

ENERGY

Washington State Data Book

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END-USE ENERGY CONSUMPTION BY SECTOR

Department of Commerce | 360-725-3112 | <http://www.commerce.wa.gov>

*Billion BTUs*¹

Calendar Year	Total	Residential	Commercial	Industrial	Transportation
1985	1,060,963	167,702	138,407	343,606	411,248
1986	1,125,610	157,395	116,620	371,974	479,621
1987	1,154,101	156,729	120,935	382,716	493,721
1988	1,231,046	169,434	133,633	411,304	516,675
1989	1,251,017	178,205	129,632	385,661	557,519
1990	1,262,126	171,636	129,199	394,271	567,020
1991	1,259,623	181,727	132,877	369,090	575,929
1992	1,320,273	171,925	126,554	382,528	639,266
1993	1,298,262	195,917	135,556	376,467	590,322
1994	1,324,397	191,478	136,580	389,097	607,242
1995	1,346,561	191,704	139,435	384,234	631,188
1996	1,351,340	210,049	147,070	374,264	619,957
1997	1,378,759	208,287	147,206	387,331	635,935
1998	1,372,295	203,885	146,222	421,382	600,806
1999	1,406,015	219,880	156,579	417,509	612,047
2000	1,368,613	220,163	160,109	364,427	623,914
2001	1,302,222	238,682	167,802	298,708	597,030
2002	1,227,945	231,329	157,299	257,762	581,555
2003	1,227,290	222,681	158,628	263,392	582,589
2004	1,248,450	224,579	157,333	265,235	601,303
2005	1,264,862	215,344	157,473	281,766	610,279
2006	1,320,861	219,431	160,588	314,913	625,929
2007	1,342,879	226,985	165,116	286,403	664,375
2008	1,312,866	237,974	173,285	296,640	604,967
2009	1,302,372	244,950	171,673	289,821	595,928
2010	1,296,291	227,077	165,957	315,034	588,223
2011	1,322,125	241,727	170,727	323,380	586,291
2012	1,329,899	228,735	168,482	326,221	606,461
2013	1,329,568	239,720	172,464	324,055	593,329
2014	1,309,879	232,674	170,162	323,428	583,615
2015	1,332,953	217,181	173,870	321,563	620,339

¹British Thermal Unit (BTU): The quantity of heat required to raise the temperature of one pound of water by one degree Fahrenheit. 1 therm = 100,000 BTU.

Table: YT01

PRIMARY ENERGY CONSUMPTION BY ENERGY SOURCE¹
 Department of Commerce | 360-725-3112 | <http://www.commerce.wa.gov>

Billion BTUs¹

Calendar Year	Biomass	Coal	Hydro- electricity ²	Nuclear Electricity	Natural Gas	Petroleum	Other Renewables ²
1985	112,367	93,669	262,982	85,377	139,983	556,023	0
1986	118,063	63,280	269,490	89,276	121,793	626,546	0
1987	122,823	95,700	238,320	57,728	136,092	634,595	0
1988	127,760	99,099	233,818	63,616	150,595	667,023	0
1989	108,569	96,651	244,125	64,745	167,988	690,238	56
1990	93,715	85,575	298,525	60,762	167,616	691,599	77
1991	74,222	89,085	304,924	44,346	179,395	693,191	96
1992	95,669	106,087	233,193	59,605	180,769	755,690	116
1993	96,782	97,804	229,736	74,946	229,616	700,623	133
1994	96,598	106,884	223,807	70,444	263,176	721,109	153
1995	90,390	69,790	281,573	72,938	264,474	739,785	174
1996	89,758	90,901	336,242	58,691	283,909	731,101	218
1997	94,302	80,466	355,536	65,526	268,141	748,806	241
1998	87,269	103,476	272,409	72,556	303,307	710,741	313
1999	89,181	96,875	331,023	63,598	302,262	721,954	341
2000	89,316	106,240	273,938	89,744	297,569	745,794	341
2001	92,755	99,441	186,807	86,159	322,413	721,282	343
2002	87,737	100,833	266,784	94,484	240,494	695,417	1,793
2003	95,750	118,207	244,907	79,360	255,839	684,436	2,555
2004	92,592	112,539	244,289	93,660	269,572	695,880	3,068
2005	81,278	112,284	245,992	86,016	272,167	709,873	2,341
2006	103,736	69,150	279,893	97,341	271,034	731,327	4,225
2007	79,080	95,738	269,043	85,051	279,429	765,109	9,046
2008	77,274	94,600	264,975	96,886	307,085	718,500	13,266
2009	84,333	84,049	248,920	69,385	319,739	695,323	13,090
2010	97,564	94,934	233,067	96,588	294,871	691,688	17,203
2011	96,284	56,951	313,375	50,293	272,261	688,565	22,631
2012	95,372	42,656	305,341	97,808	271,947	702,570	23,659
2013	100,614	74,955	266,743	88,408	327,840	686,846	25,037
2014	101,677	76,547	271,207	99,332	320,167	674,540	25,938
2015	97,619	58,272	250,531	85,347	327,992	717,394	25,279

¹British Thermal Unit (BTU): The quantity of heat required to raise the temperature of one pound of water by one degree Fahrenheit. 1 therm = 100,000 BTU.

²Hydroelectric and Renewables are direct conversion from Megawatt-hours to BTU.

Table: YT02

ENERGY EXPENDITURES BY SECTOR

Department of Commerce | 360-725-3112 | <http://www.commerce.wa.gov>

Millions of Constant \$¹

Calendar Year	Total	Commercial	Industrial	Residential	Transportation
1985	12,789	1,891	2,433	2,558	5,907
1986	10,938	1,600	2,018	2,322	4,997
1987	11,102	1,621	2,081	2,293	5,107
1988	11,468	1,693	2,355	2,409	5,010
1989	12,231	1,673	2,472	2,515	5,572
1990	12,860	1,645	2,356	2,469	6,391
1991	12,638	1,631	2,213	2,466	6,329
1992	12,171	1,624	2,091	2,317	6,139
1993	12,177	1,727	2,068	2,589	5,793
1994	12,634	1,804	2,208	2,633	5,989
1995	12,818	1,842	2,232	2,613	6,130
1996	13,644	1,929	2,136	2,812	6,767
1997	13,504	1,889	2,174	2,758	6,684
1998	12,225	1,861	2,334	2,691	5,340
1999	13,646	1,965	2,477	2,859	6,345
2000	15,824	2,089	2,539	3,012	8,184
2001	15,361	2,461	2,185	3,496	7,219
2002	14,373	2,501	1,757	3,526	6,591
2003	15,408	2,476	1,880	3,314	7,738
2004	17,348	2,566	2,019	3,450	9,312
2005	19,942	2,646	2,439	3,663	11,194
2006	22,348	2,818	2,690	3,904	12,937
2007	23,660	2,832	2,548	4,145	14,135
2008	26,573	2,992	3,083	4,339	16,159
2009	20,982	2,937	2,568	4,395	11,081
2010	22,483	2,878	2,649	4,130	12,826
2011	26,133	2,957	2,838	4,422	15,915
2012	26,267	2,916	2,692	4,178	16,480
2013	24,897	2,908	2,434	4,236	15,318
2014	23,743	2,858	2,424	3,966	14,495
2015	19,814	2,948	2,261	3,826	10,780

¹Adjusted to 2009 dollars.

Table: YT03

SELECTED ENERGY PRICES

Department of Commerce | 360-725-3112 | <http://www.commerce.wa.gov>

Constant \$ per Million BTUs^{1,2}

Calendar Year	Petroleum	Electricity	Natural Gas	Bio-fuels	Coal
1985	12.89	16.01	9.12	3.63	4.29
1986	9.42	16.08	7.76	3.11	3.71
1987	9.34	16.35	6.36	3.14	4.00
1988	8.70	16.33	6.40	3.06	3.88
1989	9.26	16.04	6.14	2.41	3.82
1990	10.40	15.01	5.39	2.12	3.76
1991	10.17	14.42	5.14	2.52	4.13
1992	8.74	14.33	5.25	2.15	3.95
1993	9.21	14.89	5.49	2.23	3.75
1994	9.13	16.05	5.35	2.15	4.18
1995	9.10	16.05	5.17	2.15	4.16
1996	10.11	16.10	5.04	2.03	3.92
1997	9.99	15.29	5.17	1.86	3.73
1998	8.07	15.11	4.75	1.96	3.13
1999	9.13	15.16	4.98	2.11	3.06
2000	11.93	15.56	6.64	2.50	3.07
2001	11.81	18.72	9.16	3.32	2.89
2002	10.97	20.31	8.61	3.30	2.98
2003	12.88	19.85	8.26	3.08	2.82
2004	14.95	19.14	9.89	3.64	3.02
2005	17.50	18.76	11.51	3.74	3.60
2006	19.57	19.06	12.10	3.38	3.91
2007	20.39	19.24	12.13	3.65	3.97
2008	25.22	19.43	11.58	4.27	4.90
2009	17.83	19.41	12.41	4.15	4.81
2010	21.20	19.39	10.36	3.83	5.60
2011	26.61	19.37	10.24	4.08	5.98
2012	26.48	19.47	9.49	3.90	5.58
2013	25.46	19.58	9.02	4.20	5.70
2014	24.39	19.36	8.45	4.52	5.59
2015	17.03	19.86	8.88	3.59	5.44

¹British Thermal Unit (BTU): The quantity of heat required to raise the temperature of one pound of water by one degree Fahrenheit. 1 therm = 100,000 BTU.

²Adjusted to 2009 dollars.

Table: YT04

NATURAL GAS PRICES BY SECTOR

Department of Commerce | 360-725-3112 | <http://www.commerce.wa.gov>

Constant \$ per Million BTU^{1,2}

Calendar Year	Residential	Commercial	Industrial	Electric Utilities
1985	11.07	9.14	7.99	7.92
1986	9.85	8.39	5.97	4.80
1987	8.76	7.27	4.64	4.17
1988	8.64	7.21	4.66	4.92
1989	8.25	7.03	4.41	7.84
1990	7.29	6.01	3.95	4.53
1991	6.57	5.71	3.92	5.55
1992	6.85	5.92	3.99	4.47
1993	6.96	6.04	4.29	5.20
1994	7.39	6.36	3.83	6.38
1995	7.49	6.37	3.49	5.81
1996	7.09	6.03	3.35	6.19
1997	6.89	5.78	3.85	7.24
1998	7.07	5.75	3.19	4.13
1999	6.97	5.80	3.35	3.27
2000	8.39	7.05	4.70	6.22
2001	11.29	9.95	5.79	8.86
2002	10.65	9.41	5.49	3.88
2003	9.47	8.29	6.79	3.67
2004	10.82	10.27	8.55	5.07
2005	12.46	11.01	10.84	7.06
2006	13.68	12.26	10.10	5.97
2007	13.89	12.40	9.81	6.17
2008	12.78	11.24	10.32	8.38
2009	13.54	11.90	11.34	5.14
2010	11.71	10.04	8.96	5.30
2011	11.57	9.79	8.90	5.34
2012	10.96	9.07	8.10	4.13
2013	10.30	8.33	7.57	4.21
2014	9.33	7.96	7.53	4.53
2015	10.09	8.35	7.62	3.16

¹British Thermal Unit (BTU): The quantity of heat required to raise the temperature of one pound of water by one degree Fahrenheit. 1 therm = 100,000 BTU.

²Adjusted to 2009 dollars.

Table: YT05

ELECTRICITY PRICES BY SECTOR

Department of Commerce | 360-725-3112 | <http://www.commerce.wa.gov>

Cents¹ per Kilowatt Hour

Calendar Year	Residential	Commercial	Industrial	Transportation
1985	6.63	6.29	3.71	4.93
1986	6.68	6.39	3.67	4.89
1987	6.95	6.22	3.82	4.34
1988	6.85	6.06	4.22	4.67
1989	6.72	6.07	4.11	4.87
1990	6.57	5.94	3.57	4.12
1991	6.32	5.82	3.32	4.09
1992	6.31	5.87	3.17	4.18
1993	6.36	6.02	3.31	4.32
1994	6.73	6.20	3.78	4.63
1995	6.58	6.18	3.92	4.21
1996	6.56	6.16	3.79	4.44
1997	6.34	6.01	3.50	4.64
1998	6.37	5.89	3.57	3.97
1999	6.37	5.87	3.64	3.97
2000	6.27	5.72	4.03	3.95
2001	6.80	6.38	5.67	4.40
2002	7.40	7.02	5.74	4.84
2003	7.27	6.99	5.49	7.44
2004	7.15	6.93	4.80	7.23
2005	7.11	6.88	4.64	7.00
2006	7.20	7.00	4.68	6.25
2007	7.46	6.73	4.69	5.90
2008	7.60	6.83	4.56	5.87
2009	7.67	6.97	4.40	5.91
2010	7.94	7.28	4.02	7.33
2011	8.01	7.25	3.96	8.27
2012	8.10	7.30	3.92	7.66
2013	8.13	7.27	3.96	7.52
2014	7.97	7.33	3.98	7.80
2015	8.27	7.47	3.95	7.44

¹Adjusted to 2009 dollars.

Table: YT06

ENERGY CONSUMPTION PER CAPITA

Department of Commerce | 360-725-3112 | <http://www.commerce.wa.gov>

Million BTUs^{1,2} per Person

Calendar Year	WA Consumption Per Capita	U.S. Consumption Per Capita
1985	240	230
1986	252	232
1987	255	234
1988	267	244
1989	265	244
1990	259	239
1991	251	235
1992	257	235
1993	247	239
1994	247	239
1995	246	242
1996	243	246
1997	243	248
1998	239	237
1999	241	237
2000	232	239
2001	218	237
2002	203	237
2003	201	237
2004	202	239
2005	202	233
2006	207	229
2007	207	231
2008	199	223
2009	195	211
2010	193	218
2011	195	217
2012	195	210
2013	193	217
2014	188	219
2015	189	215

¹British Thermal Unit (BTU): The quantity of heat required to raise the temperature of one pound of water by one degree Fahrenheit. 1 therm = 100,000 BTU.

²Non-energy petroleum consumption removed.

Table: YT07