

Green Power Program Top 10 Lists (2022 data)

Green power programs allow homes and businesses to procure green power through their electric utility or community choice aggregation (CCA). Since 2000, the National Renewable Energy Lab (NREL) has compiled data on utility green pricing programs and released annual “Top 10” lists to recognize outstanding programs. This document contains updated 2022 rankings as well as new rankings of CCA green power sales. This document is updated annually. More information about NREL’s green power market research is available at: <http://www.nrel.gov/analysis/green-power.html>.

Using information provided by utilities, NREL has developed "Top 10" rankings of utility green pricing programs for 2022 in the following categories: total sales, total number of customer participants, and participation rate (the percentage of utility customers that participated in green pricing programs). Using information provided by CCAs, NREL has developed Top 10 rankings of CCA sales and customer participants.

All Top 10 lists are based only on those utilities and CCAs that report data to NREL. Are you a utility or CCA green power program manager and want to be recognized on these lists? Please contact jenny.sumner@nrel.gov.

Utility Green Pricing Sales (as of December 2022)

Rank	Utility	Green Power Sales (MWh)
1	PacifiCorp	2,690,329
2	Portland General Electric	2,599,177
3	Austin Energy	988,049
4	Puget Sound Energy	745,420
5	Tennessee Valley Authority (TVA)	633,215
6	Pacific Gas & Electric (PG&E)	550,099
7	AES Indiana	430,057
8	Dominion Energy	380,617
9	DTE Electric	131,593
10	Consumers Energy	119,843

Utility Green Pricing Customers (as of December 2022)

Rank	Utility	Green Power Customers
1	Portland General Electric	235,369
2	PacifiCorp	176,897
3	Puget Sound Energy	82,601
4	DTE Electric	78,441
5	Dominion Energy	34,082
6	Austin Energy	28,714
7	PG&E	21,989
8	Consumers Energy	16,461
9	We Energies	11,855
10	TVA	9,416

Utility Green Pricing Sales Rate (as of December 2022)

Rank	Utility	Sales Rate (%)
1	Portland General Electric	21.8%
2	Waterloo	16.7%
3	River Falls	8.3%
4	PacifiCorp (Blue Sky Usage & Habitat)	8.0%
5	Austin Energy	6.9%
6	PacifiCorp (Blue Sky Block)	5.0%
7	Puget Sound Energy	5.0%
8	Portland General Electric	4.2%
9	Farmers Electric Cooperative - Kalona	3.9%
10	Stoughton	3.9%

Utility Green Pricing Participation Rate* (as of December 2022)

Rank	Utility	Participation Rate (%)
1	Portland General Electric	28.5%
2	River Falls	14.8%
3	PacifiCorp (Blue Sky Usage & Habitat)	14.3%
4	Farmers Electric Cooperative - Kalona	14.0%
5	Puget Sound Energy	7.0%
6	Naperville Public Utilities	6.1%
7	Austin Energy	5.9%
8	PacifiCorp (Blue Sky Block)	5.2%
9	Muscoda	5.1%
10	Stoughton	4.9%

* Due to a survey design error, the 2022 participation rate is based exclusively on residential customer participation

Utility Green Tariff Sales (as of December 2022)

Rank	Utility	Green Tariff Sales (MWh)
1	DTE Electric	922,755
2	Puget Sound Energy	719,506
3	Tennessee Valley Authority (TVA)	633,602
4	Dominion Energy Green Power	474,628
5	Consumers Energy	393,624
6	We Energies	69,733
7	Wisconsin Public Service Corp	5,046
8	Naperville Public Utilities - Electric	2,040

Utility Green Power All Sales* (as of December 2022)

Rank	Utility	All Sales (MWh)
1	PacifiCorp	2,690,329
2	Portland General Electric	2,599,177
3	Puget Sound Energy	1,464,926
4	TVA	1,266,817
5	DTE Electric	1,054,368
6	Austin Energy	988,049
7	Dominion Energy	855,245
8	PG&E	550,099
9	Consumers Energy	513,467
10	AES Indiana	430,057

* All green power sales refer to sum of utility green pricing and utility green tariff sales

Note: Several utilities administer several green pricing programs. Program sales and participation rankings are based on utility-wide sales. Program sales and participation rates are calculated at the program level.

CCA Green Power Sales* (as of December 2022)

Rank	CCA	Sales (MWh)
1	Clean Power Alliance	3,570,040
2	East Bay Community Energy	1,361,466
3	MCE	1,258,013
4	San Diego Community Power	1,075,258
5	CleanPowerSF	695,035
6	Orange County Power Authority	691,901
7	Peninsula Clean Energy	591,570
8	Cape Light Compact	511,519
9	Silicon Valley Clean Energy	333,951
10	Sonoma Clean Power Authority	305,265

* CCA green power sales refer to RECs retired on behalf of CCA customers above renewable portfolio standard obligations

CCA Green Power Customers* (as of December 2022)

Rank	CCA	Customers
1	Clean Power Alliance	881,572
2	San Diego Community Power	713,633
3	East Bay Community Energy	641,532
4	MCE	584,576
5	CleanPowerSF	383,756
6	Peninsula Clean Energy	310,901
7	Silicon Valley Clean Energy	278,106
8	Orange County Power Authority	236,000
9	Sonoma Clean Power Authority	229,954
10	Cape Light Compact	150,374

* CCA green power customer counts include all customers purchasing a product with more renewable energy than required by state renewable portfolio standards

ARCHIVES

2021 Data

Green Power Sales (as of December 2021)

Rank	Utility	Green Power Sales (MWh)
1	Portland General Electric	2,791,015
2	PacifiCorp	2,738,430
3	Tennessee Valley Authority (TVA)	1,051,929
4	Xcel Energy	1,017,548
5	Austin Energy	771,910
6	Puget Sound Energy	671,471
7	DTE Energy	646,965
8	Pacific Gas & Electric (PG&E)	598,394
9	Dominion Energy	422,686
10	AES Indiana (Indianapolis Power and Light)	255,832

Green Power Customers (as of December 2021)

Rank	Utility	Green Power Customers
1	Portland General Electric	232,612
2	PacifiCorp	151,892
3	Xcel Energy	140,457
4	Puget Sound Energy	81,739
5	DTE Energy	43,508
6	Dominion Energy	33,718
7	Austin Energy	27,989
8	Pacific Gas & Electric (PG&E)	27,606
9	Consumers Energy	17,409
10	We Energies	11,961

Green Power Sales Rate (as of December 2021)

Rank	Utility	Green Power Sales Rate
1	Portland General Electric (Green Future Choice)	21.9%
2	Waterloo Utilities	18.16%
3	Springfield Electric	16.13%
4	Oak Ridge Electric Department	7.9%
5	PacifiCorp (Blue Sky Usage & Habitat)	7.71%
6	Portland General Electric (Green Future Enterprise)	6.74%
7	River Falls Municipal Utilities	6.28%
8	Austin Energy (GreenChoice)	5.80%
9	PacifiCorp (Blue Sky Block – Bulk Purchase Option)	4.67%
10	Tippah Electric Power Association	3.9%

Green Power Participation Rate (as of December 2021)

Rank	Utility	Green Power Sales (MWh)
1	Portland General Electric	26%
2	River Falls Municipal Utilities	14.58%
3	PacifiCorp (Blue Sky Usage & Habitat)	10.02%
4	Puget Sound Energy (Green Power & Solar Choice)	6.84%
5	Naperville Public Utilities- Electric	5.96%
6	Muscoda Utilities	5.28%
7	Austin Energies (GreenChoice)	5.26%
8	Stoughton Utilities	4.8%
9	PacifiCorp (Blue Sky Block)	4.3%
10	Holy Cross Energy (Wind Renewable Energy Purchase Program)	4.28%

Green Tariff Sales* (as of December 2021)

Rank	Utility	Green Tariff Sales (MWh)
1	Puget Sound Energy	604,373
2	PacifiCorp	461,962
3	Tennessee Valley Authority (TVA)	93,764
4	We Energies	45,154
5	Ameren Missouri	23,862
6	Wisconsin Public Service Corporation	2,360
7	Upper Michigan Energy Resources Corporation	12

* List refers only to those utilities who report to our annual survey. Are you a green tariff program manager and want to be recognized on this list? Please contact jenny.heeter@nrel.gov.

All Sales* (as of December 2021)

Rank	Utility	Green Tariff Sales (MWh)
1	Portland General Electric	2,791,015
2	PacifiCorp	2,738,430
3	Puget Sound Energy	1,275,844
4	Tennessee Valley Authority (TVA)	1,145,693
5	Xcel Energy	1,017,548
6	Austin Energy	771,910
7	DTE Energy	646,965
8	Pacific Gas & Electric (PG&E)	598,394
9	Dominion Energy	422,686
10	AES Indiana (Indianapolis Power and Light)	255,832

* All sales refer to sum of utility green pricing and utility green tariff sales

Note: Several utilities administer several green pricing programs. Program sales and participation rankings are based on utility-wide sales. Program sales and participation rates are calculated at the program level.

2020 Data

Green Power Sales (as of December 2020)

Rank	Utility	Green Power Sales (MWh)
1	Portland General Electric	2,593,869
2	PacifiCorp	1,519,326
3	Xcel Energy	950,674
4	Austin Energy	727,711
5	Puget Sound Energy	638,855
6	Silicon Valley Power	426,316
7	Dominion Energy Virginia	389,413
8	Tennessee Valley Authority (TVA)	335,524
9	AES Indiana	218,278
10	Consumers Energy	200,430

Green Power Customers (as of December 2020)

Green Power Customers (as of December 2020)

Rank	Utility	Green Power Customers
1	Portland General Electric	232,129
2	Xcel Energy	151,783
3	PacifiCorp	142,879
4	Puget Sound Energy	72,131
5	Dominion Energy Virginia	36,655
6	Austin Energy	24,835
7	DTE Energy	23,647
8	Consumers Energy	18,476
9	National Grid	14,511
10	We Energies	12,455

Green Power Sales Rate (as of December 2020)

Rank	Utility	Green Power Sales Rate
1	Portland General Electric (Green Future Choice)	21.39%
2	Silicon Valley Power	11.40%
3	PacifiCorp (Blue Sky Usage & Habitat)	7.50%
4	Portland General Electric (Green Future Enterprise)	7.49%
5	River Falls Municipal Utilities	6.55%
6	Waterloo Utilities	5.86%
7	Alameda Municipal Power	5.43%
8	Grand Marais Public Utility Commission	4.85%
9	Farmers Electric Cooperative	3.83%
10	Puget Sound Energy	3.38%

Green Power Participation Rate

(as of December 2020)

Rank	Utility	Green Power Sales (MWh)
1	Portland General Electric	26%
2	Farmers Electric Cooperative	19.21%
3	River Falls Municipal Utilities	11.93%
4	Alameda Municipal Power	10.29%
5	PacifiCorp (Blue Sky Usage & Habitat)	9.13%
6	Silicon Valley Power	6.76%
7	Puget Sound Energy	6.12%
8	Muscoda Utilities	5.38%
9	Naperville Public Utilities - Electric	4.83%
10	Stoughton Utilities	4.57%

2019 Data

Green Power Sales
(as of December 2019)

Rank	Utility	Green Power Sales (MWh)
1	Portland General Electric	2,315,319
2	Sacramento Municipal Utility District	1,189,504
3	PacifiCorp	911,579
4	Xcel Energy	843,686
5	Austin Energy	775,702
6	Puget Sound Energy	570,580
7	Silicon Valley Power	391,901
8	Dominion Energy Virginia	358,447
9	Tennessee Valley Authority (TVA)	225,767
10	Consumers Energy	204,609

Green Power Customers
(as of December 2019)

Rank	Utility	Green Power Customers
1	Portland General Electric	225,492
2	Xcel Energy	145,565
3	PacifiCorp	134,485
4	Sacramento Municipal Utility District	71,867
5	Puget Sound Energy	62,480
6	Dominion Energy Virginia	33,640
7	Austin Energy	23,720
8	Consumers Energy	19,710
9	We Energies	13,052
10	Seattle City Light	10,964

**Green Power Sales Rate
(as of December 2019)**

Rank	Utility	Green Power Sales Rate
1	Portland General Electric (Green Source)	19.97%
2	Sacramento Municipal Utility District (Greenergy)	8.53%
3	Oak Ridge Electric Department	7.39%
4	PacifiCorp (Blue Sky Usage & Habitat)	7.06%
5	Portland General Electric (C&I Clean Wind)	5.94%
6	Alameda Municipal Power	5.61%
7	Wellesley Municipal Light Plant	4.65%
8	River Falls Municipal Utilities	4.16%
9	Columbus Water & Light	3.09%
10	Puget Sound Energy	2.91%

**Green Power Participation Rate
(as of December 2019)**

Rank	Utility	Green Power Sales (MWh)
1	Portland General Electric (Green Source)	25.53%
2	River Falls Municipal Utilities	13.22%
3	Alameda Municipal Power	11.84%
4	Sacramento Municipal Utility District (Greenergy)	11.23%
5	Wellesley Municipal Light Plant	10.15%
6	PacifiCorp (Blue Sky Usage & Habitat)	9.05%
7	Silicon Valley Power	7.54%
8	Muscoda Utilities	5.80%
9	Puget Sound Energy	5.41%
10	Stoughton Utilities	5.02%

2018 Data

**Top Green Power Sales
(as of December 2018)**

Rank	Utility	Green Power Sales (MWh)
1	Portland General Electric	1,996,143
2	Sacramento Municipal Utility District	1,040,013
3	PacifiCorp	837,755
4	Austin Energy	757,228
5	Xcel Energy	551,217
6	Puget Sound Energy	524,113
7	Tennessee Valley Authority (TVA)	510,932
8	Silicon Valley Power	422,515
9	Dominion Energy Virginia	397,325

10	Indianapolis Power & Light	221,857
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**Green Power Customers
(as of December 2018)**

Rank	Utility	Green Power Customers
1	Portland General Electric	204,889
2	PacifiCorp	128,535
3	Xcel Energy	120,334
4	Sacramento Municipal Utility District	71,833
5	Puget Sound Energy	49,535
6	Dominion Energy Virginia	30,778
7	DTE Energy	26,934
8	Consumers Energy	20,919
9	Austin Energy	20,625
10	National Grid	16,009

**Green Power Sales Rate
(as of December 2018)**

Rank	Utility	Green Power Sales Rate
1	Portland General Electric	16.90%
2	Silicon Valley Power	11.85%
3	Sacramento Municipal Utility District	10.49%
4	PacifiCorp (Blue Sky Usage & Habitat)	6.61%
5	Austin Energy (GreenChoice)	5.65%
6	Portland General Electric	5.45%
7	Alameda Municipal Power (Alameda Green)	4.79%
8	River Falls Municipal Utility	3.94%
9	Stoughton Utilities	2.57%
10	Puget Sound Energy	2.54%

Note: Several utilities administer several green pricing programs. Program participation and sales rankings are based on utility-wide sales. Program participation rate is calculated at the program level.

**Green Power Participation Rate
(as of December 2018)**

Rank	Utility	Green Power Participation Rate
1	Portland General Electric	22.91%
2	Alameda Municipal Power (Alameda Green)	13.23%
3	River Falls Municipal Utilities	11.67%
4	Sacramento Municipal Utility District	10.45%
5	Pacific Power (Blue Sky)	9.60%
6	Silicon Valley Power	7.84%
7	Muscoda Utilities	5.84%
8	Stoughton Utilities	4.97%
9	Naperville Public Utilities (Renewable Energy Program)	4.96%
10	Westby Utilities	4.22%

2017 Data

Top Green Power Program Participants (as of December 2017)

Rank	Utility	Green Power Participants
1	Portland General Electric	173,856
2	PacifiCorp	120,423
3	Xcel Energy	113,772
4	Sacramento Municipal Utility District	71,873
5	Puget Sound Energy	46,211
6	Dominion Energy	27,779
7	DTE Energy	22,425
8	Austin Energy	17,557
9	National Grid	16,955
10	Avangrid NYSEG and RG&E	15,539

Top Green Power Participation Rate (as of December 2017)

Rank	Utility (Green Pricing Program)	Participation Rate
1	Portland General Electric (Green Source)	19.44%
2	Sacramento Municipal Utility District	11.61%
3	Farmers Electric Cooperative - Kalona	10.78%
4	Wellesley Municipal Light Plant	10.56%
5	River Falls Municipal Utilities	10.00%
6	Silicon Valley Power (Santa Clara)	9.35%
7	Alameda Municipal Power	8.91%
8	Pacific Power	8.76%
9	Muscoda Utilities	6.00%
10	Naperville Public Utilities - Electric	5.43%

**Top Green Power Sales
(as of December 2017)**

Rank	Utility	Sales (MWh/year)
1	Portland General Electric	1,843,565
2	Sacramento Municipal Utility District	848,623
3	PacifiCorp	820,644
4	Austin Energy	708,326
5	Tennessee Valley Authority	504,227
6	Puget Sound Energy	500,926
7	Xcel Energy	424,589
8	Silicon Valley Power	423,808
9	Dominion Energy	329,607
10	Indianapolis Power & Light Company	215,175

Note: Several utilities administer several green pricing programs. Program participation and sales rankings are based on utility-wide sales. Program participation rate is calculated at the program level.

**Top Green Power Sales Rate
(as of December 2017)**

Rank	Utility (Green Pricing Program)	Sales Rate
1	Portland General Electric (Green Source)	14.40%
2	Silicon Valley Power (Santa Clara)	12.15%
3	Sacramento Municipal Utility District	7.87%
4	(TVA) Oak Ridge Electric Department	7.09%
5	Pacific Power (Blue Sky Usage & Habitat)	6.22%
6	Austin Energy	5.48%
7	River Falls Municipal Utilities	3.95%
8	Wellesley Municipal Light Plant	3.35%
9	Alameda Municipal Power	3.25%
10	Oklahoma Gas & Electric	2.81%

Note: Portland General Electric's Commercial & Industrial Clean Wind program has a sales rate of 4.31%.

2016 Data

Top Green Power Program Participants (as of December 2016)

Rank	Utility	Green Power Participants
1	Portland General Electric	150,519
2	PacifiCorp	112,268
3	Xcel Energy	100,359
4	Sacramento Municipal Utility District	71,970
5	Puget Sound Energy	41,543
6	Dominion Virginia Power	24,104
7	National Grid	17,462
8	Avangrid NYSEG and RG&E	16,386
9	We Energies	14,953
10	Austin Energy	14,721

Top Green Power Participation Rate (as of December 2016)

Rank	Utility	Participation Rate
1	Portland General Electric (Green Source)	16.92%
2	Sacramento Municipal Utility District	11.72%
3	Farmers Electric Cooperative - Kalona	11.60%
4	River Falls Municipal Utilities	9.60%
5	Pacific Power - CA, OR, & WA	8.37%
6	Silicon Valley Power	8.13%
7	Madison Gas and Electric Company	6.36%
8	Alameda Municipal Power	6.27%
9	Naperville Public Utilities - Electric	5.53%
10	Stoughton Utilities	5.00%

Note: Other PacifiCorp programs have participation rates of: Pacific Power Oregon only – 9.95%, Rocky Mountain Power (ID, UT, WY) – residential only – 5.39%, Rocky Mountain Power (ID, UT, WY) – 4.47%, PacifiCorp (Pacific Power and Rocky Mountain Power) – 6.06%.

Top Green Power Sales (as of December 2016)

Rank	Utility	Sales (MWh/year)
1	Portland General Electric	1,524,616
2	Sacramento Municipal Utility District	741,337
3	PacifiCorp	733,363
4	Austin Energy	733,070
5	Puget Sound Energy	471,025

6	Xcel Energy	352,921
7	Dominion Virginia Power	336,917
8	Tennessee Valley Authority	232,127
9	Silicon Valley Power	206,692
10	Indianapolis Power & Light Co.	200,604

Note: Several utilities administer several green pricing programs. Program participation and sales rankings are based on utility-wide sales. Program participation rate is calculated at the program level.

**Top Green Power Sales Rate
(as of December 2016)**

Rank	Utility	Sales Rate
1	Portland General Electric (Green Source)	12.30%
2	Sacramento Municipal Utility District	7.20%
3	Silicon Valley Power	6.03%
4	Austin Energy	5.69%
5	PacifiCorp (Blue Sky Usage & Habitat)	5.50%
6	River Falls Municipal Utilities	4.30%
7	Park Electric Cooperative	3.41%
8	Madison Gas and Electric Company	3.07%
9	Alameda Municipal Power	2.92%
10	Stoughton Utilities	2.70%

Note: Portland General Electric's Commercial & Industrial Clean Wind program has a sales rate of 5.23%. Other PacifiCorp programs have sales rates of: Pacific Power Usage, Habitat and Block (Oregon-only) – 6.59%, Pacific Power Usage and Habitat (Oregon-only) – 6.16%.

2015 Data

Top Green Power Program Participants (as of December 2015)

Rank	Utility	Green Power Participants
1	Portland General Electric	128,983
2	PacifiCorp	106,655
3	Xcel Energy	96,635
4	Sacramento Municipal Utility District	71,875
5	Puget Sound Energy	43,365
6	Dominion Virginia Power	26,974
7	Consumers Energy Company	19,618
8	Iberdrola: New York State Electric & Gas and Rochester Gas & Electric	17,407
9	National Grid	16,276
10	We Energies	15,595

Top Green Power Participation Rate (as of December 2015)

Rank	Utility	Participation Rate
1	Portland General Electric (Green Source)	14.65%
2	Farmers Electric Cooperative - Kalona	11.93%
3	Sacramento Municipal Utility District	11.75%
4	PacifiCorp - Oregon (Blue Sky Usage, Block and Habitat)	9.46%
5	River Falls Municipal Utilities	8.58%
6	Silicon Valley Power	7.94%
7	Madison Gas & Electric Company	7.16%
8	Alameda Municipal Power	6.44%
9	Naperville Public Utilities - Electric	5.97%
10	Stoughton Utilities	5.14%

Note: Other PacifiCorp programs have rates of 8.98%: Pacific Power (CA, OR, WA) - residential only; 7.91%: Pacific Power - Usage, Habitat, Block (PP system wide - OR; WA; CA); 7.37%: Pacific Power-Blue Sky Usage & Habitat; 5.83%: PacifiCorp PP & RMP.

**Top Green Power Sales
(as of December 2015)**

Rank	Utility	Sales (MWh/year)
1	Portland General Electric	1,356,388
2	PacifiCorp	716,849
3	Austin Energy	637,462
4	Sacramento Municipal Utility District	629,625
5	Puget Sound Energy	482,772
6	Dominion Virginia Power	345,223
7	Xcel Energy	340,973
8	Tennessee Valley Authority	202,195
9	Indianapolis Light and Power Company	182,496
10	Silicon Valley Power	179,621

**Top Green Power Sales Rate
(as of December 2015)**

Rank	Utility	Sales Rate
1	Portland General Electric (Green Source)	10.47%
2	Sacramento Municipal Utility District	6.01%
3	Silicon Valley Power	5.64%
4	PacifiCorp (Blue Sky Usage & Habitat)	5.30%
5	Edmond Electric/City of Edmond	5.15%
6	Austin Energy	4.56%
7	Waterloo Utilities	4.37%
8	River Falls Municipal Utilities	3.76%
9	Madison Gas and Electric Company	3.11%
10	Stoughton Utilities	2.69%

Note: Portland General Electric's Commercial & Industrial Clean Wind program has a rate of 5.92%; PacifiCorp's Usage, Habitat and Block (Oregon) program a rate of 4.09%.

2014 Data

Total Number of Customer Participants (as of December 2014)

Rank	Utility	Green Power Participants
1	Portland General Electric	108,709
2	PacifiCorp	100,594
3	Xcel Energy	88,181
4	Sacramento Municipal Utility District	71,578
5	Puget Sound Energy	44,689
6	Eversource/United Illuminating	27,950
7	Dominion Virginia Power	25,298
8	DTE Energy (Detroit Edison)	23,102
9	Iberdrola: New York State Electric & Gas and Rochester Gas & Electric	18,561
10	Consumers Energy	18,071

Customer Participation Rate (as of December 2014)

Rank	Utility	Participation Rate
1	Portland General Electric (Green Source)	12.33%
2	Sacramento Municipal Utility District	11.76%
3	Wellesley Municipal Light Plant (MA)	11.05%
4	Farmers Electric Cooperative of Kalona	10.46%
5	Eversource/United Illuminating	8.93%
6	PacifiCorp (Blue Sky Usage and Habitat)	8.90%
7	Silicon Valley Power	8.17%
8	Madison Gas & Electric Co	7.97%
9	City of Naperville (IL)	6.23%
10	River Falls Municipal Utilities	5.88%

Green Power Sales (as of December 2014)

Rank	Utility	Sales (MWh/year)
1	Portland General Electric	1,171,978
2	Austin Energy	683,986
3	PacifiCorp	673,977
4	Puget Sound Energy	450,191
5	Sacramento Municipal Utility District	446,995
6	Xcel Energy	377,480
7	Eversource/United Illuminating	250,456
8	Dominion Virginia Power	244,853
9	Tennessee Valley Authority	206,522
10	CPS Energy	170,931

**Green Power Sales as a Percentage of Total Retail Electricity Sales (in MWh)
(as of December 2014)**

Rank	Utility	Sales Rate
1	Waterloo Utilities	23.68%
2	City of Wellesley Municipal Light Plant (MA)	11.0%
3	Edmond Electric	10.45%
4	Portland General Electric (Green Source)	8.96%
5	River Falls Municipal Utilities	8.14%
6	Silicon Valley Power	5.31%
7	Austin Energy	5.20%
8	Pacific Power (Blue Sky Usage and Habitat)	4.98%
9	Sacramento Municipal Utility District	4.31%
10	City of Palo Alto (CA)	3.23%

2013 Data

Green Pricing Program Renewable Energy Sales (as of December 2013)

Rank	Utility	Sales (MWh/year)
1	Portland General Electric	986,660*
2	Austin Energy	863,956
3	PacifiCorp	634,092
4	Sacramento Municipal Utility District	423,724
5	Xcel Energy (CO, MI, MN, NM, WI) ¹	388,157
6	Puget Sound Energy	380,155
7	Connecticut Power & Light/ United Illuminating	273,658
8	CPS Energy	205,713
9	Tennessee Valley Authority	199,067
10	Oklahoma Gas & Electric Co	189,462

Total Number of Customer Participants (as of December 2013)

Rank	Utility	Number of Customers
1	Portland General Electric	99,818
2	PacifiCorp	94,787
3	Xcel Energy (CO, MI, MN, NM, WI) ²	77,054
4	Sacramento Municipal Utility District	63,104
5	Puget Sound Energy	40,519
6	Connecticut Power & Light/United Illuminating	27,786
7	DTE Energy	22,686
8	Dominion Virginia Power	20,362
9	Iberdrola: New York State Electric & Gas and Rochester Gas & Electric	19,498
10	WE Energies	17,711

Customer Participation Rate (as of December 2013)

Rank	Utility	Customer Participation Rate
1	City of Palo Alto (CA)	19.4%
2	Farmers Electric Cooperative of Kalona	14.0%
3	Portland General Electric ³	12.6%
4	Town of Wellesley Municipal Light Plant (MA)	11.1%
5	Sacramento Municipal Utility District	10.4%
6	Madison Gas & Electric Co	8.5%
7	PacifiCorp - (OR) ⁴	8.3%

8	Silicon Valley Power	7.7%
9	City of Naperville - (IL)	7.0%
10	River Falls Municipal Utilities	5.7%

**Green Power Sales as a Percentage of Total Retail Electricity Sales (in MWh)
(as of December 2013)**

Rank	Utility	% of Load
1	Waterloo Utilities	23.8%
2	Edmond Electric	11.5%
3	Portland General Electric ⁵	8.4%
4	River Falls Municipal Utilities	7.4%
5	City of Palo Alto - (CA)	6.0%
6	Silicon Valley Power	5.2%
7	PacifiCorp/ Pacific Power ⁶	4.5%
8	Sacramento Municipal Utility District	4.1%
9	Madison Gas & Electric Co	3.6%
10	Town of Wellesley Municipal Light Plant (MA)	3.3%

**Net Price Premium Charged for New, Residential Customer-Driven Renewable Power
(as of December 2013)**

Rank	Utility	Net Premium
1	Austin Energy	-1.04¢/kWh
2	Oklahoma Gas & Electric Co	0.04¢/kWh
3	Indianapolis Power & Light Co	0.06¢/kWh
4	City of Palo Alto – (CA)	0.20¢/kWh
5	Edmond Electric	0.27¢/kWh
6	Xcel – (MN) ⁷	0.29¢/kWh
7	Avista Corp – (WA & ID)	0.33¢/kWh
8	Portland General Electric ⁸	0.80¢/kWh
9	Duke Energy (NC, SC, IN, OH, KY)	0.90¢/kWh
10	Connecticut Power & Light/United Illuminating	0.99¢/kWh

Notes:

¹ Windsource and Renewable Energy Trust

² Windsource and Renewable Energy Trust

³ Green Source

⁴ Note that PacifiCorp's Blue Sky Usage and Habitat achieved 6.4% customer participation rate

⁵ Green Source

⁶ Blue Sky Usage and Habitat; note that PacifiCorp/Pacific Power's Standard Block, Block QS, Usage & Habitat in Oregon achieved 3.5% in green power sales

⁷ Windsource

⁸ Green Source

* Portland General Electric data were updated 10/10/14

2012 Data

Green Pricing Program Renewable Energy Sales (as of December 2012)

Rank	Utility	Sales (MWh/year)
1	Portland General Electric	834,125
2	Austin Energy	744,443
3	PacifiCorp	604,007
4	Sacramento Municipal Utility District	416,477
5	Xcel Energy	390,056
6	Puget Sound Energy	365,796
7	Connecticut Light and Power Co. / United Illuminating	254,838
8	Dominion Virginia Power	250,364
9	Oklahoma Gas & Electric Co.	210,187
10	CPS Energy	179,786

Total Number of Customer Participants (as of December 2012)

Rank	Utility	Participants
1	Portland General Electric	87,987
2	PacifiCorp - Blue Sky Usage, Block, and Habitat	87,919
3	Xcel Energy	61,315
4	Sacramento Municipal Utility District	55,207
5	Puget Sound Energy	34,962
6	Connecticut Light and Power Co. / United Illuminating	27,664
7	Iberdrola: NYSEG and RG&E	21,201
8	We Energies	20,066
9	National Grid	18,302
10	Dominion Virginia Power	15,179

Customer Participation Rate (as of December 2012)

Rank	Utility	Customer Participation Rate
1	City of Palo Alto (California)	18.2%
2	Portland General Electric	12.4%
3	Madison Gas & Electric Co.	9.4%
4	Sacramento Municipal Utility District	9.2%
5	City of Naperville (Illinois)	7.6%
6	Pacific Power (Oregon)	7.6%
7	Silicon Valley Power	6.9%
8	River Falls Municipal Utilities	6.1%
9	Stoughton Utilities	5.1%

10	Cuba City Light & Water	5.0%
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**Green Power Sales as a Percentage of Total Retail Electricity Sales (in MWh)
(as of December 2012)**

Rank	Utility	% of Load
1	Waterloo Utilities	23.9%
2	Edmond Electric	10.7%
3*	City of Palo Alto	8.1%
3	River Falls Municipal Utilities	7.3%
4	Austin Energy	6.0%
5	Portland General Electric	4.4%
6	Madison Gas & Electric Co.	4.1%
6	PacifiCorp - Blue Sky Usage and Habitat	4.1%
8	Sacramento Municipal Utility District	3.9%
9	Stoughton Utilities	2.9%
10	Silicon Valley Power	2.8%

* City of Palo Alto provided an updated response after the submission deadline. The updated ranking is provided here but the remaining rankings have been unchanged.

**Net Price Premium Charged for New, Residential Customer-Driven Renewable Power
(as of December 2012)**

Rank	Utility	Net Premium
1	City of Ponca (Oklahoma)	-0.87¢/kWh
2	Public Service Co. of New Mexico	0.04¢/kWh
3	Edmond Electric	0.14¢/kWh
4	Indianapolis Power & Light Co.	0.15¢/kWh
5	Avista Corp. (Washington and Idaho)	0.33¢/kWh
6	Arizona Public Service	0.40¢/kWh
7	Xcel Energy (Minnesota only)	0.66¢/kWh
8	Oklahoma Gas & Electric Co.	0.86¢/kWh
9	Connecticut Light and Power Co. / United Illuminating	0.99¢/kWh
10	CPS Energy	1.00¢/kWh
10	WPPI Energy	1.00¢/kWh

Note: The average net premium for City of Ponca over 2012 was -0.08¢/kWh.

**Utilities Using at Least 2% Solar to Supply their Green Pricing Programs
(as of December 2012)**

Rank	Utility	% Solar
1	Sacramento Municipal Utility District	14.5%
2	Tennessee Valley Authority	5.9%
3	Xcel Energy (Colorado only)	3.0%
4	City of Palo Alto (California)	2.5%

5	Alameda Municipal Power	2.0%
5	PacifiCorp - Blue Sky Habitat & Usage	2.0%

Note: While additional individual utility products may include at least 2% solar, this list represents the overall mix provided by the utility to meet all of its green pricing needs.

* Data were not collected in 2011.

2010 Data

Green Pricing Program Renewable Energy Sales (as of December 2010)

Rank	Utility	Resources Used	Sales (kWh/year)	Sales (aMW) ^a
1	Austin Energy ^b	Wind, landfill gas	754,203,479	86.1
2	Portland General Electric ^c	Wind, biomass, geothermal	735,745,202	84.0
3	PacifiCorp ^{bde}	Wind, biomass, landfill gas, solar	587,373,391	67.1
4	Sacramento Municipal Utility District ^b	Wind, hydro, biomass, solar	395,537,564	45.2
5	Xcel Energy ^{bf}	Wind, solar	388,837,429	44.4
6	Puget Sound Energy ^{bg}	Wind, landfill gas, biomass, small hydro, solar	314,892,507	35.9
7	Connecticut Light and Power/United Illuminating	Wind, hydro	229,408,999	26.2
8	CPS Energy ^h	Wind	186,880,675	21.3
9	National Grid ⁱ	Biomass, wind, small hydro, solar	167,149,902	19.1
10	We Energies ^b	Wind, landfill gas, solar	164,546,605	18.8

- a. An "average megawatt" (aMW) is a measure of continuous capacity equivalent (i.e. operating at a 100% capacity factor).
- b. Product is Green-e Energy (www.green-e.org) certified.
- c. Marketed in partnership with Green Mountain Energy Company.
- d. Some Oregon products marketed in partnership with 3Degrees Group Inc.
- e. Includes Pacific Power and Rocky Mountain Power.
- f. Includes Northern States Power, Public Service Company of Colorado and Southwestern Public Service.
- g. Residential product marketed in partnership with 3Degrees Group Inc.
- h. Data period: February 2010 thru January 2011.
- i. Includes Niagara Mohawk, Massachusetts Electric, Narragansett Electric, and Nantucket Electric.

**Total Number of Customer Participants
(as of December 2010)**

Rank	Utility	Program(s)	Participants
1	Portland General Electric ^a	Clean Wind, Green Source, Renewable Future	77,907
2	PacifiCorp ^{bc}	Blue Sky Block ^d , Blue Sky Usage ^d , Blue Sky Habitat ^d	76,322
3	Xcel Energy ^e	WindSource ^d , Renewable Energy Trust	66,401
4	Sacramento Municipal Utility District	Greenergy ^d	51,498
5	PECO ^f	PECO WIND	32,629
6	Puget Sound Energy ^g	Green Power Program ^d	29,398
7	Connecticut Light and Power/United Illuminating	CTCleanEnergyOptions	24,283
8	Iberdrola USA: NYSEG and RG&E ^f	Catch the Wind	23,011
9	We Energies	Energy for Tomorrow ^d	22,306
10	National Grid ^h	GreenUp	21,475

- a. Marketed in partnership with Green Mountain Energy Company.
- b. Includes Pacific Power and Rocky Mountain Power.
- c. Some Oregon products marketed in partnership with 3Degrees Group Inc.
- d. Product is Green-e Energy certified.
- e. Includes Northern States Power, Public Service Company of Colorado and Southwestern Public Service.
- f. Marketed in partnership with Community Energy Inc.
- g. Residential product marketed in partnership with 3Degrees Group Inc.
- h. Includes Niagara Mohawk, Massachusetts Electric, Narragansett Electric, and Nantucket Electric.

**Green Power Sales as a Percentage of Total Retail Electricity Sales (in kWh)
(as of December 2010)**

Rank	Utility	Program(s)	% of Load
1	Waterloo Utilities ^a	Renewable Energy Program ^b	22.6%
2	Edmond Electric ^c	Pure and Simple	9.9%
3	Portland General Electric ^d	Clean Wind, Green Source, Renewable Future	8.1%
4	City of Palo Alto Utilities ^e	Palo Alto Green ^b	7.4%
5	River Falls Municipal Utilities	Renewable Energy Program ^a	7.2%
6	Austin Energy	Green Choice ^b	6.3%
7	Madison Gas and Electric	Green Power Tomorrow	4.5%
8	Pacific Power-Oregon Only ^f	Blue Sky Block ^b , Blue Sky Usage ^b , Blue Sky Habitat ^b	4.3%
9	Sacramento Municipal Utility District	Greenergy ^b	3.9%

10	Park Electric Cooperative ^g	Green Power Program	3.4%
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- a. Power supplied by WPPI Energy.
- b. Product is Green-e Energy certified.
- c. Power supplied by Oklahoma Municipal Power Authority.
- d. Marketed in partnership with Green Mountain Energy Company.
- e. Marketed in partnership with 3Degrees Group Inc.
- f. Some Oregon products marketed in partnership with 3Degrees Group Inc.
- g. Power supplied by Basin Electric Power Cooperative.

**Price Premium Charged for New, Residential Customer-Driven Renewable Power
(as of December 2010)**

Rank	Utility	Resources Used	Premium (¢/kWh)
1	Indianapolis Power & Light Company ^a	Wind	0.14
2	Edmond Electric ^{bc}	Wind	0.27
3	Avista Utilities	Wind, landfill gas, hydro	0.33
4	City of Onawa	Wind	0.40
5	Flathead Electric Cooperative ^d	Wind	0.50
5	Moorhead Public Service	Wind	0.50
5	Sacramento Municipal Utility District ^a	Wind, hydro, biomass, solar	0.50
8	OG&E Electric Services ^e	Wind	0.72
9	Emerald People's Utility District	Landfill gas, wind, biomass	0.80
10	Xcel Energy (Minnesota only) ^{ac}	Wind	0.84

- a. Product is Green-e Energy certified.
- b. Power supplied by Oklahoma Municipal Power Authority.
- c. Premium is variable; customers in these programs are exempt or otherwise protected from changes in utility fuel charges.
- d. Power is supplied by Basin Electric Power Cooperative.
- e. 0.72¢/kWh represents the average price premium paid. The premium varies from .7¢/kWh to .9¢/kWh, based on purchase quantities.

**Customer Participation Rate
(as of December 2010)**

Rank	Utility	Program(s)	Customer Participation Rate	Program Start Year
1	City of Palo Alto Utilities ^a	Palo Alto Green ^b	21.5%	2003
2	Portland General Electric ^c	Clean Wind, Green Source, Renewable Future	12.6%	2002
3	Farmers Electric Cooperative of Kalona	Green Power Project	11.2%	2009

4	Madison Gas and Electric	Green Power Tomorrow	9.0%	1999
5	Sacramento Municipal Utility District	Greenergy ^b	8.7%	1997
6	City of Naperville, IL ^d	Renewable Energy Program	8.0%	2005
7	Silicon Valley Power ^a	Santa Clara Green Power ^b	7.8%	2004
8	Pacific Power - Oregon Only ^g	Blue Sky Block ^b , Blue Sky Usage ^b , Blue Sky Habitat ^b	6.9%	2000 ^h
9	River Falls Municipal Utilities ^e	Renewable Energy Program ^b	6.4%	2001
10	Lake Mills Light & Water ^e	Renewable Energy Program ^b	5.3%	2001

- a. Marketed in partnership with 3Degrees Group Inc.
- b. Product is Green-e Energy certified.
- c. Marketed in partnership with Green Mountain Energy Company.
- d. Marketed in partnership with Community Energy Inc.
- e. Power supplied by WPPI Energy.
- f. Some products marketed in partnership with 3Degrees Group Inc.
- g. Blue Sky Habitat & Blue Sky Usage programs began in 2002.

**Community Solar Programs
(as of December 2010)**

Utility/Provider	Program	Program Size (kW)	Program Start
Ashland, Oregon	Solar Pioneers II	63	2008
Bainbridge Island, Washington	Solar for Sakai	5	2009
Ellensburg, Washington	Community Solar Project	27	2006
Florida Keys Electric Cooperative	Simple Solar	117	2008
Holy Cross Energy/Clean Energy Collective	Mid Valley Solar Array	80	2010
Sacramento Municipal Utility District	SolarShares	1,000	2008
St. George, Utah	SunSmart	250	2009
United Power	Sol Partners Cooperative Solar Farm	10	2009

For More Information -

Online Report: *Utility Green Pricing Programs: What Defines Success?* NREL/TP-620-29831, August 2001. ([PDF 1.1 MB](#))

2009 Data

Green Pricing Program Renewable Energy Sales (as of December 2009)

Rank	Utility	Resources Used	Sales (kWh/year)	Sales (aMW) ^a
1	Austin Energy	Wind, landfill gas	764,895,830	87.3
2	Portland General Electric ^b	Wind, biomass, geothermal	740,880,487	84.6
3	PacifiCorp ^{cde}	Wind, biomass, landfill gas, solar	578,744,080	66.1
4	Sacramento Municipal Utility District ^c	Wind, hydro, biomass, solar	377,535,530	43.1
5	Xcel Energy ^{cf}	Wind, solar	374,296,375	42.7
6	Puget Sound Energy ^{cg}	Wind, landfill gas, biomass, small hydro, solar	303,046,167	34.6
7	Connecticut Light and Power/United Illuminating	Wind, hydro	197,458,734	22.5
8	National Grid ^h	Biomass, wind, small hydro, solar	174,536,130	19.9
9	Public Service Company of New Mexico	Wind	173,863,751	19.8
10	We Energies ^c	Wind, landfill gas, solar	173,217,802	19.8

- a. An "average megawatt" (aMW) is a measure of continuous capacity equivalent (i.e. operating at a 100% capacity factor).
- b. Marketed in partnership with Green Mountain Energy Company.
- c. Product is Green-e Energy (www.green-e.org) certified.
- d. Some Oregon products marketed in partnership with 3Degrees Group Inc.
- e. Includes Pacific Power and Rocky Mountain Power.
- f. Includes Northern States Power, Public Service Company of Colorado and Southwestern Public Service.
- g. Residential product marketed in partnership with 3Degrees Group Inc.
- h. Includes Niagara Mohawk, Massachusetts Electric, Narragansett Electric, and Nantucket Electric.

er Sales as a Percentage of Total Retail Electricity Sales (in kWh) (as of December 2009)

Rank	Utility	Program(s)	% of Load
1	Waterloo Utilities ^a	Renewable Energy Program ^b	21.4%
2	Edmond Electric ^c	Pure and Simple	8.1%
3	Portland General Electric ^d	Clean Wind, Green Source, Renewable Future	7.9%
4	City of Palo Alto Utilities ^e	Palo Alto Green ^b	6.9%
5	Austin Energy	Green Choice	6.4%
6	River Falls Municipal Utilities	Renewable Energy Program ^a	6.2%
7	Madison Gas and Electric	Green Power Tomorrow	4.9%
8	Sacramento Municipal Utility District	Greenergy ^b	3.6%
9	Park Electric Cooperative ^f	Green Power Program	3.4%
10	PacifiCorp (Oregon only) ^{be}	Blue Sky Block ^b , Blue Sky Usage ^b , Blue Sky Habitat	2.8%

- a. Power supplied by WPPI Energy.
- b. Product is Green-e Energy certified.
- c. Power supplied by Oklahoma Municipal Power Authority.
- d. Marketed in partnership with Green Mountain Energy Company.
- e. Marketed in partnership with 3Degrees Group Inc.
- f. Power supplied by Basin Electric Power Cooperative.

Total Number of Customer Participants (as of December 2009)

Rank	Utility	Program(s)	Participants
1	Portland General Electric ^a	Clean Wind, Green Source, Renewable Future	72,812
2	PacifiCorp ^{bc}	Blue Sky Block ^d , Blue Sky Usage ^d , Blue Sky Habitat	71,165
3	Xcel Energy ^e	WindSource ^d , Renewable Energy Trust	70,393
4	Sacramento Municipal Utility District	Greenergy ^d	50,250
5	PECO ^f	PECO WIND	34,491
6	Puget Sound Energy ^{cg}	Green Power Program ^d	25,789
7	National Grid ^h	GreenUp	22,888
8	Connecticut Light and Power/United Illuminating	CTCleanEnergyOptions	22,336
9	We Energies	Energy for Tomorrow ^d	20,927
10	Iberdrola USA: NYSEG and RG&E ^f	Catch the Wind	20,386

- a. Marketed in partnership with Green Mountain Energy Company.
- b. Includes Pacific Power and Rocky Mountain Power.
- c. Some Oregon products marketed in partnership with 3Degrees Group Inc.
- d. Product is Green-e Energy certified.
- e. Includes Northern States Power, Public Service Company of Colorado and Southwestern Public Service.
- f. Marketed in partnership with Community Energy Inc.
- g. Residential product marketed in partnership with 3Degrees Group Inc.
- h. Includes Niagara Mohawk, Massachusetts Electric, Narragansett Electric, and Nantucket Electric.

Customer Participation Rate (as of December 2009)

Rank	Utility	Program(s)	Customer Participation Rate	Program Start Year
1	City of Palo Alto Utilities ^a	Palo Alto Green ^b	20.8%	2003
2	Portland General Electric ^c	Clean Wind, Green Source, Renewable Future	10.2%	2002
3	Madison Gas and Electric	Green Power Tomorrow	9.6%	1999
4	Sacramento Municipal Utility District	Greenergy ^b	8.5%	1997
5	City of Naperville ^d	Renewable Energy Program	8.4%	2005
6	Silicon Valley Power ^a	Santa Clara Green Power ^b	8.1%	2004
7	Pacific Power - Oregon Only ^a	Blue Sky Block ^b , Blue Sky Usage ^b , Blue Sky Habitat	6.5%	2002
8	River Falls Municipal Utilities ^e	Renewable Energy Program ^b	5.8%	2001
9	Stoughton Utilities ^e	Renewable Energy Program ^b	5.2%	2002
10	Lake Mills Light & Water ^e	Renewable Energy Program ^b	5.1%	2002
10	Pacific County PUD	Green Power Tomorrow	5.1%	2002

- a. Marketed in partnership with 3Degrees Group Inc.
- b. Product is Green-e Energy certified.
- c. Marketed in partnership with Green Mountain Energy Company.
- d. Marketed in partnership with Community Energy Inc.
- e. Power supplied by WPPI Energy.

Premium Charged for New, Customer-Driven Renewable Power (as of December 2009)

Rank	Utility	Resources Used	Premium (¢/kWh)
1	Edmond Electric ^{ab}	Wind	-0.17
2	OG&E Company ^{ac}	Wind	0.28
3	Avista Utilities	Wind, landfill gas, hydro	0.33
4	Park Electric Cooperative ^d	Wind	0.39
5	Arizona Public Service Company ^e	Wind, geothermal, biomass, landfill gas, solar	0.40
6	Indianapolis Power & Light Company	Wind	0.42
7	Flathead Electric Cooperative ^d	Wind	0.50
7	Sacramento Municipal Utility District ^e	Wind, hydro, biomass, solar	0.50
9	Xcel Energy (New Mexico) ^{ae}	Wind, solar	0.75
10	Emerald People's Utility District	Landfill gas, wind, biomass	0.80

- a. Premium is variable; customers in these programs are exempt or otherwise protected from changes in utility fuel charges.
- b. Power supplied by Oklahoma Municipal Power Authority.
- c. OG&E Company offers two rate structures for its Wind Power program; the lowest premium is for the rate which exempts customers from the fuel charge.
- d. Power is supplied by Basin Electric Power Cooperative.
- e. Product is Green-e Energy certified.

For More Information -

Online Report: *Utility Green Pricing Programs: What Defines Success?*. NREL/TP-620-29831, August 2001. ([PDF 1.1 MB](#))

2008 Data

Green Pricing Program Renewable Energy Sales (as of December 2008)

Rank	Utility	Resources Used	Sales (kWh/year)	Sales (Avg. MW) ^a
1	Austin Energy	Wind, landfill gas	723,824,901	82.6
2	Portland General Electric ^b	Wind, biomass	681,943,576	77.9
3	PacifiCorp ^{cde}	Wind, biomass, landfill gas, solar	492,892,222	56.3
4	Xcel Energy ^{ef}	Wind	362,040,082	41.3
5	Sacramento Municipal Utility District ^e	Wind, solar, biomass, landfill gas, hydro	325,275,628	37.1
6	Puget Sound Energy ^e	Wind, solar, biomass, landfill gas, hydro	291,166,600	33.2
7	Public Service Company of New Mexico	Wind	176,497,697	20.1
8	We Energies ^e	Wind, landfill gas, solar	176,242,630	20.1
9	National Grid ^{gh}	Biomass, wind, small hydro, solar	174,612,444	19.9
10	PECO ⁱ	Wind	172,782,490	19.7

- a. An "average megawatt" (aMW) is a measure of continuous capacity equivalent (i.e., operating at a 100% capacity factor).
- b. Some products marketed in partnership with Green Mountain Energy Company.
- c. Includes Pacific Power and Rocky Mountain Power.
- d. Some Oregon products marketed in partnership with 3Degrees Group, Inc.
- e. Product is Green-e certified. For Xcel Energy, the Colorado and Minnesota Windsorce products are *Green-e* certified.
- f. Includes Northern States Power, Public Service Company of Colorado, and Southwestern Public Service.
- g. Includes Niagara Mohawk, Massachusetts Electric, Narragansett Electric, and Nantucket Electric.
- h. Marketed in partnership with Community Energy, Inc., EnviroGen, Green Mountain Energy Company, Mass Energy, People's Power & Light, and Sterling Planet.
- i. Marketed in partnership with Community Energy, Inc.

Total Number of Customer Participants (as of December 2008)

Rank	Utility	Program(s)	Participants
1	Xcel Energy ^a	<i>Windsource^b Renewable Energy Trust</i>	71,571
2	Portland General Electric ^c	<i>Clean Wind Green Source</i>	69,258
3	PacifiCorp ^{de}	<i>Blue Sky Block^b Blue Sky Usage^b Blue Sky Habitat</i>	67,252
4	Sacramento Municipal Utility District	<i>Greenery^b</i>	45,992
5	PECO ^f	<i>PECO WIND</i>	36,300
6	National Grid ^{gh}	<i>GreenUp</i>	23,668
7	Energy East (NYSEG/RGE) ^f	<i>Catch the Wind</i>	22,210
8	Puget Sound Energy	<i>Green Power Program^b</i>	21,509
9	Los Angeles Department of Water & Power	<i>Green Power for a Green LA</i>	21,113
10	We Energies	<i>Energy for Tomorrow^b</i>	19,615

- a. Includes Northern States Power, Public Service Company of Colorado, and Southwestern Public Service.
- b. Product is Green-e certified. For Xcel Energy, the Colorado and Minnesota *Windsorce* products are *Green-e* certified.
- c. Some products marketed in partnership with Green Mountain Energy Company.
- d. Includes Pacific Power and Rocky Mountain Power.
- e. Some Oregon products marketed in partnership with 3Degrees Group, Inc.
- f. Marketed in partnership with Community Energy, Inc.
- g. Includes Niagara Mohawk, Massachusetts Electric, Narragansett Electric, and Nantucket Electric.
- h. Marketed in partnership with Community Energy, EnviroGen, Green Mountain Energy Company, Mass Energy, People's Power & Light, and Sterling Planet.

Customer Participation Rate (as of December 2008)

Rank	Utility	Customer Participation Rate	Program(s)	Program Start Year
1	City of Palo Alto Utilities ^{ab}	21.0%	<i>Palo Alto Green</i>	2003
2	Lenox Municipal Utilities ^c	10.5%	<i>Green City Energy</i>	2003
3	Portland General Electric ^d	9.7%	<i>Clean Wind Green Source Renewable Future</i>	2002
4	Madison Gas and Electric Company	9.6%	<i>Green Power Tomorrow</i>	1999
5	Silicon Valley Power ^{ab}	8.4%	<i>Santa Clara Green Power</i>	2004
6	Sacramento Municipal Utility District	7.8%	<i>Greenergy</i>	1997
6	City of Naperville Public Utilities ^e	7.8%	<i>Renewable Energy Program</i>	2005
8	Pacific Power (Oregon only) ^{ab}	6.2%	<i>Blue Sky Block^b Blue Sky Usage^b Blue Sky Habitat</i>	2002
9	River Falls Municipal Utilities ^{bf}	5.3%	<i>Renewable Energy Program</i>	2001
10	Lake Mills Light & Water ^{bf}	5.0%	<i>Renewable Energy Program</i>	2001

- a. Marketed in partnership with 3Degrees Group, Inc.
- b. Product is [*Green-e certified*](#).
- c. Program offered in association with the Iowa Association of Municipal Utilities.
- d. Some products marketed in partnership with Green Mountain Energy Company.
- e. Marketed in partnership with Community Energy, Inc.
- f. Power supplied by WPPI Energy.

er Sales as a Percentage of Total Retail Electricity Sales (in kWh) (as of December 2008)

Rank	Utility	Program Name	% of Load
1	Edmond Electric ^a	<i>Pure & Simple</i>	6.4%
2	Austin Energy	<i>GreenChoice</i>	6.0%
3	River Falls Municipal Utilities ^{be}	<i>Renewable Energy Program</i>	5.8%
4	City of Palo Alto Utilities ^{ce}	<i>PaloAltoGreen</i>	5.7%
5	Portland General Electric ^d	<i>Clean Wind Green Source Renewable Future</i>	3.9%
6	Madison Gas and Electric Company	<i>Green Power Tomorrow</i>	3.8%
7	Sacramento Municipal Utility District ^e	<i>Greenenergy</i>	3.0%
8	Fort Collins Utilities ^f	<i>Green Energy Program</i>	2.6%
9	Pacific Power (Oregon only) ^c	<i>Blue Sky Block^e Blue Sky Usage^e Blue Sky Habitat</i>	2.3%
10	Emerald People's Utility District	<i>EPUD Renewables</i>	2.2%

- a. Power supplied by Oklahoma Municipal Power Authority.
- b. Power supplied by WPPI Energy.
- c. Marketed in partnership with 3Degrees Group, Inc.
- d. Marketed in partnership with Green Mountain Energy Company.
- e. Product is [Green-e certified](#).
- f. Power supplied by Platte River Power Authority.

Premium Charged for New, Customer-Driven Renewable Power^a (as of December 2008)

Rank	Utility	Resources Used	Premium (¢/kWh)
1	OG&E Electric Services ^b	Wind	-1.01
2	Edmond Electric ^{bc}	Wind	-0.94
3	Avista Utilities	Wind, landfill gas, biomass	0.33
4	Park Electric Cooperative	Wind	0.44
5	Indianapolis Power and Light	Wind, landfill gas	0.65
6	PacifiCorp ^{dg}	Wind, biomass, landfill gas, solar	0.78
7	Emerald People's Utility District	Wind	0.80
7	Basin Electric Power Cooperative ^h	Wind	0.80
7	Clallam County Public Utility District ^b	Landfill gas	0.80
10	Xcel Energy (Minnesota) ^{bdf}	Wind	0.91

- a. Includes only programs that have installed or announced firm plans to install or purchase power from 100% new renewable resources.
- b. Premium is variable; customers in these programs are exempt or otherwise protected from changes in utility fuel charges.
- c. Power supplied by Oklahoma Municipal Power Authority.
- d. Product is [Green-e certified](#).
- e. The price for new customers enrolling in the program (fifth batch of renewable energy capacity).
- f. Net premium of the Minnesota *Windsorce* program.
- g. Pacific Power *Blue Sky Usage* and *Blue Sky Habitat* products; only available in Oregon. Product marketed in partnership with 3Degrees Group, Inc.
- h. A number of Basin Electric Power Cooperatives offer green power at a premium of 0.8¢/kWh

For More Information -

Online Report: *Utility Green Pricing Programs: What Defines Success?*. NREL/TP-620-29831, August 2001. ([PDF 1.1 MB](#))

2007 Data

Green Pricing Program Renewable Energy Sales (as of December 2007)

Rank	Utility	Resources Used	Sales (kWh/year)	Sales (Avg. MW) ^a
1	Austin Energy	Wind, landfill gas	577,636,840	65.9
2	Portland General Electric ^b	Geothermal, biomass, wind	553,677,903	63.2
3	PacifiCorp ^{cde}	Wind, biomass, landfill gas, solar	383,618,885	43.8
4	Florida Power & Light ^b	Biomass, wind, landfill gas, solar	373,596,000	42.6
5	Xcel Energy ^{ef}	Wind	326,553,866	37.3
6	Sacramento Municipal Utility District ^e	Wind, landfill gas, small hydro, solar	275,481,584	31.4
7	Puget Sound Energy ^e	Wind, solar, biomass, landfill gas	246,406,200	28.1
8	Basin Electric Power Cooperative	Wind	226,474,000	25.9
9	National Grid ^{gh}	Biomass, wind, small hydro, solar	180,209,571	20.6
10	PECO ⁱ	Wind	160,000,000	18.3

- a. An "average megawatt" (aMW) is a measure of continuous capacity equivalent (i.e., operating at a 100% capacity factor).
- b. Marketed in partnership with Green Mountain Energy Company. For Portland General Electric, some products marketed in partnership with Green Mountain Energy Company.
- c. Includes Pacific Power and Rocky Mountain Power.
- d. Some Oregon products marketed in partnership with 3Degrees Group, Inc.
- e. Product is Green-e certified. For Xcel Energy, the Colorado and Minnesota Windsorce products are *Green-e* certified.
- f. Includes Northern States Power, Public Service Company of Colorado, and Southwestern Public Service.
- g. Includes Niagara Mohawk, Massachusetts Electric, Narragansett Electric, and Nantucket Electric.
- h. Marketed in partnership with Community Energy, Inc., EnviroGen, Green Mountain Energy Company, Mass Energy, People's Power & Light, and Sterling Planet.
- i. Marketed in partnership with Community Energy, Inc.

Total Number of Customer Participants (as of December 2007)

Rank	Utility	Program(s)	Participants
1	Xcel Energy ^a	<i>Windsorce^b</i> <i>Renewable Energy Trust</i>	75,534
2	Portland General Electric ^{cg}	<i>Clean Wind</i> <i>Green Source</i>	61,543
3	PacifiCorp ^{de}	<i>Blue Sky Block^b</i> <i>Blue Sky Usage^b</i> <i>Blue Sky Habitat</i>	60,539
4	Sacramento Municipal Utility District	<i>Greenergy^b</i>	43,543
5	PECO ^f	<i>PECO WIND</i>	38,548
6	Florida Power & Light ^g	<i>Sunshine Energy</i>	37,184
7	National Grid ^{hi}	<i>GreenUp</i>	24,429
8	Los Angeles Department of Water & Power	<i>Green Power for a Green LA</i>	22,788
9	Puget Sound Energy	<i>Green Power Program^b</i>	20,457
10	Energy East (NYSEG/RGE) ^f	<i>Catch the Wind</i>	19,520

- a. Includes Northern States Power, Public Service Company of Colorado, and Southwestern Public Service.
- b. Product is Green-e certified. For Xcel Energy, the Colorado and Minnesota *Windsorce* products are *Green-e* certified.
- c. Some products marketed in partnership with Green Mountain Energy Company.
- d. Includes Pacific Power and Rocky Mountain Power.
- e. Some Oregon products marketed in partnership with 3Degrees Group, Inc.
- f. Marketed in partnership with Community Energy, Inc.
- g. Marketed in partnership with Green Mountain Energy Company.
- h. Includes Niagara Mohawk, Massachusetts Electric, Narragansett Electric, and Nantucket Electric.
- i. Marketed in partnership with Community Energy, EnviroGen, Green Mountain Energy Company, Mass Energy, People's Power & Light, and Sterling Planet.

Customer Participation Rate (as of December 2007)

Rank	Utility	Customer Participation Rate	Program(s)	Program Start Year
1	City of Palo Alto Utilities ^{ab}	20.4%	<i>Palo Alto Green</i>	2003
2	Lenox Municipal Utilities ^c	14.3%	<i>Green City Energy</i>	2003
3	Silicon Valley Power ^{ab}	8.7%	<i>Santa Clara Green Power</i>	2004
4	Portland General Electric ^d	8.5%	<i>Clean Wind Green Source Renewable Future</i>	2002
5	Sacramento Municipal Utility District ^b	7.4%	<i>Greenergy</i>	1997
6	City of Naperville Public Utilities ^e	6.7%	<i>Renewable Energy Program</i>	2005
7	Montezuma Municipal Light & Power ^c	6.2%	<i>Green City Energy</i>	2003
8	Pacific Power (Oregon only) ^{ab}	5.7%	<i>Blue Sky Usage, Habitat, Block</i>	2002
9	River Falls Municipal Utilities ^f	5.3%	<i>Renewable Energy Program</i>	2001
10	Holy Cross Energy	5.2%	<i>Wind Power Pioneers Local Renewable Energy Pool</i>	1998 2002

- a. Marketed in partnership with 3Degrees Group, Inc.
- b. Product is [*Green-e certified*](#).
- c. Program offered in association with the Iowa Association of Municipal Utilities.
- d. Some products marketed in partnership with Green Mountain Energy Company.
- e. Marketed in partnership with Community Energy, Inc.
- f. Power supplied by Wisconsin Public Power Inc.

er Sales as a Percentage of Total Retail Electricity Sales (in kWh) (as of December 2007)

Rank	Utility	Program Name	% of Load
1	Edmond Electric ^a	<i>Pure & Simple</i>	5.7%
2	Austin Energy	<i>GreenChoice</i>	5.0%
3	City of Palo Alto Utilities ^{bd}	<i>PaloAltoGreen</i>	4.6%
4	Portland General Electric ^c	<i>Clean Wind, Green Source, Renewable Future</i>	2.9%
5	Silicon Valley Power ^{bd}	<i>Santa Clara Green Power</i>	2.8%
6	Sacramento Municipal Utility District ^d	<i>Greenergy</i>	2.6%
7	Basin Electric Power Cooperative	<i>PrairieWinds</i>	1.9%
7	Pacific Power (Oregon only) ^{bde}	<i>Blue Sky Usage, Habitat, Block</i>	1.9%
9	Emerald People's Utility District	<i>EPUD Renewables</i>	1.8%
10	Public Service Company of New Mexico	<i>PNM Sky Blue</i>	1.5%
10	Roseville Electric ^{bd}	<i>Green Roseville</i>	1.5%

- a. Power supplied by Oklahoma Municipal Power Authority.
- b. Marketed in partnership with 3Degrees Group, Inc.
- c. Marketed in partnership with Green Mountain Energy Company.
- d. Product is [Green-e certified](#)
- e. Renewable portfolio options offered to Oregon customers.

Premium Charged for New, Customer-Driven Renewable Power^a (as of December 2007)

Rank	Utility	Resources Used	Premium (¢/kWh)
1	Edmond Electric ^{bc}	Wind	0.09
2	OG&E Electric Services ^b	Wind	0.10
3	Austin Energy ^{be}	Wind, landfill gas	0.16
4	Indianapolis Power and Light	Wind, landfill gas	0.20
5	Park Electric Cooperative	Wind	0.22
6	Avista Utilities	Wind, landfill gas, biomass	0.33
7	Xcel Energy (Minnesota) ^{bdf}	Wind	0.58
8	Clallam County Public Utility District ^b	Landfill gas	0.70
9	PacifiCorp ^{dg}	Wind, biomass, landfill gas, solar	0.78
10	Portland General Electric ^h	Biomass, Geothermal, Wind	0.80
10	Emerald People's Utility District	Wind	0.80

- a. Includes only programs that have installed or announced firm plans to install or purchase power from 100% new renewable resources.
- b. Premium is variable; customers in these programs are exempt or otherwise protected from changes in utility fuel charges.
- c. Power supplied by Oklahoma Municipal Power Authority.
- d. Product is [Green-e certified](#).
- e. The price for new customers enrolling in the program (fourth batch of renewable energycapacity).
- f. Net premium of the Minnesota *Windsorce* program.
- g. Pacific Power *Blue Sky Usage* product; only available in Oregon. Product marketed in partnership with 3Degrees Group, Inc.
- h. Portland General Electric *Green Source* Product. Product marketed in partnership with Green Mountain Energy Company.

For More Information -

Online Report: *Utility Green Pricing Programs: What Defines Success?*. NREL/TP-620-29831, August 2001. ([PDF 1.1 MB](#))

2006 Data

Green Power Program Renewable Energy Sales (as of December 2006)

Rank	Utility	Resources Used	Sales (kWh/year)	Sales (Avg. MW^a)
1	Austin Energy	Wind, landfill gas	580,580,401	66.3
2	Portland General Electric ^b	Existing geothermal and hydro, wind	432,826,408	49.4
3	Florida Power & Light	Landfill gas, biomass, wind, solar	302,792,000	34.6
4	PacifiCorp ^{cd}	Wind, biomass, solar	299,862,690	34.2
5	Xcel Energy ^{ef}	Wind	236,505,718	27.0
6	Basin Electric Power Cooperative	Wind	217,427,000	24.8
7	Sacramento Municipal Utility District ^e	Wind, landfill gas, small hydro	216,476,278	24.7
8	National Grid ^{ghi}	Biomass, wind, small hydro, solar	156,447,869	17.9
9	OG&E Electric Services	Wind	134,553,920	15.4
10	Puget Sound Energy	Wind, solar, biogas	131,742,000	15.0

- a. An "average megawatt" (aMW) is a measure of continuous capacity equivalent (i.e., operating at a 100% capacity factor).
- b. Some products marketed in partnership with Green Mountain Energy Company.
- c. Includes Pacific Power and Rocky Mountain Power.
- d. Some Oregon products marketed in partnership with 3 Phases Energy Services.
- e. Product is Green-e certified. For Xcel Energy, the Colorado and Minnesota Windsource products are Green-e certified.
- f. Includes Northern States Power, Public Service Company of Colorado, and Southwestern Public Service.
- g. Includes Niagara Mohawk, Massachusetts Electric, Narragansett Electric, and Nantucket Electric.
- h. Marketed in partnership with Community Energy, EnviroGen, Green Mountain Energy Company, Mass Energy, People's Power & Light, and Sterling Planet.
- i. Some products are certified by Green-e or Environmental Resources Trust.

Total Number of Customer Participants (as of December 2006)

Rank	Utility	Program Name(s)	Participants
1	Xcel Energy ^a	<i>Windsource^b Renewable Energy Trust</i>	63,028
2	PacifiCorp ^{cd}	<i>Blue Sky Block Blue Sky Usage Blue Sky Habitat</i>	51,297
3	Portland General Electric ^e	<i>Clean Wind Green Source</i>	50,284
4	Sacramento Municipal Utility District	<i>Greenergy^b</i>	35,707
5	PECO ^f	<i>PECO WIND</i>	34,303
6	Florida Power & Light ^g	<i>Sunshine Energy</i>	28,742
7	Los Angeles Department of Water & Power	<i>Green Power for a Green LA</i>	24,320
8	National Grid ^{hi}	<i>GreenUpⁱ</i>	23,751
9	Puget Sound Energy	<i>Green Power Program</i>	17,426
10	We Energies	<i>Energy for Tomorrow^b</i>	15,823

- a. Includes Northern States Power, Public Service Company of Colorado, and Southwestern Public Service.
- b. Product is Green-e certified. For Xcel Energy, the Colorado and Minnesota Windsorce products are Green-e certified.
- c. Includes Pacific Power and Rocky Mountain Power.
- d. Some Oregon products marketed in partnership with 3 Phases Energy Services.
- e. Some products marketed in partnership with Green Mountain Energy Company.
- f. Marketed in partnership with Community Energy, Inc.
- g. Marketed in partnership with Green Mountain Energy Company.
- h. Includes Niagara Mohawk, Massachusetts Electric, Narragansett Electric, and Nantucket Electric.
- i. Marketed in partnership with Community Energy, EnviroGen, Green Mountain Energy Company, Mass Energy, People's Power & Light, and Sterling Planet.
- j. Some products are certified by Green-e or Environmental Resources Trust.

Customer Participation Rate (as of December 2006)

Rank	Utility	Customer Participation Rate	Program(s)	Program Start Year
1	City of Palo Alto Utilities ^a	16.9%	<i>Palo Alto Green^b</i>	2003
2	Lenox Municipal Utilities ^c	16.6%	<i>Green City Energy</i>	2003
3	Montezuma Municipal Light & Power ^c	6.5%	<i>Green City Energy</i>	2003
3	Portland General Electric ^d	6.5%	<i>Clean Wind Green Source</i>	2002
5	Sacramento Municipal Utility District	6.2%	<i>Greenergy^b</i>	1997
6	Silicon Valley Power ^a	6.1%	<i>Santa Clara Green Power</i>	2004
7	Holy Cross Energy	5.6%	<i>Wind Power Pioneers Local Renewable Energy Pool</i>	1998 2002
8	Central Electric Cooperative ^e	5.5%	<i>Green Power</i>	1999
9	River Falls Municipal Utilities ^f	5.4%	<i>Renewable Energy Program</i>	2001
10	Orcas Power and Light Cooperative	5.1%	<i>Go Green</i>	1997

- a. Marketed in partnership with 3 Phases Energy Services
- b. Product is Green-e certified.
- c. Program offered in association with the Iowa Association of Municipal Utilities.
- d. Some products marketed in partnership with Green Mountain Energy Company.
- e. Power supplied by PNGC Power.
- f. Power supplied by Wisconsin Public Power Inc.

Premium Charged for New, Customer-Driven Renewable Power^a (as of December 2006)

Rank	Utility	Resources Used	Premium (¢/kWh)
1	Austin Energy ^b	Wind, landfill gas	-0.13
2	OG&E Electric Services ^b	Wind	0.026
3	Edmond Electric ^{bc}	Wind	0.144
4	Avista Utilities	Wind, landfill gas, biomass	0.33
5	Indianapolis Power and Light	Wind	0.35
6	Eugene Water and Electric Board ^{bd}	Wind	0.65
7	Clallam County Public Utility District ^b	Landfill gas	0.70
8	PacifiCorp ^e	Wind, biomass, solar	0.78
9	Idaho Power	Wind, solar	0.882
10	Mason County PUD 3	Wind	1.0
10	Sacramento Municipal Utility District ^d	Wind, landfill gas, hydro	1.0
10	Wisconsin Public Service Corporation	Wind, landfill gas, biomass	1.0

- a. Includes only programs that have installed or announced firm plans to install or purchase power from 100% new renewable resources.
- b. Premium is variable; customers in these programs are exempt or otherwise protected from changes in utility fuel charges.
- c. Power supplied by Oklahoma Municipal Power Authority.
- d. Product is [Green-e](#) certified.
- e. Pacific Power *Blue Sky Usage* product; only available in Oregon. Product marketed in partnership with 3 Phases Energy Services.

For More Information -

Online Report: *Utility Green Pricing Programs: What Defines Success?* ([PDF Report: 1.1 MB](#))
NREL/TP-620-29831, August 2001.

2005 Data

Green Power Program Renewable Energy Sales (as of December 2005)

Rank	Utility	Resources Used	Sales (kWh/year)	Sales (Avg. MW^a)
1	Austin Energy	Wind, landfill gas	435,140,739	49.7
2	Portland General Electric ^b	Existing geothermal and hydro, wind	339,577,170	38.8
3	PacifiCorp ^{cd}	Wind, biomass, solar	234,163,591	26.7
4	Florida Power & Light	Biomass, wind, solar	224,574,530	25.6
5	Sacramento Municipal Utility District ^e	Wind, landfill gas, small hydro, solar	195,081,504	22.3
6	Xcel Energy ^{ef}	Wind	147,674,000	16.9
7	National Grid ^{ghi}	Biomass, wind, small hydro, solar	127,872,457	14.6
8	Basin Electric Power Cooperative	Wind	113,957,000	13.0
9	Puget Sound Energy	Wind, solar, biogas	71,341,000	8.1
10	OG&E Electric Services	Wind	63,591,526	7.3

- a. An "average megawatt" (aMW) is a measure of continuous capacity equivalent (i.e., operating at a 100% capacity factor).
- b. Some products marketed in partnership with Green Mountain Energy Company.
- c. Includes Pacific Power and Utah Power.
- d. Some Oregon products marketed in partnership with 3 Phases Energy Services.
- e. Product is *Green-e* certified (www.green-e.org). For Xcel Energy, only the Public Service Company of Colorado product is *Green-e* certified.
- f. Includes Northern States Power, Public Service Company of Colorado, and Southwestern Public Service.
- g. Includes Niagara Mohawk, Massachusetts Electric, Narragansett Electric, and Nantucket Electric.
- h. Marketed in partnership with Community Energy, EnviroGen, Green Mountain Energy Company, Mass Energy, People's Power & Light, and Sterling Planet.
- i. Some products are certified by *Green-e* (www.green-e.org) or Environmental Resources Trust (<http://www.ert.net>).

Total Number of Customer Participants (as of December 2005)

Rank	Utility	Program Name(s)	Participants
1	Xcel Energy ^a	<i>WindSource^b</i> <i>Renewable Energy Trust</i>	49,354
2	PacifiCorp ^{cd}	<i>Blue Sky Block</i> <i>Blue Sky Usage</i> <i>Blue Sky Habitat</i>	42,269
3	Portland General Electric ^e	<i>Clean Wind</i> <i>Green Source</i> <i>Healthy Habitat</i>	40,570
4	Sacramento Municipal Utility District	<i>Greenery^b</i>	31,229
5	Los Angeles Department of Water & Power	<i>Green Power for a Green L.A.</i>	24,380
6	Florida Power and Light ^f	<i>Sunshine Energy</i>	23,066
7	PECO ^g	<i>PECO WIND</i>	22,164
8	National Grid ^{hi}	<i>GreenUp^j</i>	20,986
9	Puget Sound Energy	<i>Green Power Program</i>	15,500
10	We Energies	<i>Energy for Tomorrow^b</i>	12,458
10	Alliant Energy ^k	<i>Second Nature^b</i>	12,426

- a. Includes Northern States Power, Public Service Company of Colorado, and Southwestern Public Service.
- b. Product is *Green-e* certified (www.green-e.org). For Xcel Energy, only the Public Service Company of Colorado product is *Green-e* certified. For Alliant Energy, Iowa and Minnesota products are *Green-e* certified.
- c. Includes Pacific Power and Utah Power.
- d. Some Oregon products marketed in partnership with 3 Phases Energy Services.
- e. Some products marketed in partnership with Green Mountain Energy Company.
- f. Marketed in partnership with Green Mountain Energy Company.
- g. Marketed in partnership with Community Energy, Inc.
- h. Includes Niagara Mohawk, Massachusetts Electric, Narragansett Electric, and Nantucket Electric.
- i. Marketed in partnership with Community Energy, EnviroGen, Green Mountain Energy Company, Mass Energy, People's Power & Light, and Sterling Planet.
- j. Some products are certified by Green-e (www.green-e.org) or Environmental Resources Trust (www.ert.net).
- k. Includes Interstate Power and Light and Wisconsin Power and Light.

Customer Participation Rate (as of December 2005)

Rank	Utility	Participation Rate	Program Name(s)	Start Date
1	City of Palo Alto Utilities ^a	13.6%	<i>Palo Alto Green^b</i>	2003
2	Lenox Municipal Utilities ^c	12.6%	<i>Green City Energy</i>	2003
3	Montezuma Municipal Light and Power ^c	6.3%	<i>Green City Energy</i>	2003
4	Holy Cross Energy	6.0%	<i>Wind Power Pioneer Local Renewable Energy Pool</i>	1998 2002
5	Sacramento Municipal Utility District	5.5%	<i>Greenergy^b</i>	1997
6	Portland General Electric ^d	5.3%	<i>Clean Wind Green Source Healthy Habitat</i>	2002
7	City of Fairbank ^c	4.9%	<i>Green City Energy</i>	2003
8	Silicon Valley Power ^a	4.8%	<i>Santa Clara Green Power</i>	2004
9	Moorhead Public Service	4.7%	<i>Capture the Wind</i>	1998
10	Central Electric Cooperative ^e	4.6%	<i>Green Power</i>	1999

- a. Marketed in partnership with 3 Phases Energy Services
- b. Product is *Green-e* certified (www.green-e.org).
- c. Program offered in association with the Iowa Association of Municipal Utilities.
- d. Some products marketed in partnership with Green Mountain Energy Company.
- e. Power supplied by PNGC Power.

Premium Charged for New, Customer-Driven Renewable Power^a (as of December 2005)

Rank	Utility	Resources Used	Premium (¢/kWh)
1	Xcel Energy ^{bc}	Wind	-0.67
2	Edmond Electric ^{bd}	Wind	-0.45
3	OG&E Electric Services ^b	Wind	-0.25
4	Avista Utilities	Wind	0.33
5	Western Farmers Electric Cooperative	Wind	0.50
6	Austin Energy ^b	Wind, landfill gas	0.70
6	Clallam County Public Utility District ^b	Landfill gas	0.70
8	PacifiCorp ^e	Wind, biomass, solar	0.78
9	Wabash Valley Power Association ^f	Landfill gas	0.90
10	Eugene Water and Electric Board ^b	Wind	0.91

- a. Includes only programs that have installed or announced firm plans to install or purchase power from 100% new renewable resources.
- b. Premium is variable; customers in these programs are exempt or otherwise protected from changes in utility fuel charges.
- c. Public Service Company of Colorado only. Product is *Green-e* certified (www.green-e.org).
- d. Power supplied by Oklahoma Municipal Power Authority.
- e. Pacific Power *Blue Sky Usage* product; only available in Oregon. Product marketed in partnership with 3 Phases Energy Services.
- f. The premium charged by participating member distribution utilities varies from 0.9¢/kWh to 1.0¢/kWh.

For More Information -

Online Report: *Utility Green Pricing Programs: What Defines Success?* ([PDF Report: 1.1 MB](#))
NREL/TP-620-29831, August 2001.

2004 Data

Green Power Program Renewable Energy Sales (as of December 2004)

Rank	Utility	Resources Used	Sales (kWh/year)	Sales (Avg. MW^a)
1	Austin Energy	Wind, landfill gas, small hydro	334,446,101	38.2
2	Portland General Electric ^b	Existing geothermal, wind, small hydro	262,142,564	29.9
3	PacifiCorp ^{cd}	Wind, biomass, solar	191,838,079	21.9
4	Sacramento Municipal Utility District ^e	Landfill gas, wind, small hydro, solar	176,774,804	20.2
5	Xcel Energy	Wind	137,946,000	15.7
6	National Grid ^{fgh}	Biomass, wind, small hydro, solar	88,204,988	10.1
7	Los Angeles Department of Power & Water	Wind and landfill gas	75,528,746	8.6
8	OG&E Electric Services	Wind	56,672,568	6.5
9	Puget Sound Energy	Wind, solar, biogas	46,110,000	5.3
10	We Energies ^e	Landfill gas, wind, small hydro	40,906,410	4.7

- a. An "average megawatt" (aMW) is a measure of capacity equivalent that assumes the capacity operates continuously.
- b. Some products marketed in partnership with Green Mountain Energy Company.
- c. Includes Pacific Power and Utah Power.
- d. Some Oregon products marketed in partnership with 3 Phases Energy Services.
- e. Product is *Green-e* accredited (www.green-e.org).
- f. Includes Niagara Mohawk, Massachusetts Electric, Narragansett Electric, and Nantucket Electric.
- g. Marketed in partnership with Community Energy, CET & Conservation Services Group, EnviroGen, Green Mountain Energy Company, Mass Energy, People's Power & Light, and Sterling Planet.
- h. Some products are *Green-e* certified (www.green-e.org).

Total Number of Customer Participants (as of December 2004)

Rank	Utility	Program Name(s)	Participants
1	Xcel Energy	<i>WindSource Renewable Energy Trust</i>	40,990
2	PacifiCorp ^{ab}	<i>Blue Sky Block Blue Sky Usage Blue Sky Habitat</i>	36,125
3	Portland General Electric ^c	<i>Clean Wind Green Source Healthy Habitat</i>	33,491
4	Sacramento Municipal Utility District	<i>Greenenergy^d PV Pioneers I</i>	28,527
5	Los Angeles Department of Water & Power	<i>Green Power for a Green L.A.</i>	27,293
6	National Grid ^e	<i>GreenUp^{fg}</i>	14,978
7	Puget Sound Energy	<i>Green Power Program</i>	14,074
8	Alliant Energy	<i>Second Nature^d</i>	11,544
9	We Energies	<i>Energy for Tomorrow^d</i>	11,120
10	Florida Power and Light ^h	<i>Sunshine Energy</i>	10,674

- a. Includes Pacific Power and Utah Power.
- b. Some Oregon products marketed in partnership with 3 Phases Energy Services.
- c. Some products marketed in partnership with Green Mountain Energy Company.
- d. Product is *Green-e* accredited (www.green-e.org).
- e. Includes Niagara Mohawk, Massachusetts Electric, Narragansett Electric, and Nantucket Electric.
- f. Marketed in partnership with Community Energy, CET & Conservation Services Group, EnviroGen, Green Mountain Energy Company, Mass Energy, People's Power & Light, and Sterling Planet.
- g. Some products are *Green-e* certified (www.green-e.org).
- h. Marketed in partnership with Green Mountain Energy Company.

Customer Participation Rate (as of December 2004)

Rank	Utility	Participation Rate	Program Name(s)	Start Date
1	Lenox Municipal Utilities ^a	14.5%	<i>Green City Energy</i>	2003
2	City of Palo Alto Utilities ^b	10.9%	<i>Palo Alto Green^c</i>	2003
3	Montezuma Municipal Light and Power ^a	6.4%	<i>Green City Energy</i>	2003
4	Holy Cross Energy	5.2%	<i>Wind Power Pioneer Local Renewable Energy Pool</i>	1998 2002
4	Moorhead Public Service	5.2%	<i>Capture the Wind</i>	1998
4	Sacramento Municipal Utility District	5.2%	<i>Greenergy^c PV Pioneers I</i>	1997 1993
7	Orcas Power & Light	4.7%	<i>Go Green</i>	1999
7	Portland General Electric ^d	4.3%	<i>Clean Wind Green Source Healthy Habitat</i>	2002
9	Central Electric Cooperative ^e	4.0%	<i>Green Power</i>	1999
10	Madison Gas & Electric	3.8%	<i>Wind Energy Program</i>	1999
10	River Falls Municipal Utilities ^f	3.8%	<i>Renewable Energy Program</i>	2001

- a. Program offered in association with the Iowa Association of Municipal Utilities.
- b. Marketed in partnership with 3 Phases Energy Services
- c. Product is *Green-e* accredited (www.green-e.org).
- d. Some products marketed in partnership with Green Mountain Energy Company.
- e. Power supplied by PNGC Power.
- f. Program offered in association with Wisconsin Public Power Inc.

Premium Charged for New, Customer-Driven Renewable Power^a (as of December 2004)

Rank	Utility	Resources Used	Premium
1	Avista Utilities	Wind	0.33¢/kWh
2	Austin Energy ^b	Wind, small hydro, landfill gas	0.50¢/kWh
3	Edmond Electric ^b	Wind	0.68¢/kWh
4	Clallam County Public Utility District	Landfill gas	0.70¢/kWh
5	Eugene Water and Electric Board ^b	Wind	0.71¢/kWh
6	PacifiCorp ^c	Wind, biomass, solar	0.78¢/kWh
7	OG&E Electric Services ^b	Wind	0.88¢/kWh
8	Wabash Valley Power Association ^d	Landfill gas	0.90¢/kWh
9	Roseville Electric	Geothermal, small hydro, solar	1.00¢/kWh
9	Sacramento Municipal Utility District ^e	Landfill gas, wind, small hydro	1.00¢/kWh
9	Southern Minnesota Municipal Power Agency	Wind	1.00¢/kWh

- a. Includes only programs that have installed or announced firm plans to install or purchase power from 100% new renewable resources.
- b. Premium is variable; customers in these programs are exempt or otherwise protected from changes in utility fuel charges.
- c. Pacific Power product marketed in partnership with 3 Phases Energy Services.
- d. The premium charged by participating member distribution utilities varies from 0.9¢/kWh to 1.0¢/kWh.
- e. Product is *Green-e* accredited (www.green-e.org).

For More Information -

Online Report: *Utility Green Pricing Programs: What Defines Success?* ([PDF Report: 1.1 MB](#))
NREL/TP-620-29831, August 2001.

2003 Data

Green Pricing Program Renewable Energy Sales (as of December 2003)

Rank	Utility	Resources Used	Sales (kWh/year)	Sales (Avg. MW)^a
1	Austin Energy	Wind and landfill gas	289,038,019	33.0
2	Portland General Electric ^b	Wind and geothermal	188,646,290	21.5
3	Sacramento Municipal Utility District ^d	Landfill gas, wind, hydro	143,160,698	16.3
4	PacifiCorp ^b	Wind and geothermal	132,168,603	15.1
5	Xcel Energy	Wind	123,700,000	14.1
6	Los Angeles Department of Power & Water	Small hydro, landfill gas, solar	87,845,342 ^c	10.0
7	Tennessee Valley Authority ^d	Biogas, wind, solar	40,491,000	4.6
8	We Energies ^d	Landfill gas, wind, hydro	34,648,566	4.0
9	Alliant Energy	Wind and landfill gas	27,958,473	3.2
10	Puget Sound Energy	Wind and solar	27,312,900	3.1

- a. An "average megawatt" (aMW) is a measure of capacity equivalent that assumes the capacity operates continuously.
- b. Marketed in partnership with Green Mountain Energy Company.
- c. Data is for 2002.
- d. Product is Green-e certified (www.green-e.org).

Total Number of Customer Participants (as of December 2003)

Rank	Utility	Program Name(s)	Participants
1	Xcel Energy	<i>WindSource Renewable Energy Trust</i>	43,039
2	Los Angeles Department of Water & Power	<i>Green Power for a Green L.A.</i>	29,677
3	Portland General Electric Company ^a	<i>Clean Wind Renewable Usage Healthy Habitat</i>	26,893
4	Sacramento Municipal Utility District	<i>Greenery^b PV Pioneers I</i>	24,542
5	PacifiCorp ^a	<i>Blue Sky Renewable Usage Habitat Option</i>	23,351
6	We Energies	<i>Energy for Tomorrow^b</i>	10,760
7	Alliant Energy	<i>Second Nature</i>	9,519
8	Austin Energy	<i>GreenChoice</i>	7,462
9	Tennessee Valley Authority	<i>Green Power Switch^b</i>	7,364
10	Wisconsin Public Service	<i>SolarWise for Schools NatureWise^b</i>	6,157

- a. Marketed in partnership with Green Mountain Energy Company.
- b. Product is Green-e certified (www.green-e.org).

Customer Participation Rate (as of December 2003)

Rank	Utility	Program Name(s)	Participation Rate	Start Date
1	Lenox Municipal Utilities ^a	<i>Green City Energy</i>	11.1%	2003
2	City of Palo Alto Utilities ^b	<i>Palo Alto Green^d</i>	6.6%	2003
3	Moorhead Public Service	<i>Capture the Wind</i>	5.5%	1998
4	Holy Cross Energy	<i>Wind Power Pioneer Local Renewable Energy Pool</i>	5.1%	1998 2002
5	Montezuma Municipal Light and Power ^a	<i>Green City Energy</i>	4.9%	2003
5	Orcas Power & Light	<i>Go Green</i>	4.9%	1999
7	City of Fairbank ^a	<i>Green City Energy</i>	4.7%	2003
8	Sacramento Municipal Utility District	<i>Greenergy^d PV Pioneers I</i>	4.6%	1997 1993
9	Central Electric Cooperative ^c	<i>Green Power</i>	4.1%	1999
10	Madison Gas & Electric	<i>Wind Energy Program</i>	3.9%	1999

- a. Program offered in association with the Iowa Association of Municipal Utilities.
- b. Product marketed in partnership with 3 Phases Energy Services.
- c. Power supplied by PNGC Power.
- d. Product is Green-e certified (www.green-e.org).

Premium Charged for New, Customer-Driven Renewable Power^a (as of December 2003)

Rank	Utility	Resources Used	Premium
1	Austin Energy ^b	Wind and landfill gas	0.59¢/kWh
2	OG&E Electric Services ^b	Wind	0.63¢/kWh
3	Clallam County Public Utility District ^b	Landfill gas	0.70¢/kWh
4	Wabash Valley Power Association ^c	Landfill gas	0.90¢/kWh
5	Roseville Electric	Geothermal and solar	1.00¢/kWh
5	Sacramento Municipal Utility District ^d	Landfill gas, wind, hydro	1.00¢/kWh
5	Southern Minnesota Municipal Power Agency	Wind	1.00¢/kWh
8	Emerald People's Utility District ^e	Wind	1.20¢/kWh
9	American Municipal Power - Ohio ^e	Hydro, wind	1.30¢/kWh
9	Eugene Water and Electric Board ^b	Wind	1.30¢/kWh

- a. Includes only programs that have installed or announced firm plans to install or purchase power from 100% new renewable resources.
- b. Premium is variable; customers in these programs are exempt or otherwise protected from changes in utility fuel charges.
- c. The premium charged by participating member distribution utilities varies from 0.9¢/kWh to 1.0¢/kWh.
- d. Product is Green-e certified (www.green-e.org).
- e. Product is marketed in partnership with Green Mountain Energy Company.

For More Information -

Online Report: *Utility Green Pricing Programs: What Defines Success?* ([PDF Report: 1.1 MB](#))
NREL/TP-620-29831, August 2001.

2002 Data

Green Pricing Program Renewable Energy Sales (as of December 2002)

Rank	Utility	Resources	Sales (kWh/year)	Sales (Avg. MW)₁
1	Austin Energy	Wind, landfill gas, solar	251,520,000	28.7
2	Sacramento Municipal Utility District	Landfill gas, wind, solar	104,344,000 ²	11.9
3	Xcel Energy	Wind and solar	103,739,000 ³	11.8
4	Los Angeles Department of Power and Water	Wind and landfill gas	66,666,000 ⁴	7.6
5	Portland General Electric ⁵	Wind and geothermal	57,989,000	6.6
6	PacifiCorp ⁵	Wind and geothermal	55,615,000	6.3
7	Tennessee Valley Authority	Wind, biomass, landfill gas, solar	35,955,000	4.1
8	We Energies	Landfill gas, wind, hydro	35,161,000	4.0
9	Puget Sound Energy	Wind and solar	20,334,000	2.3
10	Madison Gas and Electric	Wind	15,593,000	1.8

Notes:

¹ An "average megawatt" is a consistent measure of capacity equivalent that assumes the capacity operates continuously.

² Includes an estimated 3 million kWh of generation from the 1.9 MW of PV installed through the PV Pioneers program.

³ Includes an estimated 175,000 kWh of generation from the 100 kW of PV installed through the Renewable Energy Trust program.

⁴ Data for 2001 from program audit conducted by the Los Angeles City Controller, August 2002.

⁵ Marketed in partnership with Green Mountain Energy Company.

Total Number of Customer Participants (as of December 2002)

Rank	Utility	Program Name(s)	Participants
1	Los Angeles Department of Water and Power	Green Power for a Green L.A.	72,732 ¹
2	Xcel Energy	WindSource Renewable Energy Trust	32,600 ²
3	PacifiCorp ³	Blue Sky Renewable Usage Salmon-Friendly	20,028
4	Portland General Electric Company ³	Clean Wind Power Renewable Usage Salmon-Friendly	19,623
5	Sacramento Municipal Utility District	Greenenergy PV Pioneers	19,172 ⁴
6	We Energies	Energy for Tomorrow	11,014
7	Alliant Energy	Second Nature	7,280
8	Austin Energy	GreenChoice	6,725
9	Tennessee Valley Authority	Green Power Switch	6,487
10	Wisconsin Public Service	SolarWise for Schools NatureWise	5,644 ⁵

Notes:

¹ Includes 41,833 lifeline/low-income customers that have signed up for green power but do not pay a premium.

² There were 9,420 participants in the Renewable Energy Trust program as of December 2002. About 20% of these customers also participate in the Windsource program.

³ Marketed in partnership with Green Mountain Energy Company.

⁴ About 800 customers participate in the PV Pioneers program.

⁵ A total of 1,048 customers participate in the NatureWise program. There are 204 customers that participate in both of the utility's green power programs.

Customer Participation Rate (as of December 2002)

Rank	Utility	Program Name(s)	Participation Rate	Start Date
1	Moorhead Public Service	Capture the Wind	5.8%	1998
2	Orcas Power & Light	Green Power	5.5%	1999
3	Los Angeles Department of Water and Power	Green Power for a Green L.A.	5.2% ¹	1999
4	Holy Cross Energy	Wind Power Pioneers Local Renewable Energy Pool	4.9%	1998
5	Central Electric Cooperative ²	Green Power	3.7%	1999
6	Madison Gas and Electric	Wind Power Program	3.6%	1999
6	Sacramento Municipal Utility District	Greenergy PV Pioneers	3.6%	1997
8	Preston Public Utilities ³	Wind Power	3.4%	2000
9	Cass County Electric Cooperative ⁴	Infinity Wind Energy	3.1%	1999
10	Cedar Falls Utilities	Wind Energy Electric Project	3.0%	1999
10	Eugene Water and Electric Board	EWEB Wind Power	3.0%	1999

Notes:

¹ Includes lifeline/low-income customers that have signed up for green power but do not pay a premium.

² Supplied by the Pacific Northwest Generating Cooperative.

³ Supplied by Southern Minnesota Municipal Power Agency.

⁴ Supplied by Minnkota Power Cooperative.

Premium Charged for New, Customer-Driven Renewable Power¹ (as of December 2002)

Rank	Utility	Resources Used	Premium
1	Clallam County Public Utility District	Landfill gas	0.70¢/kWh
2	Roseville Electric	Reinjected geothermal, solar	1.00¢/kWh
2	Sacramento Municipal Utility District	Landfill gas, hydro, wind	1.00¢/kWh
4	Pacific County Public Utility District	Wind, hydro	1.05¢/kWh
5	Austin Energy ²	Wind, solar, landfill gas	1.08¢/kWh
6	Eugene Water and Electric Board	Wind	1.30¢/kWh
7	City of Bowling Green (Ohio)	Small hydro, solar	1.35¢/kWh
7	Dakota Electric Association	Wind	1.35¢/kWh
9	Clark Public Utilities	Wind, solar	1.50¢/kWh
9	Great River Energy ³	Wind	1.50¢/kWh
9	Moorhead Public Service ⁴	Wind	1.50¢/kWh
9	Oregon Trail Electric Cooperative	Wind	1.50¢/kWh

Notes:

¹ Includes only programs that have installed or announced firm plans to install or purchase power from new renewable resources.

² Price premium for customers who signed up for phase two of program. Customers are exempt from fuel charges.

³ Suggested retail price for member distribution cooperatives.

⁴ Adjusted to reflect the cost of 100% new wind power.

For More Information -

Online Report: *Utility Green Pricing Programs: What Defines Success?* ([PDF Report: 1.1 MB](#))
NREL/TP-620-29831, August 2001.

2001 Data

December 2001

Customer Participants (as of December 2001)

Rank	Utility	Program	# of Participants
1	Los Angeles Department of Water and Power	Green Power for a Green L.A.	87,000 ¹
2	Xcel Energy (Colorado)	WindSource	18,600
3	Sacramento Municipal Utility District	Greenergy - All Renewables	14,200
4	Xcel Energy (Colorado)	Renewable Energy Trust	10,900
5	Wisconsin Electric Power Company	Energy for Tomorrow	10,700
6	PacifiCorp	Blue Sky	7,300
7	Austin Energy	GreenChoice	6,600
8	Portland General Electric Company	Salmon Friendly Clean Wind Power	5,700
9	Wisconsin Public Service	SolarWise for Schools	5,200
10	Tennessee Valley Authority	Green Power Switch	4,900 ²

Notes:

¹ About half of the total are low-income customers that receive existing renewables at no extra cost.

² TVA supplies the power for programs offered by 12 distribution utilities.

Customer Participation Rates (as of December 2001)

Rank	Utility	Program	Participation Rate
1	Moorhead Public Service	Capture the Wind	7.0%
2	Los Angeles Department of Water and Power	Green Power for a Green L.A.	6.7% ¹
3	Orcas Power & Light Cooperative	Green Power	5.1%
3	Holy Cross Energy	Wind Power Pioneers	5.1%
5	Madison Gas and Electric	Wind Power Program	4.1%
6	Cedar Falls Utilities	Wind Energy Electric Project	4.0%
7	Central Electric Cooperative	Green Power	3.7%
8	Eugene Water and Electric Board	EWEB Wind Power	3.3%
9	Consumers Power	Green Power	3.1%
10	Sacramento Municipal Utility District	Greenergy - All Renewables	3.0%

Notes:

¹ About half of the total are low-income customers that receive existing renewables at no extra cost.

Renewable Resources Supported through Green Pricing (as of December 2001)

Rank	Utility	Resources Installed	New Capacity
1	Austin Energy	Wind/PV	76.9 MW
2	Xcel Energy (Colorado)	Wind	46.7 MW ¹
3	Los Angeles Department of Power and Water	Wind/landfill methane	27.0 MW ²
4	Sacramento Municipal Utility District	Landfill methane/PV	10.2 MW ³
5	Madison Gas and Electric	Wind	8.2 MW ⁴
6	Wisconsin Electric	Wind/hydro/landfill methane	7.2 MW ⁵
7	Eugene Water and Electric Board	Wind	6.5 MW
8	Tennessee Valley Authority	Wind/landfill methane/PV	6.2 MW ⁶
9	Wisconsin Public Power Inc.	Hydro	6.0 MW
10	Platte River Power Authority	Wind	5.3 MW ⁷

Notes:

¹ Xcel Energy sells approximately 6.3 MW from its wind projects as wholesale power to other Colorado utilities.

² LADWP purchases the wind energy equivalent of about 25 MW from PacifiCorp and APX.

³ Includes capacity installed for the Greenergy and PV Pioneers I programs.

⁴ MGE uses 3 MW of its 11.2-MW wind project to satisfy a state renewable energy mandate. The remaining capacity is supported through green pricing.

⁵ Wisconsin Electric purchases another 2.6 MW of existing landfill gas resources for its green pricing program.

⁶ TVA supplies the power for programs offered by 12 distribution utilities.

⁷ Platte River supplies the power for programs offered by Fort Collins, Estes Park, Longmont, and Loveland (Colorado). It also supplies 660 kW of wind power to Tri-State G&T.

Premium Charged for New, Customer-Driven Renewable Power¹ (as of December 2001)

Rank	Utility	Resources	Premium
1	Roseville Electric	Geothermal/PV	1.00¢/kWh
1	Sacramento Municipal Utility District	Landfill methane	1.00¢/kWh
1	Texas New Mexico Power Company	Wind	1.00¢/kWh
4	Austin Energy ²	Wind/PV	1.08¢/kWh
5	Dakota Electric Association	Wind	1.28¢/kWh
6	Eugene Water and Electric Board ³	Wind	1.32¢/kWh
7	City of Bowling Green (Ohio)	Landfill methane/PV	1.38¢/kWh
8	Clark Public Utilities	Wind/PV	1.50¢/kWh
8	Great River Energy ⁴	Wind	1.50¢/kWh
8	Moorhead Public Service ⁵	Wind	1.50¢/kWh

Notes: The premium charged in a green pricing program can be a function of any number of variables, including but not limited to the renewable energy technology utilized, the quality of the renewable energy resource, the size of the project(s), the project and company financials, the availability of subsidies or incentives, inclusion of administrative and marketing costs, the utility's avoided cost of energy, the amount of renewables already in the utility mix, and whether participating customers shoulder the full cost of the program.

¹ Includes only programs that have installed or announced firm plans to install new renewable resources.

² Price for customers in second phase of program. Price is adjusted when fuel prices change.

³ Price is adjusted when fuel prices change.

⁴ Suggested retail price for member distribution cooperatives.

⁵ Adjusted to reflect the cost of 100% new wind power.

June 2001

**Customer Participants
(as of June 2001)**

Rank	Utility	Program	# of Participants
1	Los Angeles Department of Water and Power	Green Power for a Green L.A.	80,000*
2	Public Service Company of Colorado	WindSource	14,110
3	Sacramento Municipal Utility District	Greenergy - All Renewables	11,850
4	Public Service Company of Colorado	Renewable Energy Trust	10,900
5	Wisconsin Electric Power Company	Energy for Tomorrow	10,500
6	Austin Energy	GreenChoice	8,680
7	PacifiCorp	Blue Sky	6,000
8	Wisconsin Public Service	SolarWise for Schools	5,400
9	Portland General Electric Company	Salmon Friendly and Clean Wind Power	4,540
10	Madison Gas and Electric	Wind Power Program	4,480

Notes:

* About half of the total are low-income customers that receive existing renewables at no extra cost.

Customer Participation Rates (as of August 2001)

Rank	Utility	Program	Participation Rate
1	Moorhead Public Service	Capture the Wind	7.4%
2	Los Angeles Department of Water and Power	Green Power for a Green L.A.	6.2%*
3	Holy Cross Energy	Wind Power Pioneers	4.1%
3	Madison Gas and Electric	Wind Power Program	4.1%
5	Cedar Falls Utilities	Wind Energy Electric Project	4.0%
6	Orcas Power & Light Cooperative	Green Power	3.8%
7	Eugene Water and Electric Board	EWEB Wind Power	3.7%
8	Central Electric Cooperative	Green Power	3.5%
9	City of Bowling Green	Green Power	3.4%
10	Consumers Power	Green Power Pilot Program	3.1%

Notes:

* About half of the total are low-income customers that receive existing renewables at no extra cost.

***New Renewable Resources Supported through
Green Pricing (as of June
2001)***

Rank	Utility	Resources Installed	New Capacity
1	Los Angeles Department of Power and Water	Wind/various	25.0 MW ¹
2	Austin Energy	Wind/PV	23.2 MW
3	Public Service Company of Colorado	Wind	15.8 MW ²
4	Sacramento Municipal Utility District	Landfill gas/PV	10.2 MW ³
5	Madison Gas and Electric	Wind	8.2 MW ⁴
6	Wisconsin Electric	Wind/hydro/landfill gas	7.2 MW ⁵
7	Eugene Water and Electric Board	Wind	6.5 MW
8	Wisconsin Public Power Inc.	Hydro	6.0 MW
9	Platte River Power Authority	Wind	5.3 MW ⁶
10	Alliant Energy	Wind/landfill gas	4.6 MW

Notes: Austin Energy plans to install another 53 MW of wind and landfill methane by the end of 2001; PSCo plans to add 36 MW by the end of 2001.

¹ LADWP purchases wind power equivalent to approximately 25 MW from Enron and PacifiCorp.

² PSCo sells 4.3 MW from its 20-MW wind project at wholesale to other Colorado utilities. Includes capacity installed for the WindSource and Renewable Energy Trust programs.

³ Includes capacity installed for the Greenergy and PV Pioneers I programs.

⁴ Madison Gas & Electric uses 3 MW of its 11.2-MW wind project to satisfy a state renewable energy mandate. The remainder of the project is supported through green pricing.

⁵ Wisconsin Electric purchases another 2.6 MW of existing landfill gas resources for its green pricing program.

⁶ Platte River supplies the power for programs offered by Fort Collins, Estes Park, Longmont, and Loveland. It also provides the output of one 660-kW wind turbine to Tri-State.

**Premium Charged for New, Customer-Driven
Renewable Power¹ (as of June
2001)**

Rank	Utility	Resources	Premium
1	Austin Energy ²	Wind/landfill gas/solar	0.17¢/kWh
2	Roseville Electric	Geothermal/PV	1.00¢/kWh
2	Sacramento Municipal Utility District	Landfill gas	1.00¢/kWh
2	Texas New Mexico Power Company	Wind	1.00¢/kWh
5	Dakota Electric Association	Wind	1.28¢/kWh
6	City of Bowling Green (Ohio)	Landfill gas/PV	1.38¢/kWh
7	Great River Energy ³	Wind	1.50¢/kWh
7	Moorhead Public Service ⁴	Wind	1.50¢/kWh
9	Traverse City Light & Power	Wind	1.58¢/kWh
10	El Paso Electric Company ⁵	Wind	1.92¢/kWh

Note: The premium charged in a green pricing program can be a function of any number of variables, including but not limited to the renewable energy technology utilized, the quality of the renewable energy resource, the size of the project(s), the project and company financials, the availability of subsidies or incentives, inclusion of administrative and marketing costs, the utility's avoided cost of energy, the amount of renewables already in the utility mix, and whether participating customers shoulder the full cost of the program.

¹ Includes only programs that have installed or announced firm plans to install new renewable resources.

² Price for customers who sign up for phase two of program. Customers subscribed for first phase of program are obtaining green power at a price 0.98¢/kWh below regular retail rates. Customers are exempt from fuel charges.

³ Suggested retail price for member distribution cooperatives.

⁴ Adjusted to reflect the cost of 100% new wind power.

⁵ Price premium is for residential customers; commercial customers pay a premium of 3.04¢/kWh.

2000 Data

Customer Participants (as of November 2000)

Rank	Utility	Program	# of Participants
1	Los Angeles Department of Water and Power	Green Power for a Green L.A.	65,000*
2	Public Service Company of Colorado	Windsorce/Renewable Energy Trust	21,000
3	Wisconsin Electric	Energy for Tomorrow	12,000
4	Sacramento Municipal Utility District	Greenergy/PV Pioneers	8,000
5	Wisconsin Public Service	SolarWise for Schools	5,400
6	Madison Gas and Electric	Wind Power	4,900
7	Portland General Electric	Salmon-Friendly Power/Clean Wind Power	3,900
8	Austin Energy	Green Choice	2,800
8	Tennessee Valley Authority	Green Power Switch	2,800
10	PacifiCorp	Blue Sky	2,700

Notes:

* About half of the total are low-income customers that receive existing renewables at no additional cost.

Customer Participation Rates (as of November 2000)

Rank	Utility	Program	Participation Rate
1	Moorhead Public Service	Capture the Wind	7.3%
2	Los Angeles Department of Water and Power	Green Power for a Green L.A.	4.6%*
3	Madison Gas and Electric	Wind Power	4.5%
4	Orcas Power & Light Cooperative	Green Power	4.3%
5	Holy Cross Energy	Wind Power	4.1%
6	Cedar Falls Utilities	Wind Energy	3.6%
7	Eugene Water and Electric Board	EWEB Windpower	3.4%
8	Central Electric Cooperative	Green Power	2.9%
9	City of Bowling Green	Green Power	2.8%
10	City of Ashland	Solar Pioneers	2.6%

Notes:

* About half of the total are low-income customers that receive existing renewables at no additional cost.

***New Renewable Resources Supported through
Green Pricing (as of November
2000)***

Rank	Utility	Resources Installed	New Capacity
1	Los Angeles Department of Power and Water	Wind	25.0 MW ¹
2	Public Service Company of Colorado	Wind	15.7 MW ²
3	Sacramento Municipal Utility District	Landfill methane/PV	10.2 MW ³
4	Madison Gas and Electric	Wind	8.2 MW ⁴
5	Wisconsin Electric	Wind/hydro/landfill methane	7.2 MW ⁵
6	TXU	Wind	6.6 MW
7	Eugene Water and Electric Board	Wind	6.5 MW
8	Platte River Power Authority	Wind	5.9 MW ⁶
9	Holy Cross Energy	Wind	3.0 MW ⁷
10	Tennessee Valley Authority	Wind/PV	2.0 MW

Notes: Austin Energy has announced 97 MW of wind, landfill methane, and solar that will be available in 2001; PSCo plans to add 36 MW of new wind by the end of 2001.

¹ LADWP purchases wind power equivalent to approximately 25 MW from Enron and PacifiCorp.

² PSCo sells 4.3 MW from its 20-MW wind project at wholesale to other Colorado utilities.

³ Includes capacity installed for the Greenergy and PV Pioneers I programs.

⁴ Madison Gas & Electric uses 3 MW of its 11.2-MW wind project to satisfy a state renewable energy mandate. The remainder of the project is supported through green pricing.

⁵ Wisconsin Electric purchases another 2.6 MW of existing landfill methane resources for its green pricing program.

⁶ Platte River supplies the power for programs offered by Fort Collins, Estes Park, Longmont, and Loveland.

⁷ Holy Cross Energy purchases its wind power from PSCo.

**Premium Charged for New, Customer-Driven
Renewable Power¹ (as of
November 2000)**

Rank	Utility	Resources	Premium
1	Austin Energy	Wind/landfill methane/solar	-0.5¢/kWh
2	Sacramento Municipal Utility District	Landfill methane	1.0¢/kWh
3	Dakota Electric Association	Wind	1.2¢/kWh
4	Great River Energy	Wind	1.5¢/kWh ²
4	Moorhead Public Service	Wind	1.5¢/kWh ³
6	Traverse City Light & Power	Wind	1.6¢/kWh
7	Alliant Energy	Landfill methane/wind	2.0¢/kWh
7	Minnesota Power	Wind	2.0¢/kWh
7	Wisconsin Electric ⁴	Wind/landfill methane/hydro	2.0¢/kWh
10	Holy Cross Energy	Wind	2.5¢/kWh
10	Platte River Power Authority ⁵	Wind	2.5¢/kWh
10	Public Service Company of Colorado	Wind	2.5¢/kWh
10	Tri-State G&T	Wind/landfill methane	2.5¢/kWh

Note: The premium charged in a green pricing program can be a function of any number of variables, including but not limited to the renewable energy technology utilized, the quality of the renewable energy resource, the size of the project(s), the project and company financials, the availability of subsidies or incentives, inclusion of administrative and marketing costs, the utility's avoided cost of energy, the amount of renewables already in the utility mix, and whether participating customers shoulder the full cost of the program.

¹ Includes only programs that have installed or announced firm plans to install new renewable resources.

² Suggested retail price for member distribution cooperatives.

³ Adjusted to reflect the cost of 100% new wind power.

⁴ Three-fourths of the power comes from new renewable resources.

⁵ Serves Colorado municipal utilities of Estes Park, Fort Collins, Longmont and Loveland.

April 2000

**Customer Participants
(as of April 2000)**

Rank	State	Utility	Program	# of Participants
1	CA	Los Angeles Department of Water and Power	Green Power for a Green L.A.	31,000
2	CO	Public Service Company of Colorado	Windsource	14,500
3	WI	Wisconsin Electric	Energy for Tomorrow	12,000
3	CO	Public Service Company of Colorado	Renewable Energy Trust	12,000
5	CA	Sacramento Municipal Utility District	Greenergy	6,100
6	WI	Madison Gas and Electric	Wind Power	5,200
7	WI	Wisconsin Public Service	Solar Wise for Schools	4,000
8	OR	Eugene Water and Electric Board	EWEB Windpower	2,700
9	HI	Hawaiian Electric	Sun Power for School	2,600
10	OR	Portland General Electric	Salmon-Friendly Power	2,500

**Customer Participation Rates
(as of April 2000)**

Rank	State	Utility	Program	Participation Rate
1	WI	Madison Gas and Electric	Wind Power	4.7%
2	CO	Holy Cross Energy	Wind Power	4.1%
3	WA	Orcas Power & Light	Green Power	3.8%
3	IA	Cedar Falls Utilities	Wind Energy	3.8%
5	OR	Eugene Water and Electric Board	EWEB Windpower	3.7%
6	MN	Moorhead Public Service	Capture the Wind	3.4%
7	OR	Central Electric Cooperative	Green Power	2.9%
8	OH	City of Bowling Green	Green Power	2.5%
9	CA	Los Angeles Department of Water and Power	Green Power for a Green L.A.	2.2%
10	CO	Fort Collins Utilities	Wind Power Program	2.1%

**New Renewable Resources Developed through Green Pricing
(as of April 2000)**

Rank	State	Utility	Resources Installed	New Capacity
1	CO	Public Service Company of Colorado	Wind	15.7 MW ¹
2	CA	Sacramento Municipal Utility District - Greenergy	Landfill gas	8.3 MW
3	WI	Madison Gas and Electric	Wind	8.2 MW ²
4	WI	Wisconsin Electric	Wind/hydro/landfill gas	7.2 MW ³
5	TX	TXU	Wind	6.6 MW
6	OR	Eugene Water and Electric Board	Wind	6.5 MW
7	CO	Holy Cross Energy	Wind	3.0 MW ⁴
8	CO	Fort Collins Utilities	Wind	2.9 MW ⁵
9	CA	Sacramento Municipal Utility District - PV Pioneers	PV	1.5 MW
9	KS	Western Resources	Wind	1.5 MW

Notes:

¹ PSCO sells 4 MW from its 20-MW wind project to Holy Cross Energy and Colorado Springs Utilities.

² Madison Gas & Electric uses 3 MW of its 11.2-MW wind project to satisfy a state renewable energy mandate. The remainder of the project is supported through green pricing.

³ Wisconsin Electric purchases another 2.6 MW of existing landfill gas resources for its green pricing program.

⁴ Holy Cross Energy purchases its wind power from PSCO.

⁵ Fort Collins obtains its wind power from Platte River Power Authority's 4.6 MW Wyoming wind project.

**Premium Charged for New, Customer-Driven
Renewable Power¹ (as of
April 2000)**

Rank	State	Utility	Resources	Premium
1	TX	Austin Energy	Landfill gas/wind	0.4¢/kWh
2	CA	Sacramento Municipal Utility District	Landfill gas	1.0¢/kWh
3	MN	Dakota Electric Association	Wind	1.22¢/kWh
4	MN	Great River Energy ²	Wind	1.5¢/kWh
4	MN	Moorhead Public Service ³	Wind	1.5¢/kWh
5	MI	Traverse City Light & Power	Wind	1.6¢/kWh
6	WI	Wisconsin Electric ⁴	Landfill gas/small hydro/wind	2.0¢/kWh
7	CO	Public Service Company of Colorado	Wind	2.5¢/kWh
7	CO	Holy Cross Energy	Wind	2.5¢/kWh
7	CO	Tri-State G&T	Wind	2.5¢/kWh
7	CO	Platte River Power Authority (Estes, Loveland, Fort Collins, Longmont)	Wind	2.5¢/kWh

Notes: The premium charged in a green pricing program can be a function of any number of variables, including but not limited to the renewable energy technology utilized, the quality of the renewable energy resource, the size of the project(s), the project and company financials, the availability of subsidies or incentives, inclusion of administrative and marketing costs, the utility's avoided cost of energy, the amount of renewables already in the utility mix, and whether participating customers shoulder the full cost of the program.

¹ Includes only programs that have installed or announced firm plans to install new renewable resources.

² Suggested retail price for member distribution cooperatives.

³ Adjusted to reflect the cost of 100% new wind power.

⁴ Three-fourths of the power comes from new renewable resources.