

# Facebook Sustainability Data 2016



Values are rounded (<1,000, round to -2; <1,000 round to -3; >1,000,000, round to -5); totals calculated before rounding

\*Other leased data center facilities\* includes leased data center facilities that use less than 100,000 MWh of electricity per year. Our West Coast Colocation Facility is included here as of 2013 when electricity use fell below the 100,000 MWh threshold.

## Electricity Use (MWh)

	2011	2012	2013	2014	2015	2016
Altoona, IA	not yet online	not yet online	400	30,000	174,000	342,000
Clonee, Ireland	not yet online	not yet online	not yet online	not yet online	not yet online	700
Forest City, NC	6,000	98,000	225,000	322,000	310,000	339,000
Fort Worth, TX	not yet online	not yet online	not yet online	not yet online	100	16,000
Luleå, Sweden	not yet online	5,000	53,000	105,000	187,000	295,000
Prineville, OR	71,000	153,000	224,000	262,000	284,000	327,000
East Coast Colocation Facility	205,000	237,000	226,000	229,000	224,000	317,000
West Coast Colocation Facility	227,000	185,000				
Other Leased Data Center Facilities	7,000	3,000	64,000	52,000	82,000	118,000
<b>Data Center Operations Total</b>	<b>516,000</b>	<b>680,000</b>	<b>793,000</b>	<b>999,000</b>	<b>1,260,000</b>	<b>1,756,000</b>
<b>Offices Total</b>	<b>16,000</b>	<b>24,000</b>	<b>29,000</b>	<b>36,000</b>	<b>45,000</b>	<b>74,000</b>
<b>Total Electricity Use</b>	<b>532,000</b>	<b>704,000</b>	<b>822,000</b>	<b>1,035,000</b>	<b>1,306,000</b>	<b>1,830,000</b>

## Power Usage Effectiveness

	2011	2012	2013	2014	2015	2016
<b>Annual Data Center PUE</b>	1.08	1.09	1.09	1.08	1.09	1.10

## Data Center Electricity Mix

	2011	2012	2013	2014	2015	2016
Clean & Renewable	23%	19%	14%	20%	35%	43%
Coal	27%	34%	34%	34%	26%	20%
Natural Gas	17%	15%	17%	15%	16%	17%
Nuclear	13%	22%	23%	23%	18%	16%
Uncategorized	20%	10%	12%	7%	4%	4%

## Carbon Footprint (metric tonnes CO<sub>2</sub>e)

	2011	2012	2013	2014	2015	2016
Altoona, IA	not yet online	not yet online	not yet online	400	500	700
Clonee, Ireland	not yet online	not yet online	not yet online	not yet online	not yet online	0
Forest City, NC	3,000	41,000	85,000	119,000	106,000	116,000
Fort Worth, TX	not yet online	not yet online	not yet online	not yet online	not yet online	300
Luleå, Sweden	not yet online	not yet online	100	100	100	100
Prineville, OR	48,000	104,000	162,000	187,000	207,000	239,000
East Coast Colocation Facility	101,000	117,000	91,000	103,000	81,000	115,000
West Coast Colocation Facility	44,000	36,000				
Other Leased Data Center Facilities	3,000	1,000	19,000	18,000	28,000	45,000
<b>Data Center Operations Total</b>	<b>199,000</b>	<b>299,000</b>	<b>358,000</b>	<b>427,000</b>	<b>423,000</b>	<b>516,000</b>
Corporate Travel	15,000	18,000	23,000	29,000	52,000	64,000
Hardware Transportation	6,000	11,000	7,000	8,000	19,000	7,000
Employee Commuting	8,000	10,000	10,000	13,000	30,000	36,000
Construction	36,000	35,000	45,000	34,000	96,000	56,000
<b>Other Business Activity Total</b>	<b>65,000</b>	<b>73,000</b>	<b>85,000</b>	<b>84,000</b>	<b>198,000</b>	<b>163,000</b>
<b>Offices Total</b>	<b>10,000</b>	<b>12,000</b>	<b>15,000</b>	<b>17,000</b>	<b>28,000</b>	<b>39,000</b>
<b>Total Carbon Footprint</b>	<b>275,000</b>	<b>384,000</b>	<b>458,000</b>	<b>528,000</b>	<b>649,000</b>	<b>718,000</b>

## Carbon Intensity (Scope 1 & 2 metric tonnes CO<sub>2</sub>e / monthly active person)

	2011	2012	2013	2014	2015	2016
<b>Annual Carbon Intensity</b>	0.000249	0.000294	0.000311	0.000319	0.000281	0.000299

## Scope Breakdown

	2011	2012	2013	2014	2015	2016
Scope 1	2%	1%	2%	1%	1%	1%
Scope 2	75%	80%	79%	83%	69%	76%
Scope 3	23%	19%	19%	16%	30%	23%

## Location-Based vs. Market-Based Scope 2 Impact\* (metric tonnes CO2e)

	2013		2014		2015		2016	
	Location-Based	Market-Based	Location-Based	Market-Based	Location-Based	Market-Based	Location-Based	Market-Based
Altoona, IA	300	0	21,000	0	113,000	0	222,000	0
Clonee, Ireland	not yet online	not yet online	not yet online	not yet online	not yet online	not yet online	300	0
Forest City, NC	106,000	85,000	157,000	118,000	132,000	105,000	144,000	115,000
Fort Worth, TX	not yet online	not yet online	not yet online	not yet online	100	0	8,000	0
Luleå, Sweden	1,600	0	1,000	0	2,000	0	4,000	0
Prineville, OR	84,000	158,000	100,000	186,000	100,000	207,000	99,000	238,000
East Coast Colocation Facility	107,000	91,000	112,000	103,000	95,000	81,000	136,000	115,000

\*Since 2012, we have made available two versions of our emissions data from electricity used in our data centers: market-based impact and location-based impact. We emphasize market-based emissions because we believe they provide a more accurate accounting of our impact, but we feel it's important to share both versions in the spirit of transparency. Guidance from the World Resources Institute recommends sharing both sets of numbers. You can learn more about their Scope 2 guidance here: [http://www.ghgprotocol.org/scope\\_2\\_guidance](http://www.ghgprotocol.org/scope_2_guidance). Prior to 2016, we referred to market-based emissions as contractual emissions and location-based emissions as regional emissions. The meanings are the same, but the updated language matches GHG Scope 2 guidance terminology. Only facilities exceeding the 100,000 MWh threshold are broken out above.

## Water Use\*\* (gallons)

	2014	2015	2016
Altoona, IA	5,200,000	12,000,000	24,000,000
Clonee, Ireland	not yet online	not yet online	not yet online
Forest City, NC	31,000,000	33,200,000	35,100,000
Fort Worth, TX	not yet online	not yet online	4,700,000
Luleå, Sweden	4,200,000	8,700,000	9,700,000
Prineville, OR	10,500,000	18,500,000	18,300,000
Los Lunas, NM	not yet online	not yet online	not yet online
East Coast Colocation Facility	62,700,000	64,700,000	105,700,000
Other Leased Data Center Facilities	15,300,000	23,500,000	36,400,000
<b>Data Center Operations Total</b>	<b>128,900,000</b>	<b>160,500,000</b>	<b>233,900,000</b>
<b>Offices Total</b>	<b>52,200,000</b>	<b>60,300,000</b>	<b>80,800,000</b>

	2014	2015	2016
<b>Total Water Use</b>	<b>181,100,000</b>	<b>220,800,000</b>	<b>314,800,000</b>

## Water Usage Effectiveness (data centers)

	2014	2015	2016
<b>Annual Data Center WUE</b>	0.32	0.24	0.21

## Water Intensity (gallons / monthly active person)

	2014	2015	2016
<b>Annual Water Intensity</b>	0.13	0.14	0.17

\*\*2014 was the first year we reported water data. In this report, water use refers to water withdrawal, 97% of which is provided by local utilities. In 2015 and 2016, we used 100% reclaimed water in our East Coast colocation facility. An additional 6,700,000 gallons of reclaimed water used by our other leased data center facilities in 2016 have not been included above.