



# **LIBERTY GLOBAL'S ENVIRONMENTAL REPORTING CRITERIA 2022**

Reporting period: January 1 - December 31, 2022

## **LIBERTY GLOBAL'S ENVIRONMENTAL REPORTING CRITERIA (2022)**

This document sets out the reporting criteria for Liberty Global plc's 2022 Energy Consumption and Greenhouse Gas (GHG) emissions statements as published in our UK Companies Act Annual Report and in our Corporate Responsibility Report for the year ended December 31, 2022.

### **ORGANIZATIONAL REPORTING BOUNDARIES**

Liberty Global's 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. We have reported 100% of the emissions from Telenet, in which we have an ownership interest of 61.1% as of December 31, 2022. Emissions from businesses in which we have non-controlling equity stakes are not included within our reported figures with the exception of our 50% interests in the VodafoneZiggo joint venture and the Virgin Media O2 joint venture (VMO2 JV). We have included 50% of the Scope 1 and Scope 2 market-based emissions from these joint ventures in our Scope 3 emissions.

### **ACQUISITIONS AND DISPOSITIONS**

Our policy is to include any new subsidiaries that have been acquired in the first six months of the reporting period and to exclude any subsidiaries for which we no longer have operational control. We rebase prior year data for acquisitions and dispositions.

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

All reported data covers the period from January 1 to December 31, 2022, 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 the Liberty Global 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 some cases, such as with some energy consumption where the data was not available, we have estimated the data based on our previous period,

financial costs or technical specifications of the equipment. 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) and perfluorocarbons (PFCs).

For Scope 1 emission sources, we have applied emission factors produced by the Department for Environment, Food & Rural Affairs (Defra 2022) - UK Government GHG Emission Conversion Factors for Company Reporting.

**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: Department for Environment, Food & Rural Affairs (Defra 2022) - UK Government GHG Emission Conversion Factors for Company Reporting
- United States: Environmental Protection Agency (EPA) - Emissions & Generation Resource Integrated Database (eGRID2021 - RMPA sub-region)
- For our other market operations, we have applied electricity emission factors from the International Energy Agency (IEA).

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 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.

**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 VodafoneZiggo and VMO2 joint ventures (category 15 - investments). Our emissions information for categories 5 and 6 is collected via third-party service invoices and reporting (e.g., corporate travel agency), business travel expenses and

estimates by our market operations. Our category 15 emissions are reported to us by the respective joint ventures.

We are currently developing a robust process to collect data from suppliers as part of our comprehensive Scope 3 decarbonization plan. Therefore, until the data quality is enhanced, we are excluding the emissions from “travel by third party services and installation vehicles” from the 2022 reporting and are adjusting prior year data to reflect this exclusion.

For Scope 3 emission sources, we have applied emission factors produced by the Department for Environment, Food & Rural Affairs (Defra 2022) - UK Government GHG Emission Conversion Factors for Company Reporting.

## **EMISSIONS INTENSITY METRIC**

Our emissions intensity metric provides us with meaningful targets against which to measure our business operations’ energy usage. In order to better reflect our business operations and to align with our peers for comparable data, we have updated our environmental intensity metric from Scope 1 and 2 market-based emissions per terabyte (TB) of data traffic generated, to Scope 1 and 2 market-based emissions in metric tons of CO<sub>2</sub>e per USD million of total revenue. Total revenue is adjusted 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 2019 foreign exchange rate.