SILICON VALLEY
CLEAN ENERGY

Silicon Valley Clean Energy
Member Agency
Greenhouse Gas Emissions Report

Reporting Methodology

Each year, SVCE conducts a greenhouse gas (GHG) emissions inventory for its service territory. The SVCE GHG inventory tracks energy- and transportation-related emissions in SVCE service territory and tracks and reports progress toward meeting GHG reduction targets. The inventory model aligns with the U.S. Community Protocol for Accounting and Reporting Greenhouse Gas Emissions and was developed using industry standards for estimating and accounting for emissions from energy and transportation. Inventory results are also calculated for each of SVCE's member agencies for these two sectors. In addition, member agencies may have their own accounting practices, and we've provided links to jurisdiction-specific inventories or Climate Action Plans.

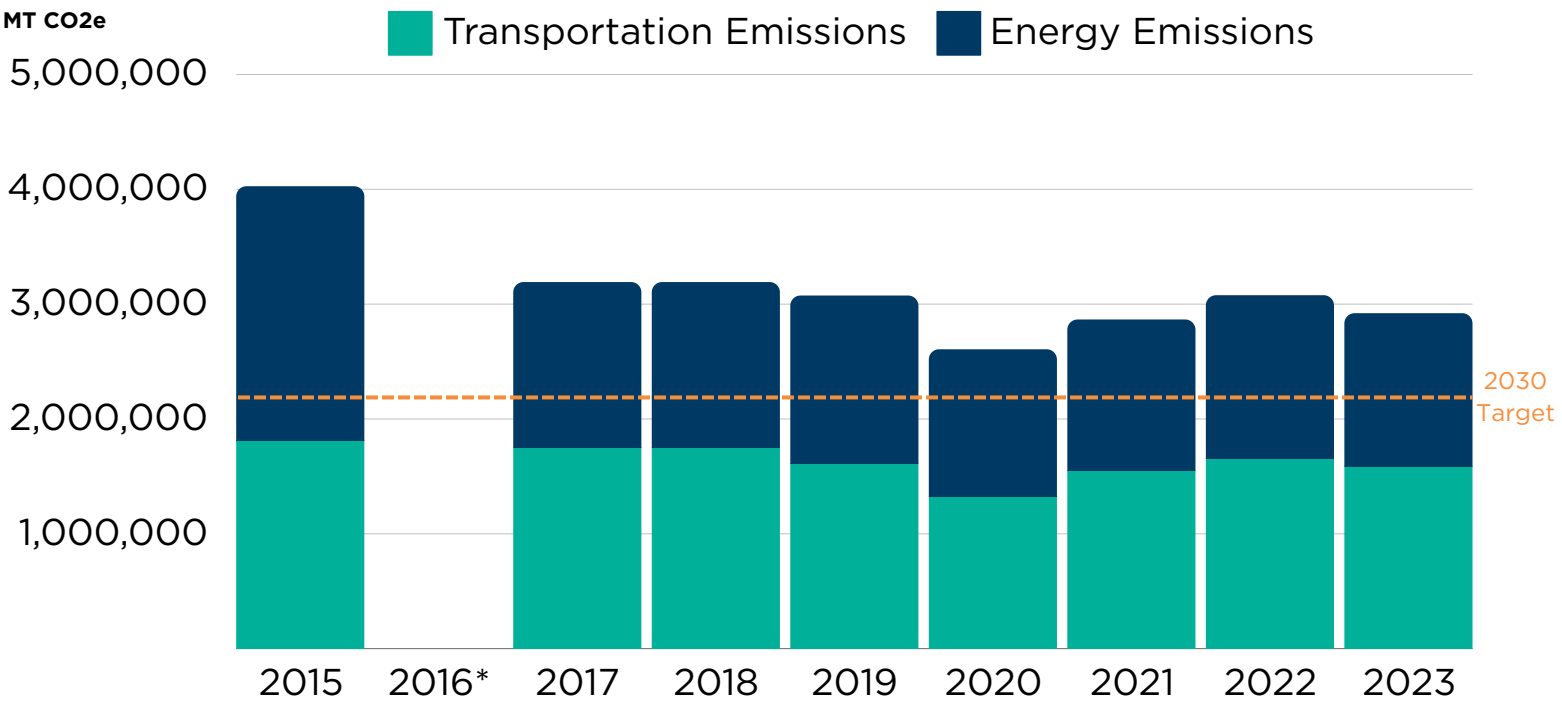
"Energy Emissions" come from electricity consumption and gas consumption in buildings and industry. These are based on PG&E meter data across SVCE territory. Annual emission factors from SVCE, PG&E and grid emissions are used to calculate electricity emissions, while the remaining emission and conversion factors used in the inventory model are pulled from industry-standard sources.

"Transportation Emissions" come from vehicles and offroad equipment like industrial equipment and lawn and garden equipment.* Emissions from the on-road transportation sector are calculated using DMV data on electric vehicle penetration, vehicle miles traveled data from the Metropolitan Transportation Commission, and vehicle fuel efficiency data from the California Air Resources Board (CARB) EMFAC database. Emissions from the offroad sector are calculated using CARB's offroad models at the county-level, then apportioned to each of the 13 member agencies using population and workforce data from the U.S. Census Bureau and Plan Bay Area. Offroad emissions from 2015-2022 are calculated using the OFFROAD2007 model and offroad emissions starting in 2023 are calculated using the OFFROAD2021 model.

"Population" data for each member agency comes from U.S. Census Bureau population estimates.

* Offroad "Airport Ground Support Equipment" were excluded from SVCE's GHG inventory because these emissions are primarily associated with San Jose International Airport which is not in SVCE service territory. "Oil Drilling" emissions were excluded since these activities do not occur in Santa Clara County.

SVCE Emissions

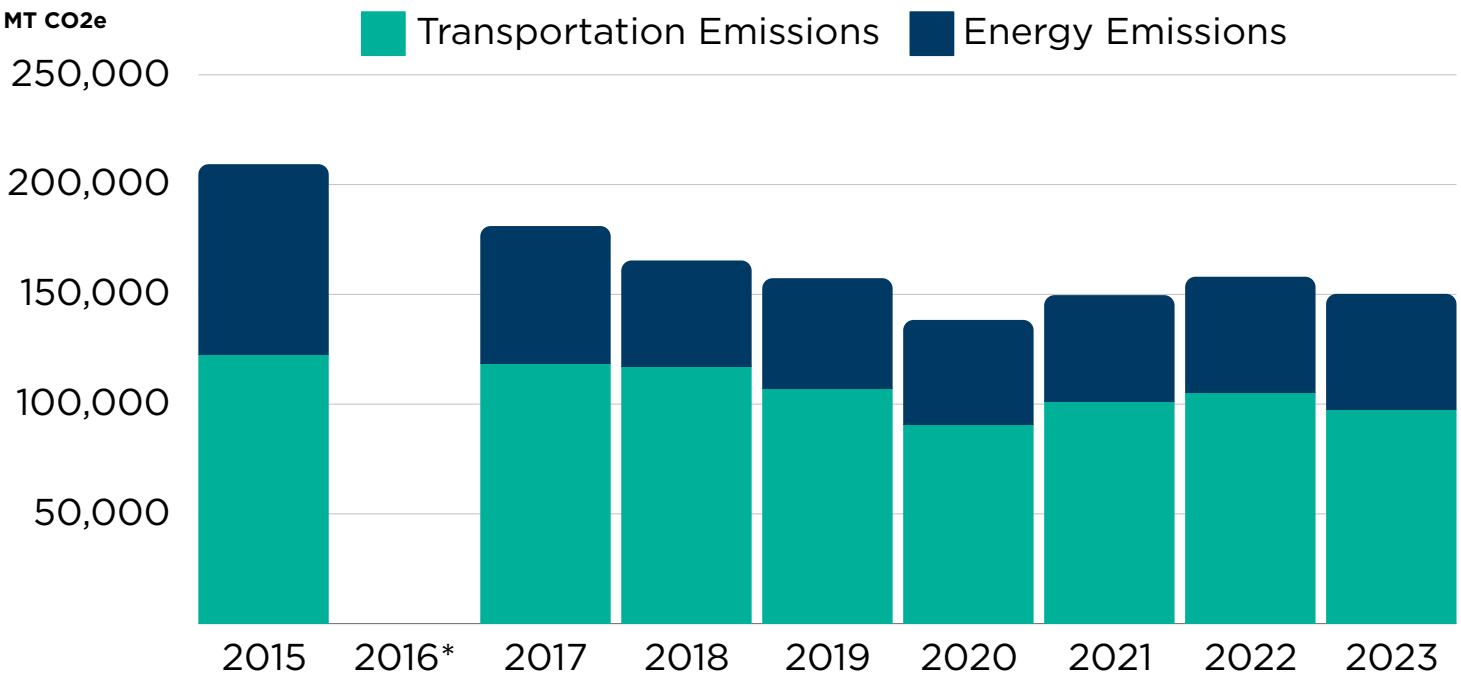


Year	Population**	Energy Sector [MT CO2e]	Transportation Sector [MT CO2e]	Total Emissions [MT CO2e]
2023	710,993	1,333,107	1,588,182	2,921,289
2022	706,772	1,419,765	1,663,798	3,083,563
2021	708,188	1,316,545	1,549,971	2,866,516
2020	710,328	1,278,791	1,328,170	2,606,960
2019	710,328	1,464,962	1,610,165	3,075,127
2018	711,297	1,441,246	1,751,162	3,192,408
2017	719,930	1,723,242	1,754,606	3,477,847
2015	719,930	2,210,009	1,816,935	4,026,944

*2016 inventory data is not available. SVCE's GHG inventory starts with the year 2017, when SVCE began service. There is an additional inventory for the year 2015 to serve as a baseline for SVCE's GHG reduction targets.

** Starting in 2018 there was a change in Unincorporated population calculation methods. Applying this same method to 2015 and 2017, the population would be around 85,000 for those years.

City of Campbell



Year	Population	Energy Sector [MT CO2e]	Transportation Sector [MT CO2e]	Total Emissions [MT CO2e]
2023	41,700	52,537	97,698	150,235
2022	42,286	52,924	105,520	158,443
2021	42,754	48,394	101,255	149,649
2020	41,793	47,658	90,696	138,354
2019	41,793	50,278	107,091	157,369
2018	42,466	48,460	116,980	165,439
2017	40,939	62,717	118,403	181,120
2015	40,939	86,514	122,790	209,303

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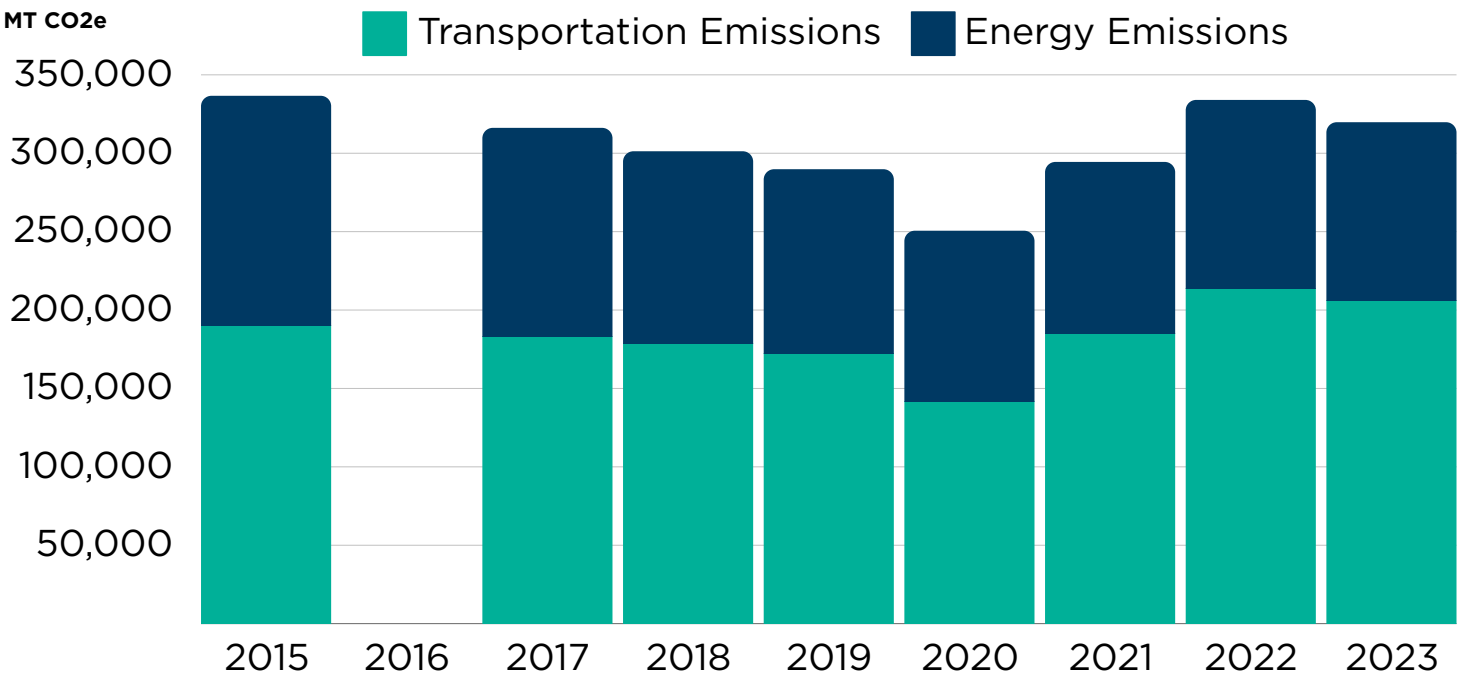
City of Cupertino



Year	Population	Energy Sector [MT CO2e]	Transportation Sector [MT CO2e]	Total Emissions [MT CO2e]
2023	57,285	113,869	205,919	319,787
2022	57,856	120,291	214,213	334,503
2021	58,622	109,718	184,746	294,464
2020	59,276	109,116	141,474	250,591
2019	59,276	117,685	172,131	289,816
2018	60,170	122,678	178,587	301,265
2017	60,643	133,152	183,037	316,190
2015	60,643	146,660	189,975	336,636

Click here to go to Cupertinos Climate Action Plan

View Cupertino's GHG Inventory

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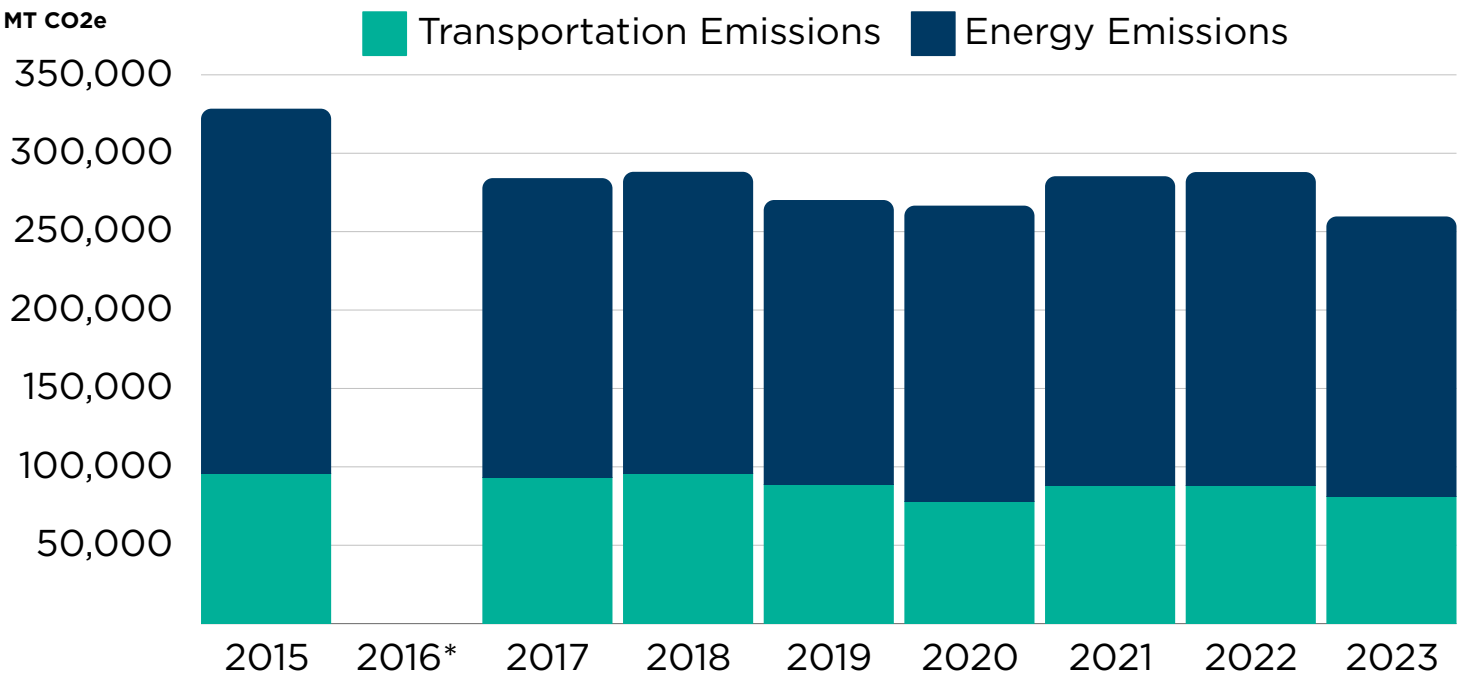
City of Gilroy



Year	Population	Energy Sector [MT CO2e]	Transportation Sector [MT CO2e]	Total Emissions [MT CO2e]
2023	58,250	178,485	81,200	259,685
2022	58,005	199,697	88,652	288,349
2021	58,101	197,181	88,163	285,344
2020	59,032	188,487	78,103	266,590
2019	59,032	181,264	88,909	270,172
2018	58,756	192,482	95,678	288,160
2017	55,069	191,195	92,939	284,134
2015	55,069	232,683	95,741	328,423

Click here to go to Gilroy's Climate Action Plan

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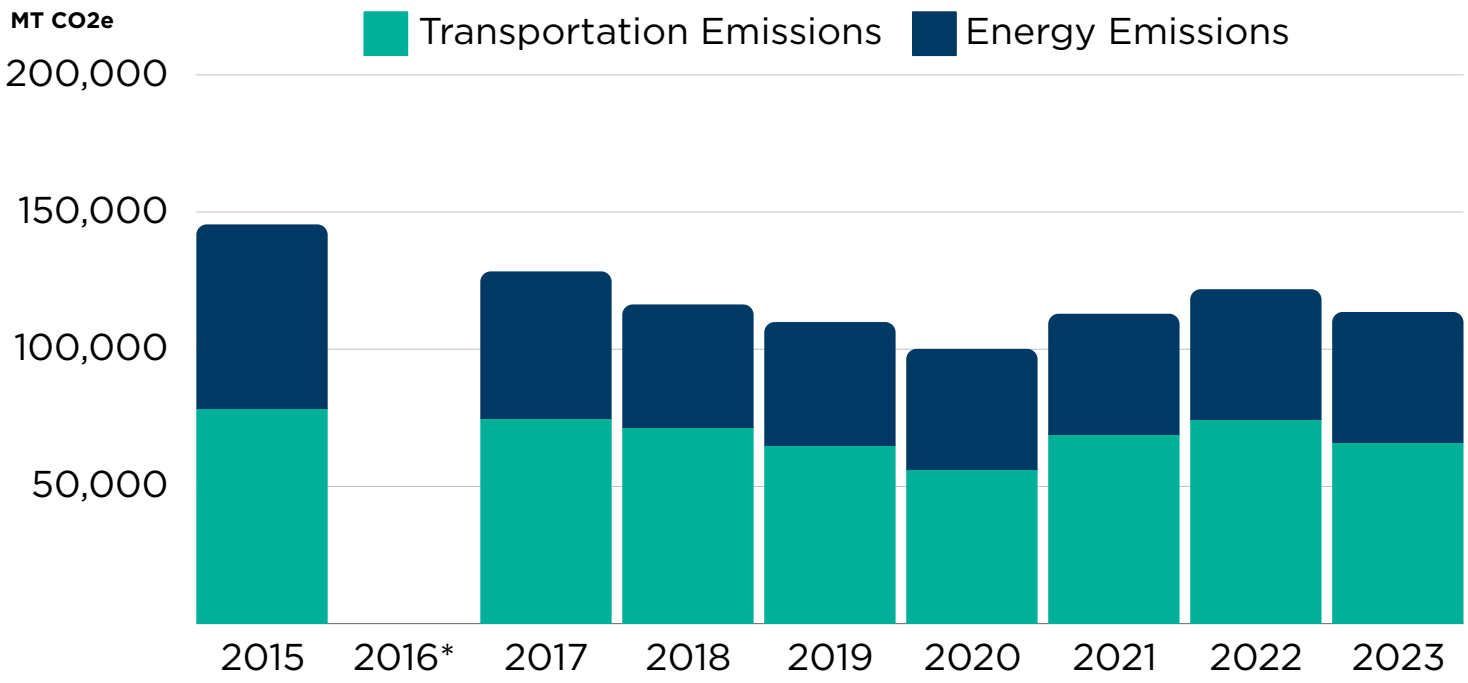
City of Los Altos



Year	Population	Energy Sector [MT CO2e]	Transportation Sector [MT CO2e]	Total Emissions [MT CO2e]
2023	29,990	47,669	65,912	113,581
2022	30,424	47,361	74,757	122,118
2021	30,700	44,102	68,840	112,941
2020	30,089	44,067	56,071	100,138
2019	30,089	44,906	65,007	109,913
2018	30,531	44,778	71,548	116,326
2017	30,561	53,503	74,866	128,369
2015	30,561	67,144	78,353	145,496

Click here to go to Los Altos's Climate Action Plan

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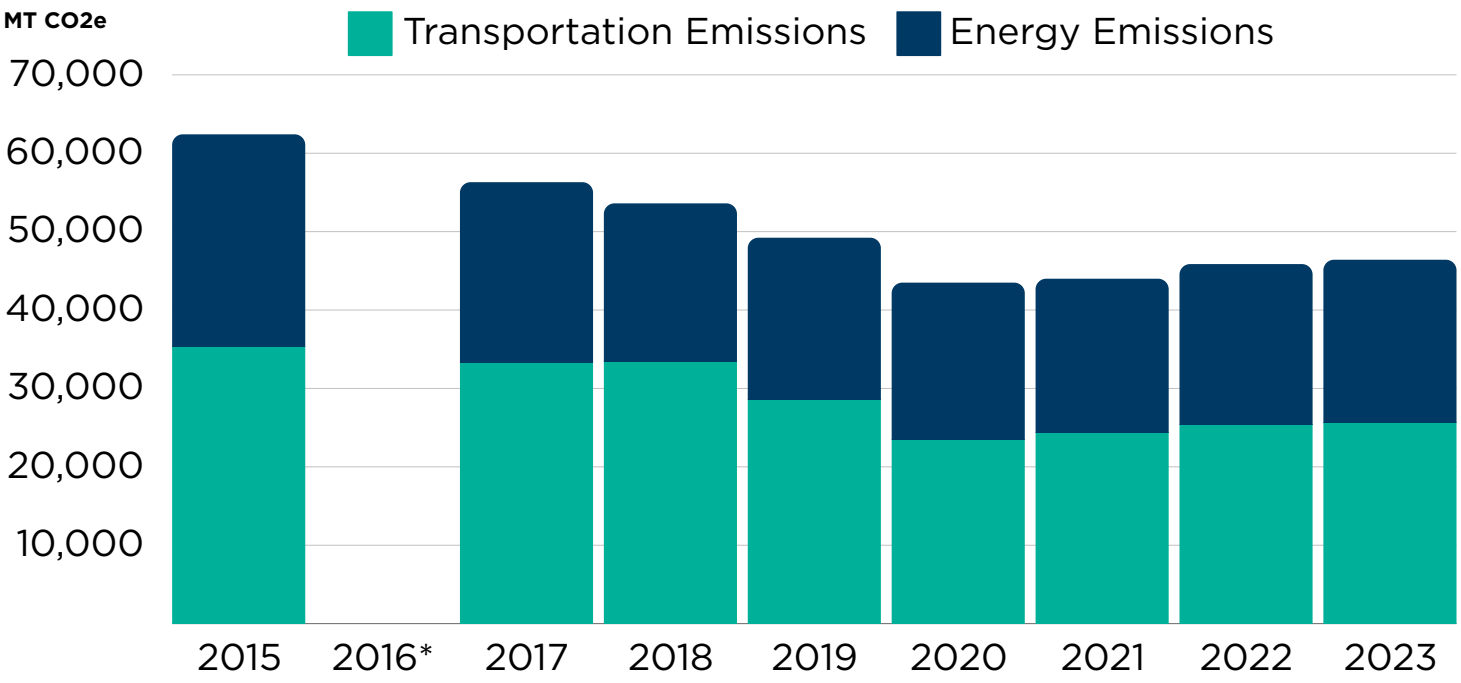
Town of Los Altos Hills



Year	Population	Energy Sector [MT CO2e]	Transportation Sector [MT CO2e]	Total Emissions [MT CO2e]
2023	8,189	20,809	25,607	46,415
2022	8,168	20,477	25,424	45,901
2021	8,295	19,616	24,380	43,996
2020	8,423	20,063	23,433	43,496
2019	8,423	20,687	28,538	49,226
2018	8,559	20,233	33,374	53,607
2017	8,501	23,061	33,247	56,307
2015	8,501	27,006	35,405	62,411

Click here to go to Los Altos Hill's Climate Action Plan

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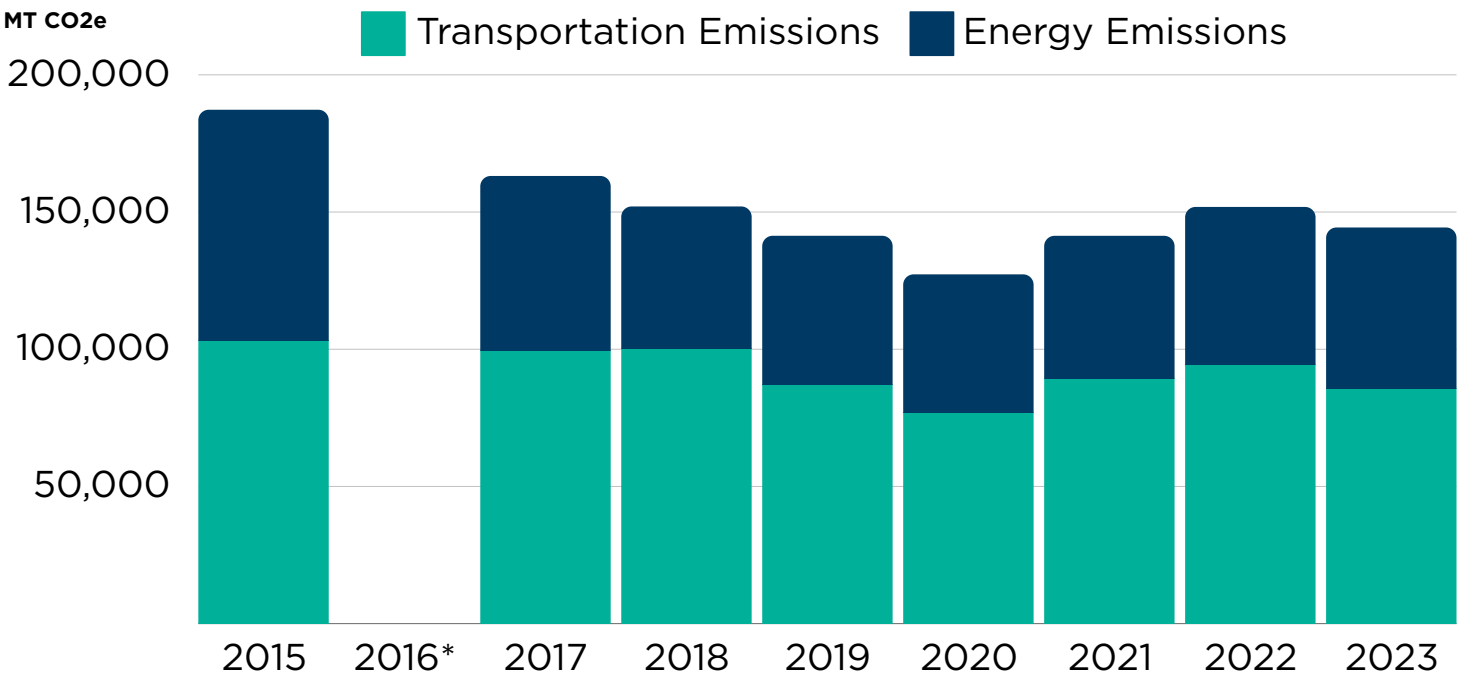
Town of Los Gatos



Year	Population	Energy Sector [MT CO2e]	Transportation Sector [MT CO2e]	Total Emissions [MT CO2e]
2023	32,216	58,780	85,592	144,372
2022	32,402	57,303	94,837	152,139
2021	32,538	51,959	89,379	141,338
2020	30,222	50,431	76,859	127,289
2019	30,222	54,343	87,007	141,350
2018	30,680	51,932	100,102	152,034
2017	30,545	63,516	99,633	163,149
2015	30,545	84,106	103,174	187,280

Click here to go to Los Gatos's Climate Action Plan

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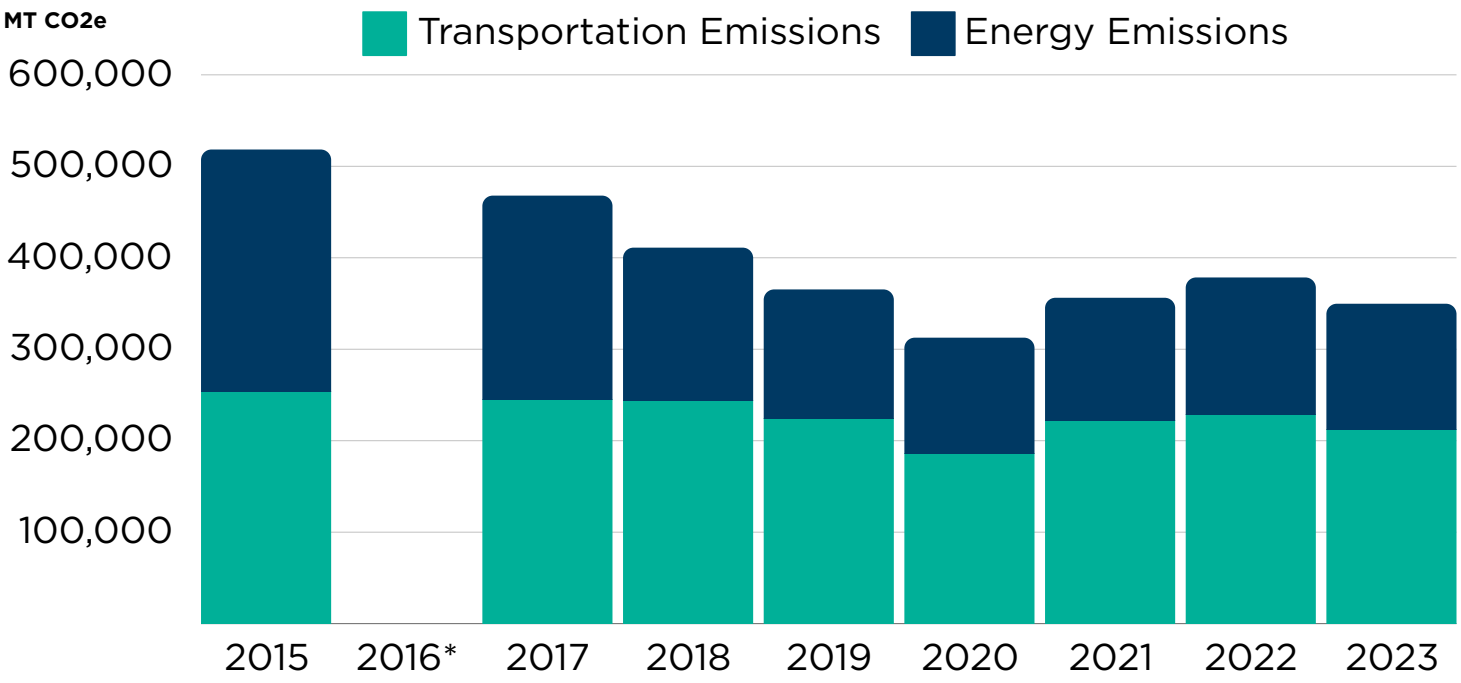
City of Milpitas



Year	Population	Energy Sector [MT CO2e]	Transportation Sector [MT CO2e]	Total Emissions [MT CO2e]
2023	77,321	137,923	211,824	349,747
2022	77,738	149,905	229,257	379,162
2021	79,066	134,602	221,668	356,270
2020	84,196	126,517	186,133	312,650
2019	84,196	141,500	223,891	365,391
2018	80,430	167,270	243,800	411,070
2017	77,528	223,036	244,926	467,963
2015	77,528	264,439	253,926	518,365

Click here to go to Milpitas's Climate Action Plan

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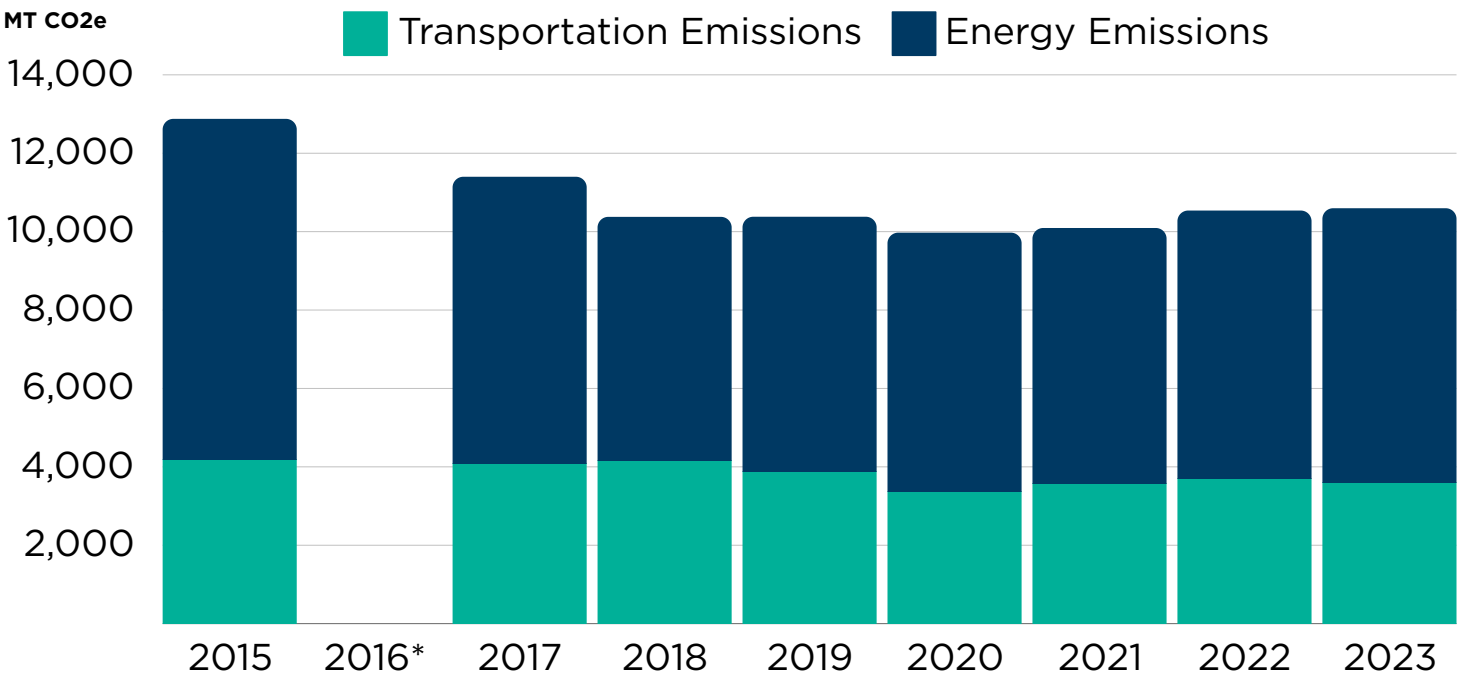
City of Monte Sereno



Year	Population	Energy Sector [MT CO2e]	Transportation Sector [MT CO2e]	Total Emissions [MT CO2e]
2023	3,479	6,966	3,601	10,566
2022	3,343	6,844	3,709	10,552
2021	3,396	6,506	3,587	10,093
2020	3,488	6,610	3,364	9,974
2019	3,488	6,497	3,883	10,380
2018	3,487	6,218	4,159	10,378
2017	3,514	7,317	4,083	11,400
2015	3,514	8,683	4,194	12,877

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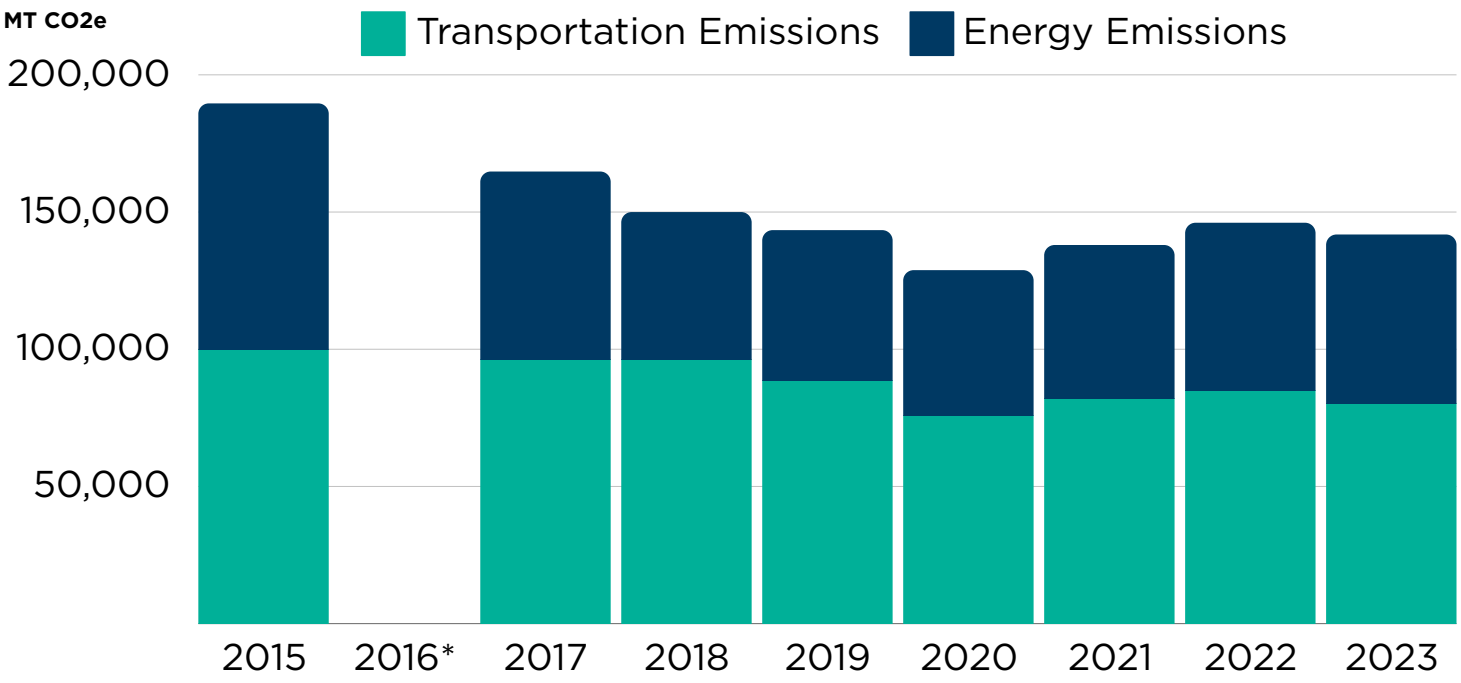
City of Morgan Hill



Year	Population	Energy Sector [MT CO2e]	Transportation Sector [MT CO2e]	Total Emissions [MT CO2e]
2023	44,478	61,449	80,369	141,818
2022	44,973	61,264	85,136	146,400
2021	45,342	55,779	82,209	137,988
2020	45,952	52,977	75,849	128,826
2019	45,952	54,743	88,665	143,407
2018	45,135	53,660	96,331	149,990
2017	44,155	68,617	96,148	164,765
2015	44,155	89,636	99,954	189,590

Click here to go to Morgan Hill's Climate Action Plan

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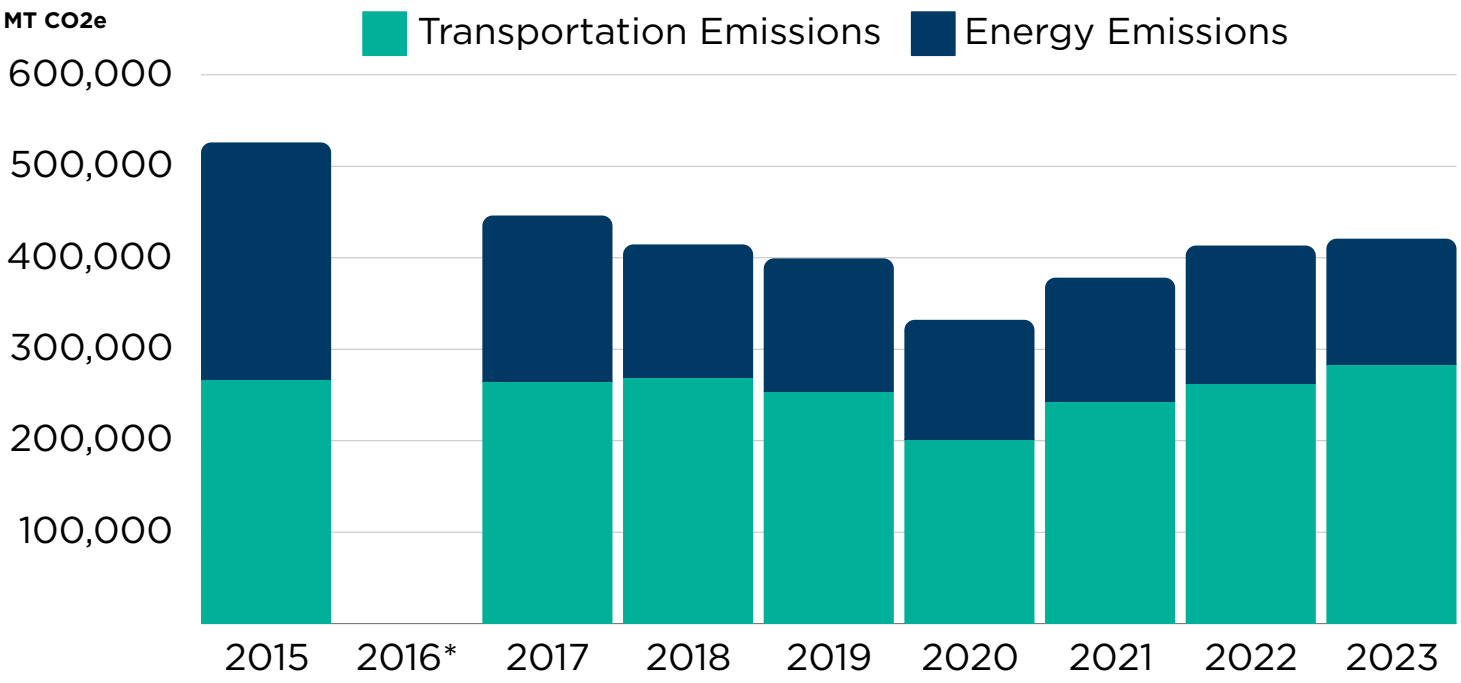
City of Mountain View



Year	Population	Energy Sector [MT CO2e]	Transportation Sector [MT CO2e]	Total Emissions [MT CO2e]
2023	81,785	137,196	283,695	420,891
2022	81,059	150,347	263,872	414,220
2021	81,516	135,129	243,133	378,262
2020	82,739	130,525	201,650	332,175
2019	82,739	145,375	253,980	399,355
2018	83,377	145,300	269,300	414,600
2017	80,447	181,792	264,411	446,203
2015	80,447	258,778	267,334	526,112

Click here to go to Mountain View's Climate Action Plan

View Mountain View's GHG Inventory

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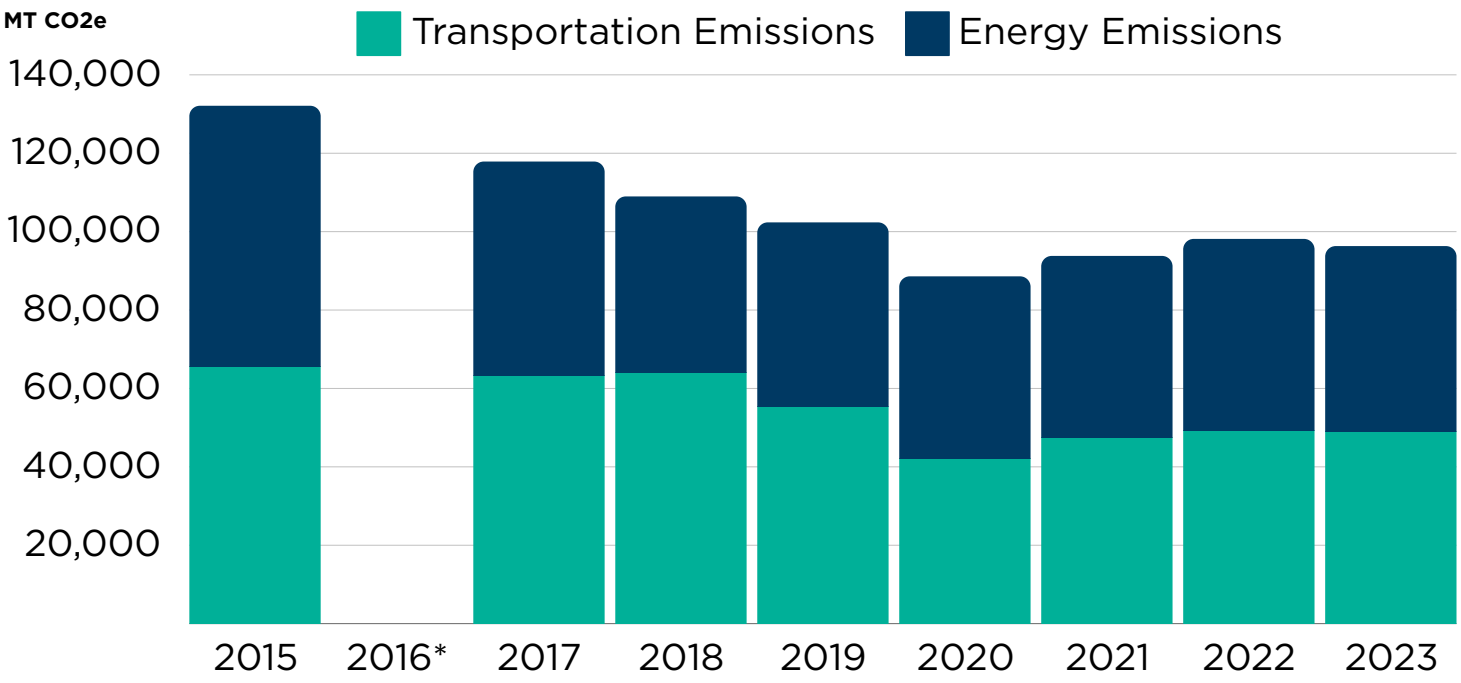
City of Saratoga



Year	Population	Energy Sector [MT CO2e]	Transportation Sector [MT CO2e]	Total Emissions [MT CO2e]
2023	29,607	48,919	47,398	96,317
2022	29,903	48,827	49,486	98,313
2021	30,163	46,232	47,575	93,808
2020	30,153	46,536	42,061	88,597
2019	30,153	47,093	55,269	102,363
2018	30,599	44,788	64,194	108,981
2017	30,767	54,563	63,320	117,883
2015	30,767	66,402	65,709	132,111

Click here to view Saratoga's Climate Action Plan

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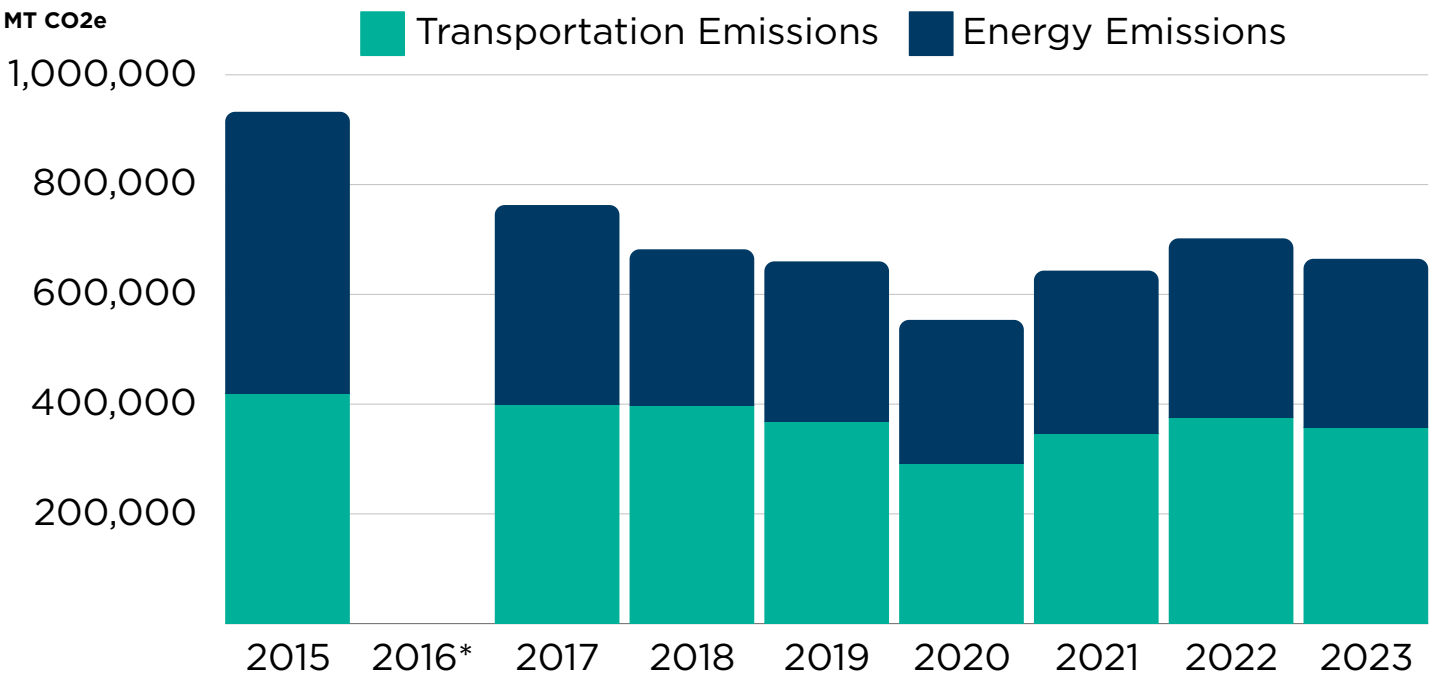
City of Sunnyvale



Year	Population	Energy Sector [MT CO2e]	Transportation Sector [MT CO2e]	Total Emissions [MT CO2e]
2023	151,967	307,728	357,038	664,766
2022	153,091	326,206	377,159	703,365
2021	152,258	297,412	345,860	643,272
2020	152,703	261,802	291,686	553,487
2019	152,703	291,563	368,525	660,087
2018	153,185	283,701	398,399	682,100
2017	152,771	364,008	398,757	762,765
2015	152,771	514,085	418,602	932,687

Click here to go to Sunnyvale's Climate Action Plan

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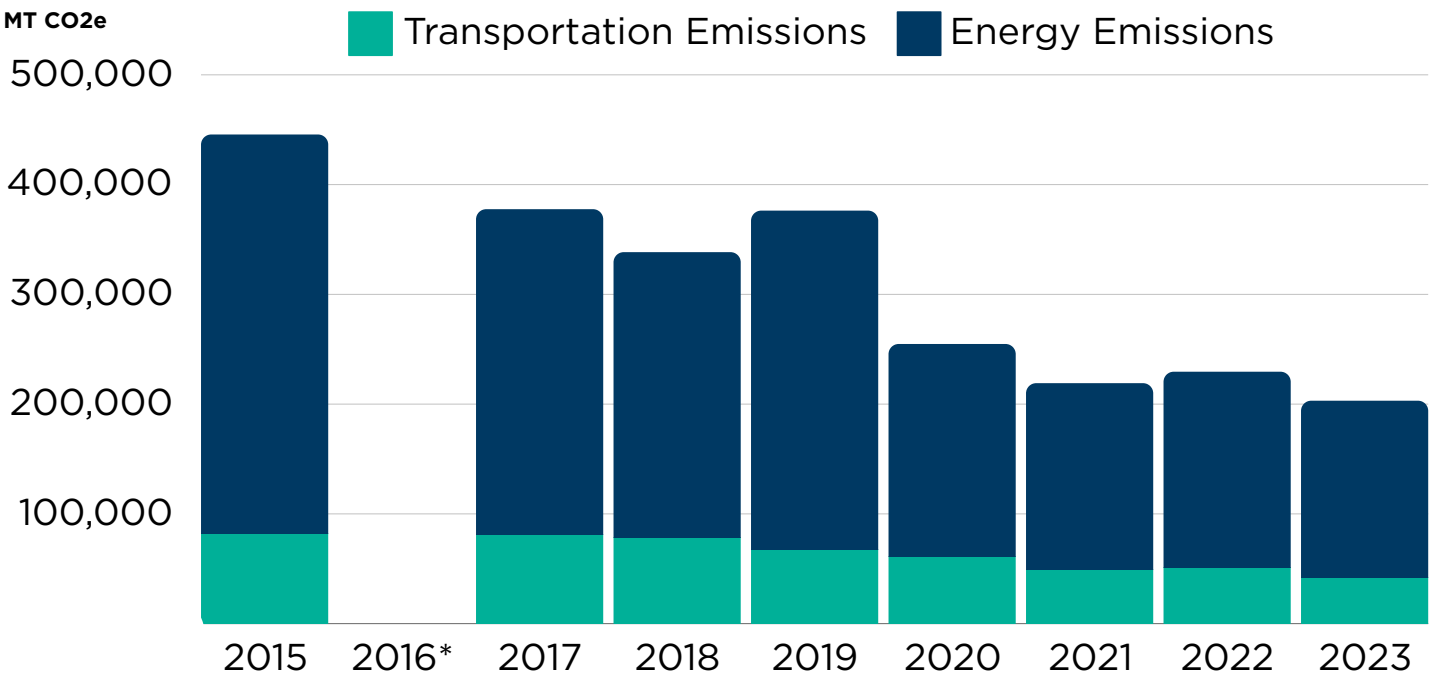
Unincorporated Santa Clara County



Year	Population**	Energy Sector [MT CO2e]	Transportation Sector [MT CO2e]	Total Emissions [MT CO2e]
2023	94,726	160,779	42,330	203,109
2022	87,524	178,320	51,777	230,097
2021	85,437	169,915	49,176	219,091
2020	82,262	194,002	60,791	254,793
2019	82,262	309,030	67,269	376,298
2018	83,922	259,747	78,709	338,456
2017	104,490	296,765	80,836	377,601
2015	104,490	363,873	81,779	445,653

Click here to go to Santa Clara County's Climate Action Plan

View the County's GHG Inventory

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Greenhouse Gas Emissions Report Frequently Asked Questions

What does transportation emissions data include?

Transportation emissions includes:

1) On-road transportation covering commercial and non-commercial travel either partially or fully within SVCE's service territory. This includes travel within SVCE territory by residents who live outside of SVCE territory.

2) Offroad transportation include vehicles that operate off of public streets used in categories such as construction, manufacturing and recreation.

What emissions factors are used for emissions associated with electricity?

SVCE and PG&E electricity emission factors are pulled from their respective Power Content Labels. The default direct access emissions factor was calculated using state-level data from CARB, then adjusted for SVCE territory based on public information about local direct access customers.

What potential emissions are excluded from this analysis?

Emissions associated with the production and life cycle of products purchased by residents and businesses in SVCE's service territory not included. In addition, air travel, waste, wastewater, gas leakage emissions, and refrigerant emissions are excluded from this inventory.

How is this emissions inventory used?

The inventory supports data-driven decision making at SVCE by providing an understanding of how emissions are changing in relation to the 2015 baseline and since SVCE's operations began. The inventory also supports local agencies in providing data to complete their own emissions reporting.