



# Liberty Global's Environmental Reporting Criteria

April 2015

This document sets out the reporting criteria for Liberty Global plc's 2014 Greenhouse Gas (GHG) emissions statements as published in its Annual Report & Accounts and in its Corporate Responsibility Report for year ending December 31, 2014.

## Reporting period and comparative data

All data in this document covers the period January 1 to December 31, 2014 unless otherwise stated. The comparative data for 2013 includes a full year's worth of data for our Virgin Media operation even though the company was not acquired until June 7, 2013. We have also made adjustments to our 2012 base year's environmental results to include Virgin Media's data, for comparative purposes.

## 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 as of December 31, 2014, using the operational control approach. This covers all global operations, including Virgin Media, operations under the UPC brand, Unitymedia, Telenet, VTR, and Liberty Puerto Rico. We have reported 100% of the emissions from Telenet (Belgium) and Liberty Puerto Rico, in which we had ownership interests of 56.6% and 60.0%, respectively, as of December 31, 2014. Emissions from businesses in which we have non-controlling equity stakes are not included within our reported figures.

## Acquisitions and disposals

In terms of our presentation of Virgin Media performance, please see above. Our policy is to include any new subsidiaries that have been entered into in the first six months of the reporting period. Therefore, we exclude the recent acquisition of Ziggo in the Netherlands (closed in November 2014) from our 2014 reporting.

In terms of disposals, substantially all of Chellomedia's assets were sold in January 2014 and have not been included in the 2014 reporting. Chellomedia's 2012 and 2013 data has remained included in the comparatives.

## The data collection process

Data from our activities is collected by the relevant data providers across all of the market operations and entered into the Credit360 system. The provided data is reviewed and approved by the relevant SPOC (single point of contact) at each of our market operations. This data is then reviewed and analyzed by the Liberty Global Corporate responsibility team and the corporate issue area experts, before being signed off by senior management and the Legal department at Liberty Global, as well as the Chief Financial Officer (CFO) in each of the market operations.



## Environmental Impacts

Our scope 1 and 3 emissions are calculated by using the UK Department for Environment, Food & Rural Affairs (DEFRA) emission factors (2014). Our scope 2 emissions are calculated by using the DEFRA emission factors (2014) for all of our European-based operations. In Latin America, we use the Energía Eléctrica de Puerto Rico - Electricity Generated (2011) emission factors in Puerto Rico and the IEA (2013) emissions factors in Chile. We use the US Environmental Protection Agency RMPA eGRID region (2012) emission factors for our US Headquarters in Denver, Colorado.

Our footprint has been restated for 2011 and 2012 to account for material changes to the 2013 conversion factors provided by DEFRA for company reporting purposes, as well as to account for the acquisition of Virgin Media. We have also amended prior year data as a result of previously used estimates and other changes that have been identified.

All calculations are based on site-specific activity data collected by our teams around the world. We have made every effort to capture the activity data as accurately as possible. However, in some cases, it is neither possible nor practical to do so and we have made estimates. In order to ensure a consistent approach to estimating data is applied across the Group, we have implemented a hierarchy of data sources.

The majority of our environmental data comes from third-party sources, such as energy invoices. In limited cases, where this information was not available, we estimated the consumption data based on previous periods' consumption, the financial cost of the energy consumed, or the technical specifications of the equipment.

**Scope 1 (Direct):** emissions come from sources that are company owned or controlled, including: emissions from static combustion (e.g. fuel used in generators for heating/power); mobile combustion (e.g. vehicle and aviation fuel from company owned or leased fleet); and coolants and propellants used (e.g. 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 included: CO<sub>2</sub>, N<sub>2</sub>O, CH<sub>4</sub>, hydrofluorocarbons (HFCs), and perfluorocarbons (PFCs).

**Scope 2 (Indirect):** emissions from purchased electricity, heat and steam. This information is collected in electricity consumption invoices, co-location service invoices (i.e. where electricity is estimated by market operations), on-site meters or inverters. Gases included: CO<sub>2</sub> (for the UK CH<sub>4</sub> and N<sub>2</sub>O gases are also included).

**Scope 3 (Indirect):** includes: emissions from business air and land travel (i.e. flights taken by employees and car travel from private vehicles); water and waste (i.e. the emissions arising from water usage and waste generated from operations); emissions arising from the impact of recycling customer premises equipment; and travel by our third party service and installation vehicles. In 2014, for the first time, emissions from the travel by our third party service and installation vehicles have been included as part of our Scope 3 emissions. This data was excluded in our 2013, 2012 and 2011 data. This information is collected via third party service invoices and reporting (e.g. corporate travel agency), business travel expenses and estimations by the market operations. Gases included: CO<sub>2</sub>, N<sub>2</sub>O, CH<sub>4</sub> (where available). Our scope 3 data excludes emissions arising from operation of customer set-top boxes and modems at the customers' premises.



## Net emissions

In line with good practice, we disclose both gross and net GHG emissions, which illustrates the impact of our procurement and production of alternative energy. Gross emissions are calculated using national grid average conversion factors for all electricity consumption and this does not account for emissions reduction activities, such as purchasing carbon offsets or procuring electricity derived from renewable energy sources. Net emissions are calculated using a conversion factor of zero for all electricity consumed from onsite renewable energy generation and from certified green energy contracts. This information is derived from credit invoices from the supplier, and third party renewable energy certificates.

## Environmental intensity metrics

In order to provide a meaningful target to measure our energy usage against our business operations, we measure our GHG emissions per terabyte (TB) of data traffic generated as we run our network and customers use our services. This calculation reflects internet protocol (IP) based data traffic from fixed broadband services, such as web browsing, IP streaming voice and video services, from all our market operations that we can reliably measure. This represents close to 50% of the revenue we generate from our total service offerings.

Currently, our intensity calculations do not take into account data traffic generated through non-IP-based and non-cable-based services. These are services such as cable television, asymmetric digital subscriber line (ADSL) and others. This is because power consumption for these services is calculated per unit of installed hardware and does not reflect actual traffic generated by customers through use of the services. We intend to convert all non-IP based services to IP-based over the next 10-15 years. As services migrate to IP-based, our intensity metric will reflect an increasing proportion of our total services, eventually covering our entire offerings.

In 2014, GHG emissions intensity is calculated on the basis of GHG emissions per terabyte (TB) of actual data traffic generated from all market operations. In 2013, we used actual TB data available from 10 market operations and estimates from four market operations. The estimates calculated for Virgin Media, Telenet, VTR and Liberty Puerto Rico were based on the assumption that the users in these market operations consume data similar to the rest of our operations for which actual data usage is available.

