

California Carbon Dioxide Inventory for 2000-2019 — by Sector and Activity

million tonnes of CO2 equivalent - (based upon IPCC Fourth Assessment Report's 100-yr Global Warming Potentials)

Included Emissions

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Electricity Generation (In State)	58.60	62.64	49.35	47.72	48.84	44.74	49.53	53.81	54.01	53.01	46.49	42.30	53.38	51.09	51.74	50.60	41.94	37.94	38.28	36.92
<i>CHP: Commercial</i>	0.73	0.67	0.76	0.86	0.69	0.73	0.71	0.77	0.76	1.05	0.79	1.14	1.34	1.35	1.26	1.37	1.07	1.15	0.76	0.65
<i>CHP: Industrial</i>	17.98	16.52	20.06	17.59	15.14	14.63	13.69	13.64	13.49	14.65	12.49	14.21	13.43	14.08	13.90	12.61	11.23	10.36	10.51	9.75
<i>Merchant Owned</i>	32.80	38.71	23.64	23.90	27.38	23.00	26.08	29.12	28.64	27.25	21.25	16.66	24.99	22.61	23.33	22.76	17.08	14.83	15.61	15.50
<i>Utility Owned</i>	7.09	6.75	4.89	5.37	5.63	6.38	9.05	10.27	11.13	10.06	11.97	10.30	13.62	13.04	13.26	13.86	12.57	11.59	11.41	11.02
Electricity Generation (Imports)	45.67	58.72	58.67	64.25	65.73	62.50	54.43	59.53	65.51	47.89	43.43	46.43	44.27	39.78	36.60	33.77	26.23	23.82	24.46	21.58
<i>Specified Imports</i>	31.47	33.42	31.88	32.34	32.95	32.62	26.59	26.94	27.76	32.91	29.99	31.20	26.89	27.96	23.17	22.56	16.55	14.98	12.90	11.69
<i>Unspecified Imports</i>	14.20	25.31	26.80	31.91	32.78	29.89	27.84	32.59	37.75	14.98	13.44	15.23	17.38	11.82	13.43	11.21	9.68	8.84	11.56	9.89
Transportation	170.82	171.37	178.79	176.42	178.30	180.46	180.74	180.76	169.97	163.52	160.81	157.65	157.46	157.46	158.92	162.64	166.25	167.74	166.34	162.96
<i>Aviation</i>	4.17	3.99	4.13	4.21	4.45	4.45	4.52	4.93	4.46	3.99	3.81	3.70	3.72	3.89	3.87	4.18	4.40	4.64	4.61	4.32
<i>Not Specified Transportation</i>	1.98	1.90	1.93	1.85	1.89	2.01	2.05	1.84	2.08	1.65	2.03	1.61	1.57	1.57	1.79	1.93	1.64	1.54	1.61	1.83
<i>Off Road</i>	2.62	2.78	2.76	2.83	3.02	3.21	3.30	3.17	2.81	2.24	2.03	2.13	2.23	2.33	2.43	2.52	2.62	2.72	2.82	2.92
<i>On Road</i>	157.25	158.12	164.50	161.55	162.95	164.16	164.00	164.36	155.03	150.67	146.95	144.05	143.89	143.43	144.28	147.72	151.72	153.21	151.36	148.47
<i>Rail</i>	1.87	1.88	2.49	2.85	2.90	3.33	3.52	3.16	2.37	1.94	2.30	2.63	2.46	2.39	2.62	2.41	2.16	1.82	2.21	1.60
<i>Water-borne</i>	2.92	2.71	2.99	3.12	3.09	3.31	3.35	3.32	3.22	3.03	3.70	3.55	3.59	3.85	3.94	3.87	3.70	3.81	3.73	3.82
Industrial	88.63	86.69	87.54	86.97	89.40	87.36	84.58	81.49	81.68	79.05	82.85	81.06	80.74	83.36	84.25	81.95	80.62	80.33	80.69	79.73
<i>CHP: Industrial</i>	11.63	10.42	10.61	10.55	12.85	12.34	12.09	11.08	10.34	12.49	12.55	9.90	8.90	8.95	8.20	7.93	7.79	7.54	8.05	7.35
<i>Manufacturing</i>	27.25	26.27	28.08	24.56	24.99	24.20	24.36	22.43	22.98	19.71	21.89	23.34	24.14	24.93	25.14	24.70	24.35	24.16	24.19	25.38
<i>Mining</i>	0.86	0.31	0.31	0.34	0.36	0.34	0.11	0.16	0.19	0.14	0.15	0.15	0.17	0.16	0.15	0.15	0.16	0.17	0.17	0.15
<i>Not Specified Industrial</i>	1.98	1.87	1.95	1.84	1.87	1.87	1.88	1.94	1.87	1.74	1.89	1.74	1.67	1.88	1.99	2.07	2.01	1.94	1.87	1.84
<i>Oil & Gas: Production & Processing</i>	17.65	17.88	16.63	19.16	19.33	18.04	15.90	15.93	17.21	16.09	15.19	15.13	15.13	17.24	17.54	17.62	15.13	15.24	15.11	14.87
<i>Petroleum Refining and Hydrogen Production</i>	28.24	28.85	29.00	29.65	28.89	29.56	29.45	29.02	28.24	28.12	30.23	29.82	29.63	29.24	29.60	28.16	29.58	29.84	29.88	28.61
<i>Solvents & Chemicals</i>	0.43	0.40	0.35	0.36	0.33	0.35	0.35	0.35	0.35	0.33	0.33	0.32	0.31	0.31	0.31	0.31	0.31	0.32	0.32	0.34
<i>Transmission and Distribution</i>	0.60	0.68	0.61	0.52	0.77	0.66	0.44	0.57	0.52	0.43	0.61	0.64	0.78	0.64	1.33	1.01	1.27	1.12	1.10	1.19
Commercial	12.53	12.33	14.13	13.06	13.28	12.92	13.22	13.29	13.33	13.77	14.46	14.11	13.91	13.76	12.98	13.18	13.89	13.81	14.15	14.38
<i>CHP: Commercial</i>	1.09	1.05	1.06	0.26	0.62	0.40	0.42	0.49	0.37	0.92	0.92	0.46	0.54	0.50	0.52	0.52	0.78	0.85	0.72	0.74
<i>Communication</i>	0.19	0.17	0.20	0.19	0.19	0.17	0.19	0.18	0.16	0.16	0.15	0.15	0.14	0.14	0.12	0.11	0.12	0.11	0.11	0.12
<i>Domestic Utilities</i>	0.25	0.18	0.17	0.37	0.32	0.23	0.29	0.30	0.28	0.28	0.27	0.25	0.26	0.25	0.25	0.23	0.24	0.23	0.24	0.26
<i>Education</i>	1.22	1.07	1.24	1.09	1.09	1.07	1.12	1.09	1.01	1.03	1.05	1.06	0.99	1.02	0.85	0.84	0.90	0.94	0.96	1.03
<i>Food Services</i>	1.90	1.97	2.48	2.31	2.27	2.29	2.46	2.42	2.31	2.22	2.23	2.25	2.27	2.33	2.30	2.32	2.36	2.37	2.38	2.40
<i>Health Care</i>	1.38	1.42	1.65	1.47	1.43	1.43	1.52	1.49	1.44	1.44	1.51	1.55	1.54	1.56	1.46	1.46	1.50	1.51	1.50	1.54
<i>Hotels</i>	0.63	0.67	0.78	0.69	0.67	0.68	0.74	0.75	0.73	0.70	0.73	0.74	0.73	0.74	0.71	0.72	0.73	0.71	0.70	0.72
<i>National Security</i>	0.20	0.31	0.21	0.19	0.20	0.18	0.21	0.20	0.17	0.18	0.17	0.18	0.16	0.14	0.13	0.13	0.14	0.13	0.15	0.16
<i>Not Specified Commercial</i>	3.90	3.95	4.44	4.68	4.67	4.67	4.33	4.34	4.67	4.65	5.21	5.19	4.88	4.78	4.60	4.75	4.95	4.74	5.17	5.13
<i>Offices</i>	0.77	0.55	0.66	0.67	0.70	0.68	0.72	0.63	0.69	0.67	0.68	0.69	0.65	0.64	0.49	0.49	0.51	0.53	0.53	0.56
<i>Retail & Wholesale</i>	0.81	0.87	1.13	1.03	1.01	1.02	1.11	1.06	0.97	1.00	1.02	1.05	1.17	1.08	0.99	1.05	1.11	1.17	1.17	1.20
<i>Transportation Services</i>	0.18	0.13	0.13	0.11	0.10	0.09	0.12	0.34	0.51	0.51	0.53	0.56	0.57	0.58	0.56	0.56	0.56	0.53	0.52	0.53

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Included Emissions

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Residential	29.27	28.36	28.51	28.03	29.05	27.88	28.27	28.40	28.71	28.35	29.08	29.47	27.21	27.99	22.81	23.26	24.29	25.03	24.77	26.97
Household Use	29.27	28.36	28.51	28.03	29.05	27.88	28.27	28.40	28.71	28.35	29.08	29.47	27.21	27.99	22.81	23.26	24.29	25.03	24.77	26.97
Transmission and Distribution																				
Agriculture & Forestry	4.07	3.97	4.60	4.45	4.72	4.88	5.77	4.03	4.25	2.77	2.94	3.82	4.09	3.90	4.67	4.55	4.05	3.20	3.36	2.64
Ag Energy Use	3.80	3.81	4.37	4.24	4.49	4.59	5.28	3.77	4.08	2.60	2.77	3.64	3.86	3.70	4.50	4.38	3.96	3.10	3.22	2.53
Ag Soil Management	0.27	0.16	0.23	0.21	0.24	0.30	0.48	0.26	0.17	0.17	0.18	0.17	0.23	0.21	0.17	0.17	0.09	0.09	0.13	0.11
Summary for Included Emissions																				
California CO2 Emissions	409.6	424.1	421.6	420.9	429.3	420.8	416.5	421.3	417.5	388.4	380.1	374.8	381.1	377.4	372.0	369.9	357.3	351.9	352.0	345.2