

# PGE Sustainability Report Key Metrics

FISCAL YEAR 2016



## Key metrics summary

Data in this report is from our 2016 fiscal year (Jan. 1, 2016, to Dec. 31, 2016), unless otherwise noted.

CORPORATE FACTS	2012	2013	2014	2015	2016
Population of service area	1,700,000	1,710,000	1,800,000	1,800,000	1,900,000
Utility plant assets (millions of dollars)	\$6,946	\$7,598	\$8,718	\$9,268	\$9,914
Revenues, net (millions of dollars)	\$1,805	\$1,819	\$1,900	\$1,898	\$1,923
Total retail energy delivered in thousands of megawatt-hours	19,190	19,419	19,266	19,382	18,971
Peak load (megawatts)	3,597	3,869	3,866	3,914	3,726
Peak load month	August	December	February	July	August

SOURCES OF ENERGY (MWH IN THOUSANDS) <sup>1</sup>	2012	2013	2014	2015	2016
<b>Generation</b>					
<b>Thermal</b>					
Coal	3,610	4,070	4,466	4,128	3,492
Natural gas	2,882	3,375	3,429	4,783	5,811
Total Thermal	6,492	7,445	7,895	8,911	9,303
<b>Hydro</b>	1,943	1,646	1,750	1,453	1,629
<b>Wind &amp; Solar</b>	1,125	1,200	1,172	1,788	1,912
Total generation	9,560	10,291	10,817	12,152	12,844
<b>Purchased Power</b>					
<b>Term</b>	7,382	6,472	5,926	4,379	6,961
<b>Hydro</b>	1,728	1,629	1,568	1,572	1,541
<b>Wind</b>	319	311	317	303	301
Total purchased power	11,714	10,959	10,437	9,239	8,803
Total system load	21,274	21,250	21,254	21,391	21,647
Less wholesale sales	(2,249)	(2,353)	(2,520)	(2,560)	(3,352)
Retail load requirement	19,025	18,897	18,734	18,831	18,295

<sup>1</sup> PGE's sources of energy, total system load, and retail load requirement for the years presented

## Key metrics summary

CUSTOMER VALUE	2012	2013	2014	2015	2016
<b>Affordable energy — reasonable prices<sup>2</sup></b>					
<b>PGE retail prices (average)</b>					
Residential (cents per kilowatt-hour)	10.72¢	10.46¢	11.37¢	11.55¢	11.40¢
Commercial (cents per kilowatt-hour)	8.75¢	8.56¢	9.14¢	9.22¢	9.25¢
Industrial (cents per kilowatt-hour)	6.09¢	6.10¢	6.46¢	6.46¢	6.68¢
<b>Regional comparison of retail prices (average)</b>					
Number of utilities <sup>3</sup>	45	46	37	39	38
Residential (cents per kilowatt-hour)	13.55¢	12.65¢	13.50¢	13.94¢	13.95¢
Commercial (cents per kilowatt-hour)	11.93¢	11.73¢	12.76¢	12.83¢	12.28¢
Industrial (cents per kilowatt-hour)	7.52¢	7.46¢	8.35¢	8.68¢	8.41¢
<b>National comparison of retail prices (average)</b>					
Number of utilities <sup>4</sup>	208	211	213	214	213
Residential (cents per kilowatt-hour)	11.88¢	12.12¢	12.51¢	12.68¢	12.56¢
Commercial (cents per kilowatt-hour)	10.09¢	10.29¢	10.76¢	10.60¢	10.37¢
Industrial (cents per kilowatt-hour)	6.67¢	6.81¢	7.02¢	6.90¢	6.75¢
<b>Green power program</b>					
<b>Residential/small business</b>					
Number of participants at year-end	87,841	99,660	108,709	128,810	150,519
Megawatt-hours sold annually	661,946	747,592	852,945	964,148	1,101,009
CO <sub>2</sub> e avoided annually (tons)	443,504	500,887	571,618	646,142	869,285
<b>Commercial/industrial</b>					
Number of participants at year-end	146	158	151	179	190
Megawatt-hours sold annually	172,178	239,068	353,508	392,240	410,330
CO <sub>2</sub> e avoided annually (tons)	115,359	160,176	236,910	262,867	323,970

<sup>2</sup> Data source: Energy Information Administration based on utility annual sales and revenue (EIA classifies customers based on their business type (NAICS) to determine the Residential, Commercial, and Industrial sectors.)

<sup>3</sup> U.S. investor-owned and public utilities greater than 1 million megawatt-hours in retail sales in the Western Electricity Coordinating Council

<sup>4</sup> Investor-owned and public utilities greater than 1 million megawatt-hours in retail sales nationally

## Key metrics summary

CUSTOMER VALUE (continued)	2012	2013	2014	2015	2016
<b>Green power program (continued)</b>					
<b>Solar program<sup>5</sup></b>					
Number of customers	3,601	4,480	5,531	6,880	8,123
Total megawatts	32.54	39.96	47.97	67.90	79.46
<b>Dispatchable Standby Generation<sup>6</sup></b>					
Number of customers	29	33	34	35	38
Number of sites	40	48	52	54	58
Total megawatts	74.06	88.91	93.86	104.76	121.36
<b>Web registrations</b>					
Annual new active web registrations <sup>7</sup>	7,295	12,033	20,222	59,243	52,000
<b>Paperless Bill program</b>					
Number of active accounts at year-end	117,004	124,894	138,626	170,407	233,867
Increase from previous year	8,593	7,890	13,732	31,781	63,460
Total percentage of customer base	14.0%	14.7%	16.2%	20.0%	27.1%
<b>Energy Partner program<sup>8</sup></b>					
Number of participants at year-end		3	23	34	41
Nominated demand (kilowatts) <sup>9</sup>		300	6,745	12,200	8,625
<b>Energy efficiency (EE)</b>					
<b>EE acquired (average megawatts)<sup>10</sup></b>					
Residential	10.48	9.24	12.29	12.02	14.31
Commercial	13.97	12.97	13.94	12.17	14.93
Industrial	10.16	12.76	10.93	7.04	7.22
Total	34.61	34.97	37.16	31.23	36.46
Cumulative since 2002	207.60	242.57	279.05	309.81	346.24
Residential average energy use per year (kilowatt-hours)	10,506	10,443	10,358	10,191	10,106

<sup>5</sup> Number includes Net Metering and Solar Payment Option customers; data calculation adjusted from annual to cumulative

<sup>6</sup> Program began in 2012

<sup>7</sup> Data calculation adjusted from 2013 report

<sup>8</sup> Program, which pays larger commercial and industrial businesses to reduce or shift their energy use during peak energy-demand times, began in 2013

<sup>9</sup> Amount of load a customer volunteers to be reduced in times of extreme grid need

<sup>10</sup> Data source: Energy Trust of Oregon (in operation since 2002); data calculation adjusted from 2015 report

## Key metrics summary

CUSTOMER VALUE (continued)	2012	2013	2014	2015	2016
<b>Annual average overall satisfaction rating</b>					
Residential <sup>11</sup>	86%	90%	88%	89%	90%
Business <sup>12</sup>	94%	94%	94%	90%	93%
Key customers <sup>13</sup>	94%	91%	91%	83%	85%
<b>Average number of customers</b>					
Residential	723,440	728,481	735,502	742,467	752,365
Commercial	103,766	104,385	105,231	105,802	106,773
Industrial	261	263	260	255	258
Total	827,467	833,129	840,993	848,524	859,396
<b>Energy deliveries (thousands of megawatt-hours)</b>					
Residential	7,505	7,702	7,462	7,325	7,348
Commercial	7,402	7,441	7,494	7,511	7,457
Industrial	4,283	4,276	4,310	4,546	4,166
Total	19,190	19,419	19,266	19,382	18,971
<b>Electric transportation</b>					
Electric vehicles in Oregon <sup>14</sup>	2,000	4,000	6,000	9,000	10,500
Public EV charging stations in Oregon <sup>15</sup>	688	802	996	1,002	1,112
Public EV quick-chargers in Oregon <sup>15</sup>	41	64	109	157	198
Number of plug-in car models available for sale in Oregon <sup>15</sup>	12	16	17	20	26
<b>Reliable energy</b>					
System Average Interruption Duration Index (SAIDI) (minutes)	72	62	95	75	97
System Average Interruption Frequency Index (SAIFI) (per 100 customers)	0.55	0.45	0.69	0.48	0.59
Customer Average Interruption Duration Index (CAIDI) (minutes)	131	137	135	156	163
Momentary Average Interruption Frequency Index (MAIFI) (per 100 customers)	1.11	0.91	1.30	1.20	1.10

<sup>11</sup> Market Strategies International Electric Utility Satisfaction Study – 4 quarter-rolling average

<sup>12</sup> Market Strategies International Electric Utility Satisfaction Study – 2 quarter-rolling average

<sup>13</sup> TQS Research survey for commercial and industrial customers

<sup>14</sup> 2011-2014 data estimated by the State of Oregon; 2015 data estimated by Portland State University's Transportation Research and Education Consortium

<sup>15</sup> Data source: Drive Oregon

## Key metrics summary

ENVIRONMENTAL FOOTPRINT	2012	2013	2014	2015	2016
<b>Greenhouse gas emissions</b>					
Greenhouse gas intensity:	.42	.39	.42	.45	.42
Retail load (tons CO <sub>2</sub> e/megawatt-hours) <sup>16</sup>					
Greenhouse gas intensity:	381	354	384	406	377
Retail load (grams CO <sub>2</sub> e/kilowatt-hours) <sup>16</sup>					
Greenhouse gases: Fleet (tons CO <sub>2</sub> e)					
Gasoline	3,280	3,795	3,658	4,511	4,400
Diesel	5,624	4,837	4,651	5,110	4,289
Greenhouse gases: Facilities (tons CO <sub>2</sub> e)					
Electricity	9,399	7,647	9,541	9,424	7,926
Natural gas	1,809	1,654	1,449	1,448	1,232
<b>Waste and recycling</b>					
Hazardous waste disposed (tons) <sup>17</sup>	14.33	0.92	2.97	12.05	95.69
Transformer oil recycled (gallons) <sup>18</sup>	17,838	75,542	93,684	NA	94,493
Motor oil recycled (gallons) <sup>19</sup>	9,793	8,899	10,124	6,042	20,033
Antifreeze recycled (gallons) <sup>19</sup>	688	726	1,106	675	629
Large PCB capacitors disposed <sup>20</sup>	129	152	323	603	0
PCB transformers disposed <sup>20</sup>	169	68	83	83	80
<b>Regulatory performance</b>					
Federal and state audits	5	7	30	26	14
Environmental compliance reviews	50	50	66	59	55

<sup>16</sup> Oregon Department of Environmental Quality reporting requirements started in 2010; data adjusted from 2016 report

<sup>17</sup> Variability of waste disposal is due to different remediation projects underway during each year

<sup>18</sup> Data source: Transformer Technologies LLC; data not available for 2015

<sup>19</sup> Data source: Thermofluids Inc.; reduction is due to frequency with which we recycle used fluids, change in type of motor oil used and modification in the schedule for antifreeze changes; PGE recycles all motor oil and antifreeze it uses

<sup>20</sup> Environmental Protection Agency reporting requirements started in 1979; PCB removal completed in 2015, resulting in 0 PCB in 2016

## Key metrics summary

QUALITY WORKFORCE	2012	2013	2014	2015	2016
<b>General employee information</b>					
Number of employees at year-end	2,603	2,596	2,662	2,646	2,752
<b>Number of regular employees</b>	<b>2,559</b>	<b>2,534</b>	<b>2,600</b>	<b>2,588</b>	<b>2,687</b>
Regular full-time employees in workforce	96.7%	95.7%	97.6%	96.2%	96.5%
Regular part-time employees in workforce	1.7%	1.9%	2.4%	1.6%	1.1%
<b>Number of temporary employees</b>	<b>44</b>	<b>62</b>	<b>62</b>	<b>58</b>	<b>65</b>
Temporary full-time employees in workforce	0.9%	1.0%	1.3%	1.0%	1.4%
Temporary part-time employees in workforce	0.8%	1.4%	1.1%	1.2%	0.9%
Regular employees represented by independent trade union organizations	30.6%	30.5%	30.0%	28.8%	28.3%
<b>Employees retiring</b>	<b>99</b>	<b>129</b>	<b>111</b>	<b>95</b>	<b>100</b>
Turnover rate	6.8%	8.1%	7.4%	6.5%	8%
Average tenure (years)	15.3	14.9	15.0	14.6	14.0
<b>Diversity</b>					
Women in workforce	30.8%	30.5%	31.2%	31.8%	31.8%
Minorities in workforce <sup>21</sup>	16.2%	16.4%	18.2%	18.7%	19.4%
<b>Health and safety</b>					
Employee fatalities	0	0	0	0	0
LWD rate (lost work days) <sup>22</sup>	1.71	1.50	1.65	1.57	1.37
DART rate (days away, restricted or transferred) <sup>22</sup>	2.84	2.42	2.74	2.50	1.73
OSHA recordable incidents rate <sup>22</sup>	4.85	4.39	4.51	3.99	3.32
<b>Reportable vehicle incidents</b>					
Total number of vehicle incidents	92	96	90	85	107
Total vehicle incident rate <sup>23</sup>	9.19	10.33	9.30	8.87	11.41
<b>Skilled workforce</b>					
Summer hires/interns	55	58	53	39	57
Apprentices started	13	4	17	10	14
Apprentices finished	10	3	7	8	11
Pre-apprentices started <sup>24</sup>		14	13	10	13
Pre-apprentices finished <sup>24</sup>		0	12	9	10

<sup>21</sup> Data based on voluntary employee reporting

<sup>22</sup> Number of incidents per 100 employees and contingent workers who report to PGE management (assuming 2,000 hours per employee per year)

<sup>23</sup> Total number of vehicle incidents times 1 million divided by total miles driven

<sup>24</sup> Filled externally; program began in 2013

## Key metrics summary

STRONG COMMUNITIES	2012	2013	2014	2015	2016
<b>Community support</b>					
Community investments (corporate) (in thousands)	\$1,535	\$1,501	\$1,704	\$1,675	\$1,561
PGE Foundation granting total (in thousands)	\$875	\$959	\$1,210	\$1,062	\$1,065
Total PGE and PGE Foundation investments (in thousands)	\$2,410	\$2,460	\$2,914	\$2,737	\$2,626
Community investments as a percent of net income	1%	1%	1%	1%	1%
<b>Volunteerism</b>					
Employee and retiree volunteer hours	47,638	38,649	46,405	41,573	45,182
Employee participation	31%	25%	32%	33%	33%
<b>Employee Giving Campaign</b>					
Employee and retiree donations (in thousands)	\$1,090	\$1,050	\$1,050	\$1,009	\$1,052
Company match (in thousands)	\$535	\$435	\$650	\$531	\$689
Total (in thousands)	\$1,625	\$1,485	\$1,700	\$1,540	\$1,741
Employee Giving Campaign participation	66%	64%	63%	64%	59%
<b>Education</b>					
Scholarships awarded	23	35	35	45	42
<b>Safety education</b>					
Students reached in classroom <sup>25</sup>	71,400	80,370	94,710	87,275	64,659
Safety fairs	15	35	31	30	31

<sup>25</sup> 2016 scheduling impacted by inclement weather



## Key metrics summary

RESPONSIBLE MANAGEMENT	2012	2013	2014	2015	2016
<b>Earnings growth</b>					
Size of company (total retail energy delivered in thousands of megawatt-hours)	19,190	19,419	19,266	19,382	18,971
Return on equity (return on average equity)	8.3%	5.9%	9.4%	8.3%	8.4%
Market capitalization (millions of dollars)	\$2,070	\$2,360	\$2,960	\$3,230	\$3,850
Share price as of Dec. 31	\$27.36	\$30.20	\$37.83	\$36.37	\$43.33
Dividend (yield percent)	3.93%	3.63%	2.95%	3.24%	2.91%
Total shareholder return	14.00%	11.88%	29.43%	-0.64%	22.7%
Earnings per share (diluted)	\$1.87	\$1.35	\$2.18	\$2.04	\$2.16
Total capital expenditures (millions of dollars)	\$303	\$656	\$1,007	\$598	\$584
<b>Ethics and compliance investigations</b>					
Launched	86	62	88	100	92
Closed	97	57	89	96	99
Substantiated claims	58%	61%	62%	51%	57%