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Electric Generation Capacity and Energy

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Download data for [Electric Generation Capacity & Energy - Excel](#)

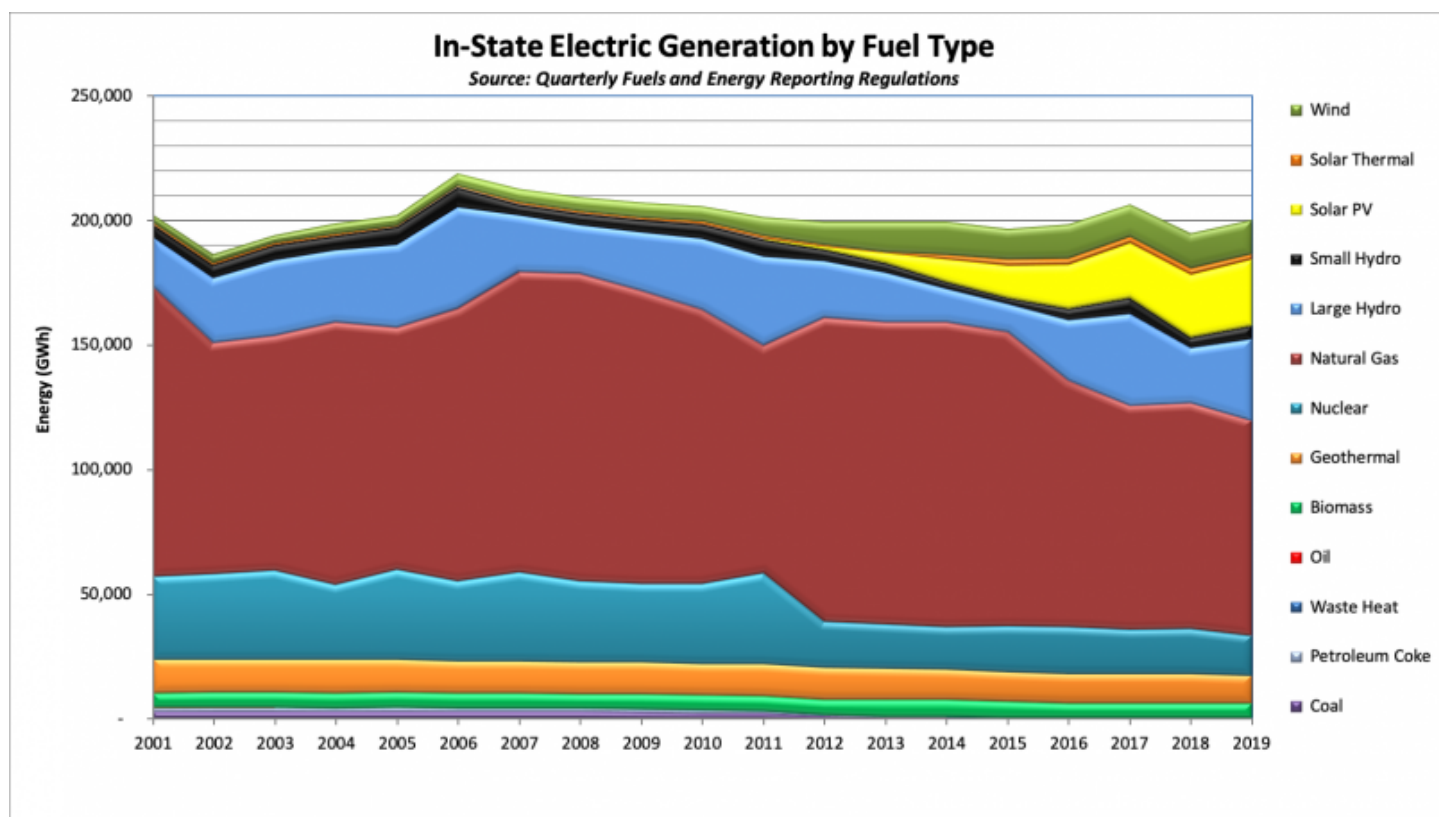
- [2019 Total System Electric Generation](#)
- [Cost of Generation Report](#)

In-State Electric Generation by Fuel Type (GWh)

Primary Fuel Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Coal	2,286	2,096	1,262	824	802	309	324	302	294	248
Petroleum Coke	1,120	1,024	318	194	208	229	207	246	207	191
Biomass	5,993	6,066	6,211	6,559	6,785	6,367	5,905	5,847	5,913	5,851
Geothermal	12,740	12,685	12,733	12,510	12,186	11,994	11,582	11,745	11,528	10,943
Nuclear	32,214	36,666	18,491	17,860	17,027	18,525	18,931	17,925	18,268	16,163
Natural Gas	109,682	91,063	121,777	120,863	121,855	117,565	98,880	89,588	90,711	86,136
Large Hydro	28,483	35,682	22,737	20,319	13,739	11,569	24,410	36,920	22,043	33,145

Primary Fuel Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Small Hydro	5,707	7,055	4,724	3,782	2,742	2,427	4,576	6,383	4,250	5,349
Solar PV	90	226	1,025	3,796	9,148	13,057	17,385	21,895	25,005	26,210
Solar Thermal	879	889	867	686	1,624	2,446	2,548	2,464	2,545	2,303
Wind	6,172	7,598	9,242	11,964	13,104	12,191	13,499	12,867	14,024	13,680
Waste Heat	241	267	217	222	237	177	182	163	223	220
Oil	52	36	48	38	45	54	37	33	35	36
Grand Total	205,657	201,353	199,652	199,618	199,503	196,910	198,466	206,378	195,044	200,475

Primary Fuel Type	2001	2002	2003	2004	2005	2006	2007	2008	2009
Coal	2,810	3,010	3,032	2,889	3,012	2,920	2,968	2,835	2,562
Petroleum Coke	1,231	1,265	1,237	1,197	1,271	1,270	1,249	1,142	1,173
Biomass	5,782	6,217	6,094	6,082	6,080	5,865	5,766	5,915	6,122
Geothermal	13,525	13,396	13,329	13,494	13,292	13,093	13,084	12,907	12,907
Nuclear	33,294	34,353	35,594	30,241	36,155	32,036	35,698	32,482	31,509
Natural Gas	116,151	92,490	94,194	105,040	96,893	108,952	120,247	122,799	117,099
Large Hydro	20,144	26,003	30,325	28,945	33,334	40,952	22,640	19,887	23,659
Small Hydro	4,844	5,356	5,996	5,545	6,928	7,607	4,466	4,573	4,880
Solar PV	3	2	2	2	2	2	2	3	17
Solar Thermal	834	848	757	739	658	614	666	730	841
Wind	3,242	3,546	3,316	4,258	4,084	4,902	5,570	5,724	6,249
Waste Heat	242	240	294	237	221	259	233	278	233
Oil	379	87	103	127	148	134	103	92	67
Grand Total	202,480	186,815	194,270	198,796	202,079	218,604	212,693	209,367	207,317

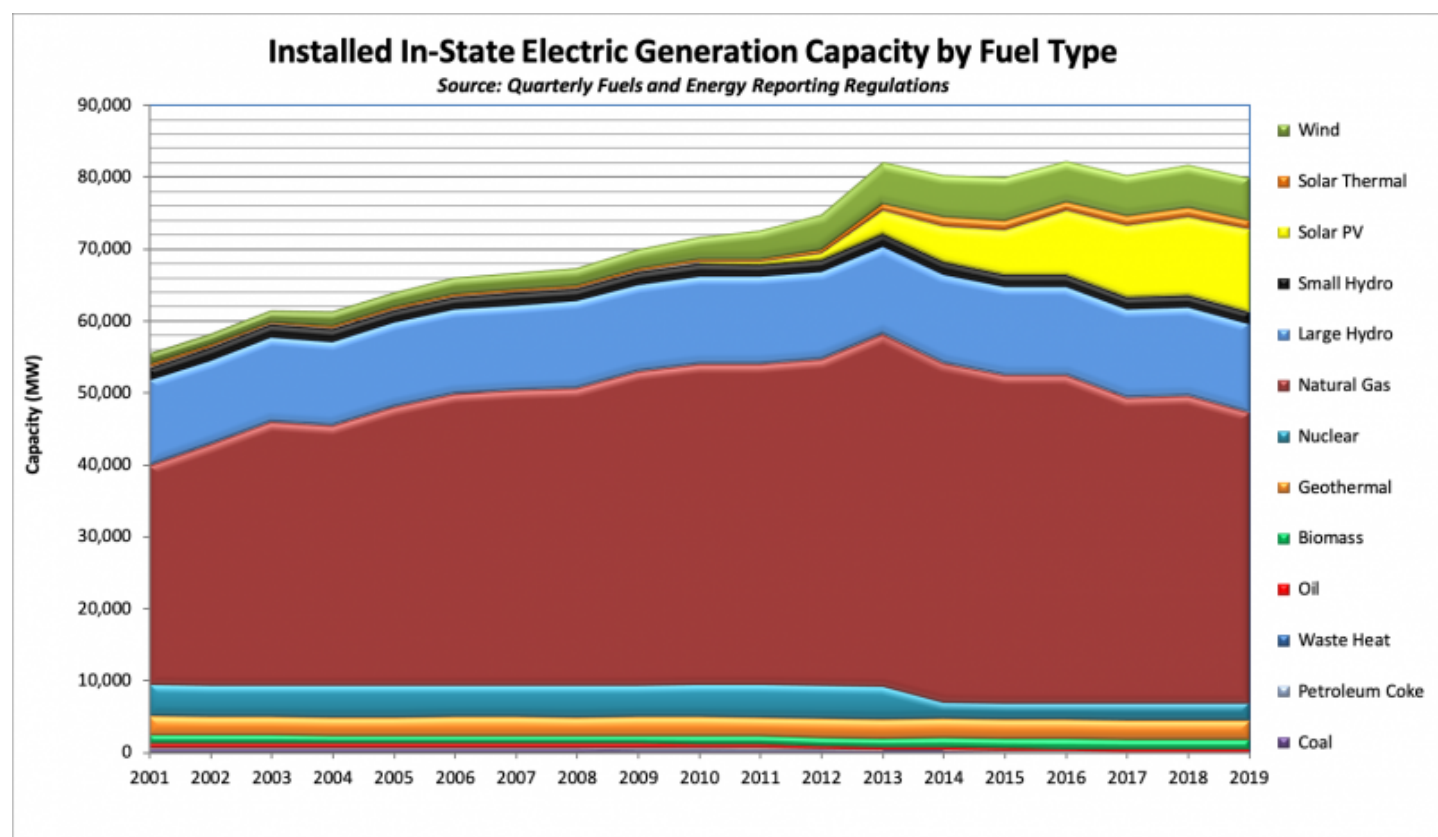


Installed In-State Electric Generation Capacity by Fuel Type (MW)

Primary Fuel Type	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Coal	408	358	295	240	240	132	93	55	55	55
Petroleum Coke	173	173	149	36	36	36	36	36	36	36
Biomass	1,128	1,182	1,212	1,226	1,310	1,329	1,337	1,319	1,325	1,308
Geothermal	2,648	2,648	2,703	2,705	2,703	2,716	2,716	2,694	2,730	2,730
Nuclear	4,577	4,647	4,647	4,647	2,393	2,393	2,393	2,393	2,393	2,393
Natural Gas	44,557	44,424	45,228	48,912	47,128	45,482	45,472	42,469	42,695	40,382
Large Hydro	12,132	12,172	12,172	12,182	12,271	12,279	12,279	12,281	12,281	12,281
Small Hydro	1,745	1,744	1,757	1,766	1,756	1,751	1,750	1,758	1,758	1,758
Solar PV	117	228	794	3,131	4,792	6,080	8,745	9,812	10,661	11,278
Solar Thermal	408	408	408	925	1,300	1,292	1,249	1,249	1,249	1,249
Wind	3,183	3,992	4,967	5,785	5,877	6,029	5,671	5,678	5,964	5,973
Waste Heat	52	52	52	52	52	52	52	52	52	52
Oil	552	509	350	350	351	351	351	351	351	351
Grand Total	71,681	72,537	74,733	81,956	80,208	79,921	82,144	80,145	81,549	79,845

Primary Fuel Type	2001	2002	2003	2004	2005	2006	2007	2008	2009
Coal	422	422	422	422	422	422	422	422	403
Petroleum Coke	173	173	173	173	173	173	173	173	173

Primary Fuel Type	2001	2002	2003	2004	2005	2006	2007	2008	2009
Biomass	1,175	1,154	1,159	1,106	1,106	1,100	1,094	1,121	1,118
Geothermal	2,625	2,623	2,623	2,623	2,623	2,641	2,696	2,598	2,648
Nuclear	4,456	4,456	4,456	4,456	4,456	4,456	4,456	4,456	4,456
Natural Gas	30,439	33,419	36,626	36,057	38,745	40,441	40,933	41,310	43,571
Large Hydro	11,857	11,721	11,721	11,721	11,710	11,812	11,812	12,093	12,093
Small Hydro	1,751	1,748	1,740	1,739	1,743	1,745	1,747	1,749	1,758
Solar PV	2	2	2	2	2	2	2	7	15
Solar Thermal	410	378	378	378	378	400	400	400	408
Wind	1,534	1,544	1,571	2,064	2,089	2,310	2,373	2,462	2,728
Waste Heat	52	52	52	52	52	52	52	52	52
Oil	635	590	567	567	567	558	575	575	575
Grand Total	55,530	58,282	61,491	61,360	64,066	66,113	66,736	67,418	69,998



Source: QFER CEC-1304 Power Plant Data Reporting

* Note: Operational capacity as of December 31 of each year. Does not include plants that retired within the year.

Data based on CEC-1304 QFER Database as of April 29, 2020.

These tables and corresponding charts are provided to show the total installed electric generation nameplate capacity of all power plants one megawatt (MW) and larger located within California, and the corresponding generation from these resources. The data is collected under the authority of the California Code of Regulations, Title 20, Division 2, Chapter 3, Section 1304(a)(1)-(2).

The information in these charts and tables is based on metering at each power plant site and, therefore, does not account for the 7-8 percent (typical) loss attributed to transmission for delivery to the customer's meter. In addition, the information includes both retail sales and non-retail sales such as water delivery and pumped storage. The information cannot be used to determine progress toward the Renewables Portfolio Standard due to these differences.

The information does not include power plants with a nameplate capacity of less than one megawatt and does not include distributed generation such as residential solar photovoltaic installations, backup power generators, or imported energy from surrounding control areas. Data is subject to change based on revisions and quality control checks.

For more information, visit the [Renewables Portfolio Standard](#).

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