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Report of Independent Accountants

To the Board of Directors of Etsy, Inc.

We have reviewed the accompanying Etsy, Inc. ("Etsy") management assertion, that the sustainability metrics identified below, as of or for the year ended December 31, 2020, are presented in conformity with the assessment criteria set forth in management's assertion.

- Total energy consumed for Scope 1 and 2 Activities (MWh) – for the year ended December 31, 2020
- Scope 1 (direct) greenhouse gas ("GHG") emissions – for the year ended December 31, 2020
- Scope 2 (indirect) GHG emissions – for the year ended December 31, 2020
- Scope 3 (indirect) cloud computing GHG emissions (Etsy only) – for the year ended December 31, 2020
- Scope 3 (indirect) from end user energy use GHG emissions – for the year ended December 31, 2020
- Scope 3 (indirect) business air travel GHG emissions – for the year ended December 31, 2020
- Scope 3 (indirect) shipping GHG emissions – for the year ended December 31, 2020
- Scope 3 (indirect) purchased goods and services GHG emissions – for the year ended December 31, 2020
- Scope 3 (indirect) packaging GHG emissions – for the year ended December 31, 2020
- Gender diversity by job category (global) – as of December 31, 2020
- Racial and ethnic diversity by job category (US) – as of December 31, 2020
- Age diversity (global) – as of December 31, 2020

Etsy's management is responsible for its assertion and for the selection of the criteria, which management believes provide an objective basis for measuring and reporting on the sustainability metrics. Our responsibility is to express a conclusion on management's assertion based on our review.

Our review was conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants (AICPA) in AT-C section 105, *Concepts Common to All Attestation Engagements,* and AT-C section 210, *Review Engagements*. Those standards require that we plan and perform the review to obtain limited assurance about whether any material modifications should be made to management's assertion in order to be fairly stated. A review is substantially less in scope than an examination, the objective of which is to obtain reasonable assurance about whether management's assertion is fairly stated, in all material respects, in order to express an opinion. Accordingly, we do not express such an opinion. We believe that our review provides a reasonable basis for our conclusion.

In performing our review, we have complied with the independence and other ethical requirements of the Code of Professional Conduct issued by the AICPA.

We applied the Statements on Quality Control Standards established by the AICPA and, accordingly, maintain a comprehensive system of quality control.

GHG emissions quantification is subject to inherent measurement uncertainty because of such things as GHG emission factors that are used in mathematical models to calculate GHG emissions and the inability of those models, due to incomplete scientific knowledge and other factors, to accurately measure under all circumstances the relationship between various inputs and the resultant GHG emissions. Environmental and energy use data used in GHG emissions calculations are subject to inherent limitations, given the nature and the methods used for measuring such data. The selection by management of different but acceptable measurement techniques could result in materially different amounts or metrics being reported.

The preparation of the other sustainability metrics requires management to establish the criteria, make determinations as to the relevancy of information to be included, and make assumptions that affect reported information. The selection by management of different but acceptable measurement techniques could result in materially different amounts or metrics being reported.

As discussed in management's assertion, Etsy has estimated GHG emissions for certain emission sources for which no primary usage data is available.

Based on our review, we are not aware of any material modifications that should be made to management's assertion in order for it to be fairly stated.

February 25, 2021

Management Assertion

Overview

Management of Etsy, Inc. (Etsy) is responsible for the completeness, accuracy and validity of the sustainability metrics (the "metrics") contained in this assertion as of or for the year ended December 31, 2020.

Management is responsible for the collection, quantification and presentation of the metrics as of or for the year ended December 31, 2020 and for the selection or development of the criteria, which management believes provide an objective basis for measuring and reporting on the metrics.

With respect to the metrics identified below, management of Etsy asserts that such metrics are presented in conformity with the assessment criteria set forth below. The figures presented below have been rounded to the nearest whole number unless otherwise indicated.

Metric Description	Definition of Metric / Assessment Criteria	Metric Quantity for the Year ended December 31, 2020 Location Based	Metric Quantity for the Year ended December 31, 2020 Market Based
Total Energy Consumed for Scope 1 and 2 Activities (MWh)	Direct and Indirect Energy Consumed Direct energy consumed: Total Megawatt hours ("MWh") of on-site renewable energy consumption, and direct energy purchased, which is comprised of natural gas, for the year ended December 31, 2020 Indirect energy consumed: Total MWh of indirect energy purchased, including purchased electricity, heat and steam generated off-site for the year ended December 31, 2020	4,488 MWh	4,488 MWh
Scope 1 GHG Emissions (tCO_2e) from direct energy consumed and fugitive emissions from refrigerant gas loss	Metric tonnes of carbon dioxide equivalent emissions (tCO_2e) for the year ended December 31, 2020, based on direct Scope 1 energy consumed and fugitive emissions from refrigerant gas loss Scope 1 emissions are based on the stationary combustion of natural gas multiplied by their associated emission factor and fugitive emissions from refrigerant gas loss	294 tCO_2e	294 tCO_2e

Metric Description	Definition of Metric / Assessment Criteria	Metric Quantity for the Year ended December 31, 2020 Location Based	Metric Quantity for the Year ended December 31, 2020 Market Based
Scope 2 GHG Emissions (tCO_2e) from indirect energy consumed	Metric tonnes of carbon dioxide equivalent emissions (tCO_2e) for the year ended December 31, 2020, based on Scope 2 indirect energy consumed Scope 2 emissions are the result of the use of purchased electricity, heat and steam generated off-site, multiplied by the associated emission factor	914 tCO_2e	4 tCO_2e
Total Scope 1 and Scope 2 GHG Emissions (tCO_2e)		1,208 tCO_2e	298 tCO_2e
Scope 3 GHG Emissions (tCO_2e) (indirect) from cloud computing (Etsy only)	Metric tonnes of carbon dioxide equivalent emissions (tCO_2e) for the year ended December 31, 2020, based on the energy consumed by our cloud computing activities *Emissions exclude Reverb cloud computing activities. Those emissions are captured in Scope 3 GHG Emissions from purchased goods and services.*	2,355 tCO_2e	0 tCO_2e
Scope 3 GHG Emissions (tCO2 e) (indirect) from end user energy use	Metric tonnes of carbon dioxide equivalent emissions (tCO2 e) for the year ended December 31, 2020, based on the energy consumed from usage of our online platform by buyers and sellers and other users globally on personal devices (mobile devices and laptops)	3,890 tCO_2e	4,127 tCO_2e

Metric Description	Definition of Metric / Assessment Criteria	Metric Quantity for the Year ended December 31, 2020
Scope 3 GHG Emissions (tCO_2e) (indirect) from business air travel	Metric tonnes of carbon dioxide equivalent emissions (tCO_2e) for the year ended December 31, 2020, based on energy consumed by our air travel providers in transporting our employees	153 tCO_2e
Scope 3 GHG Emissions (tCO_2e) (indirect) from shipping	Metric tonnes of carbon dioxide equivalent emissions (tCO_2e) for the year ended December 31, 2020, based on the energy consumed by our shipping carriers in delivering products	303,218 tCO_2e
Scope 3 GHG Emissions (tCO2 e) (indirect) from purchased goods and services	Metric tonnes of carbon dioxide equivalent emissions (tCO_2e) for the year ended December 31, 2020, based on the energy consumed from our purchased goods and services which are not captured by another scope or category of GHG emissions	42,646 tCO_2e
Scope 3 GHG Emissions (tCO2 e) (indirect) from packaging	Metric tonnes of carbon dioxide equivalent emissions (tCO_2e) for the year ended December 31, 2020, based on the lifecycle emissions from the packaging material used to ship products	53,489 tCO_2e

Metric Description	Definition of Metric / Assessment Criteria	Metric Quantity Percentage as of December 31, 2020
Gender diversity by job category (global)	The gender diversity of the global workforce by job category, according to the gender as self-reported by the employee and recorded in Etsy's Human Resources system as of December 31, 2020 <u>Definitions</u> Other Genders: An alternative to 'Female' or 'Male' as self-reported by the employee Leadership: Defined as those employees at the Director-level and above Tech: Defined as those employees who work on Product, Engineering, Analytics and HR Information and Financial Systems Administration teams Engineering: Defined as those employees with roles in the Engineering Job Family Group included within Tech Other Business Roles: Defined as those employees who work in roles outside of the Tech definition, inclusive of non-Tech Leadership positions	<u>Overall Gender % (global):</u> Female – 47.7% Male – 45.3% Other Genders – 2.0% Not Declared – 5.0% <u>Leadership Gender %:</u> Female – 43.7% Male – 55.0% Other Genders – 0.0% Not Declared – 1.3% <u>Tech Gender %:</u> Female – 36.8% Male – 54.9% Other Genders – 2.7% Not Declared – 5.6% <u>Engineering Gender %:</u> Female – 30.3% Male – 60.2% Other Genders – 3.3% Not Declared – 6.2% <u>Other Business Roles Gender %:</u> Female – 62% Male – 32.7% Other Genders – 1.0% Not Declared – 4.3%

Metric Description	Definition of Metric / Assessment Criteria	Metric Quantity Percentage as of December 31, 2020
Racial and ethnic diversity by job category (United States workforce only)	The racial and ethnic diversity of the workforce employed in the United States by job category according to the race and ethnicity as self-reported by the employee and recorded in Etsy's Human Resources system as of December 31, 2020 <u>Definitions</u> Leadership: Defined as those employees at the Director-level and above Tech: Defined as those employees who work on Product, Engineering, Analytics and HR Information and Financial Systems Administration teams Engineering: Defined as those employees with roles in the Engineering Job Family Group included within Tech Other Business Roles: Defined as those employees who work in roles outside of the Tech definition, and is inclusive of non-Tech Leadership positions	<u>Overall Race/Ethnicity % (US):</u> American Indian or Alaska Native – 0.2% Asian – 17.5% Black or African American – 5.9% Hispanic – 6.1% Two or more races – 3.4% White – 63.0% Not declared –3.8% <u>Leadership Race/Ethnicity % (US):</u> American Indian or Alaska Native 0.7% Asian – 14.4% Black or African American – 5.8% Hispanic – 2.2% Two or more races – 3.6% White – 71.9% Not declared – 1.4% <u>Tech Race/Ethnicity % (US):</u> American Indian or Alaska Native 0.1% Asian – 25.6% Black or African American – 5.0% Hispanic – 4.6% Two or more races – 4.2% White – 56.4% Not declared – 4.0% <u>Engineering Race/Ethnicity % (US):</u> American Indian or Alaska Native - 0.0% Asian – 22.6% Black or African American – 5.5% Hispanic – 5.5% Two or more races – 4.4% White – 57.5% Not declared –4.6%

Metric Description	Definition of Metric / Assessment Criteria	Metric Quantity Percentage as of December 31, 2020
Racial and ethnic diversity by job category (United States workforce only) (continued)		Other business roles Race/Ethnicity % (US): American Indian or Alaska Native 0.2% Asian – 8.0% Black or African American – 7.2% Hispanic – 8.0% Two or more races – 2.5% White – 70.6% Not declared – 3.3%
Age diversity (global)	The age diversity of the global workforce according to the date of birth as self-reported by the employee and recorded in the Company's Human Resources system as of December 31, 2020	Age % (Global): 24 or below – 3.3% 25-29 – 25.3% 30-34 – 33.8% 35-39 – 21.4% 40-49 – 12.9% 50+ – 3.3%

GHG Methodology

Etsy uses the principles and guidance of the World Resources Institute (WRI) and the World Business Council for Sustainable Development's (WBCSD) *Greenhouse Gas Protocol Initiative's Corporate GHG Accounting and Reporting Standard, Revised* (the "GHG Protocol"), and the *Corporate Value Chain (Scope 3) Accounting and Reporting Standard*, recognized external standards, to calculate and report direct and indirect GHG emissions.

For total Scope 1 and 2 emissions, using location-based reporting, metric tonnes of greenhouse gases (tGHG) are 1176.695t CO_2, 0.0871 t CH_4, 0.0090 t N_2O, 0 tBiogenic CH_4, 0 tBiogenic CO_2, and 23.673 tCO2e from refrigerant gas loss or other fugitive emissions. For total Scope 1 and 2 emissions, using market- based reporting, metric tonnes of greenhouse gases are 271.266 tCO_2, 0.0256 tCH_4, 0.00054 t N_2O, 0 tBiogenic CH_4, 0 tBiogenic CO_2. , and 23.673 tCO2e from refrigerant gas loss or other fugitive emissions.

Etsy also uses the guidance issued by the WRI and WBCSB for Scope 2 and certain Scope 3 emissions (*GHG Protocol Scope 2 Guidance, An amendment to the GHG Protocol Corporate Standard*), for reporting under both location- based and market-based methodologies. The location-based method applies average emissions factors that correspond to the grid where the consumption occurs, whereas the market-based method applies emissions factors that correspond to energy purchased through contractual instruments. Where contractual instruments were not purchased, the market-based emissions factors represent either the residual mix, where available, or the location grid-average factors.

Organizational Boundary

Etsy is using the operational control approach in conformance with the GHG Protocol to report our direct and indirect energy consumption as well as our GHG emissions from our leased space, which included offices and data centers leased by Etsy and Reverb during the year ended December 31, 2020. Etsy's leased space in this fiscal year also included certain sites that were only operational for part of the year. Reverb is included in the data unless expressly excluded.

Scope of Metrics

Scope 1 includes direct GHG emissions from stationary combustion of natural gas, as well as refrigerant gas loss. Scope 2 includes indirect GHG emissions from the use of purchased electricity, heat and steam generated off-site. CFC and HCFC refrigerants are not included in Etsy's GHG inventory; they are considered optional information to be reported separately from Scope 1 and Scope 2 GHG emissions per the GHG Protocol. Scope 3 business air travel includes global air travel of Etsy employees, or global air travel booked by Etsy for non-employee business travel (e.g., recruiting activities, seller activities). Scope 3 shipping includes emissions from the global shipment of goods between Etsy's buyers and sellers. Scope 3 cloud computing includes emissions from our cloud computing activities in Google Cloud Platform (GCP). Scope 3 emissions from purchased goods and services includes emissions from global purchased goods and services generated by an Etsy supplier that are not captured by another scope or category of GHG emissions. Scope 3 emissions from packaging includes emissions associated with the packaging materials used to ship products between Etsy's buyers and sellers. Scope 3 emissions from end user energy use includes emissions related to the use of Etsy's platform by buyers, sellers and other users globally on personal devices (mobile devices and laptops).

Greenhouse gas emissions have been calculated using energy consumption data or refrigerant gas loss, and multiplied by the relevant greenhouse gas emission factors for carbon dioxide, methane and nitrous oxide emissions, or by the global warming potential relevant to each refrigerant gas. In order to provide the most accurate estimate of Etsy's GHG emissions, primary data provided by third party invoices was used where available. Secondary data in the form of estimates, extrapolations and industry averages was used when primary data was not available. See our GHG Emissions Factors and Estimation Methodology sections below for details.

All diversity information is provided by Etsy employees voluntarily, as self-reported by the employee, and recorded in Etsy's Human Resources system. Employee demographic information can be changed at any time by the employee. The diversity metrics included in this assertion are based on data in the system as of December 31, 2020.

GHG Emission Factors

Carbon dioxide emissions and equivalents have been determined on the basis of measured or estimated energy and fuel usage, multiplied by relevant carbon emission factors and for carbon dioxide equivalent emissions taking into account relevant global warming potentials.

Emission Source	Emissions Source Type	Emission Factor Employed
Scope 1, United States	Natural Gas	EPA (2020). GHG Emission Factors Hub. Center for Corporate Climate Leadership. March 2020. http://www.epa.gov/climateleadership/inventory/ghg-emissions.html. Accessed September 2020. EPA (2020). Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990-2018. United States Environmental Protection Agency. Online: https://www.epa.gov/ghgemissions/inventory-us-greenhouse-gas-emissions-and-sinks-1990-2018
Scope 1, Europe (except the Netherlands)	Natural Gas	Department for Business, Energy and Industrial Strategy (2020). 2020 Government GHG Conversion Factors for Company Reporting.
Scope 1, the Netherlands	Natural Gas	CO2 emissiefactoren (2017), http://co2emissiefactoren.nl/lijst-emissiefactoren/. Accessed July 2018.

Emission Source	Emissions Source Type	Emission Factor Employed
Scope 1, Global	Refrigerant Gas Loss	Actual data: IPCC (2007). IPCC Fourth Assessment Report: Climate Change 2007. Intergovernmental Panel on Climate Change. Cambridge University Press, Cambridge. Estimated data: EPA (2016). Accounting Tool to Support Federal Reporting of HFC Emissions Version 1.1. Prepared by ICF International under contract for the US Environmental Protection Agency. Accessed from: https://www.epa.gov/snap/reducing-hydrofluorocarbon-hfc-use-and-emissions-federal-sector-through-snap#accounting-tool
Scope 1, Global	On-site electricity generation (renewable resources)	IEA (2009). CO2 Emissions from Fuel Combustion, 2009 Edition, Highlights. International Energy Agency.
Scope 2, Global	District Heat & Steam	IPCC (2006). Revised IPCC Guidelines for National Greenhouse Gas Inventories: Reference Manual from the Intergovernmental Panel on Climate Change to calculate emissions from district heat and steam.
Scope 2, United States	Grid Electricity	United States EPA eGRID sub-region emission factors for electricity purchased in the U.S. Electricity emission factors are updated annually based on the most current data available. EPA (2020). eGrid2018v2. Release : 3/9/2020. Online: https://www.epa.gov/energy/emissions-generation-resource-integrated-database-egrid. Accessed March 11, 2020.
Scope 2, United Kingdom	Grid Electricity	Department for Business, Energy and Industrial Strategy (2020). 2020 Government GHG Conversion Factors for Company Reporting.
Scope 2, Ireland	Grid Electricity	IEA (2019). Statistics. http://www.iea.org/stats/index.asp. IPCC (2006). Revised IPCC Guidelines for National Greenhouse Gas Inventories: Reference Manual. Intergovernmental Panel on Climate Change. Cambridge University Press, Cambridge
Scope 2, Germany	Grid Electricity	IEA (2019). Statistics. http://www.iea.org/stats/index.asp. IPCC (2006). Revised IPCC Guidelines for National Greenhouse Gas Inventories: Reference Manual. Intergovernmental Panel on Climate Change. Cambridge University Press, Cambridge
Scope 2, France	Grid Electricity	IEA (2019). Statistics. http://www.iea.org/stats/index.asp. IPCC (2006). Revised IPCC Guidelines for National Greenhouse Gas Inventories: Reference Manual. Intergovernmental Panel on Climate Change. Cambridge University Press, Cambridge
Scope 2, Ontario	Grid Electricity	EC (2020). National Inventory Report. Greenhouse Gas Sources and Sinks in Canada: 1990 - 2017. Environment Canada. Online: https://unfccc.int/documents/194925

Emission Source	Emissions Source Type	Emission Factor Employed
Scope 3	Category 6: Business air travel	Department for Business, Energy and Industrial Strategy (2020). 2020 Government GHG Conversion Factors for Company Reporting.
Scope 3	Category 9: Downstream Transportation & Distribution, Shipping	USPS calculated GHG emissions for shipping of products from an Etsy seller to an Etsy buyer
Scope 3	Category 8: Upstream Leased Assets, Cloud computing	United States EPA eGRID sub-region emission factors for electricity purchased in the U.S. Electricity emission factors are updated annually based on the most current data available. EPA (2020). eGrid2018v2. Release : 3/9/2020. Online: https://www.epa.gov/energy/emissions-generation-resource-integrated-database-egrid. Accessed March 11, 2020.
Scope 3	Category 1: Purchase Goods & Services	EPA (2019). USEEIO v1.1 - Matrices. U.S. EPA Office of Research and Development (ORD). Available online: https://catalog.data.gov/vi/dataset/useeio-v1-1-matrices/resource/2a0f07af-59e9-4b5e-b5eb-402f4b03269d. Accessed January 2021. 2020 Google CDP Report, C6.10, Page 40. https://www.gstatic.com/gumdrop/sustainability/alphabet-2020-cdp-climate-change-response.pdf 2020 Microsoft CDP Disclosure, C6.10, Page 89. https://query.prod.cms.rt.microsoft.com/cms/api/am/binary/RE2EWBx 2020 Deloitte CDP Disclosure, C6.10. https://www.cdp.net/ 2020 Salesforce CDP Disclosure, C6.10. https://www.cdp.net/
Scope 3	Category 9: Downstream Transportation & Distribution, Packaging	Franklin Associates. life cycle inventory of packaging options for shipment of retail mail-order soft goods. Prepared for Oregon Department of Environmental Quality (DEQ) and U.S. EPA Environmentally preferable purchasing program. April 2004. U.S. Environmental Protection Agency. *Paper and Paperboard: Material-Specific Data*. https://www.epa.gov/facts-and-figures-about-materials-waste-and-recycling/paper-and-paperboard-material-specific-data. Last updated 5 January 2021. Accessed 28 January 2021. U.S. Environmental Protection Agency. *Plastics: Material-Specific Data*. https://www.epa.gov/facts-and-figures-about-materials-waste-and-recycling/plastics-material-specific-data. Last updated 5 January 2021. Accessed 28 January 2021. Packaging materials specifications from uline.com. Accessed 20 August 2020.

Emission Source	Emissions Source Type	Emission Factor Employed
Scope 3	Category 11: Use of Sold Products, End user energy use	Carroll, A. & Heiser, G. (June 2010). *An Analysis of Power Consumption in a Smartphone*. Presented at USENIXATC'10 Annual Technical Conference. Yoon, C., et al. (June 2012). *AppScope: Application Energy Metering Framework for Android Smartphones using Kernel Activity Monitoring*. Presented at USENIXATC'12 Annual Technical Conference. Huang, et al. (June 2012). A *Close Examination of Performance and Power Characteristics of 4G LTE Networks*. Presented at MobiSys '12: Proceedings of the 10th international conference on Mobile systems, applications, and services. Urban, et al. (December 2017). *Energy Consumption of Consumer Electronics in U.S. Homes in 2017*. Final Report by the Fraunhofer USA Center for Sustainable Energy Systems to the Consumer Electronics Association (pg. 24). Urban, et al. (June 2014). *Energy Consumption of Consumer Electronics in U.S. Homes in 2013*. Final Report by the Fraunhofer USA Center for Sustainable Energy Systems to the Consumer Electronics Association (pg. 150). IEA (2019). Statistics. http://www.iea.org/stats/index.asp.; IPCC (2006). Revised IPCC Guidelines for National Greenhouse Gas Inventories: Reference Manual. Intergovernmental Panel on Climate Change. Cambridge University Press, Cambridge EC (2020). National Inventory Report. Greenhouse Gas Sources and Sinks in Canada: 1990 - 2017. Environment Canada. Online: https://unfccc.int/documents/194925 EPA (2020). eGrid2018v2. Release : 3/9/2020. Online: https://www.epa.gov/energy/emissions-generation-resource-integrated-database-egrid. Accessed March 11, 2020. Department for Business, Energy and Industrial Strategy (2020). 2020 Government GHG Conversion Factors for Company Reporting. Governo do Brasil (2020). MCTIC. Arquivos dos fatores médios de emissão de CO2 grid mês/ano. Ministério da Ciência, Tecnologia, Inovações e Comunicações. Online: http://www.mctic.gov.br/mctic/opencms/ciencia/SEPED/clima/textogeral/emissao_corporativos.html. Accessed January 2020. Government of India (2018). Ministry of Power, Central Electricity Authority. CO2 Baseline Database for the Indian Power Sector. User Guide, Version 14.0, December 2018.

In quantifying market-based electricity GHG emissions, GHG Protocol Scope 2 Guidance defines a hierarchy of factors for quantifying market-based emissions, in order from highest to lowest preference. The table below provides a description of the hierarchy and the relevance to Etsy for the current year inventory.

Emission Source Type	Emission Factor Employed
Direct line connection	Not applicable
Energy attribute certificates	Etsy applies a zero emission factor for on-site solar generation where Renewable Energy Credits generated are retained by Etsy, and also for purchased renewable energy attribute certificates applied to Etsy's operations.
Electricity contracts	Not applicable
Energy supplier-specific emission factors	Not applicable
Residual mix	Europe: Etsy uses available country emission factors from Association of Issuing Bodies (AIB).
Location-based factors	If none of the above options are available, Etsy uses location-based factors as described in the table above.

Uncertainty

GHG emissions quantification is subject to inherent measurement uncertainty because of such things as GHG emission factors that are used in mathematical models to calculate GHG emissions and the inability of those models, due to incomplete scientific knowledge and other factors, to accurately measure under all circumstances the relationship between various inputs and the resultant GHG emissions. Environmental and energy use data used in GHG emissions calculations are subject to inherent limitations, given the nature and the methods used for measuring such data. The selection by management of different but acceptable measurement techniques could result in materially different amounts or metrics being reported.

The preparation of the other sustainability metrics requires management to establish the criteria, make determinations as to the relevancy of information to be included, and make assumptions that affect reported information. The selection by management of different but acceptable measurement techniques could result in materially different amounts or metrics being reported.

Etsy recognizes that air travel remains an estimate since unforeseen circumstances can occur (e.g., different routes due to adverse weather, or aircraft fleet changes), however the figure presented follows DEFRA methodology and is considered to be a reasonable estimate of Etsy's air travel emissions (refer to https://www.defra.gov.uk/environment/economy/business-efficiency/reporting/).

Base data

Base data utilized in the calculation of Scope 1 (direct), Scope 2 (indirect) and Scope 3 (indirect) GHG emissions obtained from:

- Direct measurements for Scope 1;
- Third-party invoices for Scopes 1 and 2;
- Estimates for Scopes 1 and 2;
- Accounting systems and reports provided by a third-party with flight distance detail for Scope 3 business travel;

- Accounting systems and reports provided by a third party for Scope 3 shipping transaction and emissions data;
- Third-party invoices for Scope 3 cloud computing;
- Third-party invoices, accounting systems for shipping information, and survey data collected from Etsy sellers on packaging materials conducted in July 2019, for Scope 3 packaging; and,
- Visits data (user device type, duration and location) for end user energy use

Estimation Methodology

In 2020, Scope 1 and Scope 2 (market-based) GHG emissions were comprised of 10% estimated data and 90% actual data. Note that actual data refers to actual activity data (and not actual emissions data), as the activity data may rely on average non-standard conversions, such as energy content of fuel or energy intensity per surface area, before applying average emission factors to convert data into emissions. We continue to work to increase the amount of actual energy data (without the need for non-standard conversions) available at our sites. More significant assumptions were as follows:

Energy Data – Offices: Actual consumption data was collected for the for Q1 through Q3, while for the Q4 period, actual data was only partially available for some sites. Where available, annual energy consumption for offices was sourced from utility bills specific to Etsy's occupied spaces; any missing consumption was estimated as follows:

- Where specific days or meter information was not available for a specified time, but Etsy received partial actual 2020 data, the missing data was estimated by pro-rating available consumption data using daily average consumption rates.
- Geographically relevant properties with actual data were also applied to properties with missing data, using an intensity factor based on periods with actual data.
- For facilities where no energy consumption data was available for 2020, data was estimated using either consumption from a previous year or researched intensity values of office space, specific to the energy type, and where possible, specific to the location being estimated. *In 2020, researched intensity metrics were applied to both Toronto sites for district heating using data from the Energy Information Administration (EIA) (2016). 2012 Commercial Buildings Energy Consumption Survey (CBECS). Available online:*
    - *http://www.eia.gov/consumption/commercial/. Both Toronto sites relied on electricity consumption intensity data for buildings in the commercial/institutional sector from OEE (2020). Energy Use Data Handbook Tables (Canada). 1990-2017. Office of Energy Efficiency.*
    - *https://oee.nrcan.gc.ca/corporate/statistics/neud/dpa/menus/trends/handbook/tables.cfm. Paris - 33 relied on electricity consumption intensity for an all-electric naturally ventilated office using data from The Chartered Institution of Building Services Engineers (2012). Energy efficiency in buildings, CIBSE Guide F.)*
- For the facilities where no energy consumption data was available for 2020, we have adjusted utility load to 60% of the estimated utility load for the period of the year when the facilities were unoccupied due to COVID-19, based on publicly available industry estimates (*https://www.carbonlighthouse.com/covid-building-occupancy-energy-use/*).

Energy Data – Data Centers: Etsy included both server and overhead consumption; the server data was based on actual invoices, and estimated overhead energy data was derived from server consumption and Power Usage Effectiveness (PUE) from the total building provided by the vendor to calculate Etsy's share.

Refrigerant data - We did not have sufficient refrigerant source data for Berlin, London, India, Paris, San Francisco, or Toronto locations, or our co-located data center; we estimated refrigerant gas loss considering building type, surface area, type of refrigerant gas, type of equipment, and number of units per surface area using the following data source: *EPA (2016). Accounting Tool to Support Federal Reporting of HFC Emissions Version 1.1. Prepared by ICF International under contract for the US*

Environmental Protection Agency accessed from: https://www.epa.gov/snap/reducing-hydrofluorocarbon-hfc-use-and-emissions-federal-sector-through-snap#accounting-tool. Refrigerant gas loss associated with our co-located data center was excluded on the basis of immateriality.

Scope 3 GHG emissions included significant assumptions and estimates. Note that actual data refers to actual activity data (and not actual emissions data), as the activity data may rely on more estimations, as described below, before applying average emission factors to convert data into emissions. We continue to work to increase the amount of actual data available from our suppliers. More significant assumptions were as follows:

Energy Data - Cloud Computing: In addition to leased data centers, Etsy uses Google Cloud Platform (GCP) to perform computing tasks. Etsy included server, storage, network data transfers and overhead consumption. The server and storage utilization data was based on actual invoices, multiplied by energy coefficients derived from publicly available data on hardware infrastructure, specifically SPEC (Standard Performance Evaluation Corporation) Power Results 2008 - 2019, United States Data Center Energy Usage Report (2016), "Electricity Intensity of Internet Data Transmission: Untangling the Estimates," Journal of Industrial Ecology, vol. 22, no. 4 (Aug. 2017), and publicly available information on Google Cloud Platform CPU platforms, machine types, and sole-tenant nodes to estimate energy kWh, which is then multiplied by relevant carbon emission factors. The SPECs database and United States Data Center Energy Report were used for the server coefficient, the United States Data Center Energy Report was used for the storage coefficient, and the United States Data Center Energy Report and “Electricity Intensity” reports were used for the network power draw coefficient. Etsy estimates overhead energy data from PUE provided by Google. Where possible, we use instance-specific PUE, and where that data is unavailable, we rely on GCP’s fleetwide average PUE. Emissions are derived based on Google’s publicly available data around renewable energy procurement and the location of Etsy’s Google Cloud instances. Reverb cloud computing consumption via Amazon Web Services (AWS) has been excluded and alternatively included within Scope 3 Purchased Goods and Services due to limited available data.

Air travel: GHG emissions for business air travel are calculated using mileage information provided by Etsy’s third-party commercial travel manager. Etsy’s accounting system is used to calculate business air travel booked outside of the travel manager. Distances between origin and destination airports for travel logged in Etsy’s accounting system was obtained by Ecometrica using an on-line tool to calculate Great Circle Distance.

Shipping: Emissions from shipping activity are based on third-party reports with CO2e information received from our shipping partner, USPS, provided for Q1 through Q3, which is also used to estimate the Q4 emissions factor. To calculate greenhouse gas emissions for each shipment, we use shipment weight, shipment distance, shipment mail class, and an emissions factor based on the mail class derived from USPS emissions and shipment data. For shipment weight and shipment mail class, we use data from Etsy and Reverb shipping labels where available. Where weight and mail class is not available, we estimate the emissions based on available data, including estimated package weight based on product type. We calculate the distance between buyer and seller using our internal records of buyer and seller latitude and longitude. We apply an uplift of 12% to the direct mileage between buyer and seller to take into account mileage using road transportation and direct flights (rather than ‘as the crow flies’). We review this uplift factor annually.

Packaging: This metric captures both Etsy and Reverb marketplace packaging. For Etsy, it is calculated using survey data collected from Etsy sellers on packaging materials and reuse as conducted by Qualtrics, publicly available evidence on the carbon impacts of different packaging materials (reference 1 below), and the number of packages shipped on the Etsy marketplace and the associated packaging weight by packaging material. For Reverb, it is calculated using assumptions on packaging type by product category (e.g., guitars), publicly available evidence on the carbon impacts across packaging materials (reference 1 below), and the number of orders on the Reverb marketplace and the associated packaging weight by packaging material using publicly available weights of packaging materials (references 1 and 4 below). For each shipment (Etsy) or order (Reverb) we multiply the weight of the packaging material by the associated emissions factor from the Franklin Associates report referenced below to derive greenhouse gas emissions (reference 1 below). For both Etsy and Reverb, we

incorporated U.S. average recycling rates by packaging material into our analysis by pro-rating associated disposal emissions (reference 2 and 3 below). We considered the following sources for our analysis:

- Reference 1: Franklin Associates. Life cycle inventory of packaging options for shipment of retail mail-order soft goods. Prepared for Oregon Department of Environmental Quality (DEQ) and U.S. EPA environmentally preferable purchasing program. April 2004.
- Reference 2: U.S. Environmental Protection Agency. *Paper and Paperboard: Material-Specific Data*. https://www.epa.gov/facts-and-figures-about-materials-waste-and-recycling/paper-and-paperboard-material-specific-data. Last updated 5 January 2021. Accessed 28 January 2021.
- Reference 3: U.S. Environmental Protection Agency. *Plastics: Material-Specific Data*. https://www.epa.gov/facts-and-figures-about-materials-waste-and-recycling/plastics-material-specific-data. Last updated 5 January 2021. Accessed 28 January 2021.
- Reference 4: Packaging materials specifications from uline.com. Accessed 20 August 2020.

Purchased goods and services: This metric includes global purchased goods and services made by an Etsy entity that are not captured by another scope or category of GHG emissions (e.g., electricity, Scope 2). Emissions for this category are calculated by multiplying supplier spend US dollar amounts by specific coefficients for each spend type. The coefficient is obtained from the supplier directly, or from public data on industry averages (i.e., EPA EEIO model), in line with the GHG Scope 3 Protocol guidance. Where available, Etsy uses supplier-specific emissions factors from publicly available CDP reports. Etsy used supplier-specific emissions factors from the following sources:

- 2020 Google CDP Report, C6.10, Page 40. https://www.gstatic.com/gumdrop/sustainability/alphabet-2020-cdp-climate-change-response.pdf
- 2020 Microsoft CDP Disclosure, C6.10, Page 89. https://query.prod.cms.rt.microsoft.com/cms/api/am/binary/RE2EWBx
- 2020 Deloitte CDP Disclosure, C6.10. https://www.cdp.net/
- 2020 Salesforce CDP Disclosure, C6.10. https://www.cdp.net/

Reverb's supplier spend for AWS cloud computing services are included with this category in 2020 and excluded from Scope 3 Cloud computing.

End User Energy: This metric is related to energy use associated with use of Etsy's platform by buyers and sellers globally on personal devices (mobile devices and non-mobile laptops). Emissions are calculated using a user's visit length, device type, and location at the country-level. In order to calculate estimated energy consumption, visit duration is multiplied by a power draw factor in Watts, and converted to kWh. The power draw factor is determined by device type: mobile devices and non-mobile, assumed to be laptops. For mobile devices, we incorporate charging efficiency of 75%, while for non-mobile devices, we assume that the device is plugged in during use, in real-world adjusted, high active mode (i.e., a charging efficiency of 100%). Average country-level emissions factors are applied to the resulting electricity consumption to derive the associated emissions. Our assumptions are based on the following sources:

- Carroll, A. & Heiser, G. (June 2010). *An Analysis of Power Consumption in a Smartphone*. Presented at USENIXATC'10 Annual Technical Conference.
- Yoon, C., et al. (June 2012). *AppScope: Application Energy Metering Framework for Android Smartphones using Kernel Activity Monitoring*. Presented at USENIXATC'12 Annual Technical Conference.
- Huang, et al. (June 2012). A *Close Examination of Performance and Power Characteristics of 4G LTE Networks*. Presented at MobiSys '12: Proceedings of the 10th international conference on Mobile systems, applications, and services.
- Urban, et al. (December 2017). *Energy Consumption of Consumer Electronics in U.S. Homes in 2017*. Final Report by the Fraunhofer USA Center for Sustainable Energy Systems to the Consumer Electronics Association (pg. 24).
- Urban, et al. (June 2014). *Energy Consumption of Consumer Electronics in U.S. Homes in 2013*.

Final Report by the Fraunhofer USA Center for Sustainable Energy Systems to the Consumer Electronics Association (pg. 150).

Exclusions

Each year we aim to increase the quality of the data reported. As tenants of leased facilities, we do not have access to data related to heat source or generator diesel use in our data centers, complete refrigerant sources, and certain shared building common spaces energy sources. We are pursuing this data for future reports.