SCOPE 3 GHG EMISSIONS

Expanded 2023 Report

CONTENTS

ABOUT THIS REPORT

This report provides Liberty Global's estimate of greenhouse gas (GHG) emissions associated with our value chain (Scope 3) from our 2019 base-year through 2023.

Scope 3 GHG emissions are the indirect emissions linked to our upstream and downstream value chain.

Scope & Reporting Boundaries

This report provides the Scope 3 GHG emissions from 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. Our reported Scope 3 data follows the World Resources Institute (WRI) and World Business Council on Sustainable Development's (WBCSD) GHG Protocol Corporate Standard using the operational control approach. Emissions from certain minor consolidated operations are not included within our reported figures as the collection of data for these businesses is not currently practicable.

Our policy is to include Scope 3 emissions for 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 to reflect significant individual or cumulative changes when significant, including acquisitions, dispositions, changes in calculation methodologies, improvements in data accuracy and discovery of errors or omissions. As this is our initial Scope 3 report, it does not reflect any adjustments to prior year reporting. This report includes calendar year data from our 2019 base year through 2023.

About Liberty Global

Liberty Global is a world leader in converged broadband, video and mobile communications services. We deliver next-generation products through advanced fiber and 5G networks, and currently provide over 85 million[1] connections across Europe. Our businesses operate under some of the best-known consumer brands, including Sunrise in Switzerland, Telenet in Belgium, Virgin Media in Ireland, UPC in Slovakia, Virgin Media-O2 in the U.K. and VodafoneZiggo in The Netherlands. Through our substantial scale and commitment to innovation, we are building Tomorrow's Connections Today, investing in the infrastructure and platforms that empower our customers to make the most of the digital revolution, while deploying the advanced technologies that nations and economies need to thrive. Liberty Global's consolidated businesses generate annual revenue of more than $7 billion, while the VMO2 JV and the VodafoneZiggo JV generate combined annual revenue of more than $18 billion[2].

Liberty Global Ventures, our global investment arm, has a portfolio of more than 75 companies and funds across the content, technology and infrastructure industries, including stakes in companies like ITV, Televisa Univision, Plume, AtlasEdge and the Formula E racing series.

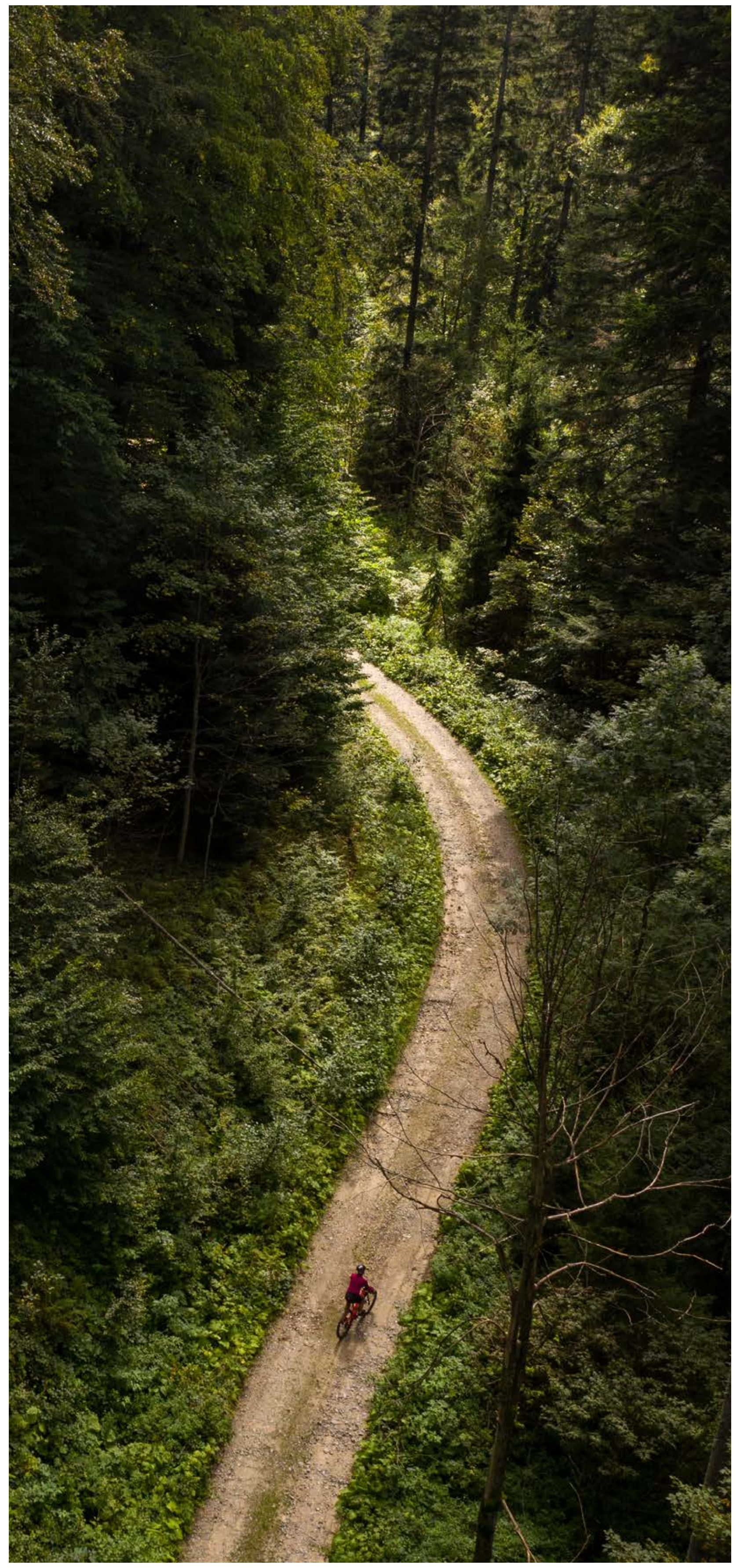
Sunrise, Telenet, the VMO2 JV and the VodafoneZiggo JV deliver mobile services as mobile network operators. Virgin Media Ireland delivers mobile services as a mobile virtual network operator through third-party networks. UPC Slovakia delivers mobile services as a reseller of SIM cards.

Liberty Global Ltd. is listed on the Nasdaq Global Select Market under the symbols "LBTYA", "LBTYB" and "LBTYK".

1 Represents aggregate consolidated and 50% owned non-consolidated fixed and mobile subscribers. Includes wholesale mobile connections of the VMO2 JV and B2B fixed subscribers of the VodafoneZiggo JV.

2 Revenue figures above are provided based on full year 2023 Liberty Global consolidated results and the combined as reported full year 2023 results for the VodafoneZiggo JV and full year 2023 U.S. GAAP results for the VMO2 JV.

ABOUT THIS REPORT

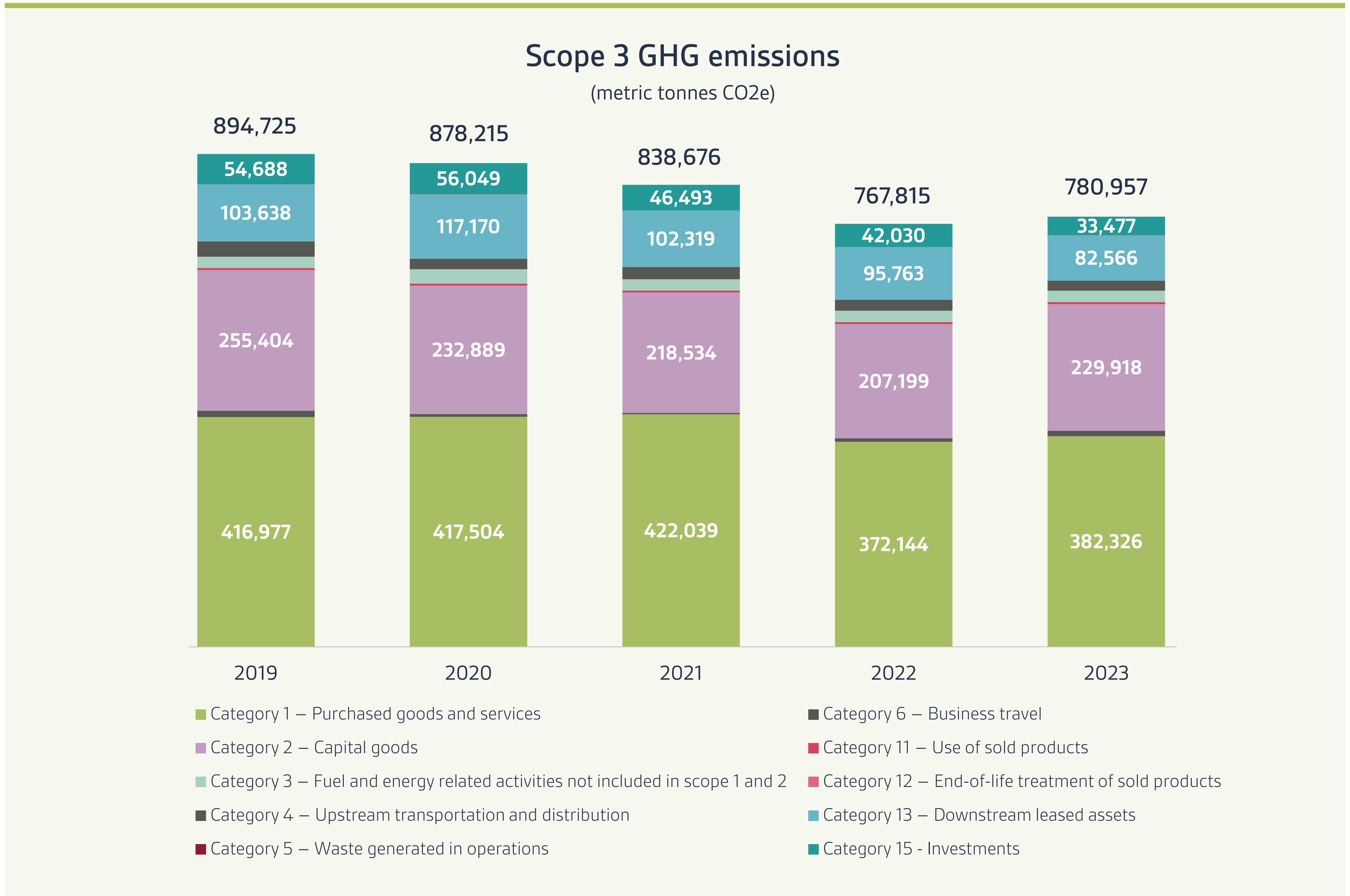


Forward looking statements

This report may contain forward-looking statements within the meaning of the US Securities Act of 1933, as amended, the Securities Exchange Act of 1934, as amended, and the Private Securities Litigation Reform Act of 1995, including statements with respect to our plans, goals and strategies (regarding Environmental, Social and Governance (ESG) matters; improvements in operating procedures and technology, and potential benefits to us therefrom; our efforts to enable our customers and vendors to achieve their own ESG goals; revenue and cost expectations; financing of operations; source and sufficiency of funds required for building new equipment and upgrading existing equipment; demand for our services; competition; government regulation; and other matters that are not historical fact. Forward-looking statements can be identified by the fact that they do not relate strictly to historical or current facts, and they often use words such as 'aim', 'anticipate', 'believe', 'budgeted', 'commit', 'continue', 'could', 'estimate', 'expect', 'goal', 'intend', 'may', 'plan', 'predict', 'potential', 'project', 'pursue', 'should', 'strategy', 'target', 'will' or 'would', or the negative thereof and other words and expressions of similar meaning. These forward-looking statements involve certain risks and uncertainties that could cause actual results to differ materially from those expressed or implied by these statements. These risks and uncertainties include events that are outside of our control, such as changes in legislation, regulation, rules, codes of practice and other governmental and non-governmental policies; our inability to reduce our environmental impact and emissions; our inability to perform at our desired standards; our inability to develop and deliver equipment, technology and software solutions to enable our customers to achieve their own ESG goals; our inability to realise intended benefits from our ESG strategies and initiatives; global economic conditions, including inflationary pressures and risks of economic downturns or recessions, environmental risks and our ability to satisfy future environmental costs; technology-related disputes; legal proceedings and actions by governmental or other regulatory agencies; public health crises, pandemics and epidemics; weather; operating costs; and other factors detailed from time to time in our filings with the US Securities and Exchange Commission, including our most recently filed Form 10- K, Form 10-K/A and Form 10-Qs. The forward-looking statements are based on certain assumptions and analyses we make in light of our experience and our perception of historical trends, current conditions, expected future developments and other factors we believe are appropriate in the circumstances. Forward-looking statements are aspirational and not guarantees or promises that goals or targets will be met. These forward-looking statements speak only as of the date of this Report. Liberty Global expressly disclaims any obligation or undertaking to disseminate any updates or revisions to any forward-looking statement contained herein to reflect any change in Liberty Global's expectations with regard thereto or any change in events, conditions or circumstances on which any such statement is based.

SCOPE 3 GHG EMISSIONS ANALYSIS

Our analysis shows that from 2019 – 2023 our estimated Scope 3 GHG emissions have decreased by 12.7%, primarily driven by a decrease in operating and capital expenditures (Categories 1 and 2), a decrease in the emissions related to the energy consumption of our leased products (Category 13) and improvements in the decarbonization activities of our investments (Category 15). This overall improvement includes a 1.7% year-over-year increase in 2023, reflecting emissions increases driven by Categories 1 and 2.



As most of our Scope 3 emissions occur in our supply chain, we are taking steps to engage with our most significant suppliers to understand their emissions and decarbonization journeys towards net zero. We also continue to deploy efforts to reduce the carbon footprint and energy consumption of our products, identify opportunities to reduce our emissions related to travel and waste management, and work closely with our JVs to align on emissions-reduction efforts.

SCOPE 3 GHG EMISSIONS DATA

The below data was calculated using a series of estimations and assumptions as outlined in our Methodology section. The below estimates may change as we continue to identify improvements to the completeness and accuracy of the underlying data and our methodologies evolve in line with emerging industry best practice.

Certain of our reported amounts, as denoted with an asterisk (*), are within KPMG LLP's independent limited assurance scope. Please see the KPMG Independent Limited Assurance Report on our website for further information.

	2023	2022	2021	2020	2019
Scope 3 GHG emissions by category	**metric tonnes CO2e**	**metric tonnes CO2e**	**metric tonnes CO2e**	**metric tonnes CO2e**	**metric tonnes CO2e**
Category 1 – Purchased goods and services	382,326	372,144	422,039	417,504	416,977
Category 2 – Capital goods	229,918	207,199	218,534	232,889	255,404
Category 3 – Fuel- and energy- related activities (not included in scope 1 or 2)	20,620	20,656	20,282	19,121	20,486
Category 4 – Upstream transportation and distribution	18,043	19,635	22,271	26,035	27,782
Category 5 – Waste generated in operations[3]	252	111	282	498	438
Category 6 – Business travel[4]	9,780	6,406	2,585	5,088	11,410
Category 11 – Use of sold products	3,791	3,705	3,705	3,695	3,736
Category 12 – End-of-life treatment of sold products	184	166	166	166	166
Category 13 – Downstream leased assets	82,566	95,763	102,319	117,170	103,638
Category 15 – Investments[5]	33,477	42,030	46,493	56,049	54,688
Total Scope 3 GHG emissions	**780,957**	**767,815**	**838,676**	**878,215**	**894,725**
Total Scope 3 GHG emissions with limited assurance (Categories 5, 6 and 15)	**43,509***	**48,547**	**49,360**	**61,635**	**66,536**

3 Includes emissions from both wastewater and solid waste, which includes the impact of recycling customer premises equipment.
4 Includes emissions from 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. The increase in travel emissions in 2023 compared to 2022 is attributed to an increase in short-haul flights and in-person meetings and conferences.
5 The decline in investment emissions in 2023 compared to 2022 is attributable to decarbonization efforts made by VMO2 and VodafoneZiggo

SCOPE 3 GHG EMISSIONS TARGETS

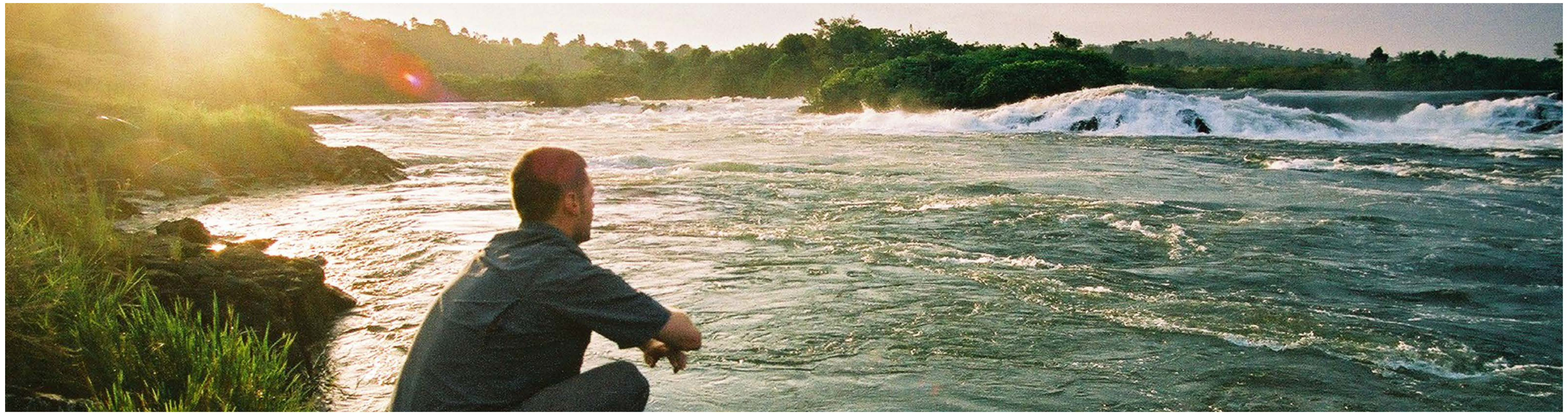
In 2020, we committed to two SBTI-approved Scope 3 GHG emissions targets:

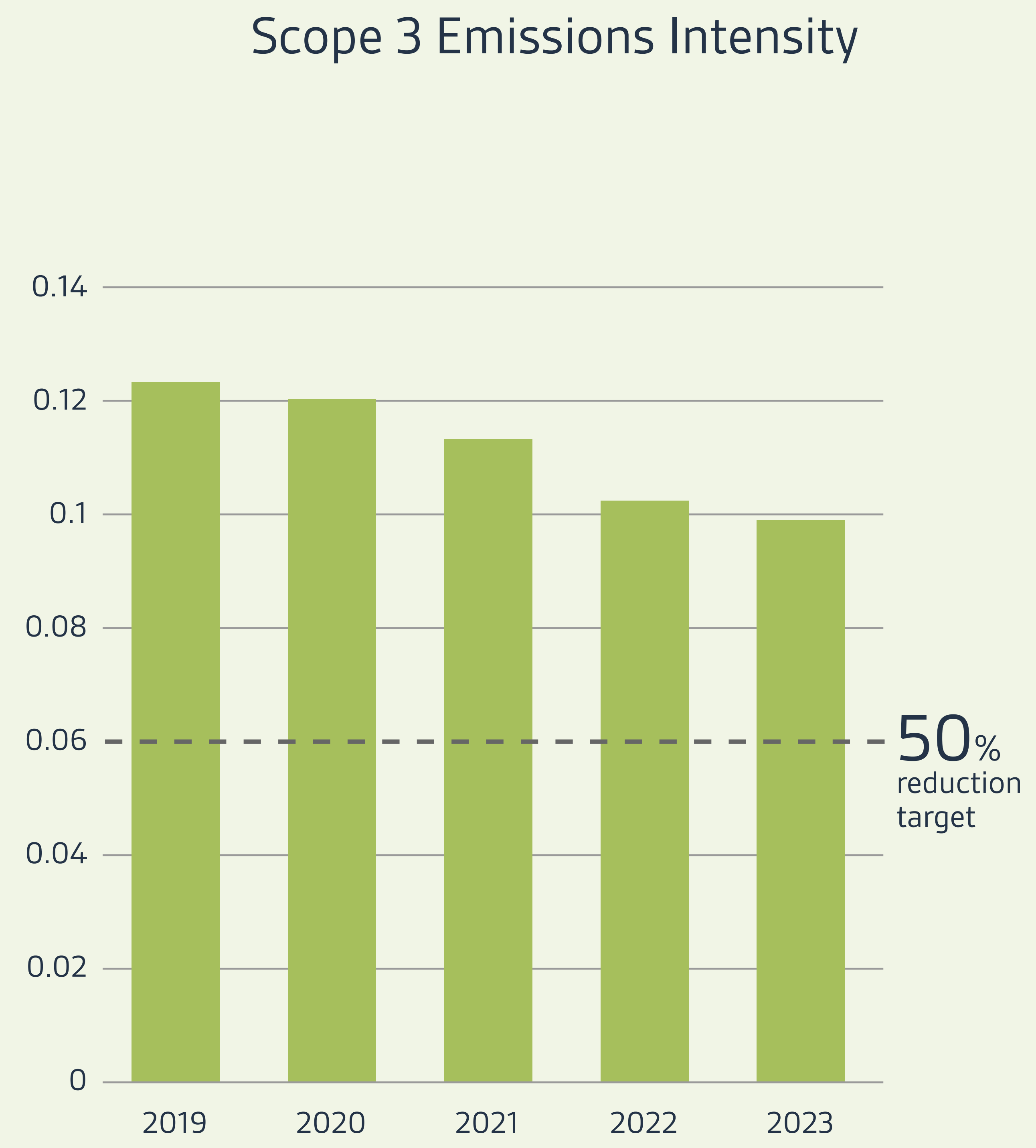
- Reduce absolute Scope 3 GHG emissions from the manufacture and use of customer premises equipment 50% by 2030 from a 2019 base year (CPE target) .
- Reduce Scope 3 GHG emissions 50% per home passed over the same target period (intensity target).

Our progress against our intensity target is presented below. Quantification of our progress against our CPE target is currently in development and results will be presented in an update to this report.

Intensity target – Scope 3 GHG emissions reduction per home passed

We calculated the emissions intensity[6] of Scope 3 GHG emissions per home passed for the operations in scope for the period 2019 – 2023. Our analysis shows that our emissions intensity has decreased by 20% compared to our 2019 base year. The decrease in emissions intensity is explained by the overall decrease in Scope 3 GHG emissions coupled with an 8.6% increase in homes passed over the reported period. This demonstrates that we have been able to decrease our overall value chain emissions even while expanding the footprint of our business.





6 Data is calculated based on total Scope 3 emissions as presented on page 5, divided by homes passed data as reported in Annual Reports - Liberty Global for the respective years

METHODOLOGY

Our estimated Scope 3 GHG emissions were compiled following the guidelines of 'The Greenhouse Gas Protocol: A Corporate Accounting and Reporting Standard (Revised Edition)' and the 'Technical Guidance for Calculating Scope 3 Emissions' published by the WRI and the WBCSD, as well as the 'Scope 3 Guidance for Telecommunication Operators' published by The Global Enabling Sustainability Initiative (GeSI). For financed emissions, we follow the Partnership for Carbon Accounting Financials.

Categories	Calculation method	Emission factor
Category 1 – Purchased goods and services	Spend-based method calculated by multiplying the spend[7] in dollars by the relevant emission factor per unit of economic value adjusted for industry-level price index data published by the U.S. Bureau of Economic Analysis.	• Supplier-specific emissions factors where applicable, received from publicly disclosed CDP reports. • Environmental Protection Agency (EPA) - USEEIO v2.0.1.
Category 2 – Capital goods	Spend-based method calculated by multiplying the spend[8] in dollars by the relevant emission factor per unit of economic value adjusted for industry-level price index data published by the U.S. Bureau of Economic Analysis.	• Supplier-specific emissions factors where applicable, received from publicly disclosed CDP reports. • Environmental Protection Agency (EPA) - USEEIO v2.0.1.
Category 3 – Fuel- and energy- related activities (not included in scope 1 or 2)	Activity-based method calculated by energy consumption data recorded in Scopes 1 & 2 multiplied by well-to-tank transportation and distribution losses emission factors.	• Dept. for Business, Energy & Industrial Strategy - UK Government GHG Emission Conversion Factors for Company Reporting • National Renewable Energy Laboratory (NREL) • LCA data specific to wind energy as applicable
Category 4 – Upstream transportation and distribution	Spend-based method calculated by multiplying the spend in dollars by the relevant emission factor per unit of economic value and mode of transportation.	• Environmental Protection Agency (EPA) - USEEIO v2.0.1 • Dept. for Business, Energy & Industrial Strategy - UK Government GHG Emission Conversion Factors for Company Reporting • Ecoinvent Emission Factors
Category 5 – Waste generated in operations	Activity-based method calculated by multiplying waste by type in metric tonnes or cubic meter with the relevant emission factor.	• Dept. for Business, Energy & Industrial Strategy - UK Government GHG Emission Conversion Factors for Company Reporting
Category 6 – Business travel	Activity-based method calculated by multiplying the distance travelled or fuel usage reported by travel method with the relevant emission factor.[9]	• Dept. for Business, Energy & Industrial Strategy - UK Government GHG Emission Conversion Factors for Company Reporting

7 Excludes intercompany, regulatory expenses, internal labor, insurances, rent, government fees, interest, loans, payroll, amortization, depreciation, retirement contributions, employee benefits such as worker's compensation and social security payments and data reported in other categories
8 Excludes capitalized transportation reported in Category 4.
9 Emissions related to hotel accommodation and entertainment are included in Category 1 – Purchased goods and services

METHODOLOGY

Categories	Calculation method	Emission factor
Category 7 – Employee commuting	Not evaluated yet	
Category 8 – Upstream leased assets	Included in Scopes 1 & 2 GHG emissions and reported in the 2023 People Planet Progress Report	
Category 9 – Downstream transportation & distribution	Reported in Category 4	
Category 10 – Processing of sold products	Not applicable	
Category 11 – Use of sold products	Product-specific method calculated by multiplying the number of non-CPE[10] devices sold with an average annual energy usage per device, and with an estimated lifetime and then with relevant emission factor.	• Dept. for Business, Energy & Industrial Strategy - UK Government GHG Emission Conversion Factors for Company Reporting • European Residual Mixes
Category 12 – End-of-life treatment of sold products	Product-specific method calculated by multiplying the number of non-CPE[10] devices sold with the estimated product weight and the appropriate end-of-life emission factor.	• Dept. for Business, Energy & Industrial Strategy - UK Government GHG Emission Conversion Factors for Company Reporting • European Residual Mixes
Category 13 – Downstream leased assets	Product-specific method calculated by multiplying the total volume of active devices by a model-specific or average annual energy usage per device, then by the relevant emission factor.	• IEA Grid Electricity Generated - Average Load (Annual) (Direct)
Category 14 - Franchises	Not applicable	
Category 15 – Investments	Investment-specific method based on our proportional share of the Scope 1 and 2 market-based emissions from the Virgin Media O2 joint venture (VMO2), the VodafoneZiggo joint venture and the AtlasEdge joint venture.[11]	• Dept. for Business, Energy & Industrial Strategy - UK Government GHG Emission Conversion Factors for Company Reporting • European Residual Mixes • IEA Grid Electricity Generated - Average Load (Annual) (Direct)

10 Non-CPE devices refer to products sold to end consumers, such as mobile handheld devices, smart watches, game consoles, smart TVs, etc.
11 Excludes other minority-owned investments as collection of data for these entities is not currently practicable.