Our carbon footprint in the UK

2014 - 2019



	Unit	2014	2015	2016	2017	2018	2019
Location-based carbon footprint (scope 1 and 2) ¹	tonnes CO ₂ e	282,149	268,737	248,598	219,138	184,375	157,845
Market-based carbon footprint (scope 1 and 2) 1	tonnes CO ₂ e	305,601	254,665	260,360	174,863	39,906	30,905

Gross carbon footprint overview

	Unit	2014	2015	2016	2017	2018	2019
Location-based carbon footprint (scope 1 and 2)	tonnes CO ₂ e	282,147	268,737	248,598	219,138	184,375	157,845
Location-based CO ₂ e/Revenue generating unit	kg CO ₂ e	22.55	21.11	19.07	16.39	13.49	11.64
Location-based CO ₂ e/£m revenue	tonnes CO ₂ e	66.96	61.64	55.47	47.65	38.75	33.12
Location-based CO ₂ e/Employee (headcount, year end)	tonnes CO ₂ e	21.15	19.98	18.56	16.98	15.47	14.18
Location-based CO ₂ e/TB Data ²	tonnes CO ₂ e	0.06	0.04	0.03	0.02	0.01	0.01

	Unit	2014	2015	2016	2017	2018	
Location-based carbon footprint (scope 1, 2 and 3)	tonnes CO ₂ e	736,397	657,810	640,708	614,922	501,534	441,824
Location-based CO ₂ e/Revenue generating unit	kgCO ₂ e	58.85	51.66	49.15	45.99	36.69	32.57
Location-based CO ₂ e/£m revenue	tonnes CO ₂ e	174.75	150.89	142.97	133.72	105.42	92.71
Location-based CO ₂ e/Employee (headcount, year end)	tonnes CO ₂ e	55.20	48.90	47.85	47.65	42.09	39.68
Location-based CO ₂ e/TB Data ²	tonnes CO ₂ e	0.17	0.10	0.07	0.06	0.04	0.03

Breakdown

	Unit	2014	2015	2016	2017	2018	2019
Scope 1 emissions (direct)	tonnes CO ₂ e	26,439	27,807	30,898	35,054	38,854	30,905
Static combustion (diesel, gas and gas oil)	tonnes CO ₂ e	3,165	2,987	2,844	3,159	4,339	3,394
Company vehicles ³	tonnes CO ₂ e	16,147	13,455	14,424	15,123	15,183	13,349
Fugitive emissions	tonnes CO ₂ e	7,127	11,365	13,630	16,772	19,332	14,162
Scope 2 location-based emissions (indirect)	tonnes CO ₂ e	255,708	240,930	217,700	184,084	145,521	126,940
Electricity	tonnes CO ₂ e	255,708	240,930	217,700	184,084	145,521	126,940
Scope 2 market-based emissions (indirect)	tonnes CO ₂ e	279,162	226,858	229,462	139,809	1,052	0
Electricity	tonnes CO ₂ e	279,162	226,858	229,462	139,809	1,052	0
Scope 3 emissions (other indirect)	tonnes CO ₂ e	454,251	389,073	392,110	395,785	317,159	83,979
Customer premise equipment ¹	tonnes CO ₂ e	427,910	365,253	364,464	362,676	290,586	258,180
Normalised customer premise equipment	kgCO ₂ e/cpe	44.0	37.2	36.6	35.7	27.4	25.1
Modems	tonnes CO ₂ e	152,655	137,960	146,117	153,516	126,791	116,434
Emissions per modem	kgCO ₂ e/modem unit	34.3	30.0	30.4	30.6	24.5	22.2
Set-top-boxes	tonnes CO ₂ e	275,255	227,292	218,347	209,160	163,795	141,747
Emission per box	kgCO ₂ e/set-top-box unit	52.2	43.4	42.4	40.6	31.8	28.2
Air travel ⁴	tonnes CO ₂ e	2,755	5,482	4,351	3,754	4,708	4,351
Normalised air travel	kgCO ₂ e/employee (headcount, year end)		408	325	291	395	391
Land travel ⁵	tonnes CO2e	8,112	3,874	5,890	6,130	6,304	5,367
Normalised land travel	kgCO ₂ e/employee (headcount, year end)	608	288	440	475	529	482
Third party service and install ⁶	tonnes CO ₂ e	15,116	14,192	17,113	22,894	15,256	15,863
Recycling of customer premise equipment	tonnes CO ₂ e	30	16	12	35	38	19
Waste	tonnes CO ₂ e	282	212	238	253	222	162
Water	tonnes CO ₂ e	46	44	42	43	45	37

Our carbon footprint in the UK

2014 - 2019



Market-based carbon footprint overview

	Unit	2014	2015	2016	2017	2018	2019
Market-based carbon footprint (scope 1 and 2)	tonnes CO ₂ e	303,054	252,640	258,072	172,526	36,320	30,905
Market-based CO ₂ e/Revenue generating unit	kgCO ₂ e	24.22	19.84	19.80	12.90	2.66	2.28
Market-based CO ₂ e/£m revenue	tonnes CO ₂ e	71.92	57.95	57.59	37.52	7.63	6.49
Market-based CO ₂ e/Employee (head count, year end)	tonnes CO ₂ e	22.72	18.78	19.27	13.37	3.05	2.78
Market-based CO ₂ e/TB Data ²	kg CO ₂ e	69.24	39.70	29.19	16.23	2.71	1.84

	Unit	2014	2015	2016	2017	2018	2019
Market-based carbon footprint (scope 1, 2 and 3)	tonnes CO ₂ e	756,007	639,130	648,131	566,542	351,260	314,884
Market-based CO ₂ e/Revenue generating unit	kgCO ₂ e	60.42	50.20	49.72	42.37	25.70	23.21
Market-based CO ₂ e/£m revenue	tonnes CO ₂ e	179.41	146.60	144.62	123.20	73.83	66.07
Market-based CO ₂ e/Employee (headcount, year end)	tonnes CO ₂ e	56.67	47.51	48.40	43.90	29.48	28.28
Market-based CO ₂ e/TB Data ²	kg CO ₂ e	172.72	100.43	73.32	53.28	26.22	18.75

Other

	Unit	2014	2015	2016	2017	2018	2019	l
Water	m ³	133,674	127,168	122,507	125,885	130,496	106,285	l

Business-adjusted KPIs

	Unit	2014	2015	2016	2017	2018	2019
Business information	Revenue generating unit	12,513,500	12,732,400	13,035,900	13,371,600	13,667,800	13,563,900
	Revenue (£m)	4213.9	4359.6	4481.5	4598.5	4757.6	4765.6
	Employees (headcount, year end)	13,340	13,452	13,391	12,905	11,916	11,134

n/a: We do not have good enough data available

All data in this document covers the period January 1 to December 31 unless otherwise stated.

For more information on our environmental reporting criteria, please visit www.libertyglobal.com/cr/cr-report-2015.html

¹ All emission factors are based on Defra's Greenhouse gas reporting conversion factors. 2018 figures are based on Defra's 2018 conversion factors (https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2018)

² This intensity metric has been aligned with Liberty Global and therefore report our electricity consumption and also our net emissions per terabyte of data consumed. The figures for 'terabytes (TB) of data usage' are based on estimated internet protocol (IP) based traffic. We plan to collect the actual data going forward. TB of data usage excludes services not offered over IP-based technology and therefore excludes data usage in connection with cable television, digital television, video-on-demand, asymmetric digital subscriber line and time-division multiplexing licensed capacity. Over time, we expect that all of our data usage will migrate to IP-based technology.

³ Company vehicles includes company owned and leased cars and vans only. Fuel used in private vehicles that is covered by fuel card, cash allowance or reimbursed by the company are included in Scope 3 emissions

 $^{^{\}mathtt{4}}$ Data only accounts for flights booked through our booking portal, approx 90%.

⁵ Business land travel includes travel in rental cars, taxis, rail and public transportation. In addition, business land travel also includes travel in employee owned or leased vehicles for business purposes. Rail purchased outside of our central booking system and claimed back through expenses is also included

⁶ Data was estimated for one contractor in 2016 In 2017 fuel used for network expansion was included for the first time. This explains the increase in third party fuel consumed between 2016 and 2017. Data was estimated for five of our 27 contractors in 2017. For 2018, third party fuel data has been captured in the following ways:

⁻ Field service and install is based on actual fuel data provided by our 5 partners

⁻ Logistics is based on actual data provided by our single logistics partner

⁻ Network expansion data is based on a new estimation approach which will be used for future years

^{* 2014} is the baseline year for the 2020 goals.

Our carbon footprint in Ireland

2014 - 2019



	Unit	2014	2015	2016	2017	2018	2019
Location-based carbon footprint (scope 1 and 2) ¹	tonnes CO ₂ e	11,500	11,611	11,671	12,936	12,392	11,673
Market-based carbon footprint (scope 1 and 2) 1	tonnes CO,e	8,434	1,490	2,026	1,568	1,438	1,290

Gross carbon footprint overview

	Unit	2014	2015	2016	2017	2018	2019
Location-based carbon footprint (scope 1 and 2)	tonnes CO ₂ e	11,500	11,611	11,671	12,936	12,392	11,673
Location-based CO ₂ e/Revenue generating unit	kg CO ₂ e	10.35	10.61	11.43	12.67	12.40	11.75
Location-based CO ₂ e/£m revenue	tonnes CO ₂ e	40.64	44.86	35.96	35.47	31.56	28.99
Location-based CO ₂ e/Employee (headcount, year end)	tonnes CO ₂ e	13.69	17.20	16.39	17.79	11.62	12.02
Location-based CO ₂ e/TB Data ²	tonnes CO ₂ e	0.03	0.03	0.02	0.01	0.01	0.01

	Unit	2014	2015	2016	2017	2018	2019
Location-based carbon footprint (scope 1, 2 and 3)	tonnes CO ₂ e	13,970	15,738	15,576	16,145	16,809	16,453
Location-based CO ₂ e/revenue generating unit	kgCO ₂ e	13	14	15	16	17	17
Location-based CO ₂ e/£m revenue	tonnes CO ₂ e	49.36	60.81	47.99	44.27	42.80	40.86
Location-based CO ₂ e/Employee (headcount, year end)	tonnes CO ₂ e	16.63	23.32	21.88	22.21	15.77	16.94
Location-based CO ₂ e/TB Data ²	tonnes CO ₂ e	0.04	0.04	0.02	0.02	0.01	0.01

Breakdown

Breakaown							
	Unit	2014	2015	2016	2017	2018	
Scope 1 emissions (direct)	tonnes CO ₂ e	1,521	1,490	1,150	1,568	1,438	1,290
Static combustion (diesel, gas and gas oil)	tonnes CO ₂ e	45	46	168	155	178	46
Company vehicles ³	tonnes CO ₂ e	1,318	1,168	860	965	905	1,375
Fugitive emissions	tonnes CO ₂ e	159	276	122	449	354	-
Scope 2 location-based emissions (indirect)	tonnes CO ₂ e	9,979	10,121	10,521	11,368	10,954	10,383
Electricity	tonnes CO ₂ e	9,979	10,121	10,521	11,368	10,954	10,121
Scope 2 market-based emissions (indirect)	tonnes CO ₂ e	6,913	0	876	0	0	0
Electricity	tonnes CO ₂ e	6,913	0	876	0	0	2,003
Scope 3 emissions other indirect)	tonnes CO ₂ e	2,470	4,127	3,905	3,209	4,417	4,780
Customer premise equipment ⁴	tonnes CO ₂ e	-	-	-	-	-	-
Normalised customer premise equipment	kgCO ₂ e/cpe	-	-	-	-	-	-
Modems ⁴	tonnes CO ₂ e	-	-	-	-	-	-
Emissions per modem	kgCO ₂ e/modem unit	-	-	-	-	-	-
Set-top-boxes ⁴	tonnes CO ₂ e	-	-	-	-	-	-
Emission per box	kgCO ₂ e/set-top-box unit	-	-	-	-	-	-
Air travel ⁵	tonnes CO ₂ e	474	703	84	111	13	73
Normalised air travel	kgCO ₂ e/employee (headcount, year end)	564	1,041	118	153	12	75
Land travel ⁶	tonnes CO2e	509	617	612	267	382	762
Normalised land travel	kgCO ₂ e/employee (headcount, year end)	606	914	860	367	358	785
Third party service and install	tonnes CO ₂ e	1,444	2,776	3,174	2,771	3,945	3,944
Recycling of customer premise equipment	tonnes CO ₂ e	1	3	1	1	1	1
Waste	tonnes CO ₂ e	39	25	31	56	72	awaiting data
Water	tonnes CO ₂ e	3	3	3	3	4	0

Our carbon footprint in Ireland

2014 - 2019



Market-based carbon footprint overview

	Unit	2014	2015	2016	2017	2018	2019
Market-based carbon footprint (scope 1 and 2)	tonnes CO ₂ e	8,434	1,490	2,026	1,568	1,438	1,290
Market-based CO ₂ e/Revenue generating unit	kgCO ₂ e	7.59	1.36	1.98	1.54	1.44	1.30
Market-based CO ₂ e/£m revenue	tonnes CO ₂ e	29.80	5.76	6.24	4.30	3.66	3.20
Market-based CO ₂ e/Employee (head count, year end)	tonnes CO ₂ e	10.04	2.21	2.85	2.16	1.35	1.33
Market-based CO ₂ e/TB Data ²	kg CO ₂ e	23.82	3.75	3.22	1.66	1.15	0.82

	Unit	2014	2015	2016	2017	2018	2019
Market-based carbon footprint (scope 1, 2 and 3)	tonnes CO ₂ e	10,680	5,286	5,891	4,725	5,750	6,070
Market-based CO ₂ e/revenue generating unit	kgCO ₂ e	9.61	4.83	5.77	4.63	5.76	6.11
Market-based CO ₂ e/£m revenue	tonnes CO ₂ e	37.74	20.43	18.15	12.96	14.64	15.07
Market-based CO ₂ e/Employee (headcount, year end)	tonnes CO ₂ e	12.71	7.83	8.27	6.50	5.39	6.25
Market-based CO ₂ e/TB Data ²	kg CO ₂ e	30.16	13.31	9.38	4.99	4.59	3.88

Other

	Unit	2014	2015	2016	2017	2018	2019
Water	m ³	9,509	8,031	9,046	7,760	12,374	awaiting data

Business-adjusted KPIs

	Unit	2014	2015	2016	2017	2018	2019
Business information	Revenue generating unit	1,111,200	1,094,800	1,020,700	1,021,200	999,100	993,700
	Revenue (£m)	283	258.8	324.6	364.7	392.7	402.7
	Employees (headcount, year end)	840	675	712	727	1066	971

n/a: We do not have good enough data available

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