



# **LIBERTY GLOBAL LTD.'S ENVIRONMENTAL REPORTING CRITERIA 2023**

Reporting period: January 1 - December 31, 2023

## **LIBERTY GLOBAL LTD.'S ENVIRONMENTAL REPORTING CRITERIA (2023)**

This document sets out the reporting criteria for Liberty Global Ltd.'s 2023 Energy Consumption and Greenhouse Gas (GHG) emissions statements as published in our Corporate Responsibility Report for the year ended December 31, 2023.

### **ORGANIZATIONAL REPORTING BOUNDARIES**

Our reported environmental data follows the World Resources Institute and World Business Council on Sustainable Development's GHG Protocol Corporate Standard using the operational control approach. This report includes our consolidated operations in Europe under the consumer brands Telenet in Belgium, Sunrise in Switzerland, Virgin Media in Ireland, UPC in Slovakia, as well as our centralized and corporate functions, predominantly in the Netherlands, the United Kingdom and the United States. We have included our proportional share of the Scope 1 and Scope 2 market-based emissions from the Virgin Media O2 joint venture (VMO2), the VodafoneZiggo joint venture and the AtlasEdge joint venture in our Scope 3 emissions. Emissions from certain minor consolidated operations as well as businesses in which we have non-controlling equity stakes, with the exception of the three joint ventures previously specified, are not included within our reported figures as the collection of data for these businesses is not currently practicable.

### **ACQUISITIONS AND DISPOSITIONS**

Our policy is to include performance data of newly acquired subsidiaries at the end of their first full year under our ownership. Subsidiaries for which we no longer have operational control are excluded as of the reporting year that our operational control ends. We rebase prior year data for dispositions and those acquisitions that exceed 5% of a particular scope.

### **REPORTING PERIOD AND COMPARATIVE DATA**

All reported data covers the period from January 1 to December 31, 2023, unless otherwise stated. For comparative purposes and to establish revised base-year values for our environmental targets, our previously reported environmental results are adjusted for acquisitions and dispositions. These adjustments are clearly disclosed in the relevant area of the report for transparency.

We consider prior period errors to be omissions or misstatements to one or more prior periods arising from a failure to use (or misuse of) information that was available when the information was being compiled and that could have been reasonably expected to have been considered. Prior period errors are considered material if they exceed 5% for the specific scope. Material prior-period errors are corrected retrospectively by correcting the comparative amounts and are clearly disclosed in the relevant area for transparency.

### **THE DATA COLLECTION AND APPROVAL PROCESS**

Data is collected by the relevant providers across all market operations and entered into the CR360 system owned by UL (Underwriters Laboratories), an integrated sustainability data management system. The provided data is reviewed and approved by the relevant market's subject matter experts for accuracy and completeness, as well as by a member of the local accounting or financial reporting team to ensure compliance with our prescribed guidance and requirements. This data is then reviewed and approved by the Chief Financial Officer for the respective market operation before being consolidated at our level and submitted to our Chief Accounting Officer for final approval. In addition, the process is actively supported by our Corporate Responsibility team, our Legal department and senior management.

All calculations are based on site-specific activity data collected by our teams across our company footprint. The majority of our environmental data comes from third-party sources and we have made every effort to capture the activity data as accurately as possible. However, in those cases where the data was not obtainable, we have estimated based on the best available alternative, including prior period information, financial costs, technical specifications of the equipment in service, square meters of the respective location, or upon a calculation agreed with the supplier. To ensure a consistent approach in estimating data, we have provided documented reporting guidelines to our operations.

## ENVIRONMENTAL IMPACTS

In line with the GHG Protocol, our GHG emissions are calculated in carbon dioxide equivalent (CO<sub>2</sub>e) using the latest, most relevant emission conversion factors according to the countries in which we operate.

**Scope 1 (Direct)** emissions come from sources that are company owned or controlled, including (i) emissions from static combustion (i.e., fuel used in generators for heating/power), (ii) mobile combustion (i.e., vehicle and aviation fuel from company owned or leased fleet) and (iii) coolants and propellants used (i.e., in air conditioning units and fire suppression systems). This information is collected via company fuel cards, business travel expenses, third-party invoices and third-party site visits. Gases include carbon dioxide (CO<sub>2</sub>), nitrous oxide (N<sub>2</sub>O), methane (CH<sub>4</sub>), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF<sub>6</sub>) and nitrogen trifluoride (NF<sub>3</sub>).

For Scope 1 emission sources, we have applied emission factors, or alternatively, the closest equivalent, produced by the Dept. for Business, Energy & Industrial Strategy (BEIS 2023) - UK Government GHG Emission Conversion Factors for Company Reporting. We have incorporated BEIS 2023 emission factors regardless of jurisdiction as they are widely recognized, reliable, and providing for a consistent approach across our operations. .

**Scope 2 (Indirect)** emissions are from purchased electricity, heat steam and cooling. This information is collected via electricity consumption invoices, co-location service invoices (i.e., where electricity is estimated by market operations), on-site meters or inverters. Scope 2 emissions are reported using both the “location-based” methodology and the “market-based” methodology.

The location-based methodology involves applying an average emissions factor that relates to the grid on which energy consumption occurs. For our Scope 2 location-based GHG emissions, we have applied the following location-specific emission factors for our operations:

- United Kingdom: Dept. for Business, Energy & Industrial Strategy (BEIS 2023) - UK Government GHG Emission Conversion Factors for Company Reporting
- United States: Environmental Protection Agency (EPA) - Emissions & Generation Resource Integrated Database (eGRID2022 - RMPA sub-region, v1.1)
- For our other market operations, we have applied electricity emission factors from the International Energy Agency (IEA 2023 v1.1).

The market-based methodology applies if the company has operations in markets where energy certificates or supplier-specific information are available. It is designed to better reflect electricity purchasing decisions, including accounting for the impact of green or low-carbon electricity. For our Scope 2 market-based GHG emissions, we apply supplier-specific emission factors, or alternatively, the closest equivalent, where

available. For electricity that does not have supplier-specific emission factors available, we apply factors from the Reliable Disclosure (RE-DISS) to electricity consumption for our European and UK operations and factors from the Green-e Residual Mix Emissions Rates for our U.S. operations.

For 2019 through 2023, we collected supplier-specific emission factors from our global operations.

**Scope 3 (Indirect)** emissions are currently captured from the following emissions categories under the GHG Protocol: (i) emissions arising from water and waste, which include the impact of recycling customer premises equipment (category 5); (ii) business air and land travel, including the use of employee-owned vehicles for business purposes, flights taken by employees and travel in rental cars, taxis and public transportation (category 6); and (iii) the Scope 1 and Scope 2 market-based emissions from the VMO2, VodafoneZiggo, and AtlasEdge joint ventures (category 15). With the exception of category 15 emissions, our emissions information is collected via third-party service invoices and reporting (e.g., corporate travel agencies), business travel expenses and estimates by our market operations. Our category 15 emissions are reported to us by the respective joint ventures in accordance with our Scope 1 and 2 methodology to ensure consistency within our reporting. VodafoneZiggo's externally reported Scope 2 emissions exclude emissions from leased assets which differs from our approach; this has been adjusted in our reporting to align with our methodology.

For Scope 3 emission sources, we have applied emission factors produced by the Dept. for Business, Energy & Industrial Strategy (BEIS 2023) - UK Government GHG Emission Conversion Factors for Company Reporting.

### **EMISSIONS INTENSITY METRIC**

Our emissions intensity metric is Scope 1 and 2 market-based emissions in metric tons of CO<sub>2</sub>e per USD million of total revenue. We use this metric to provide us with meaningful targets against which to measure the energy usage of our business operations. Total revenue is restated to account for acquisitions and dispositions to align with similar adjustments made to our emissions. In addition, to mitigate the impact of foreign exchange rate fluctuations on our intensity metric, we have based all exchange to U.S. dollars on the average exchange rate for our 2019 base year.

### **RENEWABLE ELECTRICITY METRIC**

We measure the percentage of renewable electricity generated or purchased by our operations directly from producers or suppliers for the most recently ended financial year. This metric is also required for reporting our performance against targets specified in our Sustainability Linked Loans (SLL). Renewable electricity percentage includes the following:

- a) Renewable electricity generated on-site;
- b) Renewable electricity purchased directly from producers or suppliers; and/or
- c) Grid electricity blend consumed for which the operation has acquired an accreditation, certificate, or any other measure from a regulatory body for renewable electricity produced.

### **ENERGY EFFICIENCY METRIC**

The Energy Efficiency metric is required for reporting our performance against targets specified in our SLL. We measure the total energy consumed in the network infrastructure used to transport customer data per terabyte (TB) of data traffic generated as we run our networks and customers use our services. This

calculation reflects both internet protocol (IP) based data traffic from fixed broadband services (such as web browsing, IP TV streaming, voice services) and data traffic from mobile services (such as voice calls, text messages, and internet connections for 4G and 5G technologies; and text messages and data services for 3G technology) from our Sunrise and Virgin Media Ireland operations, measured and reported separately. In those cases when data traffic information was unavailable due to network outages, we have estimated these data points based on the average volume (Kbytes) of all other data points collected through the year. We define total energy consumed as total electricity used to run our networks, excluding electricity consumed in non-network facilities (for example offices or shops) and excluding electricity consumed for customer data transported through leased lines for which electricity is not recharged by the lessor.