California Environmental Protection Agency

2023
State Agency Greenhouse Gas Report Card

2023
State Agency Greenhouse Gas Reduction Report Card

This Report Card documents greenhouse gas (GHG) emissions from State agencies' operations.[1] Figure 1 shows the trend in reductions as reported in Report Cards from this year and previous years. This year's Report Card documents State operations' GHG emissions of 0.92 million metric tons of carbon dioxide equivalent ($MMTCO_2e$) that occurred in 2022.

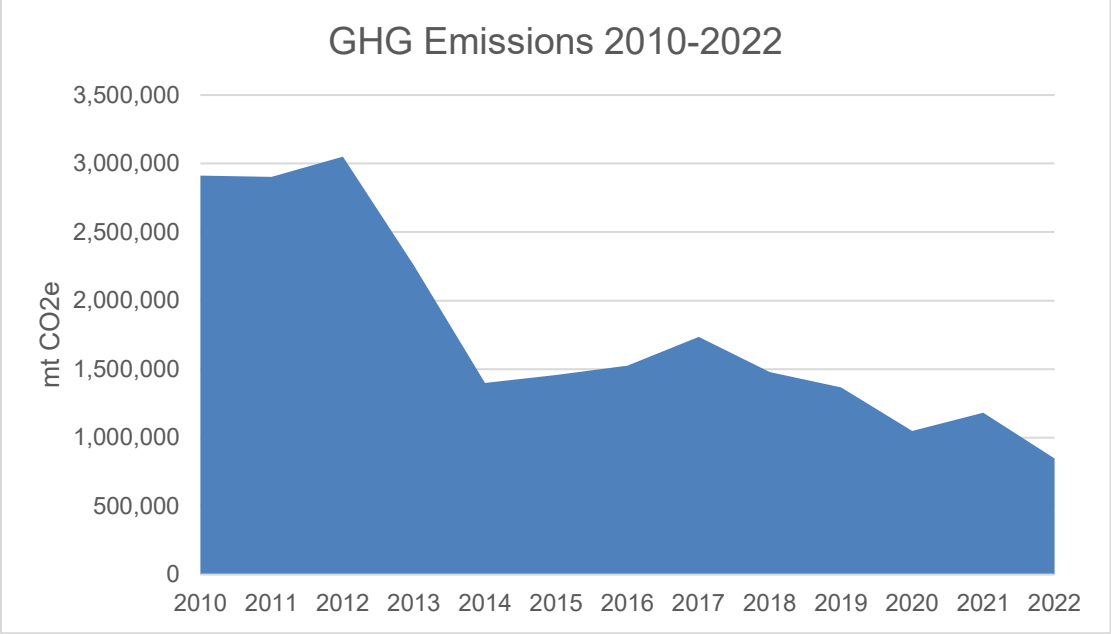

Figure 1

Background

Annually, the California Environmental Protection Agency (CalEPA) must prepare a report describing State agency actions to reduce GHG emissions, per Government Code Section 12892, Title 2, Division 3, Part 2.5 (Senate Bill 85, Statutes of 2007, Chapter 178). This law directs CalEPA to compile and organize this information in the form of a Report Card and post it on the CalEPA website. The report reflects information gathered in 2023 for actual GHG emissions occurring in 2022.

Each agency on the Climate Action Team (CAT) is required to report the GHG emissions from its own operations and activities. Table 1 lists the CAT agencies,

[1] Recent Report Cards are available at https://calepa.ca.gov/climate-action/#cat

boards, departments and commissions, and the status of the GHG inventory activities for each. The named agency or department provided the information in this table to CalEPA.

The GHG inventories employ protocols established by The Climate Registry (TCR)[2]. Inventories identified as 'verified' have been verified by an approved third party and submitted to the registry. The verified inventory reports are on the registry's website: https://theclimateregistry.org/our-members/member-reports/. Please direct any questions or comments to Ryan Radford at Ryan.Radford@calepa.ca.gov or Amanda Mattes at Amanda.Mattes@calepa.ca.gov.

GHG Inventories of State Agencies

Starting with the January 2010 report card, CalEPA began compiling GHG inventories prepared by the CAT member agencies. These inventories were each prepared independently using The Climate Registry's *General Reporting Protocol*. Executive Order B-18-12 required all State agencies under the direct authority of the Governor to take actions to reduce entity-wide greenhouse gas emissions by 10 percent by 2015 and 20 percent by 2020, as measured against a 2010 baseline.[3] In addition, Executive Order N-19-19 requires that every aspect of State government redouble its efforts to reduce greenhouse gas emissions.[4] Finally, Senate Bill 1203 (Becker, Statutes of 2022, Chapter 368) declares that it is the intent of the Legislature that State agencies aim to achieve net-zero emissions of greenhouse gas emissions resulting from their operations no later than January 1, 2035. Currently, 47 State agencies report their annual GHG emissions to The Climate Registry Information System.

From 2010-2022, State agencies reduced emissions by approximately 68 percent primarily due to the California Department of Water Resources' (DWR) divestiture of the Reid Gardner Generating Station (coal-fired power plant) in mid-2013 and DWR's ability to procure large amounts of renewable energy. The decrease in total emissions in 2019 and 2020 and increase in 2021 is due almost entirely to DWR emissions, which fluctuate year-to-year depending on rainfall levels. (See below for more information about DWR's emissions.) As of 2022, the largest GHG emissions reporting State agencies are: Department of Corrections and Rehabilitation, Department of Transportation, California Highway Patrol, Department of Fire and Forestry Protection, Department of State Hospitals, and Department of General Services. Among Constitutional Offices, the Judicial Council of California currently is the largest GHG

[2] Originally chartered by the State of California as the California Climate Action Registry.

[3] Executive Order B-18-12
https://www.ca.gov/archive/gov39/2012/04/25/news17508/index.html

[4] Executive Order N-19-19
https://www.gov.ca.gov/wp-content/uploads/2019/09/9.20.19-Climate-EO-N-19-19.pdf

emissions reporting entity. For more detailed information, please visit www.green.ca.gov.

To CalEPA's knowledge, California State agencies' 2010-2022 GHG emissions reduction of approximately 68 percent leads all subnational governments worldwide. This includes all members of the Under2 Coalition and US Climate Alliance. CalEPA's goal is to be a leader in subnational GHG reporting and contribute to the State's goal of carbon neutrality by 2045 by reducing emissions in State government operations.

Additional GHG reduction measures that agencies continue to implement include: identifying vehicles for replacement by zero emission vehicles or plug-in hybrid vehicles, implementing energy conservation principles, increasing use of renewable diesel, pursuing LEED and zero-net-energy at existing and new facilities, and participating in green energy purchase programs that supply either 50-percent or 100-percent renewable energy to State facilities.[5]

Starting with 2010 emissions, departments and agencies changed reporting methods for their emissions to avoid double counting in this State-government-wide reporting effort. For example, in the case of departments and agencies occupying buildings owned by the Department of General Services (DGS), they no longer include emissions from those buildings in their inventories. Instead, DGS reports those emissions in its own inventory. It is important to compare emissions only from calendar year 2010 forward due to these changes in reporting. For this reason, Table 1 shows pre-2010 emission numbers in a lighter shade of black than for more recent years.

Additionally, while changes in year-to-year GHG emissions can result from changes in the way State agencies do business, they also result from elements beyond individual agency control. California utilities rely extensively on hydropower for base-load energy generation. In dry years, more electricity is currently generated using natural gas compared to wet years, even as the state has substantially increased deployment of renewable energy resources. Similarly, weather conditions (cold or hot) can have a significant impact on building energy use. For policy makers to develop mid-term and long-term climate goals, they need to look at longer-term, multi-year trends, which average out the emissions impacts of weather anomalies.

Department of Water Resources

DWR is unique among State agencies due to its size, the magnitude of GHG reductions and the percentage of its reductions. Also, it is notable that DWR is only one of few State agencies that routinely verifies its GHG emissions. DWR has won many climate and environmental awards by reporting and verifying its GHG emissions annually including the Climate Leadership Award for Excellence in Greenhouse Gas Management and Organizational Leadership. Moreover, DWR has won a Climate

[5] Through the State of California partnership with investor-owned utilities, only 50-percent or 100-percent options are available. CalEPA currently participates in the SMUD and PG&E 100-percent renewable energy programs.

Leadership Award four times in six years. DWR received the awards at the Climate Leadership Conference, an annual event that honors innovative leadership and sustainability practices carried out by individuals and leaders to combat climate change.

In 2010, DWR emissions were 1,679,744 $MTCO_2e$, 79 percent of the State agency total. In 2022, DWR emissions were only 22,225 $MTCO_2e$, a remarkable 99-percent reduction in emissions.

DWR emissions fluctuated until 2012, then dropped by 81 percent from 2012 to 2014, then fluctuated at a new lower level. The year-to-year fluctuations relate to rainfall which refills reservoirs at dams that provide hydropower. The big drop in emissions resulted from expiration of the long-term contract with the coal-fired Reid Gardner Generating Station in mid-2013. Three units shut down in 2014 and the fourth in 2017.[6]

[6] Nevada Division of Environmental Protection, Reid Gardner Generating Station. https://ndep.nv.gov/environmental-cleanup/site-cleanup-program/reid-gardner-power-station

The data below is organized by Agency though many departments are reporting invidually.

Table 1: Climate Action Team - GHG Inventory Status

INVENTORY STATUS >	Member of The Climate Registry	Reporting Year	Emissions in Metric Tons CO2E for each year calculated	Emissions in Metric Tons CO2E for each year calculated	Emissions in Metric Tons CO2E for each year calculated	NOTES
			Direct	Indirect	Total	Green indicates verified inventory
Calfornia State Transportation Agency						
- *CalTrans*	Yes					
		2007	136,587	93,996	230,583	
		2008	75,546	111,331	186,877	
		2009	98,423	131,227	229,650	
		2010	125,627	89,356	214,983	
		2011	125,342	85,725	211,067	
		2012	118,242	78,373	196,615	
		2013	115,989	80,841	196,830	
		2014	110,074	45,538	155,612	
		2015	113,922	42,200	156,122	
		2016	87,614	40,829	128,443	
		2017	81,725	36,957	118,682	
		2018	100,910	20,158	121,068	
		2019	109,197	35,147	144,344	
		2020	98,013	6,594	104,607	
		2021	88,474	39,949	128,423	
		2022	88,101	35,380	123,481	

INVENTORY STATUS >	Member of The Climate Registry	Reporting Year	Emissions in Metric Tons CO2E for each year calculated	Emissions in Metric Tons CO2E for each year calculated	Emissions in Metric Tons CO2E for each year calculated	NOTES
			Direct	Indirect	Total	Green indicates verified inventory
California Environmental Protection Agency	Yes					
-Totals include inventory data for CalRecycle, CARB, OEHHA, DPR, DTSC and SWRCB						
		2005	2,632	4,914	7,546	
		2006	3,119	4,780	7,899	
		2007	3,050	5,545	8,595	
		2008	3,177	5,478	8,655	
		2010	2,364	4,884	7,248	
		2011	2,120	4,953	7,073	
		2012	1,964	4,704	6,668	
		2013	2,069	4,594	6,663	
		2014	1,822	3,961	5,783	
		2015	1,922	4,474	6,396	
		2016	1,866	3,953	5,820	
		2017	1,969	3,965	5,934	
		2018	1,842	4,336	6,178	
		2019	1,943	4,341	6,284	
		2020	1,527	3,848	5,375	
		2021	1,903	3,316	5,219	
		2022	1,356	5,663	7,039	

INVENTORY STATUS >	Member of The Climate Registry	Reporting Year	Emissions in Metric Tons CO2E for each year calculated	Emissions in Metric Tons CO2E for each year calculated	Emissions in Metric Tons CO2E for each year calculated	NOTES
			Direct	Indirect	Total	Green indicates verified inventory
California Department of Food and Agriculture	Yes					
		2010	8,133	1,974	10,107	
		2011	7,952	1,966	9,918	
		2012	6,740	1,948	8,688	
		2013	6,196	1,564	7,760	
		2014	5,774	2,350	8,124	
		2015	5,895	1,901	7,796	
		2016	5,432	1,548	6,980	
		2017	4,903	1,639	6,542	
		2018	4,988	1,479	6,467	
		2019	5,023	1,576	6,599	
		2020	4,875	1,347	6,222	
		2021	5,020	1,465	6,485	
		2022	3,347	1,498	4,845	

INVENTORY STATUS >	Member of The Climate Registry	Reporting Year	Emissions in Metric Tons CO2E for each year calculated	Emissions in Metric Tons CO2E for each year calculated	Emissions in Metric Tons CO2E for each year calculated	NOTES
			Direct	Indirect	Total	Green indicates verified inventory
California Governor's Office of Emergency Services	Yes					
		2010	294	698	992	
		2011	346	749	1,096	
		2012	302	904	1,206	
		2013	1,356	1,261	2,617	
		2014	2,109	1,570	3,679	
		2015	3,977	1,510	5,487	
		2016	2,558	1,495	4,053	
		2017	3,163	732	3,896	
		2018	2,475	821	3,296	
		2019	2,397	961	3,358	
		2020	2,986	387	3,373	
		2021	1,554	495	2,049	
		2022	1,544	523	2,067	

INVENTORY STATUS >	Member of The Climate Registry	Reporting Year	Emissions in Metric Tons CO2E for each year calculated	Emissions in Metric Tons CO2E for each year calculated	Emissions in Metric Tons CO2E for each year calculated	NOTES
			Direct	Indirect	Total	Green indicates verified inventory
CA Public Utilities Commission	Yes					
		2004	92	849	941	
		2005	432	1,084	1,516	
		2006	515	1,228	1,743	
		2010	167	892	1,059	
		2011	156	850	1,006	
		2012	149	805	954	
		2013	173	836	1,009	
		2014	152	729	881	
		2015	126	861	987	
		2016	206	680	886	
		2017	187	668	855	
		2018	348	713	1,061	
		2019	435	305	740	
		2020	233	581	814	
		2021	409	510	920	
		2022	63	469	532	

INVENTORY STATUS >	Member of The Climate Registry	Reporting Year	Emissions in Metric Tons CO2E for each year calculated	Emissions in Metric Tons CO2E for each year calculated	Emissions in Metric Tons CO2E for each year calculated	NOTES
			Direct	Indirect	Total	Green indicates verified inventory
Health and Human Services Agency						
- Department of Public Health	Yes					
		2010	5,769	6,297	12,066	
		2011	6,738	5,344	12,082	
		2012	6,276	5,076	11,352	
		2013	5,775	2,190	7,965	
		2014	4,842	523	5,365	
		2015	4,585	294	4,879	
		2016	4,572	273	4,845	
		2017	5,295	286	5,581	
		2018	4,997	298	5,295	
		2019	4,953	242	5,195	
		2020	5,350	256	5,606	
		2021	5,707	301	6,008	
		2022	5,709	265	5,974	

INVENTORY STATUS >	Member of The Climate Registry	Reporting Year	Emissions in Metric Tons CO2E for each year calculated	Emissions in Metric Tons CO2E for each year calculated	Emissions in Metric Tons CO2E for each year calculated	NOTES
			Direct	Indirect	Total	Green indicates verified inventory
Natural Resources Agency						
- The following Boards and Departments calculate emissions separately:						
- CalFire	Yes					
		2007	41,882	7,460	49,342	
		2008	37,222	6,044	43,266	
		2009	34,273	5,620	39,893	
		2010	36,237	4,507	40,744	
		2011	37,258	4,587	41,845	
		2012	46,856	4,664	51,520	
		2013	50,954	5,540	56,494	
		2014	44,992	4,574	49,566	
		2015	53,605	5,413	59,018	
		2016	57,942	4,031	61,973	
		2017	64,940	4,610	69,550	
		2018	57,538	4,345	61,883	
		2019	43,267	3,881	47,148	
		2020	62,082	3,517	65,599	
		2021	63,070	4,452	67,522	
		2022	52,948	4,904	57,852	

INVENTORY STATUS >	Member of The Climate Registry	Reporting Year	Emissions in Metric Tons CO2E for each year calculated	Emissions in Metric Tons CO2E for each year calculated	Emissions in Metric Tons CO2E for each year calculated	NOTES
			Direct	Indirect	Total	Green indicates verified inventory
Natural Resources Agency, continued						
- *CA Energy Commission*	Yes					
		2003	22	576	598	
		2008	14	948	962	
		2009	11	863	874	
		2010	4	903	907	
		2011	3	894	897	
		2012	3	1,347	1350	
		2013	1	489	490	
		2014	1	400	401	
		2015	1	424	425	
		2016	1	1	2	
		2017	0	1	1	
		2018	0	1	1	
		2019	0	1	1	
		2020	0	1	1	
		2021	0	1	1	
		2022	0	1	1	

INVENTORY STATUS >	Member of The Climate Registry	Reporting Year	Emissions in Metric Tons CO2E for each year calculated	Emissions in Metric Tons CO2E for each year calculated	Emissions in Metric Tons CO2E for each year calculated	NOTES
			Direct	Indirect	Total	Green indicates verified inventory
Natural Resources Agency, continued						
- *Dept. of Fish & Wildlife*	Yes					
		2007	15,716	18,303	34,019	
		2008	15,175	14,597	29,772	
		2009	13,557	9,026	22,583	
		2010	13,223	10,916	24,139	
		2011	13,793	8,490	22,283	
		2012	14,457	8,318	22,775	
		2013	12,244	7,993	20,237	
		2014	14,282	7,146	21,428	
		2015	13,541	7,553	21,094	
		2016	12,603	5,238	17,841	
		2017	12,169	5,648	17,817	
		2018	12,857	5,125	17,982	
		2019	12,356	4,999	17,355	
		2020	11,435	1,198	12,633	
		2021	9,923	2,009	11,932	
		2022	12,086	1,647	13,733	

INVENTORY STATUS >	Member of The Climate Registry	Reporting Year	Emissions in Metric Tons CO2E for each year calculated	Emissions in Metric Tons CO2E for each year calculated	Emissions in Metric Tons CO2E for each year calculated	NOTES
			Direct	Indirect	Total	Green indicates verified inventory
Natural Resources Agency, continued						
- *Dept. of Water Resources*	Yes					DWR has updated and re-verified its 2010-2022 GHG inventories using the TCR default EF (eGRID). DWR's previous inventories used CARB emission factors for net pump load.
		2007	14,299	3,226,250	3,240,549	
		2008	9,929	2,400,211	2,410,140	
		2009	11,477	2,025,807	2,037,284	
		2010	863,297	816,447	1,679,744	
		2011	740,566	851,513	1,592,079	
		2012	929,572	935,363	1,864,935	
		2013	470,413	619,543	1,089,956	
		2014	17,719	329,160	346,879	
		2015	14,169	437,681	451,850	
		2016	10,058	575,589	585,647	
		2017	17,651	838,669	856,320	
		2018	13,738	510,597	524,335	
		2019	10,385	405,971	416,356	
		2020	13,903	156,998	170,901	
		2021	9,344	258,925	268,269	
		2022	10,913	12,238	22,225	

INVENTORY STATUS >	Member of The Climate Registry	Reporting Year	Emissions in Metric Tons CO2E for each year calculated	Emissions in Metric Tons CO2E for each year calculated	Emissions in Metric Tons CO2E for each year calculated	NOTES
			Direct	Indirect	Total	Green indicates verified inventory
Natural Resources Agency, continued						
- Dept. of Parks and Recreation	Yes					
		2010	15,595	4,696	20,291	
		2011	15,877	5,046	20,923	
		2012	15,800	5,233	21,033	
		2013	16,521	5,793	22,314	
		2014	15,782	4,828	20,609	
		2015	13,218	6,183	19,401	
		2016	13,278	4,659	17,937	
		2017	11,187	4,333	15,520	
		2018	15,587	3,860	19,447	
		2019	15,893	4,384	20,277	
		2020	11,450	3,657	15,107	
		2021	14,573	3,777	18,350	
		2022	18,814	3,908	22,722	
Office of Planning & Research	Yes					

INVENTORY STATUS >	Member of The Climate Registry	Reporting Year	Emissions in Metric Tons CO2E for each year calculated	Emissions in Metric Tons CO2E for each year calculated	Emissions in Metric Tons CO2E for each year calculated	NOTES
			Direct	Indirect	Total	Green indicates verified inventory
Government Operations Agency						
- Dept. of General Services	Yes					The Department of General Services' inventory includes much of the operations (including buildings and vehicles) of many other agencies.
		2006	56,135	80,434	136,569	
		2007	58,124	90,739	148,863	
		2008	60,256	83,678	143,934	
		2009	55,324	80,009	135,333	
		2010	55,144	70,272	125,416	
		2011	55,342	70,225	125,567	
		2012	50,048	62,340	112,388	
		2013	43,768	66,918	110,686	
		2014	42,398	60,489	102,887	
		2015	42,702	38,646	81,348	
		2016	40,456	24,234	64,690	
		2017	39,112	14,570	53,682	
		2018	40,894	4,797	45,691	
		2019	42,374	9,717	52,091	
		2020	36,120	8,939	45,059	
		2021	37,495	7,612	45,107	
		2022	35,533	7,196	42,729	