

Facebook Sustainability Data 2018



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Values are rounded; totals calculated before rounding.

Every year we evaluate and improve our greenhouse gas inventory methodology. To ensure accurate tracking towards our 75% emissions reduction target, any changes are also applied to our 2017 base year.

Other leased data center facilities includes leased data center-related facilities that used less than 100,000 MWh of electricity in the reporting year.

Electricity Use (MWh)

	2014	2015	2016	2017	2018
Altoona, IA	30,000	174,000	342,000	500,000	612,000
Clonee, Ireland	not yet online	not yet online	1,000	17,000	200,000
Forest City, NC	322,000	310,000	339,000	433,000	547,000
Fort Worth, TX	not yet online	<500	16,000	189,000	461,000
Luleå, Sweden	105,000	187,000	295,000	301,000	337,000
Odense, Demark	not yet online	not yet online	not yet online	not yet online	4,000
Papillion, NE	not yet online	not yet online	not yet online	not yet online	5,000
Prineville, OR	262,000	284,000	327,000	426,000	488,000
Los Lunas, NM	not yet online	not yet online	not yet online	not yet online	26,000
East Coast Leased Data Center Facility	229,000	224,000	317,000	359,000	432,000
Other Leased Data Center Facilities	51,000	82,000	118,000	135,000	133,000
Data Centers Total	999,000	1,260,000	1,756,000	2,360,000	3,245,000
Offices Total	36,000	45,000	74,000	102,000	181,000

	2014	2015	2016	2017	2018
Total Electricity Use	1,035,000	1,306,000	1,830,000	2,462,000	3,427,000

Power Usage Effectiveness

	2014	2015	2016	2017	2018
Annual Data Center PUE	1.08	1.09	1.10	1.10	1.11

Electricity Mix

	2014	2015	2016	2017	2018
Renewable	21%	35%	44%	51%	75%
Non-renewable	79%	65%	56%	49%	25%

Operational Greenhouse Gas Emissions (market-based Scope 1 & 2 metric tons CO₂e)

	2014	2015	2016	2017	2018
Altoona, IA	<500	1,000	1,000	1,000	1,000
Clonee, Ireland	not yet online	not yet online	0	<500	<500
Forest City, NC	119,000	106,000	116,000	136,000	53,000
Fort Worth, TX	not yet online	not yet online	<500	1,000	1,000
Luleå, Sweden	<500	<500	<500	<500	<500
Odense, Demark	not yet online	not yet online	not yet online	not yet online	0
Papillion, NE	not yet online	not yet online	not yet online	not yet online	<500
Prineville, OR	187,000	207,000	239,000	293,000	137,000
Los Lunas, NM	not yet online	not yet online	not yet online	not yet online	1,000
East Coast Leased Data Center Facility ¹	103,000	81,000	115,000	98,000	102,000
Other Leased Data Center Facilities ¹	18,000	28,000	45,000	40,000	17,000
Data Centers Total	427,000	423,000	516,000	568,000	314,000
Offices Total	17,000	28,000	39,000	37,000	25,000

	2014	2015	2016	2017	2018
Total Operational GHG Emissions	444,000	451,000	555,000	604,000	339,000

Select Value Chain Emissions² (Scope 3 metric tons CO₂e)

	2014	2015	2016	2017	2018
Construction	34,000	96,000	56,000	191,000	184,000
Business Travel ³	29,000	52,000	64,000	246,000	397,000
Employee Commuting	13,000	30,000	36,000	57,000	92,000

Greenhouse Gas Intensity (market-based Scope 1 & 2 metric tons CO₂e / monthly active person)

	2014	2015	2016	2017	2018
Annual GHG Intensity	0.00032	0.00028	0.00030	0.00028	0.00015

Operational Greenhouse Gas Emissions by Scope (market-based metric tons CO2e)

	2014	2015	2016	2017	2018
Scope 1	5,000 1%	6,000 1%	9,000 2%	11,000 2%	19,000 6%
Scope 2	440,000 99%	444,000 99%	545,000 98%	594,000 98%	320,000 94%

Market-Based vs. Location-Based Scope 2 Data Center GHG Emissions (metric tons CO2e)

	2016		2017		2018	
	Market-Based ⁵	Location-Based	Market-Based	Location-Based	Market-Based	Location-Based
Altoona, IA	0	222,000	0	283,000	0	346,000
Clonee, Ireland	0	<500	0	7,000	0	82,000
Forest City, NC	115,000	144,000	135,000	159,000	52,000	201,000
Fort Worth, TX	0	8,000	0	87,000	0	212,000
Luleå, Sweden	0	4,000	0	4,000	0	7,000
Odense, Demark	not yet online	not yet online	not yet online	not yet online	0	1,000
Papillion, NE	not yet online	not yet online	not yet online	not yet online	0	3,000
Prineville, OR	238,000	99,000	293,000	127,000	137,000	145,000
Los Lunas, NM	not yet online	not yet online	not yet online	not yet online	0	12,000
East Coast Leased Data Center Facility	115,000	135,000	98,000	106,000	102,000	128,000

Water Withdrawal (cubic meters)

	2014	2015	2016	2017	2018
Altoona, IA	18,000	44,000	87,000	106,000	139,000
Clonee, Ireland	not yet online	not yet online	not yet online	10,000	188,000
Forest City, NC	112,000	99,000	123,000	129,000	99,000
Fort Worth, TX	not yet online	not yet online	14,000	98,000	269,000
Luleå, Sweden	13,000	30,000	32,000	66,000	53,000
Odense, Demark	not yet online	not yet online	not yet online	not yet online	not yet online
Papillion, NE	not yet online	not yet online	not yet online	not yet online	not yet online
Prineville, OR	40,000	70,000	70,000	172,000	160,000
Los Lunas, NM	not yet online	not yet online	not yet online	not yet online	25,000
East Coast Leased Data Center Facility	237,000	245,000	400,000	473,000	533,000
Other Leased Data Center Facilities	44,000	78,000	98,000	85,000	264,000
Data Center Operations Total	465,000	566,000	825,000	1,139,000	1,730,000
Offices Total	198,000	227,000	305,000	470,000	638,000

	2014	2015	2016	2017	2018
Total Water Withdrawal⁴	662,000	793,000	1,129,000	1,609,000	2,367,000
Recycled Water	238,000	255,000	426,000	469,000	673,000

Water Consumption (cubic meters)

	2014	2015	2016	2017	2018 ⁵
Total Water Consumption	data not available	data not available	data not available	838,000	1,279,000

Water Usage Effectiveness

	2014	2015	2016	2017	2018
Annual Data Center WUE	0.32	0.24	0.21	0.24	0.27

Water Withdrawal Intensity (cubic meters / monthly active person)

	2014	2015	2016	2017	2018
Annual Water Intensity	0.00048	0.00050	0.00061	0.00076	0.00102

¹Because we do not control building operations in leased data center facilities, as of 2017, only emissions associated with our IT load electricity are included in our Scope 1+2 emissions.

²Scope 3 emissions in this inventory include only select activities and are not intended to represent Facebook's full value chain emissions.

³Business travel in 2017 and later includes radiative forcing for air travel.

⁴Notes on Facebook's 2018 water withdrawal: a) 28% is recycled water; b) 2% is ground water and the remainder is provided by local utilities, and all unconsumed water is returned to utility-owned wastewater treatment plants; c) 35% of water withdrawal occurs in high water stress areas (determined using WRI's Aqueduct tool); d) Not included in these figures are an additional 1.3 million cubic meters of water withdrawn for the construction of Facebook data centers.

⁵Values revised after original publication to correct data entry errors.