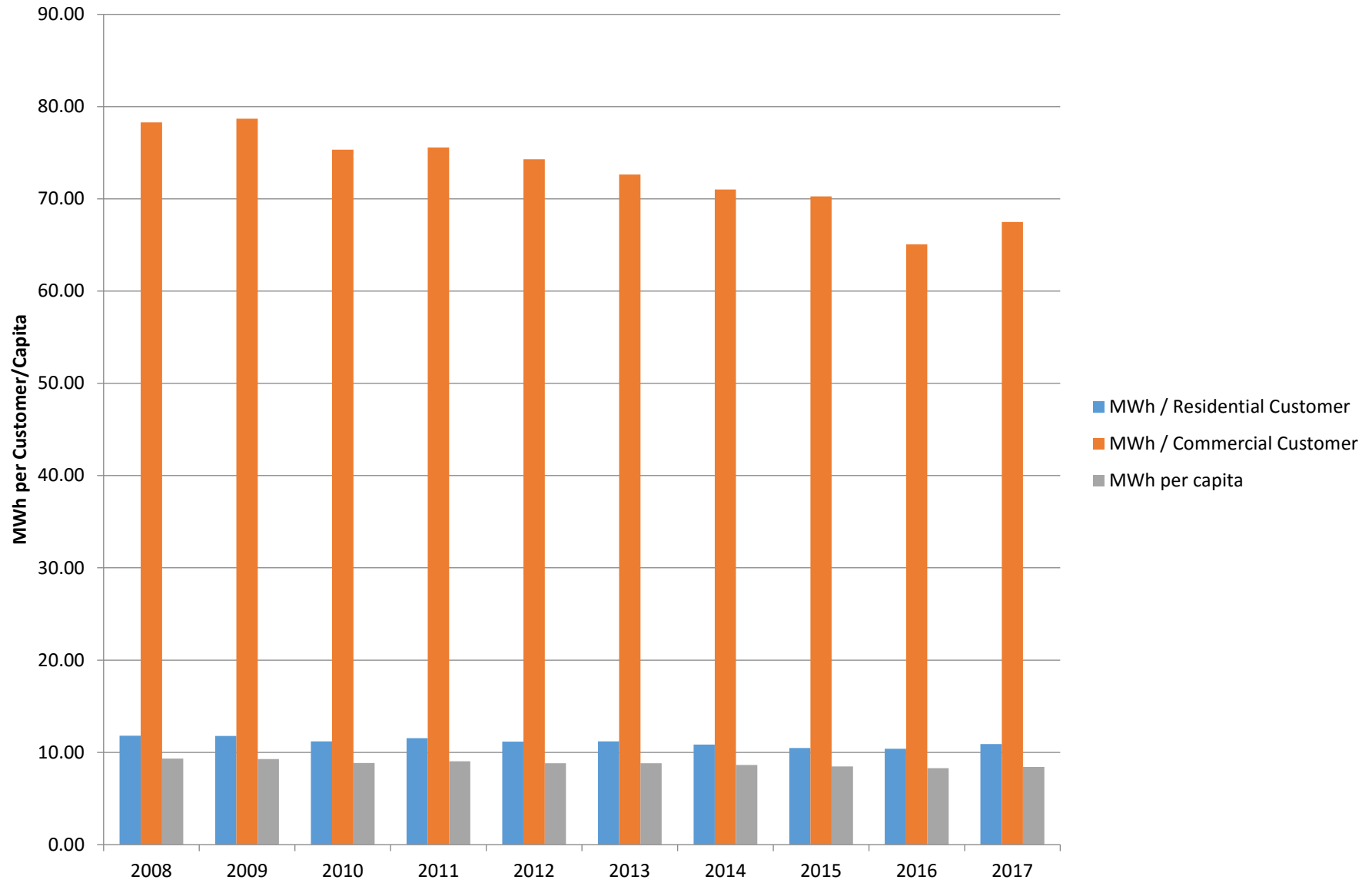
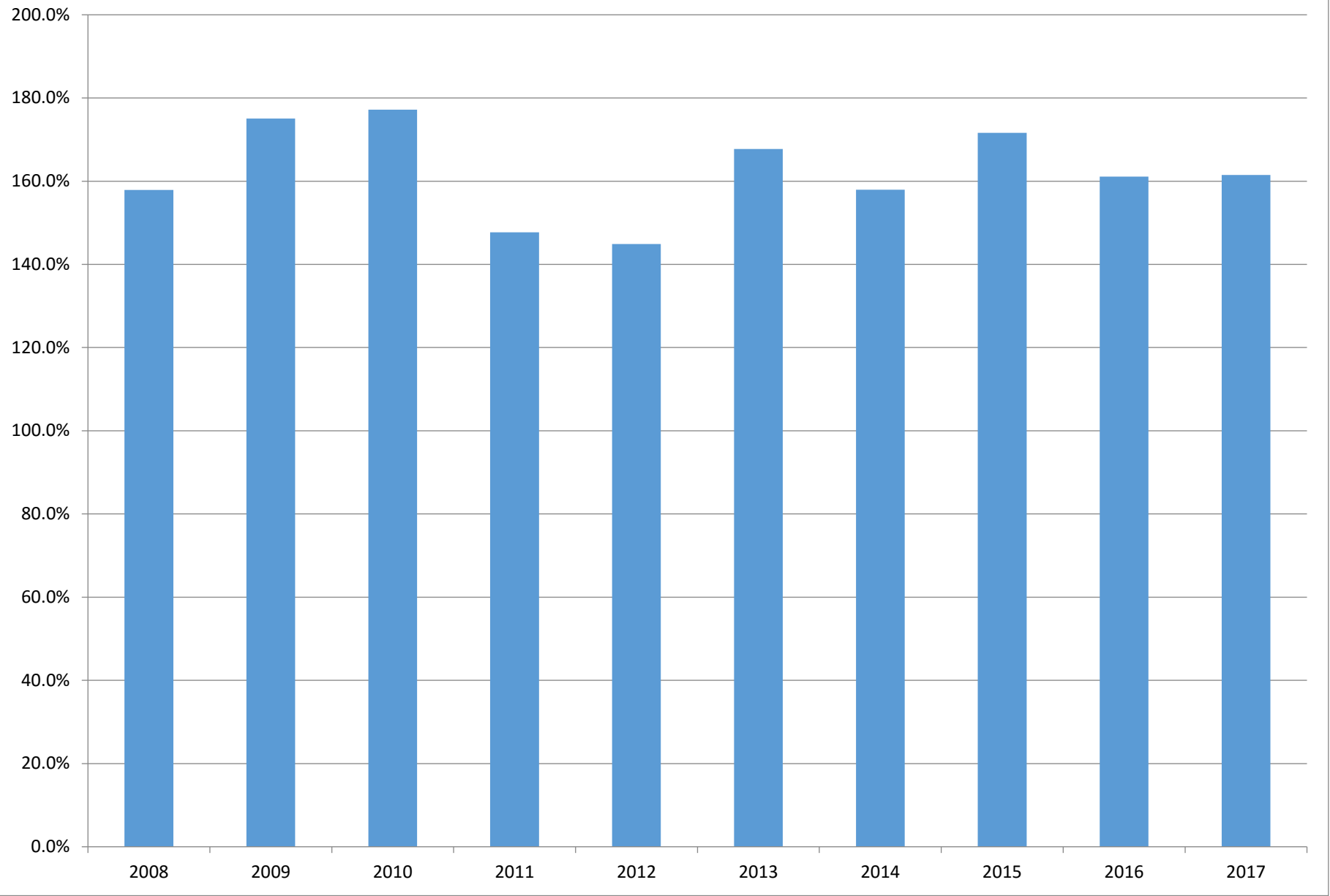


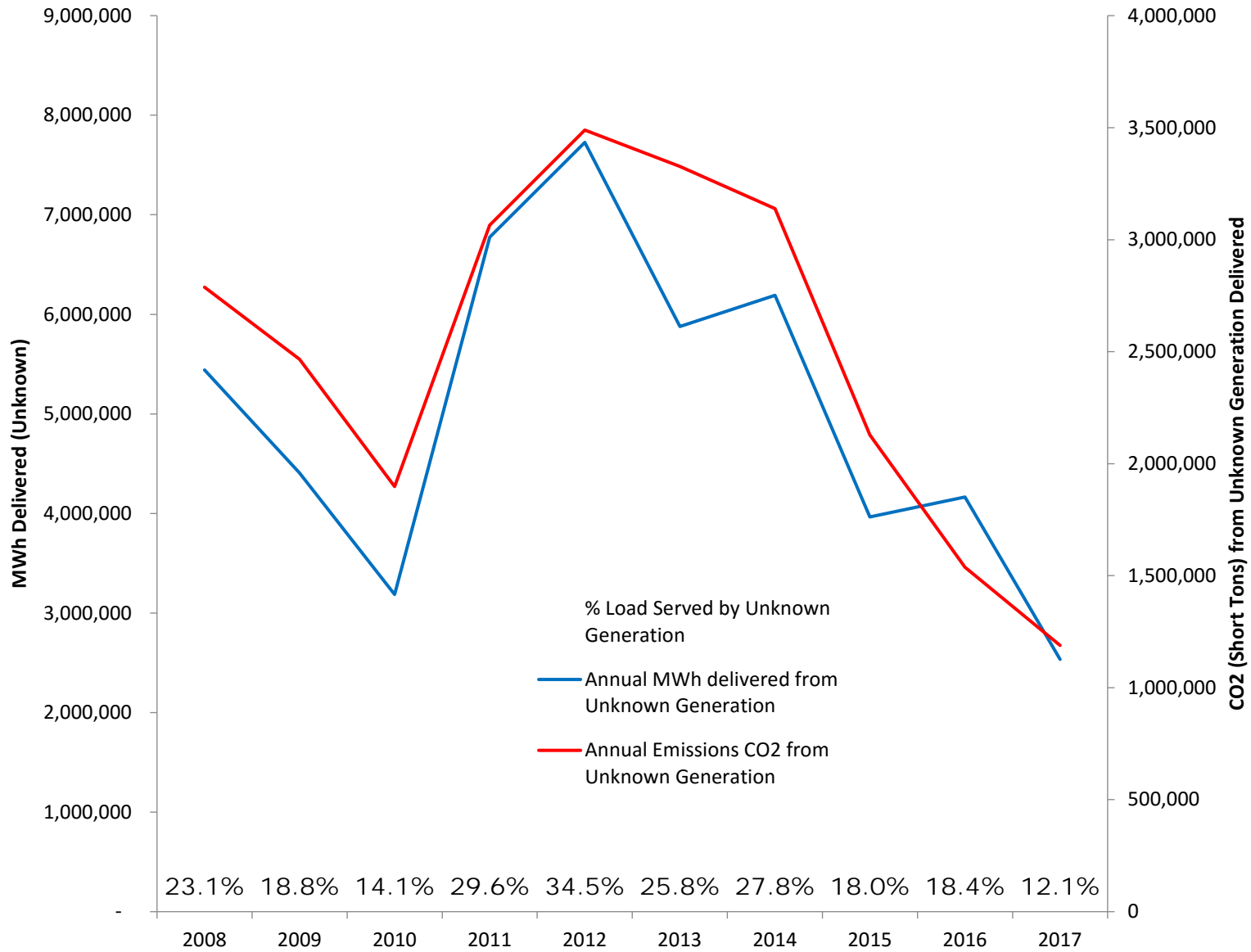
**Figure 2. Energy Intensity Metrics  
2008 - 2017**



**Figure 3. Ratio of Annual CO2 : 1990 CO2**



**Figure 4. Unknown Resources:  
Generation Delivered and Attributed Emissions**



	2006	2007	2008	2009
MWh / Residential Customer	11.64	11.74	11.80	11.78
MWh / Commercial Customer	78.83	78.61	78.30	78.68
MWh per capita	9.25	9.34	9.33	9.28

	2006	2007	2008	2009
Ratio of Annual CO2 : 1990 CO2	169.4%	175.0%	157.9%	175.1%

Annual Emissions (see other file)

	2006	2007	2008	2009
Annual Emissions CO2 from Unknown Generation	3,101,016	3,136,942	2,787,287	2,465,915
Annual MWh delivered from Unknown Generation	6,117,349	5,220,403	5,441,422	4,408,167
% Load Served by Unknown Generation	27.1%	22.5%	23.1%	18.8%

	2006	2007	2008	2009
Population Served	2,267,102	2,307,477	2,340,766	2,360,348

	1990
1990 Residential Customers Served	732291 (from 1990 10k)
1990 Population Served	1,824,620.63

2010	2011	2012	2013	2014	2015
11.20	11.54	11.17	11.20	10.84	10.47
75.34	75.58	74.28	72.63	71.02	70.25
8.86	9.03	8.82	8.82	8.64	8.48

2010	2011	2012	2013	2014	2015
177.2%	147.7%	144.9%	167.7%	157.9%	171.6%

2010	2011	2012	2013	2014	2015
1,897,917	3,064,415	3,489,259	3,326,881	3,138,202	2,128,793
3,185,183	6,774,738	7,727,006	5,877,233	6,189,748	3,964,233
14.1%	29.6%	34.5%	25.8%	27.8%	18.0%

2010	2011	2012	2013	2014	2015
2,374,059	2,384,581	2,396,763	2,383,976	2,393,758	2,418,979

2016	2017
10.40	10.89
65.07	67.49
8.29	8.41

2016	2017
161.1%	161.5%

2016	2017
1,537,602	1,188,669
4,166,129	2,534,323
18.4%	12.1%

2016	2017
2,466,653	2,524,400

## Summary Energy and Emissions Intensity Report

Utility :	Puget Sound Energy	
Reporting for year :	2017	<b>MWh per Capita</b>
Population Served :	2,524,400	<b>8.41</b>

### Energy Intensity Metrics

	MWh at Meter	MWh Proportion	Customer Count	MWh per Customer
Residential Customers	10,931,999	51.5%	1,003,984	<b>10.9</b>
Commercial Customers	9,089,842	42.8%	134,692	<b>67.5</b>
Industrial Customers	1,214,818	5.7%		
Total Load Served	21,236,659			

### Emissions Intensity Metrics

	Busbar MWh	Percent of Total Load	Short Tons CO <sub>2</sub>	
Known Resources Serving WA	18,364,275	87.9%	10,029,376	
Unknown Resources Serving WA	2,534,323	<b>12.1%</b>	1,188,669	<b>% of 1990 CO<sub>2</sub></b>
	Total Short Tons (CO <sub>2</sub> ):		<b>11,218,045</b>	<b>161.5%</b>

1990 Short Tons CO<sub>2</sub> 6,946,064

See UTC Docket UE-131723, General Order R-581, Page

	1990 Short Tons CO <sub>2</sub>
Avista	1,131,957
Pacific Power	2,399,078
Puget Sound Energy	6,946,064

Notes: Insert Blue Blanks with actual number  
MWh at Meter - Source 10k  
Busbar MWh - Calculated

Persons per household factor 2017 =  
2.51

7, Paragraph 19.

*rs (no links or calculations)*



## PSE-Owned & Firm Resources Serving WA Customers

Resource	WA MWh	lbs CO <sub>2</sub> /MWh	Short Tons CO <sub>2</sub>
<i>PSE-Owned Generation (NERC Generating Availability Data System - GADS)</i>			
Lower Baker	313,112	0	0
Snoqualmie Falls #1	60,898	0	0
Snoqualmie Falls #2	135,067	0	0
Upper Baker	355,744	0	0
Colstrip 1 & 2	1,908,332	2,442	2,195,144
Colstrip 3 & 4	2,555,373	2,228	2,712,568
Crystal Mountain	396	1,859	368
Encogen 1	69,342	1,046	36,267
Encogen 2	66,480	1,057	35,131
Encogen 3	69,378	1,064	36,907
Ferndale 1	383,068	1,005	192,552
Ferndale 2	381,873	1,015	193,842
Frederickson 1	18,492	2,370	21,910
Frederickson 2	11,360	4,744	26,943
Fredonia 1	44,480	1,893	42,092
Fredonia 2	45,384	1,927	43,727
Fredonia 3	16,508	1,244	10,272
Fredonia 4	17,880	1,216	10,870
Frederickson Unit 1	464,327	833	193,458
Goldendale	1,119,821	816	457,077
Mint Farm	915,875	857	392,321
Sumas	266,588	1,037	138,169
Whitehorn 2	7,643	3,937	15,043
Whitehorn 3	25,401	4,661	59,199
Hopkins Ridge (W184)	345,425	0	0
Lower Snake River	716,381	0	0
Wild Horse (W183)	612,984	0	0
<i>Firm Deliveries (EA Database)</i>			
3 Bar G Wind Turbine #3 LLC	25	0	0
BC Hydro (Point Roberts)	21,210	1,004	10,647
Bio Energy Washington (BEW)	5	0	0
Black Creek Hydro Inc	11,718	0	0
Blocks Dairy Farm	1	0	0
BPA	7,000	1,004	3,514
BPA Firm - WNP#3 Exchange	241,574	1,004	121,270
CC Solar 1 and CC Solar 2	29	0	0
Chelan PUD - RI & RR	2,315,054	0	0
Chelan PUD - Rock Island Syst #2	-39,402	0	0
Chelan PUD - Rocky Reach	-81,794	0	0
Douglas PUD - Wells Project	1,111,775	0	0
Edaleen Dairy LLC	4,821	0	0
Farm Power Lynden LLC	4,648	0	0

Farm Power Rexville LLC	5,379	0	0
Grant PUD - Priest Rapids Project	49,501	0	0
Island Community Solar LLC	61	0	0
Klondike Wind Power III	110,067	0	0
Knudsen Wind Turbine #1	92	0	0
Rainier Bio Gas	4,858	0	0
Skookumchuck Hydro	6,319	0	0
Smith Creek Hydro	126	0	0
Swauk Wind	9,505	0	0
Transalta Centralia Generation LLC	2,070,958	2,365	2,449,181
Transalta Centralia Generation LLC - Bookout Source Other Adjustment	1,256,783	1,004	630,905
Van Dyk - S Holsteins	2,345	0	0
VanderHaak Dairy Digester	2,323	0	0
Electron Hydro, LLC	128,752	0	0
Emerald City Renewables	36,229	0	0
Ikea Solar	82	0	0
Koma Kulshan Associates	42,817	0	0
Lake Washington -- Finn Hill	310	0	0
Nooksack	21,012	0	0
Sygitowicz Creek	986	0	0
Twin Falls Hydro	77,849	0	0
Weeks Falls	13,647	0	0
<b>Total:</b>	18,364,275		10,029,376
<b>Firm Total:</b>	7,436,665		3,215,518
<b>Firm Renewable Total:</b>	3,839,140		
<b>% Firm Renewable:</b>	52%		

Columbia River Long Term Contracts 3,355,134 16.1%

Type	Fuel
5)	
PSE-Owned	Hydro
PSE-Owned	Hydro
PSE-Owned	Hydro
PSE-Owned	Hydro
PSE-Owned	Coal
PSE-Owned	Coal
PSE-Owned	Diesel
PSE-Owned	Gas
PSE-Owned	Gas
PSE-Owned	Gas
PSE-Owned	Gas
PSE-Owned	Gas
PSE-Owned	Gas
PSE-Owned	Gas
PSE-Owned	Gas
PSE-Owned	Gas
PSE-Owned	Gas
PSE-Owned	Gas
PSE-Owned	Gas
PSE-Owned	Gas
PSE-Owned	Gas
PSE-Owned	Gas
PSE-Owned	Gas
PSE-Owned	Gas
PSE-Owned	Gas
PSE-Owned	Gas
PSE-Owned	Wind
PSE-Owned	Wind
PSE-Owned	Wind
Firm Unit-Specific	Wind
Firm-Unknown	Hydro
Firm Unit-Specific	Biogas
Firm Unit-Specific	Hydro
Firm Unit-Specific	Biogas
Firm-Unknown	System
Firm-Unknown	System
Firm Unit-Specific	Solar
Firm Unit-Specific	Hydro
Firm Unit-Specific	Hydro
Firm Unit-Specific	Hydro
Firm Unit-Specific	Hydro
Firm Unit-Specific	Biogas
Firm Unit-Specific	Biogas

Firm Unit-Specific	Biogas
Firm Unit-Specific	Hydro
Firm Unit-Specific	Solar
Firm Unit-Specific	Wind
Firm Unit-Specific	Wind
Firm Unit-Specific	Biogas
Firm Unit-Specific	Hydro
Firm Unit-Specific	Hydro
Firm Unit-Specific	Wind
Firm Unit-Specific	Coal
Firm-Unknown	System
Firm Unit-Specific	Biogas
Firm Unit-Specific	Biogas
Firm Unit-Specific	Hydro
Firm Unit-Specific	Biogas
Firm Unit-Specific	Solar
Firm Unit-Specific	Hydro
Firm Unit-Specific	Biogas
Firm Unit-Specific	Hydro
Firm Unit-Specific	Hydro
Firm Unit-Specific	Hydro
Firm Unit-Specific	Hydro

--	--

**Table 3. Unknown Resources Serving WA Customers**

Resource	Net-by-Counterparty MWh	Fuel Mix lbs CO <sub>2</sub> /MWh
<i>Firm Deliveries (EA Database)</i>		
Avista Corp. WWP Division	55,283	1,004
Avista Nichols Pump	21,065	1,004
Black Hills Power	-2,600	1,092
BP Energy Co.	217,861	1,004
BPA	98,054	1,004
BPA - CA Wind Integration	22,037	1,004
BPA - NWPP Reserve Sharing Energy	159	1,004
BPA - PTP Transactions	86,309	1,004
BPA - SCD Hourly NF	17,365	1,004
BPA - Spin Reserv Requirement	38,849	1,004
BPA IS - Hourly Non-Firm	8,707	1,004
British Columbia Transmission Corp	409	1,004
CAISO EESC Load Undistributed Costs	33,125	1,004
CAISO PRSC Undistributed Costs	-8,713	1,092
California ISO	23,659	1,004
Calpine Energy Services	-252,611	1,092
Cargill Power Markets	157,955	1,004
Chelan County PUD #1	-52,667	1,092
Citigroup Energy Inc	312,832	1,004
Clark Public Utilities	-2,830	1,092
Clatskanie PUD	-7,310	1,092
Colstrip - Energy Imbalance Market	105,631	1,004
Conoco, Inc.	-8,000	1,092
Deviation	-25,311	1,092
Douglas County PUD #1	212,117	1,004
Douglas PUD - Wells Project	20,574	1,004
EDF Trading NA LLC	475,784	1,004
Encogen	1,723	1,004
Energy Keepers Inc.	60	1,004
ENMAX Energy Marketing, Inc.	-296	1,092
Eugene Water & Electric	-63,712	1,092
Exelon Generation Co LLC	149,950	1,004
Ferndale Co-Generation	70,221	1,004
Freddie #1	214	1,004
Fredonia - Energy Imbalance Market	8,211	1,004
Fredrickson 1 & 2	6,813	1,004
Goldendale	-40,989	0
Grant County PUD #2	-4	1,092
GRIDFORCE ENERGY MANAGEMENT, LLC.	-202	1,092

Iberdrola Renewables (PPM Energy)	731,570	1,004
Idaho Power Company	-40,797	1,092
J. Aron & Company	30,000	1,004
Lower Baker	2,626	1,004
MID-C for Energy Imbalance Market	110,531	1,004
Mint Farm	-16,758	0
Morgan Stanley CG	513,602	1,004
Natur Ener USA	-211	1,092
Nevada Power Company	-16	1,092
NextEra Energy Power Marketing	4,000	1,004
Northwestern Energy	-15,807	1,092
Okanogan PUD	26,026	1,004
Pacific Gas & Elec - Exchange	0	1,092
Pacificorp	-237,749	1,092
Portland General Electric	-133,050	1,092
Powerex Corp.	-1,371,536	1,092
Public Service of Colorado	130,513	1,004
Rainbow Energy Marketing	-2,638	1,092
Sacramento Municipal	139	1,004
Seattle City Light Marketing	132,196	1,004
Shell Energy (Coral Pwr)	-73,192	1,092
Snohomish County PUD #1	12,341	1,004
Snoqualmie-Energy Imbalance Market	1,788	1,004
Sumas	24,529	1,004
Tacoma Power	30,313	1,004
Talen Energy (PPL Energy Plus)	221,765	1,004
Tenaska Power Services Co.	-3,000	1,092
The Energy Authority	788,491	1,004
TransAlta Energy Marketing	-271,727	1,092
TransCanada Energy Sales Ltd	-46,100	1,092
Turlock Irrigation District	8,325	1,004
Upper Baker	68,798	1,004
Vitol Inc.	226,338	1,004
Whitehorn 2&3	13,715	1,004
Wild Horse (W183)	-6,495	0
Williams Power Company	-3,928	1,092

**Total: 2,534,323**

WA Dept. of Commerce Fuel Mix Report =

1,004
-------

For Year	2017	
----------	------	--

Short Tons CO <sub>2</sub>
27,752
10,574
-1,420
109,366
49,223
11,062
80
43,327
8,717
19,502
4,371
205
16,629
-4,758
11,877
-137,960
79,293
-28,763
157,042
-1,546
-3,992
53,027
-4,369
-13,823
106,483
10,328
238,844
865
30
-162
-34,795
75,275
35,251
108
4,122
3,420
0
-2
-110

PSE-Own Plus Firm PPA MWh=	18,364,275
PSE-Own Plus Firm PPA CO2=	10,029,376
PSE-Own Plus Firm PPA Rate=	1,092

For Year	2017	
----------	------	--

367,248
-22,281
15,060
1,318
55,486
0
257,828
-115
-9
2,008
-8,633
13,065
-129,843
-72,663
-749,044
65,518
-1,441
70
66,362
-39,973
6,195
898
12,313
15,217
111,326
-1,638
395,822
-148,400
-25,177
4,179
34,537
113,622
6,885
0
-2,145

**1,188,669**



lbs CO<sub>2</sub> per MWh

MWh

Short Tons

lbs CO<sub>2</sub> per MWh

## Summary Energy and Emissions Intensity Report

Utility :	Puget Sound Energy	
Reporting for year :	2016	<b>MWh per Capita</b>
Population Served :	2,466,653	<b>8.29</b>

### Energy Intensity Metrics

	MWh at Meter	MWh Proportion	Customer Count	MWh per Customer
Residential Customers	10,245,326	50.1%	984,739	<b>10.4</b>
Commercial Customers	8,979,883	43.9%	137,997	<b>65.1</b>
Industrial Customers	1,223,214	6.0%		
Total Load Served	20,448,423			

### Emissions Intensity Metrics

	Busbar MWh	Percent of Total Load	Short Tons CO <sub>2</sub>	
Known Resources Serving WA	18,455,004	81.6%	9,652,377	
Unknown Resources Serving WA	<b>4,166,129</b>	<b>18.4%</b>	<b>1,537,602</b>	<b>% of 1990 CO<sub>2</sub></b>
	2016 Tons CO <sub>2</sub>		<b>11,189,979</b>	<b>161.1%</b>

1990 Short Tons CO<sub>2</sub> 6,946,064

See UTC Docket UE-131723, General Order R-581, .

	1990 Short Tons CO <sub>2</sub>
Avista	1,131,957
Pacific Power	2,399,078
Puget Sound Energy	6,946,064

Insert Blue Blanks with actual nu

***Page 7, Paragraph 19.***

numbers (no links or calculations)

## Known Resources Serving WA Customers

2016

Resource	WA MWh	lbs CO <sub>2</sub> /MWh
Lower Baker	358,833	-
Snoqualmie Falls #1	53,046	-
Snoqualmie Falls #2	152,538	-
Upper Baker	369,105	-
Colstrip 1 & 2	1,958,039	2,337
Colstrip 3 & 4	2,571,140	2,172
Encogen	212,390	1,075
Ferndale Co-Generation	741,137	1,052
Freddie #1	417,525	869
Goldendale	1,028,475	825
Mint Farm	1,057,947	902
Sumas	394,996	1,074
Crystal Mountain	196	1,732
Fredonia	108,951	1,751
Fredonia 3 & 4	136,863	1,240
Fredrickson 1 & 2	19,942	3,346
Hopkins Ridge (W184)	417,242	-
Lower Snake River	873,260	-
Whitehorn 2&3	33,783	2,930
Wild Horse (W183)	672,200	-
3 Bar G Wind Turbine #3 LLC	148	-
BC Hydro (Point Roberts)	19,758	895
Bio Energy Washington (BEW)	5	-
Black Creek Hydro Inc	12,263	-
BPA	7,084	-
BPA Firm - WNP#3 Exchange	398,392	895
CC Solar 1 and CC Solar 2	29	-
Chelan PUD - RI & RR	2,313,083	-
Chelan PUD - Rock Island Syst #2	(39,689)	-
Chelan PUD - Rocky Reach	(82,394)	-
Douglas PUD - Wells Project	1,120,584	-
Edaleen Dairy LLC	4,645	-
Farm Power Lynden LLC	4,514	-
Farm Power Rexville LLC	5,138	-
Grant PUD - Priest Rapids Project	60,243	-
Island Community Solar LLC	59	-
Klamath Falls (Iberdrola)	200	807
Klondike Wind Power III	126,694	-
Knudsen Wind Turbine #1	129	-
Rainier Bio Gas	4,372	-
Skookumchuck Hydro	4,450	-
Smith Creek Hydro	193	-
Swauk Wind	11,178	-

Transalta Centralia Generation LLC	1,568,805	2,411
Van Dyk - S Holsteins	3,115	-
VanderHaak Dairy Digester	3,278	-
Electron Hydro, LLC	166,694	-
Emerald City Renewables	36,724	-
Koma Kulshan Associates	46,043	-
Lake Washington -- Finn Hill	293	-
Nooksack	24,374	-
Sygitowicz Creek	907	-
Twin Falls Hydro	79,876	-
Weeks Falls	11,111	-
Transalta Centralia Generation LLC - Bookout Source Other	965,098	895

18,455,003.53



1,891,255
-
-
-
-
-
-
-
-
-
-
431,881

9,652,377

## Unknown Resources Serving WA Customers

Resource	Net-by-Counterparty MWh	Fuel Mix lbs CO <sub>2</sub> /MWh
<i>Firm Deliveries (EA Database)</i>		
Avista Corp. WWP Division	33,590	895
Avista Nichols Pump	21,796	895
Black Hills Power	201	895
Book Outs - EITF 03-11	2,580	895
BP Energy Co.	215,742	895
BPA	258,423	895
BPA - CA Wind Integration	1,953	895
BPA - NWPP Reserve Sharing Energy	-159	1,046
BPA - PTP Transactions	39,252	895
BPA - Spin Reserv Requirement	5,037,220	895
BPA IS - Hourly Non-Firm	194	895
British Columbia Transmission Corp	15	895
CAISO EESC Load Undistributed Costs	-39,391	1,046
CAISO PRSC Undistributed Costs	17,561	895
California ISO	33,095	895
Calpine Energy Services	-29,780	1,046
Cargill Power Markets	470,528	895
Chelan County PUD #1	62,405	895
Citigroup Energy Inc	122,525	895
Clark Public Utilities	157	895
Clatskanie PUD	1,009	895
Colstrip - Energy Imbalance Market	-22,441	1,046
Conoco, Inc.	-3,825	1,046
Constellation Power Source, Inc.	-7	1,046
CP Energy Marketing (Epcor)	-1,642	1,046
Deviation	18,142	895
Douglas County PUD #1	279,149	895
EDF Trading NA LLC	-287,573	1,046
Encogen	-322	1,046
Eugene Water & Electric	-42,733	1,046
Exelon Generation Co LLC	80,290	895
Ferndale Co-Generation	1,025	895
Freddie #1	-2,196	1,046
Fredonia - Energy Imbalance Market	1,210	895
Fredrickson 1 & 2	691	895
Goldendale	25,209	895
Grant County PUD #2	20	895
GRIDFORCE ENERGY MANAGEMENT, LLC.	-68	1,046
Iberdrola Renewables (PPM Energy)	106,424	895



Idaho Power Company	-338,626	1,046
Lower Baker	753	895
MID-C for Energy Imbalance Market	5,933	895
Mint Farm	1,351	895
Morgan Stanley CG	-1,070,455	1,046
Natur Ener USA	-22	1,046
Nevada Power Company	-116	1,046
NextEra Energy Power Marketing	38,701	895
Noble Americas Gas & Power	1,200	895
NorthPoint Energy Solutions, Inc.	336	895
Northwestern Energy	54,623	895
Okanogan PUD	6,305	895
Pacific Gas & Elec - Exchange	0	1,046
Pacificorp	-393,958	1,046
Portland General Electric	295,929	895
Powerex Corp.	-1,978,155	1,046
Public Service of Colorado	-28,595	1,046
Rainbow Energy Marketing	-21,688	1,046
Sacramento Municipal	143	895
Seattle City Light Marketing	60,520	895
Shell Energy (Coral Pwr)	83,099	895
Snohomish County PUD #1	19,380	895
Snoqualmie-Energy Imbalance Market	3,163	895
Southern Cal - Edison	100	895
Sumas	4,619	895
Tacoma Power	25,553	895
Talen Energy (PPL Energy Plus)	165,789	895
Tenaska Power Services Co.	958	895
The Energy Authority	676,328	895
Transalta Centralia Generation LLC	-2,206	1,046
TransAlta Energy Marketing	-39,336	1,046
TransCanada Energy Sales Ltd	-7,308	1,046
Turlock Irrigation District	18,516	895
Upper Baker	5,749	895
Vitol Inc.	192,747	895
Whitehorn 2&3	342	895
Wild Horse (W183)	-15,815	1,046

**Total: 4,166,129**

WA Dept. of Commerce Fuel Mix Report =

895
-----

For Year	2016	
----------	------	--

Short Tons CO <sub>2</sub>
15,032
9,754
90
1,155
96,545
115,644
874
-83
17,565
2,254,156
87
7
-20,602
7,858
14,810
-15,576
210,561
27,926
54,830
70
452
-11,737
-2,001
-4
-859
8,118
124,919
-150,407
-168
-22,350
35,930
459
-1,149
541
309
11,281
9
-36
47,625

PSE-Own Plus Firm PPA MWh=	18,455,004
PSE-Own Plus Firm PPA CO2=	9,652,377
PSE-Own Plus Firm PPA Rate=	1,046

For Year	2016	
----------	------	--

-177,109
337
2,655
605
-559,872
-12
-61
17,319
537
150
24,444
2,821
-206,049
132,428
-1,034,619
-14,956
-11,343
64
27,083
37,187
8,673
1,416
45
2,067
11,435
74,191
429
302,657
-1,154
-20,574
-3,822
8,286
2,573
86,254
153
-8,271

**1,537,602**

lbs CO<sub>2</sub> per MWh

MWh

Short Tons

lbs CO<sub>2</sub> per MWh

## Unknown Resources For WA Customers

2016

WA Dept. of Co

Resource	WA MWh	Fuel Mix lbs CO <sub>2</sub> /MWh	Short Tons CO <sub>2</sub>
Avista Corp. WWP Division	72,218	895	32,318
Black Hills Power	201	895	90
Book Outs - EITF 03-11	-6,081,614	895	(2,721,522)
BP Energy Co.	688,626	895	308,160
BPA	374,896	895	167,766
BPA - NWPP Reserve Sharing Energy	233	895	104
British Columbia Transmission Corp	16	895	7
California ISO	33,095	895	14,810
Calpine Energy Services	169,176	895	75,706
Cargill Power Markets	812,939	895	363,790
Chelan County PUD #1	62,409	895	27,928
Citigroup Energy Inc	1,224,171	895	547,817
Clark Public Utilities	8,332	895	3,729
Clatskanie PUD	4,432	895	1,983
Conoco, Inc.	6,600	895	2,954
CP Energy Marketing (Epcor)	500	895	224
Douglas County PUD #1	281,095	895	125,790
EDF Trading NA LLC	483,150	895	216,210
Eugene Water & Electric	15,232	895	6,816
Exelon Generation Co LLC	160,970	895	72,034
Grant County PUD #2	20	895	9
GRIDFORCE ENERGY MANAGEMENT, LLC.	5	895	2
Iberdrola Renewables (PPM Energy)	724,215	895	324,086
Idaho Power Company	14,367	895	6,429
Morgan Stanley CG	1,046,909	895	468,492
NextEra Energy Power Marketing	41,481	895	18,563
Noble Americas Gas & Power	1,600	895	716
NorthPoint Energy Solutions, Inc.	336	895	150
Northwestern Energy	12,081	895	5,406
Okanogan PUD	14,335	895	6,415
Pacificorp	73,911	895	33,075
Portland General Electric	308,093	895	137,872
Powerex Corp.	118,836	895	53,179
Public Service of Colorado	158,000	895	70,705
Rainbow Energy Marketing	956	895	428
Sacramento Municipal	153	895	68
Seattle City Light Marketing	92,909	895	41,577
Shell Energy (Coral Pwr)	450,861	895	201,760
Snohomish County PUD #1	27,590	895	12,347
Southern Cal - Edison	100	895	45
Tacoma Power	78,082	895	34,942
Talen Energy (PPL Energy Plus)	232,943	895	104,242
Tenaska Power Services Co.	975	895	436

The Energy Authority	979,776	895	438,450
TransAlta Energy Marketing	757,605	895	339,028
TransCanada Energy Sales Ltd	2,609	895	1,168
Turlock Irrigation District	18,671	895	8,355
Vitol Inc.	2,531,701	895	1,132,936
CAISO EESC Load Undistributed Costs	-39,391	895	(17,627)
CAISO PRSC Undistributed Costs	26,884	895	12,031
Colstrip - Energy Imbalance Market	-22,441	895	(10,042)
Encogen	2,522	895	1,129
Ferndale Co-Generation	17,368	895	7,772
Freddie #1	-2,196	895	(983)
Fredonia - Energy Imbalance Market	5,396	895	2,415
Fredrickson 1 & 2	1,505	895	673
Goldendale	37,286	895	16,686
Lower Baker	753	895	337
MID-C for Energy Imbalance Market	59,160	895	26,474
Mint Farm	5,699	895	2,550
Snoqualmie-Energy Imbalance Market	3,163	895	1,416
Sumas	8,890	895	3,978
Upper Baker	18,963	895	8,486
Whitehorn 2&3	1,384	895	619
Wild Horse (W183)	-15,815	895	(7,077)
Avista Nichols Pump	21,796	895	9,754
Cargill Power Markets	200	895	90
Pacific Gas & Elec - Exchange	413,000	895	184,818
Deviation	18,142	895	8,118
Pacific Gas & Elec - Exchange	-413,000	895	(184,818)
Portland General Electric	-100	895	(45)
TransAlta Energy Marketing	-200	895	(90)
Avista Corp. WWP Division	46,050	895	20,607
BPA - CA Wind Integration	1,953	895	874
BPA - PTP Transactions	39,252	895	17,565
BPA - Spin Reserv Requirement	5,037,220	895	2,254,156
BPA IS - Hourly Non-Firm	194	895	87
EDF Trading NA LLC	-191,676	895	(85,775)
Iberdrola Renewables (PPM Energy)	-76,984	895	(34,450)
Idaho Power Company	-302,793	895	(135,500)
Morgan Stanley CG	-1,697,398	895	(759,586)
NextEra Energy Power Marketing	-205	895	(92)
Northwestern Energy	89,897	895	40,229
Pacificorp	-254,478	895	(113,879)
Portland General Electric	290,000	895	129,775
Powerex Corp.	-1,701,985	895	(761,638)
Rainbow Energy Marketing	-1,200	895	(537)
Seattle City Light Marketing	-1,900	895	(850)
Shell Energy (Coral Pwr)	-10,890	895	(4,873)
Tacoma Power	-26,625	895	(11,915)

The Energy Authority	-257,647	895	(115,297)
TransAlta Energy Marketing	-365,094	895	(163,380)
Avista Corp. WWP Division	-84,678	895	(37,893)
Book Outs - EITF 03-11	6,084,194	895	2,722,677
BP Energy Co.	-472,884	895	(211,616)
BPA	-116,473	895	(52,122)
BPA - NWPP Reserve Sharing Energy	-392	895	(175)
British Columbia Transmission Corp	-1	895	(0)
Calpine Energy Services	-198,956	895	(89,033)
Cargill Power Markets	-342,611	895	(153,318)
Chelan County PUD #1	-4	895	(2)
Citigroup Energy Inc	-1,101,646	895	(492,987)
Clark Public Utilities	-8,175	895	(3,658)
Clatskanie PUD	-3,423	895	(1,532)
Conoco, Inc.	-10,425	895	(4,665)
Constellation Power Source, Inc.	-7	895	(3)
CP Energy Marketing (Epcor)	(2,142)	895	(959)
Douglas County PUD #1	(1,946)	895	(871)
EDF Trading NA LLC	(579,047)	895	(259,124)
Eugene Water & Electric	(57,965)	895	(25,939)
Exelon Generation Co LLC	(80,680)	895	(36,104)
GRIDFORCE ENERGY MANAGEMENT, LLC.	(73)	895	(33)
Iberdrola Renewables (PPM Energy)	(540,807)	895	(242,011)
Idaho Power Company	(50,200)	895	(22,465)
Morgan Stanley CG	(419,966)	895	(187,935)
Natur Ener USA	(22)	895	(10)
Nevada Power Company	(116)	895	(52)
NextEra Energy Power Marketing	(2,575)	895	(1,152)
Noble Americas Gas & Power	(400)	895	(179)
Northwestern Energy	(47,355)	895	(21,191)
Okanogan PUD	(8,030)	895	(3,593)
Pacificorp	(213,391)	895	(95,492)
Portland General Electric	(302,064)	895	(135,174)
Powerex Corp.	(395,006)	895	(176,765)
Public Service of Colorado	(186,595)	895	(83,501)
Rainbow Energy Marketing	(21,444)	895	(9,596)
Sacramento Municipal	(10)	895	(4)
Seattle City Light Marketing	(30,489)	895	(13,644)
Shell Energy (Coral Pwr)	(356,872)	895	(159,700)
Snohomish County PUD #1	(8,210)	895	(3,674)
Tacoma Power	(25,904)	895	(11,592)
Talen Energy (PPL Energy Plus)	(67,154)	895	(30,051)
Tenaska Power Services Co.	(17)	895	(8)
The Energy Authority	(45,801)	895	(20,496)
Transalta Centralia Generation LLC	(2,206)	895	(987)
TransAlta Energy Marketing	(431,647)	895	(193,162)
TransCanada Energy Sales Ltd	(9,917)	895	(4,438)

Turlock Irrigation District	(155)	895	(69)
Vitol Inc.	(2,338,954)	895	(1,046,682)
CAISO PRSC Undistributed Costs	(9,323)	895	(4,172)
Encogen	(2,844)	895	(1,273)
Ferndale Co-Generation	(16,343)	895	(7,313)
Fredonia - Energy Imbalance Market	(4,186)	895	(1,873)
Fredrickson 1 & 2	(814)	895	(364)
Goldendale	(12,077)	895	(5,404)
MID-C for Energy Imbalance Market	(53,228)	895	(23,819)
Mint Farm	(4,348)	895	(1,946)
Sumas	(4,271)	895	(1,911)
Upper Baker	(13,213)	895	(5,913)
Whitehorn 2&3	(1,042)	895	(466)
	4,166,129		1,864,343



[Commerce Fuel Mix Report](#) =

		895	lbs CO <sub>2</sub> per MWh
For Year	2016		

Previous reports rate = 1,002 lb/MWh, total emissions:  
2,086,933 short tons

	A	B	C	D	E	F	G	H	I
1	<b>Summary Energy and Emissions Intensity Report</b>								
2									
3		Utility :	Puget Sound Energy						
4	Reporting for year :	2015	<b>MWh per Capita</b>						
5	Population Served :	2,418,979	<b>8.48</b>						
6									
7	<i>Energy Intensity Metrics</i>								
8						Customer	<b>MWh per</b>		
9				MWh at Meter	MWh Proportion	Count	<b>Customer</b>		
10	Residential Customers			10,164,709	49.6%	970,830	<b>10.5</b>		
11	Commercial Customers			9,087,102	44.3%	129,347	<b>70.3</b>		
12	Industrial Customers			1,257,958	6.1%				
13	Total Load Served			20,509,769					
14									
15	<i>Emissions Intensity Metrics</i>								
16					Percent of	<b>Short</b>			
17				Busbar MWh	Total Load	<b>Tons CO<sub>2</sub></b>			
18	Known Resources Serving WA			18,066,615	82.0%	9,793,361			
19	Unknown Resources Serving WA			<b>3,964,233</b>	<b>18.0%</b>	<b>2,128,793</b>	<b>% of 1990 CO<sub>2</sub></b>		
20				2015	Tons CO <sub>2</sub>	<b>11,922,154</b>	<b>171.6%</b>		
21									
22						1990 Short Tons CO <sub>2</sub>	6,946,064		
23									
24						<b>See UTC Docket UE-131723, General Order R-581, Page 7, Paragraph 19.</b>			
25							1990		
26							Short Tons CO <sub>2</sub>		
27						Avista	1,131,957		
28						Pacific Power	2,399,078		
29						Puget Sound Energy	6,946,064		

## Known Resources Serving WA Customers

2015

Resource	WA MWh	lbs CO <sub>2</sub> /MWh	Short Tons CO <sub>2</sub>
Lower Baker	308,611	-	-
Snoqualmie Falls #1	17,891	-	-
Snoqualmie Falls #2	100,980	-	-
Upper Baker	278,750	-	-
Colstrip 1 & 2	1,756,858	2,595	2,279,098
Colstrip 3 & 4	2,738,174	2,359	3,229,428
Crystal Mountain	294	1,823	268
Encogen	297,658	1,059	157,600
Ferndale Co-Generation	868,467	1,029	446,779
Freddie #1	623,181	875	272,686
Fredonia	113,691	1,577	89,625
Fredonia 3 & 4	47,604	1,200	28,566
Fredrickson 1 & 2	39,935	2,385	47,632
Goldendale	1,498,666	811	607,527
Hopkins Ridge (W184)	364,779	-	-
Lower Snake River	741,768	-	-
Mint Farm	1,701,036	888	755,178
Sumas	601,053	1,036	311,307
Whitehorn 2&3	38,733	1,953	37,815
Wild Horse (W183)	608,886	-	-
3 Bar G Wind Turbine #3 LLC	138	-	-
Barclays Bank Plc	106,200	696	36,972
BC Hydro (Point Roberts)	19,584	696	6,818
Bio Energy Washington (BEW)	2	-	-
Black Creek Hydro Inc	6,366	-	-
Book Outs - EITF 03-11	(2,253)	-	-
BPA	7,000	-	-
BPA Firm - WNP#3 Exchange	343,584	696	119,615
CC Solar 1 and CC Solar 2	23	-	-
Chelan PUD - RI & RR	2,299,343	-	-
Chelan PUD - Rock Island Syst #2	(39,940)	-	-
Chelan PUD - Rocky Reach	(82,401)	-	-
Douglas PUD - Wells Project	1,094,705	-	-
Edaleen Dairy LLC	4,697	-	-
Farm Power Lynden LLC	4,858	-	-
Farm Power Rexville LLC	4,485	-	-
Grant PUD - Priest Rapids Project	53,743	-	-
Island Community Solar LLC	62	-	-
Klamath Falls (Iberdrola)	400	806	161
Klondike Wind Power III	119,141	-	-
Knudsen Wind Turbine #1	130	-	-
Rainier Bio Gas	4,950	-	-
Skookumchuck Hydro	4,961	-	-

Smith Creek Hydro	163	-	-
Swauk Wind	11,369	-	-
Transalta Centralia Generation LLC	1,135,396	2,407	1,366,285
Van Dyk - S Holsteins	1,619	-	-
VanderHaak Dairy Digester	3,455	-	-
BIO FUEL WA	32,657	-	-
Electron Hydro, LLC	62,833	-	-
Emerald City Renewables	1,087	-	-
Hutchinson Creek	744	-	-
Koma Kulshan Associates	36,094	-	-
Lake Washington -- Finn Hill	279	-	-
Nooksack	22,257	-	-
Sygitowicz Creek	739	-	-
Twin Falls Hydro	52,604	-	-
Weeks Falls	8,527	-	-
	<u>18,066,615</u>		<u>9,793,361</u>

## Unknown Resources For WA Customers

2015


WA Dept. of Co

Resource	WA MWh	Fuel Mix lbs CO <sub>2</sub> /MWh	Short Tons CO <sub>2</sub>
Avista Corp. WWP Division	127,355	1074	68,390
Barclays Bank Plc	-30	1074	(16)
Black Hills Power	1,200	1074	644
Book Outs - EITF 03-11	-5,721,875	1074	(3,072,647)
BP Energy Co.	340,839	1074	183,031
BPA	141,462	1074	75,965
British Columbia Transmission Corp	67	1074	36
California ISO	12,114	1074	6,505
Calpine Energy Services	350,294	1074	188,108
Cargill Power Markets	779,739	1074	418,720
Chelan County PUD #1	857	1074	460
Citigroup Energy Inc	507,518	1074	272,537
Clark Public Utilities	5,045	1074	2,709
Clatskanie PUD	2,021	1074	1,085
Conoco, Inc.	2,000	1074	1,074
Constellation Power Source, Inc.	7	1074	4
Douglas County PUD #1	271,759	1074	145,935
EDF Trading NA LLC	2,085,606	1074	1,119,970
ENMAX Energy Marketing, Inc.	990	1074	532
Eugene Water & Electric	10,905	1074	5,856
Exelon Generation Co LLC	183,085	1074	98,317
Grant County PUD #2	14,148	1074	7,597
Iberdrola Renewables (PPM Energy)	677,785	1074	363,971
Idaho Power Company	14,768	1074	7,930
J. Aron & Company	10,400	1074	5,585
JP Morgan Ventures Energy	67,092	1074	36,028
Morgan Stanley CG	1,304,649	1074	700,597
NextEra Energy Power Marketing	113,998	1074	61,217
Noble Americas Energy Solutions	800	1074	430
NorthPoint Energy Solutions, Inc.	300	1074	161
Northwestern Energy	10,619	1074	5,702
Okanogan PUD	15,430	1074	8,286
Pacificorp	26,590	1074	14,279
Portland General Electric	109,691	1074	58,904
Powerex Corp.	144,388	1074	77,536
Public Service of Colorado	800	1074	430
Rainbow Energy Marketing	12,393	1074	6,655
Sacramento Municipal	5,966	1074	3,204
Seattle City Light Marketing	96,380	1074	51,756
Shell Energy (Coral Pwr)	309,247	1074	166,066
Snohomish County PUD #1	18,557	1074	9,965
Southern Cal - Edison	42,837	1074	23,003
Tacoma Power	38,385	1074	20,613

Talen Energy (PPL Energy Plus)	242,781	1074	130,373
Tenaska Power Services Co.	297	1074	159
The Energy Authority	57,242	1074	30,739
TransAlta Energy Marketing	1,275,174	1074	684,768
TransCanada Energy Sales Ltd	15,993	1074	8,588
Turlock Irrigation District	24,277	1074	13,037
Vitol Inc.	1,563,318	1074	839,502
Western Area Power Association	3	1074	2
Avista Nichols Pump	22,743	1074	12,213
Pacific Gas & Elec - Exchange	413,000	1074	221,781
Interchange-out deviation	52,887	1074	28,400
Pacific Gas & Elec - Exchange	-413,000	1074	(221,781)
Avista Corp. WWP Division	-59,334	1074	(31,862)
Black Hills Power	-30	1074	(16)
Book Outs - EITF 03-11	5,724,128	1074	3,073,857
BP Energy Co.	-303,763	1074	(163,121)
BPA	-284,002	1074	(152,509)
British Columbia Transmission Corp	-28	1074	(15)
Calpine Energy Services	-117,995	1074	(63,363)
Cargill Power Markets	-176,345	1074	(94,697)
Chelan County PUD #1	-4,207	1074	(2,259)
Citigroup Energy Inc	-327,954	1074	(176,111)
Clark Public Utilities	-6,032	1074	(3,239)
Clatskanie PUD	-3,692	1074	(1,983)
Conoco, Inc.	-5,200	1074	(2,792)
Constellation Power Source, Inc.	-89	1074	(48)
CP Energy Marketing (Epcor)	-902	1074	(484)
Douglas County PUD #1	-2,350	1074	(1,262)
EDF Trading NA LLC	-1,158,465	1074	(622,096)
ENMAX Energy Marketing, Inc.	-346	1074	(186)
Eugene Water & Electric	-22,601	1074	(12,137)
Exelon Generation Co LLC	-154,413	1074	(82,920)
Fortis BC	-13,980	1074	(7,507)
Grant County PUD #2	-34,904	1074	(18,743)
Iberdrola Renewables (PPM Energy)	-465,716	1074	(250,089)
Idaho Power Company	-28,166	1074	(15,125)
J. Aron & Company	-10,000	1074	(5,370)
JP Morgan Ventures Energy	-64,335	1074	(34,548)
Morgan Stanley CG	-799,848	1074	(429,518)
Natur Ener USA	-61	1074	(33)
Nevada Power Company	-1,267	1074	(680)
NextEra Energy Power Marketing	-1,748	1074	(939)
NorthPoint Energy Solutions, Inc.	-50	1074	(27)
Northwestern Energy	-27,585	1074	(14,813)
Okanogan PUD	-1,425	1074	(765)
Pacificorp	-270,353	1074	(145,180)
Portland General Electric	-154,103	1074	(82,753)

Powerex Corp.	-165,730	1074	(88,997)
Public Service of Colorado	-600	1074	(322)
Rainbow Energy Marketing	-5,067	1074	(2,721)
Sacramento Municipal	-15,711	1074	(8,437)
Seattle City Light Marketing	-34,982	1074	(18,785)
Shell Energy (Coral Pwr)	-349,844	1074	(187,866)
Snohomish County PUD #1	-7,576	1074	(4,068)
Southern Cal - Edison	-200	1074	(107)
Tacoma Power	-15,061	1074	(8,088)
Talen Energy (PPL Energy Plus)	-70,877	1074	(38,061)
Tenaska Power Services Co.	-828	1074	(445)
The Energy Authority	-41,339	1074	(22,199)
TransAlta Energy Marketing	-637,562	1074	(342,371)
TransCanada Energy Sales Ltd	-7,621	1074	(4,092)
Turlock Irrigation District	-208	1074	(112)
Vitol Inc.	-1,812,075	1074	(973,084)
Western Area Power Association	-2	1074	(1)
Transalta Contract - Source "Other" and Bookouts	515,781	1074	276,974
	3,964,233		2,128,793

[Commerce Fuel Mix Report](#) =

		1,074	lbs CO <sub>2</sub> per MWh
For Year	2015		

Previous reports rate = 1,046 lb/MWh, total emissions:  
2,072,888 short tons



	A	B	C	D	E	F	G	H	I
1	<b>Summary Energy and Emissions Intensity Report</b>								
2									
3		Utility :	Puget Sound Energy						
4	Reporting for year :	2014	<b>MWh per Capita</b>						
5	Population Served :	2,393,758	<b>8.64</b>						
6									
7	<i>Energy Intensity Metrics</i>								
8						Customer	<b>MWh per</b>		
9				MWh at Meter	MWh Proportion	Count	<b>Customer</b>		
10	Residential Customers			10,412,460	50.4%	960,708	<b>10.8</b>		
11	Commercial Customers			9,043,539	43.7%	127,346	<b>71.0</b>		
12	Industrial Customers			1,216,903	5.9%				
13	Total Load Served			20,672,902					
14									
15	<i>Emissions Intensity Metrics</i>								
16					Percent of	<b>Short</b>			
17				Busbar MWh	Total Load	<b>Tons CO<sub>2</sub></b>			
18	Known Resources Serving WA			16,087,761	72.2%	7,833,030			
19	Unknown Resources Serving WA			<b>6,189,748</b>	<b>27.8%</b>	<b>3,138,202</b>	<b>% of 1990 CO<sub>2</sub></b>		
20				2014	Tons CO <sub>2</sub>	<b>10,971,233</b>	<b>157.9%</b>		
21									
22						1990 Short Tons CO <sub>2</sub>	6,946,064		
23									
24						<b>See UTC Docket UE-131723, General Order R-581, Page 7, Paragraph 19.</b>			
25							1990		
26							Short Tons CO <sub>2</sub>		
27						Avista	1,131,957		
28						Pacific Power	2,399,078		
29						Puget Sound Energy	6,946,064		

## Known Resources Serving WA Customers

2014

Resource	WA MWh	lbs CO <sub>2</sub> /MWh	Short Tons CO <sub>2</sub>
Electron	42,364	-	-
Lower Baker	429,609	-	-
Snoqualmie Falls #1	40,375	-	-
Snoqualmie Falls #2	147,767	-	-
Upper Baker	340,085	-	-
Colstrip 1 & 2	2,114,046	2,408	2,545,659
Colstrip 3 & 4	2,395,521	2,342	2,804,661
Encogen	218,069	1,067	116,340
Ferndale Co-Generation	722,557	1,016	366,904
Freddie #1	346,743	1,725	299,122
Goldendale	1,029,457	829	426,497
Mint Farm	1,284,786	872	560,102
Sumas	446,065	1,033	230,368
Crystal Mountain	358	1,823	326
Fredonia	56,805	1,772	50,330
Fredonia 3 & 4	11,338	1,329	7,536
Fredrickson 1 & 2	14,347	3,747	26,882
Hopkins Ridge (W184)	442,303	-	-
Lower Snake River	883,475	-	-
Whitehorn 2&3	24,458	2,654	32,453
Wild Horse (W183)	649,976	-	-
3 Bar G Wind Turbine #3 LLC	144	-	-
Barclays Bank Plc	216,079	696	75,226
BC Hydro (Point Roberts)	20,697	696	7,205
Bio Energy Washington (BEW)	14	-	-
Black Creek Hydro Inc	14,183	-	-
Book Outs - EITF 03-11	(10,172)	-	-
BPA	7,000	-	-
BPA Firm - WNP#3 Exchange	360,022	696	125,338
CC Solar 1 and CC Solar 2	28	-	-
Chelan PUD - RI & RR	2,323,845	-	-
Chelan PUD - Rock Island Syst #2	(38,431)	-	-
Chelan PUD - Rocky Reach	(81,380)	-	-
Douglas PUD - Wells Project	1,048,857	-	-
Edaleen Dairy LLC	3,734	-	-
Farm Power Lynden LLC	4,947	-	-
Farm Power Rexville LLC	5,242	-	-
Grant PUD - Priest Rapids Project	50,317	-	-
Island Community Solar LLC	60	-	-
Klamath Falls (Iberdrola)	1,200	814	488
Klondike Wind Power III	129,205	-	-
Knudsen Wind Turbine #1	152	-	-
Qualco Energy	290	-	-

Rainier Bio Gas	5,028	-	-
Skookumchuck Hydro	6,471	-	-
Smith Creek Hydro	174	-	-
Swauk Wind	11,216	-	-
Transalta Centralia Generation LLC	133,020	2,369	157,594
Van Dyk - S Holsteins	2,189	-	-
VanderHaak Dairy Digester	3,511	-	-
BIO FUEL WA	36,677	-	-
Electron Hydro, LLC	8,568	-	-
Hutchinson Creek	233	-	-
Koma Kulshan Associates	48,523	-	-
Lake Washington -- Finn Hill	271	-	-
Nooksack	25,212	-	-
Sygitowicz Creek	1,168	-	-
Twin Falls Hydro	92,558	-	-
Weeks Falls	16,407	-	-
	<u>16,087,761</u>		<u>7,833,030</u>

## Unknown Resources For WA Customers

2014


WA Dept. of Co

Resource	WA MWh	Fuel Mix lbs CO <sub>2</sub> /MWh	Short Tons CO <sub>2</sub>
Avista Corp. WWP Division	321,265	1014	162,881
Black Hills Power	875	1014	444
Book Outs - EITF 03-11	(2,005,870)	1014	(1,016,976)
BP Energy Co.	1,096,755	1014	556,055
BPA	169,672	1014	86,024
Burbank, City of	200	1014	101
California ISO	65,176	1014	33,044
Calpine Energy Services	47,482	1014	24,073
Cargill Power Markets	609,585	1014	309,060
Chelan County PUD #1	4,821	1014	2,444
Citigroup Energy Inc	145,653	1014	73,846
City of Idaho Falls	10	1014	5
Clark Public Utilities	5,396	1014	2,736
Clatskanie PUD	2,270	1014	1,151
Constellation Power Source, Inc.	20	1014	10
CP Energy Marketing (Epcor)	825	1014	418
Douglas County PUD #1	277,023	1014	140,451
EDF Trading NA LLC	611,857	1014	310,211
ENMAX Energy Marketing, Inc.	100	1014	51
Eugene Water & Electric	12,875	1014	6,528
Exelon Generation Co LLC	187,630	1014	95,128
Grant County PUD #2	12,652	1014	6,415
Iberdrola Renewables (PPM Energy)	716,696	1014	363,365
Idaho Power Company	12,466	1014	6,320
J. Aron & Company	20,400	1014	10,343
JP Morgan Ventures Energy	156,705	1014	79,449
Morgan Stanley CG	1,790,503	1014	907,785
Natur Ener USA	1	1014	1
NextEra Energy Power Marketing	56,233	1014	28,510
Noble Americas Energy Solutions	4,000	1014	2,028
Noble Americas Gas & Power	4,000	1014	2,028
NorthPoint Energy Solutions, Inc.	871	1014	442
Northwestern Energy	1,948	1014	988
Okanogan PUD	7,707	1014	3,907
Pacificorp	71,357	1014	36,178
Portland General Electric	183,483	1014	93,026
Powerex Corp.	100,896	1014	51,154
Rainbow Energy Marketing	5,071	1014	2,571
Sacramento Municipal	2,075	1014	1,052
Seattle City Light Marketing	69,998	1014	35,489
Shell Energy (Coral Pwr)	365,203	1014	185,158
Snohomish County PUD #1	20,464	1014	10,375
Southern Cal - Edison	47,417	1014	24,040

Tacoma Power	151,109	1014	76,612
Talen Energy (PPL Energy Plus)	235,629	1014	119,464
Tenaska Power Services Co.	4,534	1014	2,299
The Energy Authority	51,948	1014	26,338
TransAlta Energy Marketing	1,300,789	1014	659,500
TransCanada Energy Sales Ltd	2,410	1014	1,222
Turlock Irrigation District	81,172	1014	41,154
Vitol Inc.	452,905	1014	229,623
Avista Nichols Pump	22,326	1014	11,319
Pacific Gas & Elec - Exchange	413,000	1014	209,391
Deviation	76,074	1014	38,569
Exelon Generation Co LLC	(25)	1014	(13)
Pacific Gas & Elec - Exchange	(413,000)	1014	(209,391)
Avista Corp. WWP Division	(60,183)	1014	(30,513)
Black Hills Power	(390)	1014	(198)
Book Outs - EITF 03-11	2,016,042	1014	1,022,133
BP Energy Co.	(51,111)	1014	(25,913)
BPA	(159,211)	1014	(80,720)
British Columbia Transmission Corp	(49)	1014	(25)
Brookfield Energy Marketing	(800)	1014	(406)
Burbank, City of	(2,400)	1014	(1,217)
Calpine Energy Services	(117,424)	1014	(59,534)
Cargill Power Markets	(190,421)	1014	(96,543)
Chelan County PUD #1	(16,609)	1014	(8,421)
Citigroup Energy Inc	(26,800)	1014	(13,588)
Clark Public Utilities	(9,222)	1014	(4,676)
Clatskanie PUD	(4,124)	1014	(2,091)
Conoco, Inc.	(1,200)	1014	(608)
Constellation Power Source, Inc.	(119)	1014	(60)
CP Energy Marketing (Epcor)	(947)	1014	(480)
Douglas County PUD #1	(1,819)	1014	(922)
EDF Trading NA LLC	(136,984)	1014	(69,451)
Eugene Water & Electric	(38,757)	1014	(19,650)
Exelon Generation Co LLC	(16,580)	1014	(8,406)
Fortis BC	(27,508)	1014	(13,947)
Grant County PUD #2	(27,899)	1014	(14,145)
Iberdrola Renewables (PPM Energy)	(536,036)	1014	(271,770)
Idaho Power Company	(15,235)	1014	(7,724)
J. Aron & Company	(2,600)	1014	(1,318)
JP Morgan Ventures Energy	(5,071)	1014	(2,571)
Morgan Stanley CG	(332,554)	1014	(168,605)
Natur Ener USA	(24)	1014	(12)
Nevada Power Company	(159)	1014	(81)
NextEra Energy Power Marketing	(159)	1014	(81)
Noble Americas Gas & Power	(400)	1014	(203)
NorthPoint Energy Solutions, Inc.	(3,481)	1014	(1,765)
Northwestern Energy	(68,236)	1014	(34,596)

Okanogan PUD	(1,855)	1014	(940)
Pacificorp	(109,675)	1014	(55,605)
Portland General Electric	(123,272)	1014	(62,499)
Powerex Corp.	(401,453)	1014	(203,537)
Rainbow Energy Marketing	(21,430)	1014	(10,865)
Sacramento Municipal	(4,593)	1014	(2,329)
Seattle City Light Marketing	(20,865)	1014	(10,579)
Shell Energy (Coral Pwr)	(210,325)	1014	(106,635)
Snohomish County PUD #1	(12,377)	1014	(6,275)
Tacoma Power	(14,402)	1014	(7,302)
Talen Energy (PPL Energy Plus)	(52,930)	1014	(26,836)
Tenaska Power Services Co.	(512)	1014	(260)
The Energy Authority	(36,276)	1014	(18,392)
TransAlta Energy Marketing	(302,261)	1014	(153,246)
TransCanada Energy Sales Ltd	(20,682)	1014	(10,486)
Turlock Irrigation District	(311)	1014	(158)
Vitol Inc.	(221,200)	1014	(112,148)
	6,189,748		3,138,202

[Commerce Fuel Mix Report](#) = 1,014 lbs CO<sub>2</sub> per MWh

For Year	2014	
----------	------	---

Previous reports rate = 1,024 lb/MWh, total emissions:  
3,167,831 short tons

	A	B	C	D	E	F	G	H	I	
1	<b>Summary Energy and Emissions Intensity Report</b>									
2										
3		Utility :	Puget Sound Energy							
4	Reporting for year :	2013	<b>MWh per Capita</b>							
5	Population Served :	2,383,976	<b>8.82</b>							
6										
7	<i>Energy Intensity Metrics</i>									
8						Customer	<b>MWh per</b>			
9				MWh at Meter	MWh Proportion	Count	<b>Customer</b>			
10	Residential Customers			10,718,566	51.0%	956,782	<b>11.2</b>			
11	Commercial Customers			9,086,128	43.2%	125,099	<b>72.6</b>			
12	Industrial Customers			1,215,442	5.8%					
13	Total Load Served			21,020,136						
14										
15	<i>Emissions Intensity Metrics</i>									
16					Percent of	<b>Short</b>				
17				Busbar MWh	Total Load	<b>Tons CO<sub>2</sub></b>				
18	Known Resources Serving WA			16,925,901	74.2%	8,324,309				
19	Unknown Resources Serving WA			<b>5,877,233</b>	<b>25.8%</b>	<b>3,326,881</b>	<b>% of 1990 CO<sub>2</sub></b>			
20				2013	Tons CO <sub>2</sub>	<b>11,651,191</b>	<b>167.7%</b>			
21										
22						1990 Short Tons CO <sub>2</sub>	6,946,064			
23										
24	<i>See UTC Docket UE-131723, General Order R-581, Page 7, Paragraph 19.</i>									
25							1990			
26							Short Tons CO <sub>2</sub>			
27						Avista	1,131,957			
28						Pacific Power	2,399,078			
29						Puget Sound Energy	6,946,064			



## Known Resources Serving WA Customers

**2013**

Resource	WA MWh	lbs CO <sub>2</sub> /MWh	Short Tons CO <sub>2</sub>
Electron	57,768	-	-
Lower Baker	350,428	-	-
Snoqualmie Falls #1	(173)	-	-
Snoqualmie Falls #2	76,307	-	-
Upper Baker	353,240	-	-
Colstrip 1 & 2	2,322,485	2,417	2,806,950
Colstrip 3 & 4	2,023,723	2,311	2,338,102
Encogen	268,267	1,090	146,207
Ferndale Co-Generation	869,394	1,001	435,310
Freddie #1	416,397	1,735	361,260
Goldendale	1,469,094	817	599,992
Mint Farm	1,614,348	864	697,586
Sumas	536,585	1,027	275,548
Crystal Mountain	49	2,629	64
Fredonia	112,471	1,470	82,689
Fredonia 3 & 4	12,944	1,252	8,104
Fredrickson 1 & 2	27,905	2,728	38,062
Hopkins Ridge (W184)	406,600	-	-
Lower Snake River	816,895	-	-
Whitehorn 2&3	27,796	2,273	31,594
Wild Horse (W183)	659,105	-	-
3 Bar G Wind Turbine #3 LLC	203	-	-
Barclays Bank Plc	216,075	1,132	122,312
BC Hydro (Point Roberts)	21,366	1,132	12,095
Bio Energy Washington (BEW)	1	-	-
Black Creek Hydro Inc	12,819	-	-
Book Outs - EITF 03-11	(204,155)	-	-
BPA	7,000	-	-
BPA Firm - WNP#3 Exchange	374,969	1,132	212,256
CC Solar 1 and CC Solar 2	28	-	-
Chelan PUD - RI & RR	2,436,603	-	-
Chelan PUD - Rock Island Syst #2	(43,063)	-	-
Chelan PUD - Rocky Reach	(78,804)	-	-
Douglas PUD - Wells Project	1,064,303	-	-
Edaleen Dairy LLC	3,925	-	-
Farm Power Lynden LLC	4,129	-	-
Farm Power Rexville LLC	5,448	-	-
Grant PUD - Priest Rapids Project	72,986	-	-
Island Community Solar LLC	59	-	-
JP Morgan Ventures Energy	161,925	1,132	91,660
Klamath Falls (Iberdrola)	8,450	807	3,411
Klondike Wind Power III	134,050	-	-
Knudsen Wind Turbine #1	128	-	-

Qualco Energy	3,381	-	-
Rainier Bio Gas	5,795	-	-
Shell Energy (Coral Pwr)	107,950	1,132	61,106
Skookumchuck Hydro	6,742	-	-
Smith Creek Hydro	147	-	-
Swauk Wind	10,572	-	-
Van Dyk - S Holsteins	2,315	-	-
VanderHaak Dairy Digester	2,970	-	-
Bio Energy Washington (BEW)	27	-	-
BIO FUEL WA	1,565	-	-
Hutchinson Creek	815	-	-
Koma Kulshan Associates	40,136	-	-
Lake Washington -- Finn Hill	288	-	-
Nooksack	23,772	-	-
Sygitowicz Creek	1,170	-	-
Twin Falls Hydro	83,479	-	-
Weeks Falls	14,707	-	-
	<u>16,925,901</u>		<u>8,324,309</u>

## Unknown Resources For WA Customers

2013

WA Dept. of Co

Resource	WA MWh	Fuel Mix lbs CO <sub>2</sub> /MWh	Short Tons CO <sub>2</sub>
Avista Corp. WWP Division	231,202	1132	130,875
Black Hills Power	4,600	1132	2,604
Book Outs - EITF 03-11	(3,157,200)	1132	(1,787,173)
BP Energy Co.	1,103,049	1132	624,395
BPA	417,735	1132	236,464
Brookfield Energy Marketing	800	1132	453
Burbank, City of	200	1132	113
California ISO	34,629	1132	19,602
Calpine Energy Services	82,375	1132	46,629
Cargill Power Markets	475,057	1132	268,912
Chelan County PUD #1	15,616	1132	8,840
Citigroup Energy Inc	209,900	1132	118,817
Clark Public Utilities	16,000	1132	9,057
Clatskanie PUD	2,268	1132	1,284
Constellation Power Source, Inc.	12,317	1132	6,972
CP Energy Marketing (Epcor)	5,815	1132	3,292
DB Energy Trading LLC	433,233	1132	245,237
Douglas County PUD #1	305,577	1132	172,976
EDF Trading NA LLC	163,552	1132	92,581
Eugene Water & Electric	14,487	1132	8,201
Exelon Generation Co LLC	60,279	1132	34,122
Grant County PUD #2	27,401	1132	15,511
Iberdrola Renewables (PPM Energy)	862,192	1132	488,055
Idaho Power Company	8,565	1132	4,848
J. Aron & Company	16,200	1132	9,170
JP Morgan Ventures Energy	1,017,850	1132	576,167
Morgan Stanley CG	2,038,800	1132	1,154,088
Natur Ener USA	2	1132	1
NextEra Energy Power Marketing	38,830	1132	21,980
Noble Americas Energy Solutions	8,800	1132	4,981
Noble Americas Gas & Power	400	1132	226
Northwestern Energy	26,622	1132	15,070
Okanogan PUD	26,282	1132	14,877
Pacificorp	82,864	1132	46,906
Portland General Electric	43,399	1132	24,567
Powerex Corp.	176,702	1132	100,024
Rainbow Energy Marketing	20,918	1132	11,841
Sacramento Municipal	1,700	1132	962
San Diego Gas & Electric	76	1132	43
Seattle City Light Marketing	144,546	1132	81,822
Shell Energy (Coral Pwr)	611,302	1132	346,035
Snohomish County PUD #1	49,476	1132	28,007
Southern Cal - Edison	49,519	1132	28,031

Tacoma Power	104,948	1132	59,407
Talen Energy (PPL Energy Plus)	172,219	1132	97,487
Tenaska Power Services Co.	5,800	1132	3,283
The Energy Authority	97,683	1132	55,295
TransAlta Energy Marketing	1,129,071	1132	639,125
TransCanada Energy Sales Ltd	681	1132	385
Turlock Irrigation District	60,816	1132	34,426
Vitol Inc.	262,136	1132	148,385
Pacific Gas & Elec - Exchange	413,000	1132	233,784
Deviation	47,849	1132	27,085
Pacific Gas & Elec - Exchange	(413,000)	1132	(233,784)
Avista Corp. WWP Division	(45,139)	1132	(25,551)
Barclays Bank Plc	(35)	1132	(20)
Black Hills Power	(1,762)	1132	(997)
Book Outs - EITF 03-11	3,361,355	1132	1,902,737
BP Energy Co.	(297,433)	1132	(168,366)
BPA	(165,628)	1132	(93,756)
British Columbia Transmission Corp	(65)	1132	(37)
Brookfield Energy Marketing	(800)	1132	(453)
Burbank, City of	(2,200)	1132	(1,245)
California ISO	(8,579)	1132	(4,856)
Calpine Energy Services	(390,795)	1132	(221,214)
Cargill Power Markets	(158,112)	1132	(89,501)
Chelan County PUD #1	(25,371)	1132	(14,362)
Citigroup Energy Inc	(60,746)	1132	(34,386)
Clark Public Utilities	(18,922)	1132	(10,711)
Clatskanie PUD	(5,659)	1132	(3,203)
Constellation Power Source, Inc.	(1)	1132	(1)
CP Energy Marketing (Epcor)	(1,115)	1132	(631)
DB Energy Trading LLC	8	1132	5
Douglas County PUD #1	(3,025)	1132	(1,712)
EDF Trading NA LLC	(40,695)	1132	(23,036)
Eugene Water & Electric	(35,479)	1132	(20,083)
Exelon Generation Co LLC	(34,998)	1132	(19,811)
Fortis BC	(144,215)	1132	(81,635)
Grant County PUD #2	(26,969)	1132	(15,266)
Iberdrola Renewables (PPM Energy)	(646,518)	1132	(365,970)
Idaho Power Company	(27,009)	1132	(15,289)
J. Aron & Company	(52,425)	1132	(29,676)
JP Morgan Ventures Energy	(54,818)	1132	(31,030)
Morgan Stanley CG	(389,258)	1132	(220,344)
Natur Ener USA	(9)	1132	(5)
NextEra Energy Power Marketing	(1,181)	1132	(669)
Noble Americas Energy Solutions	(5,999)	1132	(3,396)
Noble Americas Gas & Power	(6,600)	1132	(3,736)
NorthPoint Energy Solutions, Inc.	(23,745)	1132	(13,441)
Northwestern Energy	(83,310)	1132	(47,159)

Okanogan PUD	(2,675)	1132	(1,514)
Pacificorp	(277,031)	1132	(156,817)
Portland General Electric	(192,170)	1132	(108,780)
Powerex Corp.	(403,044)	1132	(228,148)
Rainbow Energy Marketing	(35,434)	1132	(20,058)
Sacramento Municipal	(7,107)	1132	(4,023)
San Diego Gas & Electric	(975)	1132	(552)
Seattle City Light Marketing	(23,533)	1132	(13,321)
Shell Energy (Coral Pwr)	(279,421)	1132	(158,170)
Sierra Pacific Power	(2,095)	1132	(1,186)
Snohomish County PUD #1	(30,000)	1132	(16,982)
Southern Cal - Edison	(175)	1132	(99)
Tacoma Power	(36,049)	1132	(20,406)
Talen Energy (PPL Energy Plus)	(64,235)	1132	(36,361)
Tenaska Power Services Co.	(870)	1132	(492)
The Energy Authority	(43,118)	1132	(24,407)
TransAlta Energy Marketing	(391,631)	1132	(221,688)
TransCanada Energy Marketing	(3,692)	1132	(2,090)
TransCanada Energy Sales Ltd	(27,429)	1132	(15,527)
Turlock Irrigation District	(3,960)	1132	(2,242)
Vitol Inc.	(466,011)	1132	(263,791)
	5,877,233		3,326,881

[Commerce Fuel Mix Report](#) = 1,132 lbs CO<sub>2</sub> per MWh

For Year	2013	
----------	------	---

	A	B	C	D	E	F	G	H	I
1	<b>Summary Energy and Emissions Intensity Report</b>								
2									
3		Utility :	Puget Sound Energy						
4	Reporting for year :	2012	<b>MWh per Capita</b>						
5	Population Served :	2,396,763	<b>8.82</b>						
6									
7	<i>Energy Intensity Metrics</i>								
8						Customer	<b>MWh per</b>		
9				MWh at Meter	MWh Proportion	Count	<b>Customer</b>		
10	Residential Customers			10,744,641	50.8%	961,914	<b>11.2</b>		
11	Commercial Customers			9,192,545	43.5%	123,757	<b>74.3</b>		
12	Industrial Customers			1,208,801	5.7%				
13	Total Load Served			21,145,987					
14									
15	<i>Emissions Intensity Metrics</i>								
16					Percent of	<b>Short</b>			
17				Busbar MWh	Total Load	<b>Tons CO<sub>2</sub></b>			
18	Known Resources Serving WA			14,688,684	65.5%	6,574,991			
19	Unknown Resources Serving WA			<b>7,727,006</b>	<b>34.5%</b>	<b>3,489,259</b>	<b>% of 1990 CO<sub>2</sub></b>		
20				2012	Tons CO <sub>2</sub>	<b>10,064,250</b>	<b>144.9%</b>		
21									
22						1990 Short Tons CO <sub>2</sub>	6,946,064		
23									
24						<b>See UTC Docket UE-131723, General Order R-581, Page 7, Paragraph 19.</b>			
25							1990		
26							Short Tons CO <sub>2</sub>		
27						Avista	1,131,957		
28						Pacific Power	2,399,078		
29						Puget Sound Energy	6,946,064		

## Known Resources Serving WA Customers

2012

Resource	WA MWh	lbs CO <sub>2</sub> /MWh	Short Tons CO <sub>2</sub>
Electron	49,583	-	-
Lower Baker	349,273	-	-
Snoqualmie Falls #1	(1,203)	-	-
Snoqualmie Falls #2	(636)	-	-
Upper Baker	349,723	-	-
Colstrip 1 & 2	1,424,335	2,350	1,673,470
Colstrip 3 & 4	2,385,189	2,394	2,854,790
Encogen	108,457	1,049	56,908
Ferndale Co-Generation	1,607	19,631	15,774
Freddie #1	175,177	1,749	153,218
Goldendale	909,497	789	358,642
Mint Farm	1,098,069	870	477,773
Sumas	223,750	1,050	117,437
Crystal Mountain	298	72,577	10,823
Fredonia	17,193	14,671	126,117
Fredonia 3 & 4	25,360	1,267	16,064
Fredrickson 1 & 2	31,650	2,995	47,389
Hopkins Ridge (W184)	430,640	-	-
Lower Snake River	714,783	-	-
Whitehorn 2&3	29,278	5,720	83,735
Wild Horse (W183)	677,390	-	-
3 Bar G Wind Turbine #3 LLC	190	-	-
Barclays Bank Plc	217,875	666	72,526
BC Hydro (Point Roberts)	21,417	666	7,129
Black Creek Hydro Inc	11,481	-	-
Book Outs - EITF 03-11	(449,210)	-	-
BPA	6,832	-	-
BPA Firm - WNP#3 Exchange	400,153	666	133,202
CC Solar 1 and CC Solar 2	3	-	-
Chelan PUD - RI & RR	2,300,840	-	-
Chelan PUD - Rock Island Syst #2	716,417	-	-
Chelan PUD - Rocky Reach	(80,276)	-	-
Douglas PUD - Wells Project	979,910	-	-
Edaleen Dairy LLC	1,391	-	-
Farm Power Lynden LLC	4,188	-	-
Farm Power Rexville LLC	5,803	-	-
Grant PUD - Priest Rapids Project	75,568	-	-
Island Community Solar LLC	58	-	-
JP Morgan Ventures Energy	549,589	666	182,946
Klamath Falls (Iberdrola)	500	802	200
Klondike Wind Power III	124,794	-	-
Knudsen Wind Turbine #1	135	-	-
Powerex Corp.	120,000	666	39,945



Qualco Energy	3,402	-	-
Rainier Bio Gas	58	-	-
Shell Energy (Coral Pwr)	439,124	666	146,174
Skookumchuck Hydro	6,422	-	-
Smith Creek Hydro	215	-	-
Swauk Wind	29	-	-
Van Dyk - S Holsteins	2,762	-	-
VanderHaak Dairy Digester	3,538	-	-
WASCO Hydro	38,227	-	-
Bio Energy Washington (BEW)	2,787	-	-
Hutchinson Creek	1,244	-	-
Koma Kulshan Associates	42,519	-	-
Lake Washington -- Finn Hill	96	-	-
Nooksack	25,295	-	-
Port Townsend Paper Co.	1,475	989	729
Sygitowicz Creek	1,478	-	-
Twin Falls Hydro	95,827	-	-
Weeks Falls	17,114	-	-
	<u>14,688,684</u>		<u>6,574,991</u>

## Unknown Resources For WA Customers

2012

WA Dept. of Co

Resource	2012		
	WA MWh	Fuel Mix lbs CO <sub>2</sub> /MWh	Short Tons CO <sub>2</sub>
Deferral Offsets	(52)	903	(24)
Deferral Offsets	(102)	903	(46)
Avista Corp. WWP Division	126,962	903	57,332
Barclays Bank Plc	22,000	903	9,934
Black Hills Power	1,600	903	723
Book Outs - EITF 03-11	(2,428,057)	903	(1,096,430)
BP Energy Co.	1,236,010	903	558,141
BPA	384,113	903	173,453
Brookfield Energy Marketing	1,200	903	542
Calpine Energy Services	467,588	903	211,147
Cargill Power Markets	252,059	903	113,821
Chelan County PUD #1	124,383	903	56,167
Citigroup Energy Inc	1,014,046	903	457,909
Clark Public Utilities	26,743	903	12,076
Clatskanie PUD	11,019	903	4,976
Constellation Power Source, Inc.	65,386	903	29,526
CP Energy Marketing (Epcor)	1,133	903	512
DB Energy Trading LLC	502,043	903	226,706
Douglas County PUD #1	336,342	903	151,881
EDF Trading NA LLC	222,630	903	100,532
ENMAX Energy Marketing, Inc.	75	903	34
Eugene Water & Electric	42,962	903	19,400
Grant County PUD #2	36,506	903	16,485
Iberdrola Renewables (PPM Energy)	561,582	903	253,592
Idaho Falls Power	25	903	11
Idaho Power Company	10,082	903	4,553
J. Aron & Company	2,400	903	1,084
JP Morgan Ventures Energy	1,278,611	903	577,378
Merrill Lynch Commodities	269,356	903	121,632
Morgan Stanley CG	1,078,306	903	486,927
Natur Ener USA	448	903	202
NextEra Energy Power Marketing	113,935	903	51,449
Noble Americas Energy Solutions	800	903	361
Noble Americas Gas & Power	800	903	361
NorthPoint Energy Solutions, Inc.	4	903	2
Northwestern Energy	3,418	903	1,543
Okanogan PUD	1,487	903	671
Pacific Summit Energy LLC	1,179	903	532
Pacificorp	76,562	903	34,573
PG&E Energy Trading	70,000	903	31,610
Portland General Electric	24,419	903	11,027
Powerex Corp.	231,003	903	104,313
Rainbow Energy Marketing	23,628	903	10,670

Sacramento Municipal	3,654	903	1,650
San Diego Gas & Electric	451	903	204
Seattle City Light Marketing	246,052	903	111,109
Shell Energy (Coral Pwr)	182,238	903	82,293
Snohomish County PUD #1	176,041	903	79,494
Southern Cal - Edison	62,658	903	28,294
Tacoma Power	200,033	903	90,328
Talen Energy (PPL Energy Plus)	109,330	903	49,370
Tenaska Power Services Co.	32,812	903	14,817
The Energy Authority	457,673	903	206,670
TransAlta Energy Marketing	1,404,952	903	634,430
TransCanada Energy Marketing	200	903	90
TransCanada Energy Sales Ltd	(200)	903	(90)
Tri-State Generation and Transmissi	124	903	56
Turlock Irrigation District	3,343	903	1,510
BPA	35,599	903	16,075
Pacific Gas & Elec - Exchange	413,000	903	186,497
BPA	(35,375)	903	(15,974)
Deviation	42,717	903	19,289
Pacific Gas & Elec - Exchange	(412,995)	903	(186,495)
Avista Corp. WWP Division	(37,126)	903	(16,765)
Barclays Bank Plc	(2,400)	903	(1,084)
Black Hills Power	(18,302)	903	(8,265)
Book Outs - EITF 03-11	2,877,267	903	1,299,278
BP Energy Co.	(97,731)	903	(44,132)
BPA	(147,151)	903	(66,448)
British Columbia Transmission Corp	(57)	903	(26)
Brookfield Energy Marketing	(2,000)	903	(903)
Calpine Energy Services	(142,467)	903	(64,333)
Cargill Power Markets	(311,820)	903	(140,808)
Chelan County PUD #1	(6,435)	903	(2,906)
Citigroup Energy Inc	(93,176)	903	(42,075)
Clark Public Utilities	(13,840)	903	(6,250)
Clatskanie PUD	(5,387)	903	(2,433)
Constellation Power Source, Inc.	(22,185)	903	(10,018)
CP Energy Marketing (Epcor)	(1,299)	903	(587)
DB Energy Trading LLC	(242,964)	903	(109,714)
Douglas County PUD #1	(1,410)	903	(637)
EDF Trading NA LLC	(34,355)	903	(15,514)
ENMAX Energy Marketing, Inc.	(225)	903	(102)
Eugene Water & Electric	(17,869)	903	(8,069)
Exelon Generation Co LLC	(2,800)	903	(1,264)
Fortis BC	(56,236)	903	(25,394)
Grant County PUD #2	(11,925)	903	(5,385)
Iberdrola Renewables (PPM Energy)	(541,878)	903	(244,694)
Idaho Power Company	(25,835)	903	(11,666)
J. Aron & Company	(2,800)	903	(1,264)

JP Morgan Ventures Energy	(52,134)	903	(23,542)
Morgan Stanley CG	(310,918)	903	(140,400)
Natur Ener USA	(6)	903	(3)
NextEra Energy Power Marketing	(2,739)	903	(1,237)
Noble Americas Energy Solutions	(2,800)	903	(1,264)
Noble Americas Gas & Power	(7,600)	903	(3,432)
NorthPoint Energy Solutions, Inc.	(8,404)	903	(3,795)
Northwestern Energy	(84,493)	903	(38,154)
Okanogan PUD	(470)	903	(212)
Pacific Summit Energy LLC	(430)	903	(194)
Pacificorp	(116,892)	903	(52,785)
PG&E Energy Trading	(216,530)	903	(97,778)
Portland General Electric	(72,993)	903	(32,961)
Powerex Corp.	(406,530)	903	(183,575)
Rainbow Energy Marketing	(58,846)	903	(26,573)
Sacramento Municipal	(10,011)	903	(4,521)
San Diego Gas & Electric	(29,918)	903	(13,510)
Seattle City Light Marketing	(46,589)	903	(21,038)
Shell Energy (Coral Pwr)	(299,293)	903	(135,151)
Sierra Pacific Power	(1,542)	903	(696)
Snohomish County PUD #1	(9,531)	903	(4,304)
Southern Cal - Edison	(20,000)	903	(9,031)
Tacoma Power	(19,628)	903	(8,863)
Talen Energy (PPL Energy Plus)	(67,867)	903	(30,646)
Tenaska Power Services Co.	(36,412)	903	(16,442)
The Energy Authority	(34,934)	903	(15,775)
TransAlta Energy Marketing	(443,951)	903	(200,474)
TransCanada Energy Sales Ltd	(49,555)	903	(22,377)
Tri-State Generation and Transmissi	(12,499)	903	(5,644)
Turlock Irrigation District	(3,606)	903	(1,628)
Western Area Power Association	(407)	903	(184)
	7,727,006		3,489,259

[Commerce Fuel Mix Report](#) =

903

lbs CO<sub>2</sub> per MWh

For Year	2012	
----------	------	---

	A	B	C	D	E	F	G	H	I
1	<b>Summary Energy and Emissions Intensity Report</b>								
2									
3		Utility :	Puget Sound Energy						
4	Reporting for year :	2011	<b>MWh per Capita</b>						
5	Population Served :	2,384,581	<b>9.03</b>						
6									
7	<i>Energy Intensity Metrics</i>								
8						Customer	<b>MWh per</b>		
9				MWh at Meter	MWh Proportion	Count	<b>Customer</b>		
10	Residential Customers			11,045,116	51.3%	957,025	<b>11.5</b>		
11	Commercial Customers			9,275,081	43.1%	122,720	<b>75.6</b>		
12	Industrial Customers			1,214,232	5.6%				
13	Total Load Served			21,534,429					
14									
15	<i>Emissions Intensity Metrics</i>								
16					Percent of	<b>Short</b>			
17				Busbar MWh	Total Load	<b>Tons CO<sub>2</sub></b>			
18	Known Resources Serving WA			16,075,429	70.4%	7,195,140			
19	Unknown Resources Serving WA			<b>6,774,738</b>	<b>29.6%</b>	<b>3,064,415</b>	<b>% of 1990 CO<sub>2</sub></b>		
20				2011	Tons CO <sub>2</sub>	<b>10,259,555</b>	<b>147.7%</b>		
21									
22						1990 Short Tons CO <sub>2</sub>	6,946,064		
23									
24	<b>See UTC Docket UE-131723, General Order R-581, Page 7, Paragraph 19.</b>								
25							1990		
26							Short Tons CO <sub>2</sub>		
27						Avista	1,131,957		
28						Pacific Power	2,399,078		
29						Puget Sound Energy	6,946,064		

## Known Resources Serving WA Customers

2011

Resource	WA MWh	lbs CO <sub>2</sub> /MWh	Short Tons CO <sub>2</sub>
Electron	50,341	-	-
Lower Baker	332,792	-	-
Snoqualmie Falls #1	(290)	-	-
Snoqualmie Falls #2	(175)	-	-
Upper Baker	301,309	-	-
Colstrip 1 & 2	1,897,910	2,327	2,208,276
Colstrip 3 & 4	2,312,673	2,380	2,751,525
Encogen	88,888	1,095	48,657
Freddie #1	135,218	868	58,692
Goldendale	609,013	795	242,000
Mint Farm	702,081	871	305,693
Sumas	178,397	1,016	90,630
Crystal Mountain	273	1,835	251
Fredonia	27,940	1,632	22,806
Fredonia 3 & 4	48,850	1,232	30,081
Fredrickson 1 & 2	9,976	12,617	62,931
Hopkins Ridge (W184)	433,219	-	-
Whitehorn 2&3	22,501	1,901	21,384
Wild Horse (W183)	730,659	-	-
3 Bar G Wind Turbine #3 LLC	105	-	-
Barclays Bank Plc	109,875	845	46,438
BC Hydro (Point Roberts)	22,074	845	9,329
Black Creek Hydro Inc	9,716	-	-
Book Outs - EITF 03-11	(509,390)	-	-
BPA	7,000	-	-
BPA Firm - WNP#3 Exchange	413,808	845	174,892
Chelan PUD - RI & RR	129,926	-	-
Chelan PUD - Rock Island Syst #2	1,647,786	-	-
Chelan PUD - Rocky Reach	2,517,798	-	-
Douglas PUD - Wells Project	1,061,183	-	-
Farm Power Lynden LLC	3,412	-	-
Farm Power Rexville LLC	4,904	-	-
Grant PUD - Priest Rapids Project	253,731	-	-
Island Community Solar LLC	15	-	-
JP Morgan Ventures Energy	385,873	845	163,086
Klondike Wind Power III	132,950	-	-
Knudsen Wind Turbine #1	86	-	-
Powerex Corp.	180,000	845	76,075
Qualco Energy	3,315	-	-
Sempra Energy Trading	161,925	845	68,436
Shell Energy (Coral Pwr)	437,989	845	185,112
Skookumchuck Hydro	5,017	-	-
Smith Creek Hydro	170	-	-

Van Dyk - S Holsteins	750	-	-
VanderHaak Dairy Digester	3,919	-	-
WASCO Hydro	38,437	-	-
Hutchinson Creek	1,180	-	-
Koma Kulshan Associates	41,095	-	-
March Point Cogen. - 1 & 2	769,775	712	274,126
Nooksack	24,529	-	-
Port Townsend Paper Co.	2,962	1,037	1,536
Spokane MSW	143,386	4,486	321,649
Sygitowicz Creek	1,154	-	-
Tenaska	81,307	776	31,534
Twin Falls Hydro	90,260	-	-
Weeks Falls	15,834	-	-
	<u>16,075,429</u>		<u>7,195,140</u>



## Unknown Resources For WA Customers

2011

WA Dept. of Co

Resource	WA MWh	Fuel Mix lbs CO <sub>2</sub> /MWh	Short Tons CO <sub>2</sub>
Avista Corp. WWP Division	117,376	905	53,093
Barclays Bank Plc	27,750	905	12,552
Black Hills Power	3,515	905	1,590
BNP Paribas Energy Trading	119,000	905	53,827
Book Outs - EITF 03-11	(3,113,284)	905	(1,408,231)
BP Energy Co.	345,552	905	156,303
BPA	382,105	905	172,837
British Columbia Transmission Corp	9	905	4
Burbank, City of	2,000	905	905
Cargill Power Markets	318,865	905	144,232
Chelan County PUD #1	8,620	905	3,899
Citigroup Energy Inc	1,028,188	905	465,080
Clark Public Utilities	8,570	905	3,876
Clatskanie PUD	15,878	905	7,182
Constellation Power Source, Inc.	298,689	905	135,106
CP Energy Marketing (Epcor)	5,848	905	2,645
DB Energy Trading LLC	197,398	905	89,289
Douglas County PUD #1	277,494	905	125,519
EDF Trading NA LLC	585,729	905	264,943
Eugene Water & Electric	63,900	905	28,904
Exelon Generation Co LLC	10,000	905	4,523
Grant County PUD #2	57,335	905	25,934
Hinson Power Company	20,800	905	9,408
Iberdrola Renewables (PPM Energy)	587,403	905	265,700
Idaho Power Company	73,320	905	33,165
J. Aron & Company	400	905	181
JP Morgan Ventures Energy	1,148,676	905	519,580
Merrill Lynch Commodities	350,800	905	158,677
Morgan Stanley CG	1,335,550	905	604,109
NextEra Energy Power Marketing	30,168	905	13,646
Noble Americas Energy Solutions	10,800	905	4,885
Noble Americas Gas & Power	3,200	905	1,447
NorthPoint Energy Solutions, Inc.	430	905	195
Northwestern Energy	6,224	905	2,815
Okanogan PUD	4,945	905	2,237
Pacific Northwest Generatin Coop.	337,472	905	152,649
Pacific Summit Energy LLC	1,952	905	883
Pacificorp	78,506	905	35,511
PG&E Energy Trading	104,400	905	47,223
Portland General Electric	41,895	905	18,950
Powerex Corp.	168,076	905	76,026
Public Service of Colorado	800	905	362
Rainbow Energy Marketing	48,216	905	21,810


Sacramento Municipal	5,763	905	2,607
San Diego Gas & Electric	556	905	251
Seattle City Light Marketing	251,794	905	113,894
Sempra Energy Trading	77,538	905	35,073
Shell Energy (Coral Pwr)	484,678	905	219,234
Sierra Pacific Power	125	905	57
Snohomish County PUD #1	43,003	905	19,452
Southern Cal - Edison	14,057	905	6,358
Tacoma Power	108,837	905	49,230
Talen Energy (PPL Energy Plus)	122,522	905	55,420
Tenaska	202	905	91
Tenaska Power Services Co.	400	905	181
The Energy Authority	55,496	905	25,102
TransAlta Energy Marketing	2,238,117	905	1,012,367
Turlock Irrigation District	37,399	905	16,917
Western Area Power Association	1,669	905	755
Black Creek Hydro	3,049	905	1,379
BPA	45,405	905	20,538
Pacific Gas & Elec - Exchange	413,092	905	186,854
Black Creek Hydro	(6,556)	905	(2,965)
BPA	(46,691)	905	(21,120)
Deviation	34,040	905	15,397
Pacific Gas & Elec - Exchange	(413,000)	905	(186,812)
Avista Corp. WWP Division	(30,733)	905	(13,901)
Barclays Bank Plc	(29,465)	905	(13,328)
Black Hills Power	(2,654)	905	(1,200)
BNP Paribas Energy Trading	(20,616)	905	(9,325)
Book Outs - EITF 03-11	3,622,674	905	1,638,643
BP Energy Co.	(148,410)	905	(67,130)
BPA	(84,760)	905	(38,339)
British Columbia Transmission Corp	(1)	905	(0)
Burbank, City of	(800)	905	(362)
Cargill Power Markets	(141,861)	905	(64,168)
Chelan County PUD #1	(1,600)	905	(724)
Citigroup Energy Inc	(167,241)	905	(75,648)
Clark Public Utilities	(6,320)	905	(2,859)
Clatskanie PUD	(8,952)	905	(4,049)
Conoco, Inc.	(40)	905	(18)
Constellation Power Source, Inc.	(50,578)	905	(22,878)
CP Energy Marketing (Epcor)	(9,659)	905	(4,369)
DB Energy Trading LLC	(73,077)	905	(33,055)
Douglas County PUD #1	(1,531)	905	(693)
EDF Trading NA LLC	(95,429)	905	(43,165)
ENMAX Energy Marketing, Inc.	567	905	256
Eugene Water & Electric	(33,425)	905	(15,119)
Exelon Generation Co LLC	(15,200)	905	(6,875)
Grant County PUD #2	(27,856)	905	(12,600)

Iberdrola Renewables (PPM Energy)	(428,020)	905	(193,606)
Idaho Power Company	(24,625)	905	(11,139)
J. Aron & Company	(21,600)	905	(9,770)
JP Morgan Ventures Energy	(47,261)	905	(21,378)
Los Angeles Dept. Water & Power	(1,150)	905	(520)
Merrill Lynch Commodities	(18,800)	905	(8,504)
Morgan Stanley CG	(586,129)	905	(265,124)
N. California Power Agency	(482)	905	(218)
Natur Ener USA	(30)	905	(14)
NextEra Energy Power Marketing	(9,250)	905	(4,184)
Noble Americas Energy Solutions	(800)	905	(362)
Noble Americas Gas & Power	(3,388)	905	(1,532)
NorthPoint Energy Solutions, Inc.	(7,683)	905	(3,475)
Northwestern Energy	(56,370)	905	(25,498)
Okanogan PUD	(855)	905	(387)
Pacific Northwest Generatin Coop.	(1,655)	905	(749)
Pacific Summit Energy LLC	(57,339)	905	(25,936)
Pacificorp	(246,935)	905	(111,696)
PG&E Energy Trading	(790,398)	905	(357,521)
Portland General Electric	(251,716)	905	(113,859)
Powerex Corp.	(294,366)	905	(133,150)
Public Service of Colorado	(1,600)	905	(724)
Rainbow Energy Marketing	(69,776)	905	(31,562)
Redding, City of	(69)	905	(31)
Sacramento Municipal	(28,531)	905	(12,905)
San Diego Gas & Electric	(22,412)	905	(10,138)
Seattle City Light Marketing	(23,444)	905	(10,604)
Shell Energy (Coral Pwr)	(457,267)	905	(206,835)
Sierra Pacific Power	(14,123)	905	(6,388)
Snohomish County PUD #1	(9,938)	905	(4,495)
Southern Cal - Edison	(526,126)	905	(237,982)
Tacoma Power	(19,779)	905	(8,947)
Talen Energy (PPL Energy Plus)	(185,885)	905	(84,081)
Tenaska Power Services Co.	(3,600)	905	(1,628)
The Energy Authority	(19,100)	905	(8,639)
TransAlta Energy Marketing	(212,919)	905	(96,310)
TransCanada Energy Sales Ltd	(14,806)	905	(6,697)
Turlock Irrigation District	(24,869)	905	(11,249)
Western Area Power Association	(1,265)	905	(572)
	6,774,738		3,064,415

[Commerce Fuel Mix Report](#) =

905

lbs CO<sub>2</sub> per MWh

For Year	2011	
----------	------	---

	A	B	C	D	E	F	G	H	I	
1	<b>Summary Energy and Emissions Intensity Report</b>									
2										
3		Utility :	Puget Sound Energy							
4	Reporting for year :	2010	<b>MWh per Capita</b>							
5	Population Served :	2,374,059	<b>8.86</b>							
6										
7	<b>Energy Intensity Metrics</b>									
8						Customer	<b>MWh per</b>			
9				MWh at Meter	MWh Proportion	Count	<b>Customer</b>			
10	Residential Customers			10,672,888	50.8%	952,802	<b>11.2</b>			
11	Commercial Customers			9,192,953	43.7%	122,015	<b>75.3</b>			
12	Industrial Customers			1,160,586	5.5%					
13	Total Load Served			21,026,427						
14										
15	<b>Emissions Intensity Metrics</b>									
16					Percent of	<b>Short</b>				
17				Busbar MWh	Total Load	<b>Tons CO<sub>2</sub></b>				
18	Known Resources Serving WA			19,409,091	85.9%	10,411,371				
19	Unknown Resources Serving WA			<b>3,185,183</b>	<b>14.1%</b>	<b>1,897,917</b>	<b>% of 1990 CO<sub>2</sub></b>			
20				2010	Tons CO <sub>2</sub>	<b>12,309,288</b>	<b>177.2%</b>			
21										
22						1990 Short Tons CO <sub>2</sub>	6,946,064			
23										
24	<b>See UTC Docket UE-131723, General Order R-581, Page 7, Paragraph 19.</b>									
25							1990			
26							Short Tons CO <sub>2</sub>			
27						Avista	1,131,957			
28						Pacific Power	2,399,078			
29						Puget Sound Energy	6,946,064			

## Known Resources Serving WA Customers

2010

Resource	WA MWh	lbs CO <sub>2</sub> /MWh	Short Tons CO <sub>2</sub>
Electron	88,025	-	-
Lower Baker	366,338	-	-
Snoqualmie Falls #1	13,051	-	-
Snoqualmie Falls #2	101,677	-	-
Upper Baker	360,505	-	-
Colstrip 1 & 2	2,293,375	2,459	2,820,139
Colstrip 3 & 4	2,904,730	2,254	3,273,215
Encogen	197,772	1,048	103,636
Freddie #1	418,446	852	178,267
Goldendale	1,541,236	802	618,132
Mint Farm	1,441,302	853	614,819
Sumas	410,626	1,004	206,118
Crystal Mountain	114	2,093	119
Fredonia	11,885	1,779	10,571
Fredonia 3 & 4	62,288	1,251	38,956
Fredrickson 1 & 2	10,272	2,013	10,337
Hopkins Ridge (W184)	381,271	-	-
Whitehorn 2&3	8,367	1,870	7,824
Wild Horse (W183)	609,655	-	-
BC Hydro (Point Roberts)	20,921	843	8,814
Book Outs - EITF 03-11	(753,803)	-	-
BPA	7,000	-	-
BPA Firm - WNP#3 Exchange	406,710	843	171,343
Chelan PUD - Rock Island Syst #2	1,213,235	-	-
Chelan PUD - Rocky Reach	1,914,094	-	-
Credit Suisse Energy, LLC	107,950	843	45,478
Douglas PUD - Wells Project	871,104	-	-
Farm Power Lynden LLC	204	-	-
Farm Power Rexville LLC	4,874	-	-
Grant PUD - Priest Rapids Project	331,731	-	-
Klondike Wind Power III	120,632	-	-
NWestern Energy(MPC) Firm Contract	788,313	2,157	850,106
Powerex Corp.	179,999	843	75,832
Qualco Energy	3,520	-	-
Sempra Energy Trading	547,795	843	230,780
Shell Energy (Coral Pwr)	330,050	843	139,047
Snohomish PUD Conservation	14,464	843	6,094
VanderHaak Dairy Digester	2,552	-	-
WASCO Hydro	40,782	-	-
Hutchinson Creek	1,107	-	-
Koma Kulshan Associates	42,708	-	-
March Point Cogen. - 1 & 2	1,081,243	713	385,211
Nooksack	25,922	-	-

Port Townsend Paper Co.	2,886	1,034	1,492
Spokane MSW	141,480	4,609	326,048
Sygitowicz Creek	1,228	-	-
Tenaska	652,723	885	288,992
Twin Falls Hydro	73,498	-	-
Weeks Falls	13,234	-	-
	<u>19,409,091</u>		<u>10,411,371</u>

## Unknown Resources For WA Customers

2010

[WA Dept. of Co](#)


Resource	2010		
	WA MWh	Fuel Mix lbs CO <sub>2</sub> /MWh	Short Tons CO <sub>2</sub>
Avista Corp. WWP Division	165,695	1192	98,730
Barclays Bank Plc	138,700	1192	82,646
Black Hills Power	1,224	1192	729
BNP Paribas Energy Trading	15,600	1192	9,295
Book Outs - EITF 03-11	(3,094,185)	1192	(1,843,695)
BP Energy Co.	78,616	1192	46,844
BPA	206,160	1192	122,842
Burbank, City of	59,686	1192	35,564
Cargill Power Markets	183,821	1192	109,531
Chelan County PUD #1	15,633	1192	9,315
Citigroup Energy Inc	775,756	1192	462,241
Clatskanie PUD	25,594	1192	15,250
Conoco, Inc.	82,208	1192	48,984
Constellation Power Source, Inc.	95,234	1192	56,746
CP Energy Marketing (Epcor)	10,876	1192	6,481
DB Energy Trading LLC	117,600	1192	70,073
Douglas County PUD #1	184,451	1192	109,907
Eagle Energy Partners	31	1192	18
EDF Trading NA LLC	320,131	1192	190,753
Endure Energy LLC	17,600	1192	10,487
ENMAX Energy Marketing, Inc.	430	1192	256
Eugene Water & Electric	63,929	1192	38,093
Fortis Energy Marketing & Trading	4,000	1192	2,383
Grant County PUD #2	20,495	1192	12,212
Iberdrola Renewables (PPM Energy)	682,132	1192	406,454
Idaho Power Company	17,382	1192	10,357
J. Aron & Company	32,200	1192	19,187
JP Morgan Ventures Energy	136,924	1192	81,587
Merrill Lynch Commodities	55,600	1192	33,130
Modesto Irrigation District	45	1192	27
Morgan Stanley CG	1,135,590	1192	676,651
NextEra Energy Power Marketing	20,186	1192	12,028
Noble Americas Energy Solutions	24,200	1192	14,420
NorthPoint Energy Solutions, Inc.	4,037	1192	2,405
Northwestern Energy	2,854	1192	1,701
Occidental Power Services	30,400	1192	18,114
Okanogan PUD	2,374	1192	1,415
Pacific Northwest Generatin Coop.	87,811	1192	52,323
Pacific Summit Energy LLC	46,767	1192	27,866
Pacificorp	80,243	1192	47,813
Portland General Electric	292,936	1192	174,548
Powerex Corp.	300,036	1192	178,779
Public Service of Colorado	6,500	1192	3,873



Rainbow Energy Marketing	98,150	1192	58,483
Redding, City of	173	1192	103
Sacramento Municipal	5,475	1192	3,262
San Diego Gas & Electric	684	1192	408
Seattle City Light Marketing	249,821	1192	148,858
Sempra Energy Trading	995,085	1192	592,930
Shell Energy (Coral Pwr)	355,579	1192	211,875
Sierra Pacific Power	1,600	1192	953
Snohomish County PUD #1	45,702	1192	27,232
Southern Cal - Edison	13,647	1192	8,132
Tacoma Power	47,836	1192	28,503
Talen Energy (PPL Energy Plus)	147,357	1192	87,804
Tenaska	1,038	1192	619
The Energy Authority	78,028	1192	46,494
TransAlta Energy Marketing	1,107,783	1192	660,082
TransCanada Energy Sales Ltd	8,791	1192	5,238
Turlock Irrigation District	52,383	1192	31,213
Western Area Power Association	20	1192	12
Black Creek Hydro	11,424	1192	6,807
BPA	65,580	1192	39,076
Pacific Gas & Elec - Exchange	412,908	1192	246,035
TransAlta Energy Marketing	1,533,400	1192	913,689
Black Creek Hydro	(10,438)	1192	(6,220)
BPA	(57,475)	1192	(34,247)
Deviation	20,831	1192	12,413
Pacific Gas & Elec - Exchange	(413,000)	1192	(246,089)
TransAlta Energy Marketing	(1,536,249)	1192	(915,387)
Avista Corp. WWP Division	(27,014)	1192	(16,097)
Barclays Bank Plc	(40,109)	1192	(23,899)
Black Hills Power	(2,465)	1192	(1,469)
BNP Paribas Energy Trading	(29,925)	1192	(17,831)
Book Outs - EITF 03-11	3,847,988	1192	2,292,855
BP Energy Co.	(259,544)	1192	(154,651)
BPA	(159,865)	1192	(95,257)
British Columbia Transmission Corp	(49)	1192	(29)
Burbank, City of	(530)	1192	(316)
Cargill Power Markets	(261,663)	1192	(155,914)
Chelan County PUD #1	(5,161)	1192	(3,075)
Citigroup Energy Inc	(767,741)	1192	(457,465)
Clatskanie PUD	(10,025)	1192	(5,973)
Conoco, Inc.	(111,624)	1192	(66,512)
Constellation Power Source, Inc.	(42,662)	1192	(25,421)
CP Energy Marketing (Epcor)	(54,095)	1192	(32,233)
DB Energy Trading LLC	(150,800)	1192	(89,855)
Douglas County PUD #1	(1,065)	1192	(635)
Eagle Energy Partners	(831)	1192	(495)
EDF Trading NA LLC	(58,348)	1192	(34,767)

Endure Energy LLC	(1,200)	1192	(715)
ENMAX Energy Marketing, Inc.	(1,808)	1192	(1,077)
Eugene Water & Electric	(14,553)	1192	(8,672)
Fortis Energy Marketing & Trading	(12,000)	1192	(7,150)
Grant County PUD #2	(45,909)	1192	(27,355)
Iberdrola Renewables (PPM Energy)	(442,218)	1192	(263,499)
Idaho Power Company	(60,759)	1192	(36,204)
J. Aron & Company	(800)	1192	(477)
JP Morgan Ventures Energy	(92,601)	1192	(55,177)
Merrill Lynch Commodities	(75,385)	1192	(44,919)
Modesto Irrigation District	(10)	1192	(6)
Morgan Stanley CG	(454,431)	1192	(270,776)
N. California Power Agency	(356)	1192	(212)
Natur Ener USA	(2)	1192	(1)
NextEra Energy Power Marketing	(294)	1192	(175)
NorthPoint Energy Solutions, Inc.	(10,173)	1192	(6,062)
Northwestern Energy	(48,784)	1192	(29,068)
Okanogan PUD	(175)	1192	(104)
Pacific Northwest Generatin Coop.	(4,755)	1192	(2,833)
Pacific Summit Energy LLC	(111,596)	1192	(66,495)
Pacificorp	(167,918)	1192	(100,055)
Portland General Electric	(68,889)	1192	(41,048)
Powerex Corp.	(330,673)	1192	(197,034)
Public Service of Colorado	(4,400)	1192	(2,622)
Rainbow Energy Marketing	(46,883)	1192	(27,936)
Redding, City of	(463)	1192	(276)
Sacramento Municipal	(4,178)	1192	(2,489)
San Diego Gas & Electric	(10,399)	1192	(6,196)
Seattle City Light Marketing	(24,056)	1192	(14,334)
Sempra Energy Trading	(112,120)	1192	(66,808)
Shell Energy (Coral Pwr)	(449,454)	1192	(267,811)
Sierra Pacific Power	(2,937)	1192	(1,750)
Snohomish County PUD #1	(6,352)	1192	(3,785)
Southern Cal - Edison	(1,236,986)	1192	(737,068)
Tacoma Power	(2,132)	1192	(1,270)
Talen Energy (PPL Energy Plus)	(176,278)	1192	(105,037)
The Energy Authority	(8,119)	1192	(4,838)
TransAlta Energy Marketing	(318,081)	1192	(189,531)
TransCanada Energy Sales Ltd	(9,650)	1192	(5,750)
Turlock Irrigation District	(5,147)	1192	(3,067)
	3,185,183		1,897,917

[Commerce Fuel Mix Report](#) = 1,192 lbs CO<sub>2</sub> per MWh

For Year	2010	
----------	------	---

	A	B	C	D	E	F	G	H	I
1	<b>Summary Energy and Emissions Intensity Report</b>								
2									
3		Utility :	Puget Sound Energy						
4	Reporting for year :	2009	<b>MWh per Capita</b>						
5	Population Served :	2,360,348	<b>9.28</b>						
6									
7	<i>Energy Intensity Metrics</i>								
8						Customer	<b>MWh per</b>		
9				MWh at Meter	MWh Proportion	Count	<b>Customer</b>		
10	Residential Customers			11,163,371	51.0%	947,299	<b>11.8</b>		
11	Commercial Customers			9,584,670	43.8%	121,817	<b>78.7</b>		
12	Industrial Customers			1,148,060	5.2%				
13	Total Load Served			21,896,101					
14									
15	<i>Emissions Intensity Metrics</i>								
16					Percent of	<b>Short</b>			
17				Busbar MWh	Total Load	<b>Tons CO<sub>2</sub></b>			
18	Known Resources Serving WA			19,034,284	81.2%	9,694,556			
19	Unknown Resources Serving WA			<b>4,408,167</b>	<b>18.8%</b>	<b>2,465,915</b>	<b>% of 1990 CO<sub>2</sub></b>		
20				2009	Tons CO <sub>2</sub>	<b>12,160,471</b>	<b>175.1%</b>		
21									
22						1990 Short Tons CO <sub>2</sub>	6,946,064		
23									
24	<b>See UTC Docket UE-131723, General Order R-581, Page 7, Paragraph 19.</b>								
25							1990		
26							Short Tons CO <sub>2</sub>		
27						Avista	1,131,957		
28						Pacific Power	2,399,078		
29						Puget Sound Energy	6,946,064		

## Known Resources Serving WA Customers

2009

Resource	WA MWh	lbs CO <sub>2</sub> /MWh	Short Tons CO <sub>2</sub>
Electron	90,894	-	-
Lower Baker	344,847	-	-
Snoqualmie Falls #1	62,769	-	-
Snoqualmie Falls #2	151,915	-	-
Upper Baker	337,354	-	-
Colstrip 1 & 2	2,310,597	2,654	3,066,301
Colstrip 3 & 4	2,140,507	2,551	2,730,520
Encogen	384,510	1,108	213,081
Goldendale	1,368,799	888	607,905
Mint Farm	1,426,828	914	651,926
Sumas	539,532	1,080	291,289
Crystal Mountain	419	1,824	383
Freddie #1	454,203	938	213,104
Fredonia	64,045	1,569	50,257
Fredonia 3 & 4	89,229	1,397	62,317
Fredrickson 1 & 2	18,586	1,770	16,449
Hopkins Ridge (W184)	381,219	-	-
Whitehorn 2&3	16,995	1,739	14,777
Wild Horse (W183)	565,275	-	-
BC Hydro (Point Roberts)	22,271	819	9,122
BPA	7,014	-	-
BPA Firm - WNP#3 Exchange	393,717	819	161,268
Chelan PUD - Rock Island Syst #2	1,263,318	-	-
Chelan PUD - Rocky Reach	2,007,333	-	-
Douglas PUD - Wells Project	959,848	-	-
Farm Power Rexville LLC	1,523	-	-
Grant PUD - Priest Rapids	234,580	-	-
Grant PUD - Priest Rapids Project	82,584	-	-
Grant PUD - Wanapum	313,799	-	-
Klondike Wind Power III	132,569	-	-
NWestern Energy(MPC) Firm Contract	591,921	2,421	716,565
Qualco Energy	3,036	-	-
Snohomish PUD Conservation	89,728	819	36,753
VanderHaak Dairy Digester	2,346	-	-
WASCO Hydro	39,992	-	-
Koma Kulshan Associates	36,065	-	-
March Point Cogen. - 1 & 2	995,858	711	354,048
Nooksack	23,210	-	-
Port Townsend Paper Co.	1,817	999	907
Puyallup Energy Recovery Company	344	-	-
Spokane MSW	133,987	1,701	113,963
Sygitowicz Creek	1,018	-	-
Tenaska	866,455	885	383,621

Twin Falls Hydro	69,082	-	-
Weeks Falls	12,348	-	-
	<u>19,034,284</u>		<u>9,694,556</u>

## Unknown Resources For WA Customers

2009

[WA Dept. of Co](#)

Resource	WA MWh	Fuel Mix lbs CO <sub>2</sub> /MWh	Short Tons CO <sub>2</sub>
Avista Corp. WWP Division	165,618	1119	92,646
Barclays Bank Plc	16,746	1119	9,368
Black Hills Power	3,800	1119	2,126
Book Outs - EITF 03-11	(3,599,695)	1119	(2,013,658)
BP Energy Co.	37,192	1119	20,805
BPA	334,870	1119	187,325
Burbank, City of	175	1119	98
Cargill Power Markets	380,859	1119	213,051
Chelan County PUD #1	29,209	1119	16,339
Citigroup Energy Inc	338,327	1119	189,259
Clatskanie PUD	50,919	1119	28,484
Conoco, Inc.	73,722	1119	41,240
Constellation Power Source, Inc.	562,741	1119	314,796
CP Energy Marketing (Epcor)	28,908	1119	16,171
Credit Suisse Energy, LLC	445,000	1119	248,932
DB Energy Trading LLC	147,600	1119	82,567
Douglas County PUD #1	187,749	1119	105,026
Eagle Energy Partners	106,240	1119	59,430
EDF Trading NA LLC	31,850	1119	17,817
Endure Energy LLC	30,600	1119	17,118
ENMAX Energy Marketing, Inc.	2,456	1119	1,374
Eugene Water & Electric	89,317	1119	49,964
Fortis Energy Marketing & Trading	133,941	1119	74,926
Grant County PUD #2	53,441	1119	29,895
Hinson Power Company	800	1119	448
Iberdrola Renewables (PPM Energy)	882,331	1119	493,573
Idaho Falls Power	37,654	1119	21,064
Idaho Power Company	92,731	1119	51,873
Integritys Energy Services, Inc	1,800	1119	1,007
J. Aron & Company	14,000	1119	7,832
JP Morgan Ventures Energy	143,436	1119	80,238
Los Angeles Dept. Water & Power	50	1119	28
Merrill Lynch Commodities	400	1119	224
Modesto Irrigation District	90	1119	50
Morgan Stanley CG	992,212	1119	555,040
N. California Power Agency	323	1119	181
Noble Americas Energy Solutions	3,400	1119	1,902
NorthPoint Energy Solutions, Inc.	6,592	1119	3,688
Northwestern Energy	7,969	1119	4,458
Occidental Power Services	31,600	1119	17,677
Okanogan PUD	3,810	1119	2,131
Pacific Northwest Generatin Coop.	216,587	1119	121,158
Pacific Summit Energy LLC	68,094	1119	38,092

Pacificorp	185,612	1119	103,831
Portland General Electric	208,659	1119	116,723
Powerex Corp.	316,076	1119	176,812
Public Service of Colorado	3,600	1119	2,014
Rainbow Energy Marketing	222,154	1119	124,272
Redding, City of	496	1119	277
Sacramento Municipal	6,590	1119	3,686
Seattle City Light Marketing	211,502	1119	118,314
Sempra Energy Trading	2,267,825	1119	1,268,614
Shell Energy (Coral Pwr)	485,252	1119	271,448
Sierra Pacific Power	25	1119	14
Snohomish County PUD #1	57,116	1119	31,951
Southern Cal - Edison	7,805	1119	4,366
Tacoma Power	75,813	1119	42,410
Talen Energy (PPL Energy Plus)	407,444	1119	227,923
Tenaska	2,895	1119	1,619
The Energy Authority	122,625	1119	68,596
TransAlta Energy Marketing	278,480	1119	155,781
TransCanada Energy Marketing	7,326	1119	4,098
TransCanada Energy Sales Ltd	9,898	1119	5,537
Turlock Irrigation District	850	1119	475
Western Area Power Association	360	1119	201
Black Creek Hydro	6,088	1119	3,406
BPA	76,504	1119	42,796
Deviation	(23,318)	1119	(13,044)
Morgan Stanley CG	20,000	1119	11,188
Pacific Gas & Elec - Exchange	413,000	1119	231,031
Powerex Corp.	38,000	1119	21,257
TransAlta Energy Marketing	1,533,600	1119	857,891
Black Creek Hydro	(4,172)	1119	(2,334)
BPA	(81,545)	1119	(45,616)
Deviation	(43,829)	1119	(24,518)
Morgan Stanley CG	(17,200)	1119	(9,622)
Pacific Gas & Elec - Exchange	(413,000)	1119	(231,031)
Powerex Corp.	(68,795)	1119	(38,484)
TransAlta Energy Marketing	(1,533,600)	1119	(857,891)
Avista Corp. WWP Division	(39,571)	1119	(22,136)
Barclays Bank Plc	(33,513)	1119	(18,747)
Black Hills Power	(1,600)	1119	(895)
Book Outs - EITF 03-11	3,599,695	1119	2,013,658
BP Energy Co.	(152,945)	1119	(85,557)
BPA	(254,156)	1119	(142,174)
British Columbia Transmission Corp	(35)	1119	(20)
Cargill Power Markets	(240,421)	1119	(134,491)
Chelan County PUD #1	(3,890)	1119	(2,176)
Citigroup Energy Inc	(635,716)	1119	(355,618)
Clatskanie PUD	(15,633)	1119	(8,745)



Conoco, Inc.	(111,736)	1119	(62,505)
Constellation Power Source, Inc.	(61,701)	1119	(34,515)
CP Energy Marketing (Epcor)	(605)	1119	(338)
Credit Suisse Energy, LLC	(8,444)	1119	(4,724)
DB Energy Trading LLC	(182,400)	1119	(102,034)
Douglas County PUD #1	(450)	1119	(252)
Eagle Energy Partners	(10,242)	1119	(5,729)
ENMAX Energy Marketing, Inc.	(6,394)	1119	(3,577)
Eugene Water & Electric	(19,889)	1119	(11,126)
Fortis Energy Marketing & Trading	(110,920)	1119	(62,048)
Grant County PUD #2	(22,571)	1119	(12,626)
Hinson Power Company	(3,950)	1119	(2,210)
Iberdrola Renewables (PPM Energy)	(485,458)	1119	(271,564)
Idaho Power Company	(31,952)	1119	(17,874)
Integrays Energy Services, Inc	(4,800)	1119	(2,685)
J. Aron & Company	(43,800)	1119	(24,502)
JP Morgan Ventures Energy	(162,587)	1119	(90,951)
Los Angeles Dept. Water & Power	(400)	1119	(224)
Modesto Irrigation District	(2,329)	1119	(1,303)
Morgan Stanley CG	(660,584)	1119	(369,529)
N. California Power Agency	(558)	1119	(312)
Natur Ener USA	(9)	1119	(5)
NorthPoint Energy Solutions, Inc.	(40,364)	1119	(22,579)
Northwestern Energy	(22,137)	1119	(12,383)
Occidental Power Services	(33,200)	1119	(18,572)
Okanogan PUD	(180)	1119	(101)
Pacific Northwest Generatin Coop.	(15,026)	1119	(8,405)
Pacific Summit Energy LLC	(141,740)	1119	(79,289)
Pacificorp	(175,631)	1119	(98,247)
PG&E Energy Trading	(1,400)	1119	(783)
Portland General Electric	(88,446)	1119	(49,476)
Powerex Corp.	(547,840)	1119	(306,460)
Public Service of Colorado	(6,800)	1119	(3,804)
Rainbow Energy Marketing	(57,994)	1119	(32,442)
Redding, City of	(441)	1119	(247)
Sacramento Municipal	(11,919)	1119	(6,667)
San Diego Gas & Electric	(1,032)	1119	(577)
Seattle City Light Marketing	(33,841)	1119	(18,931)
Sempra Energy Trading	(272,319)	1119	(152,334)
Shell Energy (Coral Pwr)	(446,690)	1119	(249,877)
Sierra Pacific Power	(3,532)	1119	(1,976)
Silicon Valley Pwr - Santa Clara	(35)	1119	(20)
Snohomish County PUD #1	(10,967)	1119	(6,135)
Southern Cal - Edison	(502,250)	1119	(280,957)
Tacoma Power	(2,294)	1119	(1,283)
Talen Energy (PPL Energy Plus)	(71,305)	1119	(39,888)
The Energy Authority	(14,698)	1119	(8,222)

TransAlta Energy Marketing	(297,158)	1119	(166,229)
TransCanada Energy Marketing	(4,687)	1119	(2,622)
TransCanada Energy Sales Ltd	(10,850)	1119	(6,069)
Turlock Irrigation District	(3,013)	1119	(1,685)
Western Area Power Association	(80)	1119	(45)
	4,408,167		2,465,915

[Commerce Fuel Mix Report](#) =

1,119

lbs CO<sub>2</sub> per MWh

For Year	2009	
----------	------	---

	A	B	C	D	E	F	G	H	I
1	<b>Summary Energy and Emissions Intensity Report</b>								
2									
3		Utility :	Puget Sound Energy						
4	Reporting for year :	2008	<b>MWh per Capita</b>						
5	Population Served :	2,340,766	<b>9.33</b>						
6									
7	<i>Energy Intensity Metrics</i>								
8						Customer	<b>MWh per</b>		
9				MWh at Meter	MWh Proportion	Count	<b>Customer</b>		
10	Residential Customers			11,082,670	50.7%	939,440	<b>11.8</b>		
11	Commercial Customers			9,453,940	43.3%	120,743	<b>78.3</b>		
12	Industrial Customers			1,304,662	6.0%				
13	Total Load Served			21,841,272					
14									
15	<i>Emissions Intensity Metrics</i>								
16					Percent of	<b>Short</b>			
17				Busbar MWh	Total Load	<b>Tons CO<sub>2</sub></b>			
18	Known Resources Serving WA			18,130,450	76.9%	8,179,190			
19	Unknown Resources Serving WA			<b>5,441,422</b>	<b>23.1%</b>	<b>2,787,287</b>	<b>% of 1990 CO<sub>2</sub></b>		
20				2008	Tons CO <sub>2</sub>	<b>10,966,476</b>	<b>157.9%</b>		
21									
22						1990 Short Tons CO <sub>2</sub>	6,946,064		
23									
24	<i>See UTC Docket UE-131723, General Order R-581, Page 7, Paragraph 19.</i>								
25							1990		
26							Short Tons CO <sub>2</sub>		
27						Avista	1,131,957		
28						Pacific Power	2,399,078		
29						Puget Sound Energy	6,946,064		

## Known Resources Serving WA Customers

2008

Resource	WA MWh	lbs CO <sub>2</sub> /MWh	Short Tons CO <sub>2</sub>
Electron	96,154	-	-
Lower Baker	321,027	-	-
Snoqualmie Falls #1	59,492	-	-
Snoqualmie Falls #2	181,143	-	-
Upper Baker	317,108	-	-
Colstrip 1 & 2	2,124,142	2,267	2,408,203
Colstrip 3 & 4	2,943,303	2,143	3,153,532
Encogen	98,884	907	44,831
Goldendale	1,368,284	686	469,580
Sumas	218,930	798	87,328
Crystal Mountain	361	1,689	305
Freddie #1	545,866	350	95,622
Fredonia	7,453	1,941	7,234
Fredonia 3 & 4	9,931	1,159	5,755
Fredrickson 1 & 2	15,741	2,256	17,756
Hopkins Ridge (W184)	425,322	-	-
Whitehorn 2&3	4,135	1,772	3,663
Wild Horse (W183)	682,097	-	-
BC Hydro (Point Roberts)	22,695	845	9,592
BPA	7,063	-	-
BPA Firm - WNP#3 Exchange	374,999	845	158,490
Chelan PUD - Rock Island Syst #2	1,327,464	-	-
Chelan PUD - Rocky Reach	2,144,307	-	-
Douglas PUD - Wells Project	1,045,492	-	-
Grant PUD - Priest Rapids	464,474	-	-
Grant PUD - Wanapum	456,458	-	-
Klondike Wind Power III	148,311	-	-
NWestern Energy(MPC) Firm Contract	795,395	2,016	801,890
Snohomish PUD Conservation	89,984	845	38,031
VanderHaak Dairy Digester	2,232	-	-
WASCO Hydro	41,552	-	-
Hutchinson Creek	2,058	-	-
Koma Kulshan Associates	36,092	-	-
March Point Cogen. - 1 & 2	1,022,961	712	364,270
Nooksack	19,741	-	-
Port Townsend Paper Co.	2,366	2,524	2,986
Puyallup Energy Recovery Company	1,747	-	-
Spokane MSW	128,135	4,609	295,317
Sygitowicz Creek	652	-	-
Tenaska	491,579	874	214,806
Twin Falls Hydro	73,323	-	-
Weeks Falls	11,994	-	-

--	--	--	--

18,130,450

8,179,190

## Unknown Resources For WA Customers

2008

[WA Dept. of Co](#)

Resource	WA MWh	Fuel Mix lbs CO <sub>2</sub> /MWh	Short Tons CO <sub>2</sub>
Avista Corp. WWP Division	228,885	1024	117,243
Barclays Bank Plc	54,188	1024	27,757
Bear Energy LP	82,433	1024	42,225
Benton County PUD	5,473	1024	2,803
Black Hills Power	4,193	1024	2,148
Book Outs - EITF 03-11	(1,458,513)	1024	(747,101)
BP Energy Co.	8,471	1024	4,339
BPA	287,771	1024	147,406
Burbank, City of	1,205	1024	617
Cargill Power Markets	156,466	1024	80,147
Chelan County PUD #1	60,076	1024	30,773
Citigroup Energy Inc	176,981	1024	90,656
Clatskanie PUD	29,829	1024	15,279
Conoco, Inc.	260,284	1024	133,327
Constellation Power Source, Inc.	447,128	1024	229,035
CP Energy Marketing (Epcor)	30,330	1024	15,536
Credit Suisse Energy, LLC	28,450	1024	14,573
DB Energy Trading LLC	43,073	1024	22,063
Douglas County PUD #1	239,272	1024	122,563
ENMAX Energy Marketing, Inc.	868	1024	445
Eugene Water & Electric	123,300	1024	63,159
Fortis Energy Marketing & Trading	145,965	1024	74,768
Franklin County PUD #1	4,960	1024	2,541
Grant County PUD #2	40,063	1024	20,522
Grays Harbor PUD #1	10,385	1024	5,320
Highland Energy LLC	14,297	1024	7,323
Hinson Power Company	2,000	1024	1,024
Iberdrola Renewables (PPM Energy)	448,401	1024	229,687
Idaho Power Company	55,219	1024	28,285
Integrus Energy Services, Inc	2,400	1024	1,229
J. Aron & Company	36,400	1024	18,645
JP Morgan Ventures Energy	96,579	1024	49,471
Lehman Bros Commodity Services	14,444	1024	7,399
Los Angeles Dept. Water & Power	480	1024	246
Louis Dreyfus Energy	285	1024	146
Modesto Irrigation District	430	1024	220
Morgan Stanley CG	1,248,783	1024	639,670
N. California Power Agency	439	1024	225
NorthPoint Energy Solutions, Inc.	8,475	1024	4,341
Northwestern Energy	27,923	1024	14,303
Occidental Power Services	200	1024	102
Okanogan PUD	3,660	1024	1,875
Pacific Northwest Generatin Coop.	156,918	1024	80,379


Pacific Summit Energy LLC	82,391	1024	42,204
Pacificorp	290,962	1024	149,041
PG&E Energy Trading	506	1024	259
Portland General Electric	106,316	1024	54,459
Powerex Corp.	352,187	1024	180,402
Public Service of Colorado	9,806	1024	5,023
Rainbow Energy Marketing	82,452	1024	42,235
Redding, City of	1,284	1024	658
Sacramento Municipal	2,095	1024	1,073
San Diego Gas & Electric	1,032	1024	529
Seattle City Light Marketing	113,723	1024	58,253
Sempra Energy Trading	894,356	1024	458,120
Shell Energy (Coral Pwr)	940,286	1024	481,647
Sierra Pacific Power	7,828	1024	4,010
Silicon Valley Pwr - Santa Clara	1,820	1024	932
Snohomish County PUD #1	76,572	1024	39,223
Southern Cal - Edison	6,100	1024	3,125
SUEZ Energy Marketing (Tractebel)	24,295	1024	12,445
Tacoma Power	100,697	1024	51,581
Talen Energy (PPL Energy Plus)	103,775	1024	53,157
Tenaska	114,114	1024	58,453
The Energy Authority	54,630	1024	27,983
TransAlta Energy Marketing	583,432	1024	298,854
TransCanada Energy Marketing	11,288	1024	5,782
TransCanada Power Corp.	5,120	1024	2,623
Turlock Irrigation District	6,176	1024	3,164
UBS AG	32,800	1024	16,801
Western Area Power Association	796	1024	408
Black Creek Hydro	4,649	1024	2,381
BPA	97,704	1024	50,047
Constellation Power Source, Inc.	70,000	1024	35,856
Deviation	(28,008)	1024	(14,347)
Pacific Gas & Elec - Exchange	413,116	1024	211,612
Powerex - Exchange	25,607	1024	13,117
Seattle City Light Marketing	18,800	1024	9,630
TransAlta Energy Marketing	1,099,250	1024	563,074
Black Creek Hydro	(4,708)	1024	(2,412)
BPA	(99,125)	1024	(50,775)
Constellation Power Source, Inc.	(70,000)	1024	(35,856)
Pacific Gas & Elec - Exchange	(413,016)	1024	(211,561)
Powerex - Exchange	(25,607)	1024	(13,117)
Seattle City Light Marketing	(18,800)	1024	(9,630)
TransAlta Energy Marketing	(1,099,250)	1024	(563,074)
Arizona Public Service	(15)	1024	(8)
Avista Corp. WWP Division	(41,915)	1024	(21,470)
Barclays Bank Plc	(32,027)	1024	(16,405)
Bear Energy LP	(43,931)	1024	(22,503)



Benton County PUD	(1,335)	1024	(684)
Black Hills Power	(2,123)	1024	(1,087)
Book Outs - EITF 03-11	1,458,513	1024	747,101
BP Energy Co.	(28,512)	1024	(14,605)
BPA	(138,425)	1024	(70,906)
British Columbia Transmission Corp	(23)	1024	(12)
Burbank, City of	(1,085)	1024	(556)
Cargill Power Markets	(177,806)	1024	(91,078)
Chelan County PUD #1	(7,327)	1024	(3,753)
Citigroup Energy Inc	(232,727)	1024	(119,211)
Clatskanie PUD	(17,042)	1024	(8,730)
Conoco, Inc.	(8,142)	1024	(4,171)
Constellation Power Source, Inc.	(86,673)	1024	(44,397)
CP Energy Marketing (Epcor)	(7,691)	1024	(3,940)
Credit Suisse Energy, LLC	(1,600)	1024	(820)
DB Energy Trading LLC	(53,578)	1024	(27,445)
Douglas County PUD #1	(461)	1024	(236)
ENMAX Energy Marketing, Inc.	(2,690)	1024	(1,378)
Eugene Water & Electric	(38,663)	1024	(19,805)
Fortis Energy Marketing & Trading	(131,275)	1024	(67,244)
Franklin County PUD #1	(690)	1024	(353)
Grant County PUD #2	(13,801)	1024	(7,069)
Grays Harbor PUD #1	(937)	1024	(480)
Highland Energy LLC	(14,406)	1024	(7,379)
Hinson Power Company	(10,318)	1024	(5,285)
Iberdrola Renewables (PPM Energy)	(97,329)	1024	(49,855)
Idaho Power Company	(22,104)	1024	(11,322)
Integrus Energy Services, Inc	(3,600)	1024	(1,844)
J. Aron & Company	(20,700)	1024	(10,603)
JP Morgan Ventures Energy	(98,388)	1024	(50,398)
Lehman Bros Commodity Services	(5,520)	1024	(2,828)
Louis Dreyfus Energy	(1,113)	1024	(570)
Merrill Lynch Commodities	(5,200)	1024	(2,664)
Modesto Irrigation District	(180)	1024	(92)
Morgan Stanley CG	(491,984)	1024	(252,011)
N. California Power Agency	(260)	1024	(133)
NorthPoint Energy Solutions, Inc.	(5,792)	1024	(2,967)
Northwestern Energy	(13,384)	1024	(6,856)
Okanogan PUD	(455)	1024	(233)
Pacific Northwest Generatin Coop.	(11,857)	1024	(6,074)
Pacific Summit Energy LLC	(80,207)	1024	(41,085)
Pacificorp	(122,205)	1024	(62,598)
PG&E Energy Trading	(800)	1024	(410)
Portland General Electric	(37,229)	1024	(19,070)
Powerex Corp.	(317,422)	1024	(162,595)
Public Service of Colorado	(15,435)	1024	(7,906)
Rainbow Energy Marketing	(74,196)	1024	(38,006)

Redding, City of	(1,257)	1024	(644)
Sacramento Municipal	(2,305)	1024	(1,181)
San Diego Gas & Electric	(30,998)	1024	(15,878)
Seattle City Light Marketing	(51,896)	1024	(26,583)
Sempra Energy Trading	(38,348)	1024	(19,643)
Shell Energy (Coral Pwr)	(158,471)	1024	(81,174)
Sierra Pacific Power	(17,217)	1024	(8,819)
Silicon Valley Pwr - Santa Clara	(166)	1024	(85)
Snohomish County PUD #1	(22,679)	1024	(11,617)
Southern Cal - Edison	(4,250)	1024	(2,177)
SUEZ Energy Marketing (Tractebel)	(15,700)	1024	(8,042)
Synergy Power Marketing	(2,578)	1024	(1,321)
Tacoma Power	(3,208)	1024	(1,643)
Talen Energy (PPL Energy Plus)	(22,392)	1024	(11,470)
The Energy Authority	(11,297)	1024	(5,787)
TransAlta Energy Marketing	(200,683)	1024	(102,797)
TransCanada Energy Marketing	(14,678)	1024	(7,519)
Turlock Irrigation District	(2,835)	1024	(1,452)
UBS AG	(1,600)	1024	(820)
Western Area Power Association	(275)	1024	(141)
	5,441,422		2,787,287

[Commerce Fuel Mix Report](#) = 1,024 lbs CO<sub>2</sub> per MWh

For Year	2008	
----------	------	---

	A	B	C	D	E	F	G	H	I
1	<b>Summary Energy and Emissions Intensity Report</b>								
2									
3		Utility :	Puget Sound Energy						
4	Reporting for year :	2007	<b>MWh per Capita</b>						
5	Population Served :	2,307,477	<b>9.34</b>						
6									
7	<i>Energy Intensity Metrics</i>								
8						Customer	<b>MWh per</b>		
9				MWh at Meter	MWh Proportion	Count	<b>Customer</b>		
10	Residential Customers			10,869,347	50.4%	926,080	<b>11.7</b>		
11	Commercial Customers			9,317,624	43.2%	118,533	<b>78.6</b>		
12	Industrial Customers			1,364,264	6.3%				
13	Total Load Served			21,551,235					
14									
15	<i>Emissions Intensity Metrics</i>								
16					Percent of	<b>Short</b>			
17				Busbar MWh	Total Load	<b>Tons CO<sub>2</sub></b>			
18	Known Resources Serving WA			17,976,918	77.5%	9,018,558			
19	Unknown Resources Serving WA			<b>5,220,403</b>	<b>22.5%</b>	<b>3,136,942</b>	<b>% of 1990 CO<sub>2</sub></b>		
20				2007	Tons CO <sub>2</sub>	<b>12,155,500</b>	<b>175.0%</b>		
21									
22						1990 Short Tons CO <sub>2</sub>	6,946,064		
23									
24						<b>See UTC Docket UE-131723, General Order R-581, Page 7, Paragraph 19.</b>			
25							1990		
26							Short Tons CO <sub>2</sub>		
27						Avista	1,131,957		
28						Pacific Power	2,399,078		
29						Puget Sound Energy	6,946,064		

## Known Resources Serving WA Customers

2007

Resource	WA MWh	lbs CO <sub>2</sub> /MWh	Short Tons CO <sub>2</sub>
Electron	88,729	-	-
Lower Baker	436,208	-	-
Snoqualmie Falls #1	52,146	-	-
Snoqualmie Falls #2	176,100	-	-
Upper Baker	401,050	-	-
Colstrip 1 & 2	2,366,043	2,510	2,968,949
Colstrip 3 & 4	2,776,869	2,421	3,360,762
Encogen	182,970	1,128	103,153
Goldendale	636,737	784	249,585
Crystal Mountain	313	1,963	308
Freddie #1	440,914	392	86,407
Fredonia	7,928	1,600	6,341
Fredonia 3 & 4	19,647	1,159	11,390
Fredrickson 1 & 2	8,908	1,325	5,899
Hopkins Ridge (W184)	402,465	-	-
Whitehorn 2&3	13,208	1,471	9,717
Wild Horse (W183)	612,858	-	-
BC Hydro (Point Roberts)	22,373	859	9,607
BPA	6,923	-	-
BPA Firm - WNP#3 Exchange	339,510	859	145,784
Chelan PUD - Rock Island Syst #2	1,279,176	-	-
Chelan PUD - Rocky Reach	2,478,149	-	-
Douglas PUD - Wells Project	1,143,974	-	-
Grant PUD - Priest Rapids	437,351	-	-
Grant PUD - Wanapum	471,766	-	-
Klondike Wind Power III	8,570	-	-
NWestern Energy(MPC) Firm Contract	744,477	2,462	916,276
Snohomish PUD Conservation	89,728	859	38,529
VanderHaak Dairy Digester	2,092	-	-
WASCO Hydro	43,893	-	-
Hutchinson Creek	1,860	-	-
Koma Kulshan Associates	43,644	-	-
March Point Cogen. - 1 & 2	1,025,308	716	367,300
Nooksack	22,964	-	-
Port Townsend Paper Co.	2,611	1,071	1,398
Puyallup Energy Recovery Company	2,757	-	-
Spokane MSW	141,747	4,476	317,244
Sumas Cogeneration	228,957	849	97,162
Sygitowicz Creek	458	-	-
Tenaska	729,134	885	322,748
Twin Falls Hydro	73,012	-	-
Weeks Falls	13,390	-	-

--	--	--	--

17,976,918

9,018,558

## Unknown Resources For WA Customers

2007

[WA Dept. of Co](#)

Resource	WA MWh	Fuel Mix lbs CO <sub>2</sub> /MWh	Short Tons CO <sub>2</sub>
ATCO Power Canada	343	1202	206
Avista Corp. WWP Division	78,344	1202	47,077
Avista Energy	213,884	1202	128,523
Barclays Bank Plc	61,000	1202	36,655
Bear Energy LP	160,006	1202	96,148
Benton County PUD	23,621	1202	14,194
Black Hills Power	4,400	1202	2,644
Book Outs - EITF 03-11	(2,169,507)	1202	(1,303,658)
BP Energy Co.	32,332	1202	19,428
BPA	246,829	1202	148,320
British Columbia Transmission Corp	85	1202	51
Burbank, City of	1,105	1202	664
Cargill Power Markets	87,029	1202	52,296
Chelan County PUD #1	57,329	1202	34,449
Citigroup Energy Inc	186,496	1202	112,066
Clatskanie PUD	17,582	1202	10,565
Conoco, Inc.	46,240	1202	27,786
Constellation Power Source, Inc.	927,668	1202	557,436
CP Energy Marketing (Epcor)	79,114	1202	47,540
Credit Suisse Energy, LLC	153,200	1202	92,058
DB Energy Trading LLC	25,400	1202	15,263
Douglas County PUD #1	299,493	1202	179,965
ENMAX Energy Marketing, Inc.	1,711	1202	1,028
Eugene Water & Electric	94,235	1202	56,626
Fortis Energy Marketing & Trading	93,400	1202	56,124
Franklin County PUD #1	18,589	1202	11,170
Grant County PUD #2	56,689	1202	34,064
Grays Harbor PUD #1	32,287	1202	19,401
Highland Energy LLC	950	1202	571
Hinson Power Company	1,600	1202	961
Iberdrola Renewables (PPM Energy)	297,538	1202	178,791
Idaho Falls Power	42,710	1202	25,664
Idaho Power Company	60,463	1202	36,332
J. Aron & Company	22,050	1202	13,250
JP Morgan Ventures Energy	79,600	1202	47,832
Klamath Falls, City of	139,856	1202	84,040
Lehman Bros Commodity Services	67,050	1202	40,290
Los Angeles Dept. Water & Power	1,425	1202	856
Merrill Lynch Commodities	16,400	1202	9,855
Modesto Irrigation District	2,538	1202	1,525
Morgan Stanley CG	744,517	1202	447,381
N. California Power Agency	521	1202	313
Noble Americas Energy Solutions	2,096	1202	1,259


NorthPoint Energy Solutions, Inc.	6,276	1202	3,771
Northwestern Energy	12,808	1202	7,696
Occidental Power Services	10,803	1202	6,492
Okanogan PUD	4,694	1202	2,821
Pacific Northwest Generatin Coop.	170,767	1202	102,614
Pacific Summit Energy LLC	5,580	1202	3,353
Pacificorp	207,443	1202	124,653
PG&E Energy Trading	7,857	1202	4,721
Pinnacle West Marketing & Trading	21,000	1202	12,619
Portland General Electric	315,978	1202	189,871
Powerex Corp.	287,187	1202	172,571
PP&L Montana, LLC.	61,832	1202	37,155
Public Service of Colorado	18,791	1202	11,292
Rainbow Energy Marketing	181,241	1202	108,908
Redding, City of	1,171	1202	704
Sacramento Municipal	4,925	1202	2,959
San Diego Gas & Electric	3,300	1202	1,983
Seattle City Light Marketing	132,332	1202	79,518
Sempra Energy Trading	934,094	1202	561,297
Shell Energy (Coral Pwr)	700,864	1202	421,149
Sierra Pacific Industries	13,296	1202	7,990
Sierra Pacific Power	16,272	1202	9,778
Silicon Valley Pwr - Santa Clara	80	1202	48
Snohomish County PUD #1	72,772	1202	43,729
Southern Cal - Edison	10,850	1202	6,520
SUEZ Energy Marketing (Tractebel)	106,896	1202	64,234
Tacoma Power	81,554	1202	49,006
Talen Energy (PPL Energy Plus)	11,082	1202	6,659
Tenaska	658	1202	395
The Energy Authority	13,880	1202	8,340
TransAlta Energy Marketing	1,681,755	1202	1,010,567
TransCanada Energy Marketing	9,169	1202	5,510
TransCanada Power Corp.	5,615	1202	3,374
Turlock Irrigation District	8,922	1202	5,361
UBS AG	20,016	1202	12,028
Western Area Power Association	171	1202	103
Williams Power Company	90	1202	54
Avista Energy	31,945	1202	19,196
Black Creek Hydro	2,245	1202	1,349
BPA	82,864	1202	49,793
Cargill Power Markets	28,800	1202	17,306
Deviation	24,866	1202	14,942
Douglas County PUD #1	122	1202	73
Pacific Gas & Elec - Exchange	412,900	1202	248,112
Powerex - Exchange	483,866	1202	290,755
Shell Energy (Coral Pwr)	28,832	1202	17,325
Tacoma Power	30,800	1202	18,508



TransAlta Energy Marketing	602,125	1202	361,817
Avista Energy	(32,120)	1202	(19,301)
Black Creek Hydro	(2,959)	1202	(1,778)
BPA	(83,521)	1202	(50,188)
Cargill Power Markets	(28,800)	1202	(17,306)
Citigroup Energy Inc	(50,000)	1202	(30,045)
Douglas County PUD #1	(122)	1202	(73)
Pacific Gas & Elec - Exchange	(413,001)	1202	(248,172)
Powerex - Exchange	(483,866)	1202	(290,755)
Shell Energy (Coral Pwr)	(28,832)	1202	(17,325)
Tacoma Power	(30,800)	1202	(18,508)
TransAlta Energy Marketing	(552,125)	1202	(331,772)
Avista Corp. WWP Division	(24,864)	1202	(14,941)
Avista Energy	(123,747)	1202	(74,360)
Barclays Bank Plc	(78,600)	1202	(47,231)
Bear Energy LP	(63,113)	1202	(37,925)
Benton County PUD	(5,756)	1202	(3,459)
Black Hills Power	(4,759)	1202	(2,860)
Book Outs - EITF 03-11	2,169,507	1202	1,303,658
BP Energy Co.	(29,896)	1202	(17,965)
BPA	(166,938)	1202	(100,313)
British Columbia Transmission Corp	(144)	1202	(87)
Burbank, City of	(990)	1202	(595)
Cargill Power Markets	(103,403)	1202	(62,135)
Chelan County PUD #1	(1,500)	1202	(901)
Citigroup Energy Inc	(177,691)	1202	(106,775)
Clatskanie PUD	(8,512)	1202	(5,115)
Conoco, Inc.	(27,645)	1202	(16,612)
Constellation Power Source, Inc.	(35,515)	1202	(21,341)
CP Energy Marketing (Epcor)	(46,075)	1202	(27,686)
Credit Suisse Energy, LLC	(32,236)	1202	(19,371)
DB Energy Trading LLC	(5,600)	1202	(3,365)
Douglas County PUD #1	(220)	1202	(132)
ENMAX Energy Marketing, Inc.	(4,053)	1202	(2,435)
Eugene Water & Electric	(20,381)	1202	(12,247)
Fortis Energy Marketing & Trading	(82,563)	1202	(49,612)
Franklin County PUD #1	(1,984)	1202	(1,192)
Grant County PUD #2	(10,136)	1202	(6,091)
Grays Harbor PUD #1	(4,011)	1202	(2,410)
Highland Energy LLC	(50)	1202	(30)
Hinson Power Company	(4,843)	1202	(2,910)
Iberdrola Renewables (PPM Energy)	(168,650)	1202	(101,342)
Idaho Power Company	(47,675)	1202	(28,648)
J. Aron & Company	(35,775)	1202	(21,497)
JP Morgan Ventures Energy	(30,400)	1202	(18,267)
Klamath Falls, City of	(1,172)	1202	(704)
Lehman Bros Commodity Services	(42,162)	1202	(25,335)

Los Angeles Dept. Water & Power	(4,310)	1202	(2,590)
Merrill Lynch Commodities	(20,775)	1202	(12,484)
Modesto Irrigation District	(5,467)	1202	(3,285)
Morgan Stanley CG	(308,680)	1202	(185,486)
N. California Power Agency	(789)	1202	(474)
Noble Americas Energy Solutions	(5,000)	1202	(3,005)
NorthPoint Energy Solutions, Inc.	(12,286)	1202	(7,383)
Northwestern Energy	(19,257)	1202	(11,572)
Occidental Power Services	(1,275)	1202	(766)
Pacific Northwest Generatin Coop.	(15,299)	1202	(9,193)
Pacific Summit Energy LLC	(5,250)	1202	(3,155)
Pacificorp	(137,660)	1202	(82,720)
PG&E Energy Trading	(2,250)	1202	(1,352)
Pinnacle West Marketing & Trading	(1,034)	1202	(621)
Portland General Electric	(98,543)	1202	(59,215)
Powerex Corp.	(337,035)	1202	(202,524)
PP&L Montana, LLC.	(29,839)	1202	(17,930)
Public Service of Colorado	(1,668)	1202	(1,002)
Rainbow Energy Marketing	(174,730)	1202	(104,995)
Redding, City of	(702)	1202	(422)
Sacramento Municipal	(2,980)	1202	(1,791)
San Diego Gas & Electric	(1,200)	1202	(721)
Seattle City Light Marketing	(45,037)	1202	(27,063)
Sempra Energy Trading	(137,302)	1202	(82,505)
Shell Energy (Coral Pwr)	(155,921)	1202	(93,693)
Sierra Pacific Power	(15,870)	1202	(9,536)
Silicon Valley Pwr - Santa Clara	(1,548)	1202	(930)
Snohomish County PUD #1	(25,283)	1202	(15,193)
Southern Cal - Edison	(5,734)	1202	(3,446)
SUEZ Energy Marketing (Tractebel)	(83,511)	1202	(50,182)
Tacoma Power	(6,646)	1202	(3,994)
Talen Energy (PPL Energy Plus)	(1,217)	1202	(731)
The Energy Authority	(511)	1202	(307)
TransAlta Energy Marketing	(1,339,719)	1202	(805,038)
TransCanada Energy Marketing	(3,855)	1202	(2,316)
TransCanada Power Corp.	(2,083)	1202	(1,252)
Turlock Irrigation District	(1,311)	1202	(788)
UBS AG	(18,330)	1202	(11,015)
Western Area Power Association	(410)	1202	(246)
Williams Power Company	(1,186)	1202	(713)
	5,220,403		3,136,942

[Commerce Fuel Mix Report](#) =

1,202


lbs CO<sub>2</sub> per MWh

For Year	2007
----------	------

	A	B	C	D	E	F	G	H	I	J	K
1	<b>Summary Energy and Emissions Intensity Report</b>										
2											
3		Utility :	Puget Sound Energy								
4	Reporting for year :	2006	<b>MWh per Capita</b>								
5	Population Served :	2,267,102	<b>9.25</b>								
6											
7	<i>Energy Intensity Metrics</i>										
8						Customer	<b>MWh per</b>				
9				MWh at Meter	MWh Proportion	Count	<b>Customer</b>				
10	Residential Customers			10,593,340	50.5%	909,876	<b>11.6</b>				
11	Commercial Customers			9,009,721	43.0%	114,299	<b>78.8</b>				
12	Industrial Customers			1,368,672	6.5%						
13	Total Load Served			20,971,733							
14											
15	<i>Emissions Intensity Metrics</i>										
16					Percent of	<b>Short</b>					
17				Busbar MWh	Total Load	<b>Tons CO<sub>2</sub></b>					
18	Known Resources Serving WA			16,470,704	72.9%	8,663,255					
19	Unknown Resources Serving WA			<b>6,117,349</b>	<b>27.1%</b>	<b>3,101,016</b>	<b>% of 1990 CO<sub>2</sub></b>				
20				2006	Tons CO <sub>2</sub>	<b>11,764,271</b>	<b>169.4%</b>				
21											
22					1990 Short Tons CO <sub>2</sub>	6,946,064	<i>Example number, use correct number from cells below.</i>				
23											
24	<i>See UTC Docket UE-131723, General Order R-581, Page 7, Paragraph 19.</i>										
25						1990					
26						Short Tons CO <sub>2</sub>					
27						Avista	1,131,957				
28						Pacific Power	2,399,078				
29						Puget Sound Energy	6,946,064				

## Known Resources Serving WA Customers

2006

Resource	WA MWh	lbs CO <sub>2</sub> /MWh	Short Tons CO <sub>2</sub>
Electron	67,270	-	-
Lower Baker	334,145	-	-
Snoqualmie Falls #1	47,557	-	-
Snoqualmie Falls #2	161,751	-	-
Upper Baker	338,553	-	-
Colstrip 1 & 2	2,180,745	2,483	2,707,654
Colstrip 3 & 4	2,619,283	2,451	3,210,066
Encogen	259,963	1,063	138,107
Crystal Mountain	1,060	1,719	912
Freddie #1	393,030	765	150,410
Fredonia	42,874	1,279	27,429
Fredrickson 1 & 2	12,684	1,725	10,940
Hopkins Ridge (W184)	361,587	-	-
Whitehorn 2&3	13,578	1,596	10,838
Wild Horse (W183)	11,242	-	-
BC Hydro (Point Roberts)	22,243	845	9,401
BPA	7,077	-	-
BPA Firm - WNP#3 Exchange	362,075	845	153,028
Chelan PUD - Rock Island Syst #2	1,294,355	-	-
Chelan PUD - Rocky Reach	2,365,522	-	-
Douglas PUD - Wells Project	1,133,871	-	-
Grant PUD - Priest Rapids	443,113	-	-
Grant PUD - Wanapum	455,505	-	-
NWestern Energy(MPC) Firm Contract	723,917	2,466	892,482
Snohomish PUD Conservation	89,664	845	37,896
VanderHaak Dairy Digester	1,823	-	-
WASCO Hydro	36,732	-	-
Hutchinson Creek	2,171	-	-
Koma Kulshan Associates	33,468	-	-
March Point Cogen. - 1 & 2	983,696	727	357,475
Nooksack	17,653	-	-
Port Townsend Paper Co.	1,847	1,056	976
Puyallup Energy Recovery Company	4,829	-	-
Spokane MSW	141,325	4,574	323,188
Sumas Cogeneration	579,514	927	268,748
Sygitowicz Creek	586	-	-
Tenaska	844,472	861	363,708
Twin Falls Hydro	67,233	-	-
Weeks Falls	12,691	-	-
	<u>16,470,704</u>		<u>8,663,255</u>

## Unknown Resources For WA Customers

2006

[WA Dept. of Co](#)

Resource	WA MWh	Fuel Mix lbs CO <sub>2</sub> /MWh	Short Tons CO <sub>2</sub>
Arizona Public Service	2,000	1014	1,014
ATCO Power Canada	820	1014	416
Avista Corp. WWP Division	102,667	1014	52,044
Avista Energy	713,907	1014	361,895
Barclays Bank Plc	7,600	1014	3,853
Bear Energy LP	48	1014	24
Benton County PUD	22,518	1014	11,415
Black Hills Power	12,360	1014	6,266
Book Outs - EITF 03-11	(2,421,278)	1014	(1,227,398)
BP Energy Co.	181,121	1014	91,814
BPA	739,012	1014	374,621
Burbank, City of	4,195	1014	2,127
Cargill Power Markets	48,374	1014	24,522
Chelan County PUD #1	40,907	1014	20,737
Cincinnati Gas & Electric Co	7,400	1014	3,751
Cinergy Services	21,330	1014	10,813
Citigroup Energy Inc	117,050	1014	59,335
Clatskanie PUD	9,785	1014	4,960
Conoco, Inc.	17,475	1014	8,858
Constellation Power Source, Inc.	320,060	1014	162,245
DB Energy Trading LLC	27,200	1014	13,788
Douglas County PUD #1	292,497	1014	148,273
ENMAX Energy Marketing, Inc.	175	1014	89
Epcor Merchant & Capital	63,703	1014	32,292
Eugene Water & Electric	63,650	1014	32,266
Fortis Energy Marketing & Trading	16,400	1014	8,314
Franklin County PUD #1	15,035	1014	7,622
Grant County PUD #2	89,108	1014	45,171
Grays Harbor PUD #1	21,400	1014	10,848
Iberdrola Renewables (PPM Energy)	400,182	1014	202,861
Idaho Falls Power	84,230	1014	42,698
Idaho Power Company	99,558	1014	50,468
J. Aron & Company	20,000	1014	10,138
JP Morgan Ventures Energy	10,000	1014	5,069
King County	40	1014	20
Klamath Falls, City of	31,207	1014	15,819
Lehman Bros Commodity Services	7,800	1014	3,954
Los Angeles Dept. Water & Power	1,275	1014	646
Macquarie Energy LLC	83,200	1014	42,176
Merrill Lynch Commodities	24,400	1014	12,369
Modesto Irrigation District	852	1014	432
Morgan Stanley CG	276,663	1014	140,246
N. California Power Agency	1,315	1014	667

New Mexico, Public Service Company	3,200	1014	1,622
Noble Americas Energy Solutions	29,225	1014	14,815
NorthPoint Energy Solutions, Inc.	1,342	1014	680
Northwestern Energy	9,629	1014	4,881
Occidental Power Services	1,064	1014	539
Okanogan PUD	3,761	1014	1,907
Pacific Northwest Generatin Coop.	181,909	1014	92,214
Pacificorp	352,506	1014	178,693
PG&E Energy Trading	24,945	1014	12,645
Pinnacle West Capital Corp	889,475	1014	450,894
Portland General Electric	500,872	1014	253,903
Powerex Corp.	504,275	1014	255,628
PP&L Montana, LLC.	41,793	1014	21,186
Public Service of Colorado	19,800	1014	10,037
Rainbow Energy Marketing	121,336	1014	61,508
Redding, City of	2,903	1014	1,472
Sacramento Municipal	5,025	1014	2,547
San Diego Gas & Electric	6,904	1014	3,500
Seattle City Light Marketing	172,078	1014	87,230
Sempra Energy Trading	1,226,010	1014	621,491
Shell Energy (Coral Pwr)	730,645	1014	370,380
Sierra Pacific Power	26,329	1014	13,347
Silicon Valley Pwr - Santa Clara	448	1014	227
Snohomish County PUD #1	80,505	1014	40,810
Southern Cal - Edison	29,334	1014	14,870
SUEZ Energy Marketing (Tractebel)	116,640	1014	59,127
Sumas Cogeneration	21,788	1014	11,045
Tacoma Power	107,444	1014	54,466
Tenaska	1,537	1014	779
TransAlta Energy Marketing	1,162,941	1014	589,520
TransCanada Power Corp.	3,828	1014	1,940
Turlock Irrigation District	13,371	1014	6,778
UBS AG	100,496	1014	50,944
Western Area Power Association	473	1014	240
Wild Horse Test Power	144,854	1014	73,430
Williams Power Company	425	1014	215
Avista Energy	305,656	1014	154,944
Black Creek Hydro	2,816	1014	1,427
BPA	102,038	1014	51,725
Cargill Power Markets	30,396	1014	15,408
Deviation	(24,938)	1014	(12,641)
Douglas County PUD #1	75	1014	38
Pacific Gas & Elec - Exchange	412,904	1014	209,310
Powerex - Exchange	610,192	1014	309,319
Seattle City Light Marketing	78,400	1014	39,743
Tacoma Power	24,876	1014	12,610
Tacoma, City of	210	1014	106

TransAlta Energy Marketing	895,958	1014	454,180
Avista Energy	(309,216)	1014	(156,748)
Black Creek Hydro	(3,057)	1014	(1,550)
BPA	(103,655)	1014	(52,545)
Cargill Power Markets	(31,096)	1014	(15,763)
Douglas County PUD #1	(75)	1014	(38)
Pacific Gas & Elec - Exchange	(413,000)	1014	(209,359)
Powerex - Exchange	(610,192)	1014	(309,319)
Seattle City Light Marketing	(78,400)	1014	(39,743)
Storage/Interchange - Out	(21)	1014	(11)
Tacoma Power	(25,065)	1014	(12,706)
TransAlta Energy Marketing	(895,958)	1014	(454,180)
Arizona Public Service	(3,400)	1014	(1,724)
Avista Corp. WWP Division	(41,478)	1014	(21,026)
Avista Energy	(307,922)	1014	(156,092)
Barclays Bank Plc	(6,000)	1014	(3,042)
Bear Energy LP	(3,298)	1014	(1,672)
Benton County PUD	(4,433)	1014	(2,247)
Black Hills Power	(650)	1014	(329)
Book Outs - EITF 03-11	2,421,278	1014	1,227,398
BP Energy Co.	(95,783)	1014	(48,554)
BPA	(141,345)	1014	(71,651)
British Columbia Transmission Corp	(23)	1014	(12)
Burbank, City of	(3,121)	1014	(1,582)
Cargill Power Markets	(84,873)	1014	(43,024)
Chelan County PUD #1	(1,200)	1014	(608)
Cincinnati Gas & Electric Co	(13,200)	1014	(6,691)
Cinergy Services	(24,697)	1014	(12,519)
Citigroup Energy Inc	(88,920)	1014	(45,075)
Clatskanie PUD	(4,691)	1014	(2,378)
Conoco, Inc.	(44,413)	1014	(22,514)
Constellation Power Source, Inc.	(80,970)	1014	(41,045)
DB Energy Trading LLC	(30,000)	1014	(15,208)
Douglas County PUD #1	(980)	1014	(497)
ENMAX Energy Marketing, Inc.	(6,322)	1014	(3,205)
Epcor Merchant & Capital	(21,189)	1014	(10,741)
Eugene Water & Electric	(16,203)	1014	(8,214)
Fortis Energy Marketing & Trading	(45,575)	1014	(23,103)
Franklin County PUD #1	(1,725)	1014	(874)
Grant County PUD #2	(16,830)	1014	(8,531)
Grays Harbor PUD #1	(4,477)	1014	(2,269)
Hinson Power Company	(3,200)	1014	(1,622)
Iberdrola Renewables (PPM Energy)	(183,683)	1014	(93,113)
Idaho Power Company	(77,637)	1014	(39,356)
J. Aron & Company	(13,600)	1014	(6,894)
JP Morgan Ventures Energy	(20,000)	1014	(10,138)
Klamath Falls, City of	(9,281)	1014	(4,705)



Lehman Bros Commodity Services	(49,275)	1014	(24,979)
Los Angeles Dept. Water & Power	(3,215)	1014	(1,630)
Macquarie Energy LLC	(77,000)	1014	(39,033)
Merrill Lynch Commodities	(40,881)	1014	(20,723)
Modesto Irrigation District	(8,394)	1014	(4,255)
Morgan Stanley CG	(252,602)	1014	(128,049)
N. California Power Agency	(3,417)	1014	(1,732)
Noble Americas Energy Solutions	(2,072)	1014	(1,050)
NorthPoint Energy Solutions, Inc.	(17,324)	1014	(8,782)
Northwestern Energy	(25,569)	1014	(12,961)
Occidental Power Services	(5,300)	1014	(2,687)
Okanogan PUD	(260)	1014	(132)
Pacific Northwest Generatin Coop.	(7,665)	1014	(3,886)
Pacificorp	(299,493)	1014	(151,819)
PG&E Energy Trading	(10,225)	1014	(5,183)
Pinnacle West Capital Corp	(11,000)	1014	(5,576)
Portland General Electric	(84,922)	1014	(43,049)
Powerex Corp.	(546,974)	1014	(277,273)
PP&L Montana, LLC.	(54,840)	1014	(27,800)
Public Service of Colorado	(12,930)	1014	(6,554)
Rainbow Energy Marketing	(182,633)	1014	(92,581)
Redding, City of	(2,030)	1014	(1,029)
Sacramento Municipal	(9,398)	1014	(4,764)
San Diego Gas & Electric	(11,112)	1014	(5,633)
Seattle City Light Marketing	(43,046)	1014	(21,821)
Sempra Energy Trading	(186,355)	1014	(94,467)
Shell Energy (Coral Pwr)	(215,517)	1014	(109,250)
Sierra Pacific Power	(23,099)	1014	(11,709)
Silicon Valley Pwr - Santa Clara	(16,202)	1014	(8,213)
Snohomish County PUD #1	(29,170)	1014	(14,787)
Southern Cal - Edison	(18,966)	1014	(9,614)
SUEZ Energy Marketing (Tractebel)	(115,860)	1014	(58,732)
Tacoma Power	(9,162)	1014	(4,644)
TransAlta Energy Marketing	(618,699)	1014	(313,632)
TransCanada Power Corp.	(15,432)	1014	(7,823)
Turlock Irrigation District	(2,765)	1014	(1,402)
UBS AG	(74,264)	1014	(37,646)
Western Area Power Association	(515)	1014	(261)
Williams Power Company	(425)	1014	(215)
	6,117,349		3,101,016

[Commerce Fuel Mix Report](#) = 1,014 lbs CO<sub>2</sub> per MWh


For Year	2006	
----------	------	---

Table with columns A through S and rows 1 through 300. The table contains demographic, economic, and social data for various counties in Washington state, including King, Pierce, and Whatcom. Rows include population estimates, age and sex distributions, race and ethnicity, education levels, and housing characteristics. A URL is provided in row 1 for census data: http://www.census.gov/quickfacts/table/H0031014/53073,53067,53063,53031,53029,53067

This geographic level of poverty and health estimates are not comparable to other geographic levels of these estimates. Some estimates presented here come from sample data, and thus have sampling errors that may render some apparent differences between geographic statistically insignificant. Click the Quick Info icon. Selected "hover.png" alt="hover.png" icon to the left of each row in TABLE view to learn about sampling error. The vintage year (e.g., V2015) refers to the final year of the series (2010 thru 2015). Different vintage years of estimates are not comparable. (a) Includes persons reporting only one race (b) Hispanics may be of any race, so also are included in applicable race categories (c) Economic Census - Puerto Rico data are not comparable to U.S. Economic Census data (d) Suppressed to avoid disclosure of confidential information (e) Fewer than 25 firms (f) Footnote on this item in place of data (g) NA: Not available (h) Suppressed; does not meet publication standards (i) Not applicable (j) Value greater than zero but less than half unit of measure shown (k) QuickFacts data are derived from: Population Estimates, American Community Survey, Census of Population and Housing, Current Population Survey, Small Area Health Insurance Estimates, Small Area Income and Poverty Estimates, State and County Housing Unit Estimates, County Business Patterns, Nonemployer Statistics, Economic Census, Survey of Business Owners, Building Permits.

		Skagit Count Pierce County, Washington	
<i>People</i>			
<i>Population</i>			
Population estimates, July 1, 2016, (V2016)	123681		861312
Population estimates, July 1, 2015, (V2015)	121846		843954
Population estimates base, April 1, 2010, (V2016)	116901		795219
Population estimates base, April 1, 2010, (V2015)	116901		795229
Population, percent change - April 1, 2010 (estimates base) to July 1, 2016	5.8		8.3
Population, percent change - April 1, 2010 (estimates base) to July 1, 2015	4.2		6.1
Population, Census, April 1, 2010	116901		795225
<i>Age and Sex</i>			
Persons under 5 years, percent, July 1, 2015, (V2015)	6.1		6.8
Persons under 5 years, percent, April 1, 2010	6.5		7.0
Persons under 18 years, percent, July 1, 2015, (V2015)	22.3		23.8
Persons under 18 years, percent, April 1, 2010	23.7		24.9
Persons 65 years and over, percent, July 1, 2015, (V2015)	19.3		13.1
Persons 65 years and over, percent, April 1, 2010	16.1		11.0
Female persons, percent, July 1, 2015, (V2015)	50.4		50.2
Female persons, percent, April 1, 2010	50.4		50.6
<i>Race and Hispanic Origin</i>			
White alone, percent, July 1, 2015, (V2015) (a)	90.7		75.8
White alone, percent, April 1, 2010 (a)	83.4		74.2
Black or African American alone, percent, July 1, 2015, (V2015) (a)	1.0		7.4
Black or African American alone, percent, April 1, 2010 (a)	0.7		6.8
American Indian and Alaska Native alone, percent, July 1, 2015, (V2015) (a)	2.8		1.7
American Indian and Alaska Native alone, percent, April 1, 2010 (a)	2.2		1.4
Asian alone, percent, July 1, 2015, (V2015) (a)	2.3		6.7
Asian alone, percent, April 1, 2010 (a)	1.8		6.0
Native Hawaiian and Other Pacific Islander alone, percent, July 1, 2015, (V2015) (a)	0.3		1.6
Native Hawaiian and Other Pacific Islander alone, percent, April 1, 2010 (a)	0.2		1.3
Two or More Races, percent, July 1, 2015, (V2015) (a)	3.0		6.8
Two or More Races, percent, April 1, 2010 (a)	3.2		6.8
Hispanic or Latino, percent, July 1, 2015, (V2015) (b)	17.9		10.5
Hispanic or Latino, percent, April 1, 2010 (b)	16.9		9.2
White alone, not Hispanic or Latino, percent, July 1, 2015, (V2015) (a)	75.2		67.8
White alone, not Hispanic or Latino, percent, April 1, 2010 (a)	76.7		70.3
<i>Population Characteristics</i>			
Veterans, 2011-2015	10736		88396
Foreign born persons, percent, 2011-2015	9.9		9.7
<i>Housing</i>			
Housing units, July 1, 2015, (V2015)	52214		336357
Housing units, April 1, 2010	51473		325375
Owner-occupied housing unit rate, 2011-2015	66.8		61.0
Median value of owner-occupied housing units, 2011-2015	249800		232600
Median selected monthly owner costs -with a mortgage, 2011-2015	1621		1735
Median selected monthly owner costs -without a mortgage, 2011-2015	521		547
Median gross rent, 2011-2015	954		1029
Building permits, 2015	438		2897
<i>Families and Living Arrangements</i>			
Households, 2011-2015	45841		303586
Persons per household, 2011-2015	2.56		2.65
Living in same house 1 year ago, percent of persons age 1 year+, 2011-2015	83.0		82.5

Language other than English spoken at home, percent of persons age 18 and over	15.3	14.9
<i>Education</i>		
High school graduate or higher, percent of persons age 25 years+, 2011-2015	88.3	90.9
Bachelor's degree or higher, percent of persons age 25 years+, 2011-2015	24.8	24.7
<i>Health</i>		
With a disability, under age 65 years, percent, 2011-2015	9.9	10.1
Persons without health insurance, under age 65 years, percent	9.8	7.3
<i>Economy</i>		
In civilian labor force, total, percent of population age 16 years+, 2011-2015	59.0	62.3
In civilian labor force, female, percent of population age 16 years+, 2011-2015	53.9	58.2
Total accommodation and food services sales, 2012 (\$1,000) (c)	291510	1362981
Total health care and social assistance receipts/revenue, 2012 (\$1,000) (c)	700349	5369260
Total manufacturers shipments, 2012 (\$1,000) (c)	11529427	4461036
Total merchant wholesaler sales, 2012 (\$1,000) (c)	793543	7705621
Total retail sales, 2012 (\$1,000) (c)	1999168	10114397
Total retail sales per capita, 2012 (c)	16910	12461
<i>Transportation</i>		
Mean travel time to work (minutes), workers age 16 years+, 2011-2015	24.7	29.8
<i>Income and Poverty</i>		
Median household income (in 2015 dollars), 2011-2015	54129	59953
Per capita income in past 12 months (in 2015 dollars), 2011-2015	27794	28824
Persons in poverty, percent	14.9	12.4
<i>Businesses</i>		
Washington Pierce County, Washington		
Total employer establishments, 2015	3417	17012
Total employment, 2015	39772	244855
Total annual payroll, 2015 (\$1,000)	1724239	10815084
Total employment, percent change, 2014-2015	0.4	1.5
Total nonemployer establishments, 2014	7548	40709
All firms, 2012	9505	50503
Men-owned firms, 2012	4460	23389
Women-owned firms, 2012	2889	18469
Minority-owned firms, 2012	1028	9316
Nonminority-owned firms, 2012	8059	38961
Veteran-owned firms, 2012	845	5147
Nonveteran-owned firms, 2012	7902	42005
<i>Geography</i>		
Washington Pierce County, Washington		
Population per square mile, 2010	67.5	476.3
Land area in square miles, 2010	1731.20	1669.51
FIPS Code	"53057"	"53053"

This geographic level of poverty and health estimates are not comparable to other geographic levels of these estimates.

Some estimates presented here come from sample data, and thus have sampling errors that may render some estimates unreliable.

The vintage year (e.g., V2015) refers to the final year of the series (2010 thru 2015). Different vintage years of estimates may not be comparable.

(a) Includes persons reporting only one race

(b) Hispanics may be of any race, so also are included in applicable race categories

(c) Economic Census - Puerto Rico data are not comparable to U.S. Economic Census data

D: Suppressed to avoid disclosure of confidential information

F: Fewer than 25 firms

FN: Footnote on this item in place of data

NA: Not available

S: Suppressed; does not meet publication standards

X: Not applicable

Z: Value greater than zero but less than half unit of measure shown

QuickFacts data are derived from: Population Estimates, American Community Survey, Census of Population and Housing

82636	2149970	264811	44866	275222	216800
80593	2117125	260131	43269	269536	212284
78506	1931281	251137	40906	252258	201140
78506	1931256	251133	40909	252264	201140
5.3	11.3	5.4	9.7	9.1	7.8
2.7	9.6	3.6	5.8	6.8	5.5
78506	1931249	251133	40915	252264	201140

5.5	6.1	5.7	4.8	5.9	5.5
5.8	6.2	5.9	5.0	6.1	5.6
18.6	20.7	20.7	17.8	21.8	19.8
20.8	21.4	22.5	18.3	23.0	21.0
23.2	12.4	16.5	15.1	15.9	16.0
18.4	10.9	13.3	12.7	13.0	13.2
50.0	50.0	49.0	49.7	50.9	50.4
50.5	50.2	49.4	49.2	51.3	50.5

85.8	69.5	83.0	91.8	82.4	87.0
86.1	68.7	82.6	89.3	82.4	85.4
3.1	6.8	3.0	1.2	3.5	1.2
2.2	6.2	2.6	0.9	2.7	1.0
1.1	1.1	1.8	1.2	1.7	3.2
0.8	0.8	1.6	1.0	1.4	2.8
4.9	16.9	5.4	2.4	6.0	4.4
4.4	14.6	4.9	2.0	5.2	3.5
0.5	0.9	1.0	0.2	1.1	0.3
0.5	0.8	0.9	0.1	0.8	0.2
4.6	5.0	5.7	3.2	5.3	3.8
4.5	5.0	5.8	3.0	5.3	3.8
7.3	9.5	7.5	8.9	8.6	9.2
5.5	8.9	6.2	7.6	7.1	7.8
80.0	61.7	77.1	84.1	75.7	79.5
83.1	64.8	79.1	86.1	78.9	81.9

12612	115239	34009	3619	29109	13846
7.0	21.2	6.4	6.1	7.9	11.0

40850	893157	109690	22775	112553	93247
40234	851261	107367	21900	108182	90665
67.8	57.4	67.2	57.6	64.6	63.1
290900	384300	258700	242900	239400	274700
1688	2196	1689	1476	1666	1612
497	689	513	458	500	478
1076	1204	1042	798	1054	925
281	18537	918	295	1020	1144

33125	819651	97739	16953	102631	79767
2.33	2.45	2.54	2.34	2.52	2.53
82.7	81.2	81.1	70.8	81.0	82.5



**QuickFacts**  
Thurston County, Washington

QuickFacts provides statistics for all state

Enter state, county, city, town, or zip

**Table**

ALL TOPICS

**PEOPLE**

Population

- Population estimates, July 1, 2016.
- Population estimates, July 1, 2015.
- Population estimates base, April 1,
- Population estimates base, April 1,
- Population, percent change - April 1

Persons per ho  
2.50

117,352.96 804,502.90  
2.50  
weighted  
average

8.6	26.4	7.8	9.1	11.4	12.4
94.5	92.3	94.5	90.8	93.4	91.2
31.7	47.9	30.3	33.6	33.4	32.5
10.0	6.4	11.7	9.6	8.6	9.3
6.2	6.5	5.8	8.9	6.6	9.1
52.9	69.3	56.4	60.6	61.7	62.9
51.4	63.3	54.0	56.2	59.2	57.9
D	6223768	425981	101409	419185	492949
228308	17719220	1272843	114895	1584793	1026198
125716	D	328168	D	910527	14932180
57537	42092462	407880	398681	1252014	D
456279	61598157	2674165	515984	3330812	3103604
5763	30685	10487	12382	12894	15120
28.6	28.1	29.9	21.3	24.6	20.4
58815	75302	62941	46458	61677	53145
31836	41664	32063	24014	29741	27223
8.4	9.8	9.9	20.0	12.2	14.4
Washington	Washington	Washington	Washington	Washington	Washington
1706	66891	5676	1193	6039	6401
12224	1133727	57374	11086	68684	73743
433854	83213348	2188302	369769	2708536	3052018
5.2	3.4	2.6	5.5	3.5	2.5
5747	159920	14142	2519	14338	14710
7083	201404	18206	3128	18842	18054
2966	100912	7934	1248	8970	8898
2788	71005	6698	1029	6797	5810
520	45508	1947	153	2758	1802
6128	145726	15307	2832	15115	15340
905	15016	2015	232	2288	1751
5639	175951	14716	2626	15225	15060
Washington	Washington	Washington	Washington	Washington	Washington
376.6	912.9	635.9	17.8	349.4	95.5
208.45	2115.57	394.94	2297.27	721.96	2106.86
"53029"	"53033"	"53035"	"53037"	"53067"	"53073"

stimates

apparent differences between geographies statistically indistinguishable. Click the Quick Info

estimates are not comparable.



id Housing, Current Population Survey, Small Area Health Insurance Estimates, Small Area Income and Poverty Estimates

facts/table/PST045216/53057,53053,53029,53033,53035,53037

U.S. Department of Commerce | Blogs | Index A-Z | C

Search

Geography  
Maps, Products

Library  
Infographics, Publications

Data  
Tools, Developers

Surveys/Programs  
Respond, Survey Data

Newsroom  
News, Blogs

About Us  
Our Research

What's New & FAQs >

Tell us what you think >

es and counties, and for cities and towns with a *population of 5,000 or more.*

zip code

-- SELECT A FACT --

CLEAR

TABLE

MAP

CHART

DA SHBOARD

MORE

Q = Browse more datasets

THURSTON COUNTY, WASHINGTON

WHATCOM COUNTY, WASHINGTON

(V2018)	275,222	218,800
(V2015)	269,536	212,284
2010, (V2018)	252,258	201,140
2010, (V2015)	252,284	201,140
1, 2010 (estimates base) to July	9.1%	7.8%

usehold factor

77181.25 2008145 248257.06 39670.02 258630.12 201810.51 -

idth:14px;" src="/quickfacts/assets/images/info-grey2-selected\_hover.png" alt=""> icon to the left of each row in TABLE v

; State and County Housing Unit Estimates, County Business Patterns, Nonemployer Statistics, Economic Census, Survey of



iew to learn about sampling error.

Business Owners, Building Permits.