1 and Scope 2 sources.
- Scope 3 emissions are reported to be 150,467 MT CO<sub>2</sub>.
- Declared biogenic emissions associated with the combustion of landfill gas and liquid biofuels are 22,862 MT CO<sub>2</sub>.

<b>2018 Alphabet Carbon Footprint (MT CO<sub>2</sub>e)</b>		
<b>Scope 1</b>	Location-based	Market-based
	63,521	63,521
<b>Scope 2</b>	Location-based	Market-based
	4,344,686	684,236
<b>Subtotal Scope 1 + 2</b>	<b>4,408,207</b>	<b>747,757</b>
<b>Scope 3</b>	Location-based	Market-based
	150,467	150,467
<b>TOTAL FOOTPRINT</b>	<b>4,558,674</b>	<b>898,224</b>
<b>Biogenic Emissions</b>	Location-based	Market-based
	22,862	22,862

***It is therefore verified that Alphabet’s declared assertions above are materially correct, limited to the boundaries listed in the Verification Scope & Assertions section.***

Most emissions were calculated from activity data consisting of metered consumption, though some Scope 2 emissions were estimated based on square feet of occupied space and an assumed electric consumption rate. No other data and information supporting the GHG assertion were hypothetical, projected or historical in nature, other than the inherent historical nature of grid-based electricity emissions factors.

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### Verification Opinion

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Based on the method employed and the results of the verification activities undertaken, **Cameron-Cole has found no evidence of material errors, omissions or misstatements in Alphabet's Global CY2018 GHG Inventory within the boundaries described above.** Cameron-Cole also found that Alphabet's GHG accounting and calculation methodologies, processes and systems for this inventory conform to The GHG Protocol.



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June 27, 2019



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June 27, 2019