The City of SAN DIEGO

2025

Annual Climate Action Plan Report

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Message from the City Planning Department Director

Each year, the City of San Diego reports on progress we are making to reduce climate pollution and build healthier, more sustainable communities. This report shows that we are making meaningful progress in several important areas, while also making clear that more work remains.

Overall, climate pollution in 2024 was 23 percent lower than the baseline year in 2019 and 3 percent lower than 2023. More homes and businesses are using clean electricity and saving energy. Electricity from rooftops and other on-site solar systems doubled between 2019 and 2024 and the amount of clean electricity on the power grid in 2024 was nearly twice what it was in 2019. Nearly two-thirds of the electricity used in the city in 2024 came from emissions-free sources.

San Diegans are also finding cleaner ways to get around the city. Compared to the previous year, the number of electric vehicles and public charging stations increased by about 25 percent. Public transit use continued to recover from the COVID-19 pandemic, with transit boardings increasing 10 percent in 2024.

The City is also making it easier for people to live in Climate Smart Village Areas – neighborhoods closer to jobs, schools, parks, stores, transit and other everyday needs as addressed in the General Plan. In 2025, 7,259 new homes, including 2,050 new affordable homes, were permitted in these areas, representing 95 percent of new homes and 99 percent of new affordable homes. Also in 2025, the City completed community plan updates in the College Area and Clairemont communities that add space for tens of thousands of additional homes in walkable, transit-connected neighborhoods.

Other examples of progress include planting more than 5,000 new trees and building over 24 miles of new bikeways in 2025 and redirecting more than 24 million pounds of surplus food in 2024 to organizations serving people in need.

At the same time, this report shows that progress is uneven, and some important goals remain out of reach. Driving in the city remains below 2019 levels but has steadily increased in recent years. Transit ridership also remains below pre-pandemic levels. And while overall climate pollution continues to trend downward, emissions in 2024 were still about 6 percent above the average pace needed to meet the Climate Action Plan's 2030 target.

These results help show where current efforts are working and where faster progress is needed. The City remains committed to doing its part, but climate change cannot be addressed by cities alone. Lasting progress will require coordinated action across all levels of government, across businesses and institutions, and throughout everyday economic and community life – in San Diego, across California, throughout the United States and around the world.

Today, that broader coordination faces real challenges. Governments are dealing with difficult budget decisions, people and families are facing rising costs of living and national priorities are focused elsewhere. Even so, the City remains committed to advancing practical climate solutions that also improve daily life for San Diegans.

Our focus continues to be climate action that helps make neighborhoods healthier, safer, more affordable, and more connected. That means cleaner air and lower energy costs, better transportation choices, more housing near everyday needs, and stronger, more resilient communities for all San Diegans.

Heidi Vonblum, Director
City Planning Department

Climate Action Plan Reporting

The 2025 Annual Climate Action Plan Report summarizes the best available information on the City of San Diego's progress toward the goals of the Climate Action Plan. The report includes a comprehensive, citywide inventory of climate pollution in 2024[1] and tracks key indicators[2] that help us understand why and how emissions are changing over time. For many indicators, the latest available data is from 2024. Where 2025 indicator data is available, it is also provided.

The report also presents the latest emissions estimates for 2019-2023. When improved data became available while preparing the 2024 inventory (e.g., more accurate data on natural gas consumption), emissions estimates were also updated for past years to show relevant comparisons.

This approach follows international and State guidance and helps ensure that emissions trends are accurate and consistent. As a result, emissions estimates for some years will show variations from what was shown in past annual reports.

Because it measures emissions across the whole community, a citywide inventory reflects the combined impact of decisions and activities by residents, businesses, institutions, utilities and all levels of government. This is different from simply estimating the emissions reductions expected from individual City programs or projects. Those estimates can help show the potential benefits of specific actions taken by City government, but they do not capture the full picture of how emissions are actually changing across the city over time. A citywide inventory helps track real-world outcomes and overall progress toward climate goals.

[1] 2024 is the latest year for which complete data are available to complete an annual greenhouse gas emissions inventory for the city. Key data inputs needed to complete the annual greenhouse gas emissions inventory for 2025, including data related to energy consumption, electricity emissions, and vehicle miles traveled, are provided by agencies and entities external to the City (e.g., California Energy Commission, California Department of Transportation) and are not anticipated to be available to the City until late 2026 or early 2027.

[2] Performance indicators, such as number of trees planted, miles of new bikeways constructed and number of electric vehicle charging stations installed, help measure how effectively the City is carrying out the actions of the Climate Action Plan. These indicators provide valuable data on implementation progress but are not a replacement for annual greenhouse gas emissions inventories. Inventories use the best available data to estimate emissions from all sources and activities across the city, not only those directly influenced by City-led actions.

The City Planning Department retained the Energy Policy Initiatives Center of the University of San Diego School of Law to prepare the inventory and help analyze the data for key indicators. Several City departments collected and shared data needed to prepare the inventory and evaluate key indicators.

The data sources, reporting protocols, methods, assumptions and limitations involved in tracking and reporting the key indicators and preparing the citywide emissions inventory are provided in Appendices A and B, respectively.

The citywide emissions inventory is an estimate of the climate pollution (greenhouse gas emissions) produced by everyday activities across the city, including transportation, building energy use, electricity generation, waste disposal and other sources. The inventory is based as much as possible on real-world information, such as metered energy consumption, energy sources used to make electricity, traffic data, transit ridership and waste volumes. Where direct data for activities and sources in the city are not available, the inventory uses standard methods, modeling, and reasonable assumptions to estimate citywide emissions as accurately as possible.

The emissions data and key indicators included in this report, along with information on the status of actions implementing the Climate Action Plan, are available on the City's Climate Action Plan dashboard **climatedashboard.sandiego.gov.**

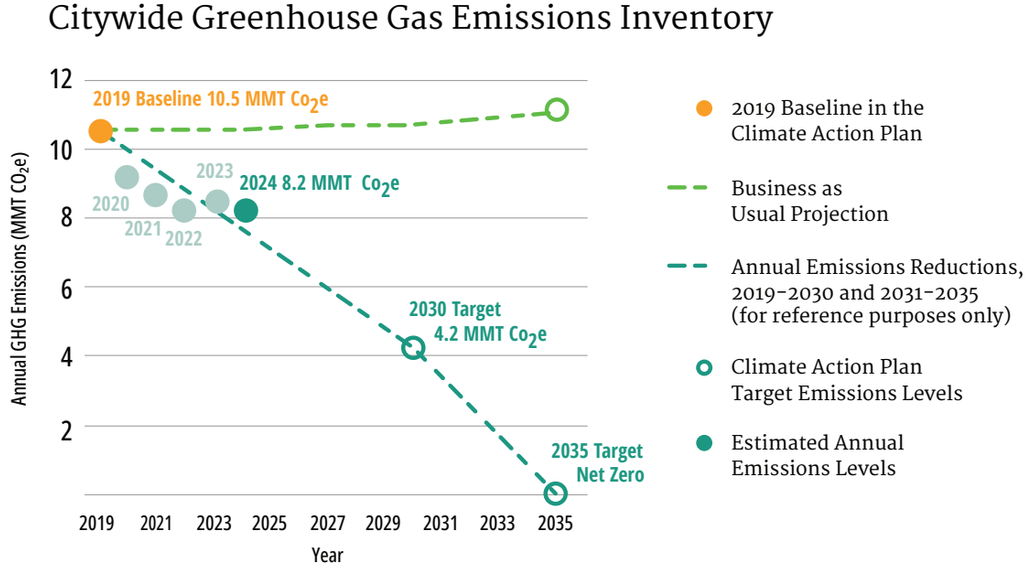
Annual Greenhouse Gas Emissions Levels in 2024

Annual GHG emissions levels were estimated to be 8.16 million metric tons of carbon dioxide equivalent (MMT CO_2e) in 2024.

Citywide emissions in 2024 were down 23 percent from 2019, the reference point for measuring future changes in emissions in the Climate Action Plan. Citywide emissions in 2024 were also down 3 percent from the prior year, when emissions levels were down 20 percent from 2019.

Figure 1. Citywide Greenhouse Gas Emissions and Reduction Targets

Estimated citywide greenhouse gas emissions from 2019-2024 are shown alongside two trajectories through 2035: a Business-as-Usual scenario assuming no Climate Action Plan implementation and a linear trajectory of average emissions reductions each year from 2019 to the Climate Action Plan's 2030 and 2035 targets.



Source: adapted from Table 3, Appendix B and "City of San Diego Greenhouse Gas Emission Projections and Reductions" (p.18), City of San Diego Climate Action Plan (2022).

Notes: MMT CO_2e = million metric tons of carbon dioxide equivalent

Progress Toward Climate Action Plan Targets

To track progress toward the Climate Action Plan's 2030 emissions reduction target, the City developed a linear trajectory of average emissions reductions needed each year from 2019 to 2030. The Climate Action Plan does not include this linear trajectory, and it does not call for specific levels of emissions reductions each year; the linear trajectory is provided only for reference purposes to help understand progress toward long-term Climate Action Plan targets.

When measured on this linear trajectory, citywide emissions would need to decrease by 0.58 MMT CO_2e on average each year to achieve the Climate Action Plan's 2030 target (Table 1). On this linear trajectory, annual emissions levels in 2024 would be 7.67 MMT CO_2e.

The estimated annual emissions levels of 8.16 MMT CO_2e for 2024 were approximately 6 percent *(0.49 MMT CO_2e)* higher than the levels that align with a linear trajectory toward the 2030 target.

Table 1. Progress Toward 2030 Emissions Reduction Target

Progress toward the Climate Action Plan's 2030 emissions reduction target using a linear trajectory from 2019 to 2030.

2019 baseline emissions	10.54 MMT CO_2e
2030 emissions reduction target	4.22 MMT CO_2e
Average annual reduction to achieve the 2030 target using a linear trajectory from 2019 to 2030	0.58 MMT CO_2e
Annual emissions levels in 2024 to align with linear trajectory	7.67 MMT CO_2e
Annual emissions levels estimated for 2024	8.16 MMT CO_2e
Difference between estimated emissions levels and the 2024 reference point on a linear trajectory	0.49 MMT CO_2e (+6%)

Source: adapted from Table 3, Appendix B and "City of San Diego Greenhouse Gas Emission Projections and Reductions" (p.18), City of San Diego Climate Action Plan (2022).

Notes: MMT CO_2e = million metric tons of carbon dioxide equivalent

GHG emissions are rounded to the nearest ten thousand.

Sums may not add up to totals due to rounding.

Sources of Greenhouse Gas Emissions in 2024

The vast majority (96%) of citywide emissions in 2024 were the result of fuels used in vehicles that move people and goods around the city (*on-road transportation*) and energy used to power homes and other buildings (*electricity and natural gas*) (Figure 2).

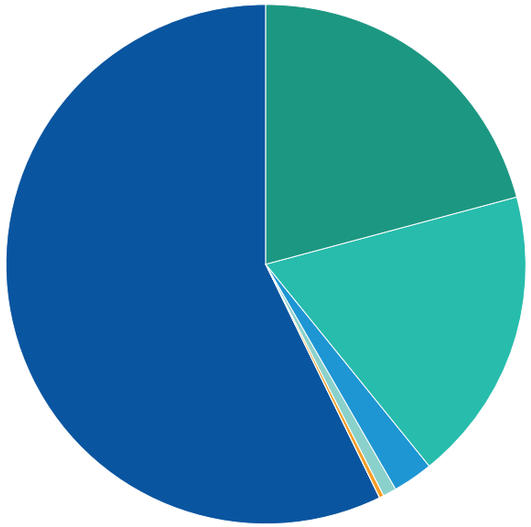
The largest source was gasoline- and diesel-powered cars and trucks, representing more than half (57%, 4.64 MMT CO_2e) of annual emissions in the city. Following that was natural gas and electricity used in homes and other buildings, accounting for 39 percent (3.19 MMT CO_2e) of 2024 emissions.

Natural gas end uses – such as water and space heating, cooking, and clothes drying – represented 21 percent of 2024 emissions (1.71 MMT CO_2e). Electricity from the grid, which is used for air conditioning, lighting, refrigeration, appliances, cooking, electric vehicle charging and more, represented 18 percent of 2024 emissions (1.48 MMT CO_2e).

The following sources and activities were responsible for the remaining 4 percent (0.34 MMT CO_2e) of emissions in 2024:

- Throwing away organic solid waste like food and yard trimmings (solid waste, 3 percent, 0.22 MMT CO_2e)
- Using equipment and vehicles for construction projects (construction equipment, less than 1 percent, 0.06 MMT CO_2e)
- Providing the City with safe drinking water and recycled water (water supply, <1%, 0.05 MMT CO_2e)
- Making wastewater safe to release or reuse (wastewater treatment, <1%, 0.01 MMT CO_2e)

Figure 2. Citywide Emissions by Emissions Sector



57%	4,637,000 - Vehicles and Driving *(On-Road Transportation)*
21%	1,710,000 - Homes and Buildings *(Natural Gas)*
18%	1,475,000 - Homes and Buildings *(Electricity)*
3%	216,000 - Organic Waste in Landfills
1%	57,000 - Construction Equipment *(Off-Road Transportation)*
<1%	51,000 - Water Supply
<1%	12,000 - Wastewater Treatment

Source: adapted from Table 3, Appendix B.

Annual Greenhouse Gas Emissions Levels by Emissions Sector, 2019–2024

Lower emissions from vehicles and driving (down 21 percent from 2019 to 2014) and from electricity and natural gas used in homes and other buildings (down 37 percent and 11 percent, respectively, from 2019 to 2024) are the main reasons for the 23 percent decrease in citywide emissions from 2019 to 2024 (Table 2; Figure 3).

Table 2. Annual Greenhouse Gas Emissions Levels by Sector, 2019-2024

Emissions Sector	Annual Emissions Levels[1] (MMT CO_2e)							
	2019	2020	2021	2022	2023	2024	Percent Change 2019-24	Percent Change 2023-24
Vehicles and Driving *(On-Road Transportation)*	5.85	4.65	4.68	4.63	4.67	4.64	-21%	< -1%
Homes and Buildings *(Electricity)*	2.34	2.29	1.71	1.56	1.59	1.48	-37%	-7%
Homes and Buildings *(Natural Gas)*	1.91	1.83	1.92	1.73	1.80	1.71	-11%	-5%
Organic Waste to Landfill *(Solid Waste)*	0.28	0.27	0.22	0.21	0.21	0.22	-22%	1%
Construction Equipment *(Off-Road Transportation)*	0.07	0.06	0.06	0.06	0.06	0.06	-17%	0%
Water	0.06	0.07	0.07	0.07	0.06	0.05	-16%	-11%
Wastewater	0.03	0.02	0.02	0.01	0.01	0.01	-54%	-8%
TOTAL	10.54	9.19	8.68	8.26	8.41	8.16	-23%	-3%

Source: adapted from Tables 3 and 4, Appendix B.

Notes:

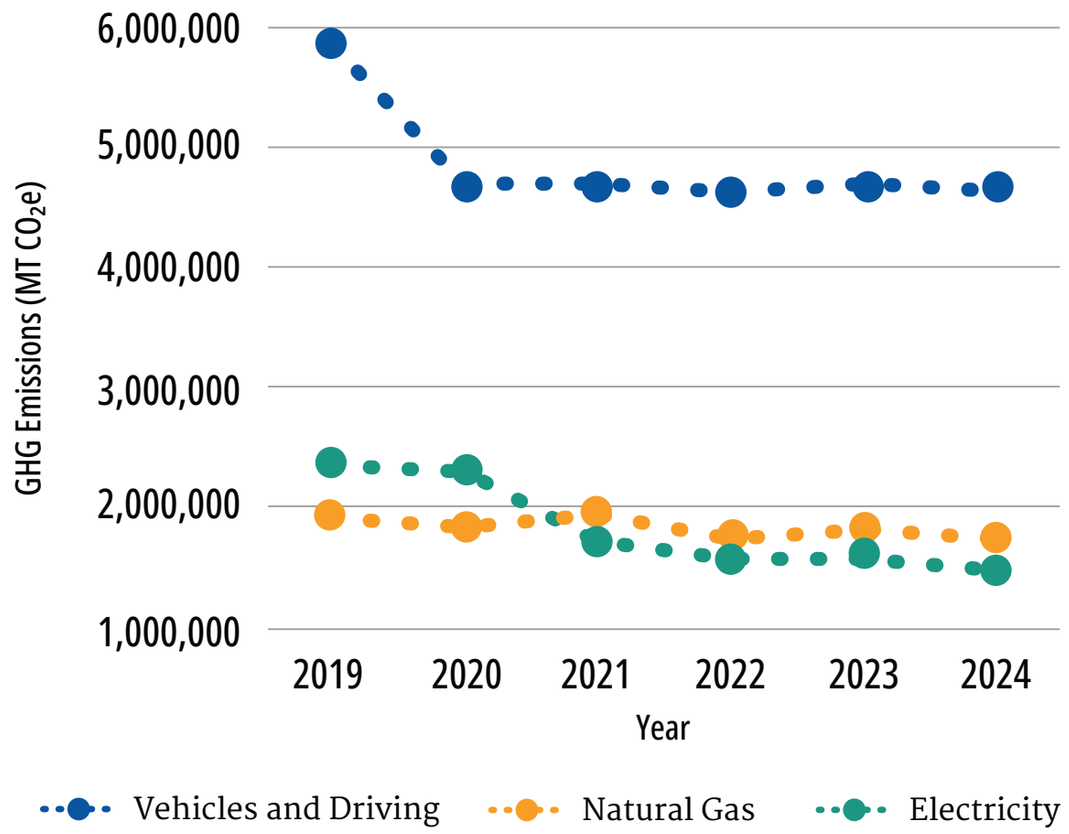
[1] GHG emissions for each sector and annual totals are rounded to the nearest ten thousand.

Sums may not add up to totals due to rounding.

MMT CO_2e = million metric tons of carbon dioxide equivalent

Figure 3. Annual Greenhouse Gas Emissions by Source, 2019–2024

Annual greenhouse gas emissions from vehicles and driving and natural gas and electricity used in homes and buildings, 2019–2024.



Source: adapted from Table 3, Appendix B.

MT CO_2e = metric tons of carbon dioxide equivalent

Taken together, 2024 emissions from electricity and natural gas used in homes and other buildings were down 25 percent since 2019 and were 6 percent lower than the prior year. Similarly, the 3 percent drop in citywide 2024 emissions from the prior year is mostly because of lower emissions from electricity and natural gas used in homes and other buildings (down 7 percent and 5 percent respectively, from 2023 to 2024).

Vehicles and Driving

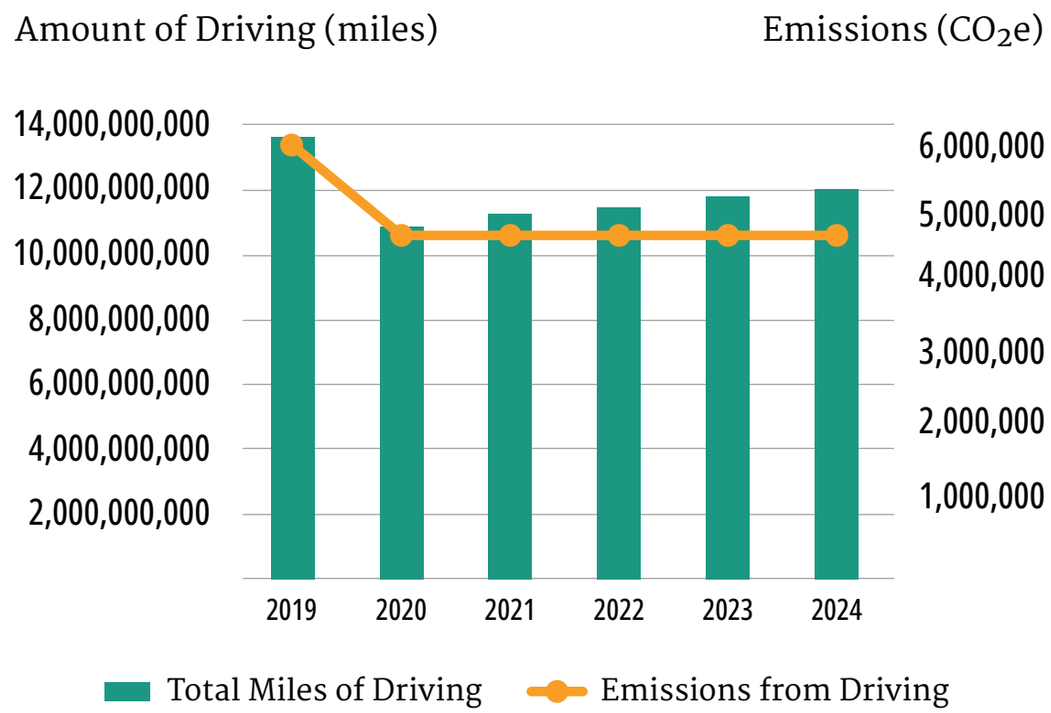
How much people drive and what kinds of vehicles they use are the biggest contributors to emissions from cars and trucks.

Compared to 2019, the amount of driving in the city was lower *(12% fewer miles driven)* and the types of vehicles being used were cleaner *(10% less pollution released per mile)* in 2024 (Figure 4; Table 3). The cars and trucks used in 2024 were also cleaner than the previous year *(3% less pollution released per mile, see Table 3)*. For example, the number of electric vehicles *(25% increase in 2024 compared to 2023)* and electric vehicle chargers *(26% increase in public Level 2 chargers, 26% increase in public fast chargers in 2024 compared to 2023)* continues to grow. Electric vehicle charging increased even more in 2025, with 29 percent more public Level 2 chargers and 38 percent more public fast chargers compared to the prior year.

However, the amount of driving in 2024 was higher *(2% more miles driven)* than in 2023. In fact, after decreasing 20 percent from 2019 to 2020 at the start of the COVID-19 pandemic, the amount of driving in the city has increased 2-3 percent per year from 2021-2024, which corresponds with schools and businesses reopening and more people returning to in-person work.

Figure 4. Vehicle Miles Traveled and Driving Emissions, 2019–2024

Total miles of driving per year compared to total greenhouse gas emissions from driving, 2019-2024.



Source: adapted from Table 11, Appendix A.

Notes: MT CO_2e = metric tons of carbon dioxide equivalent

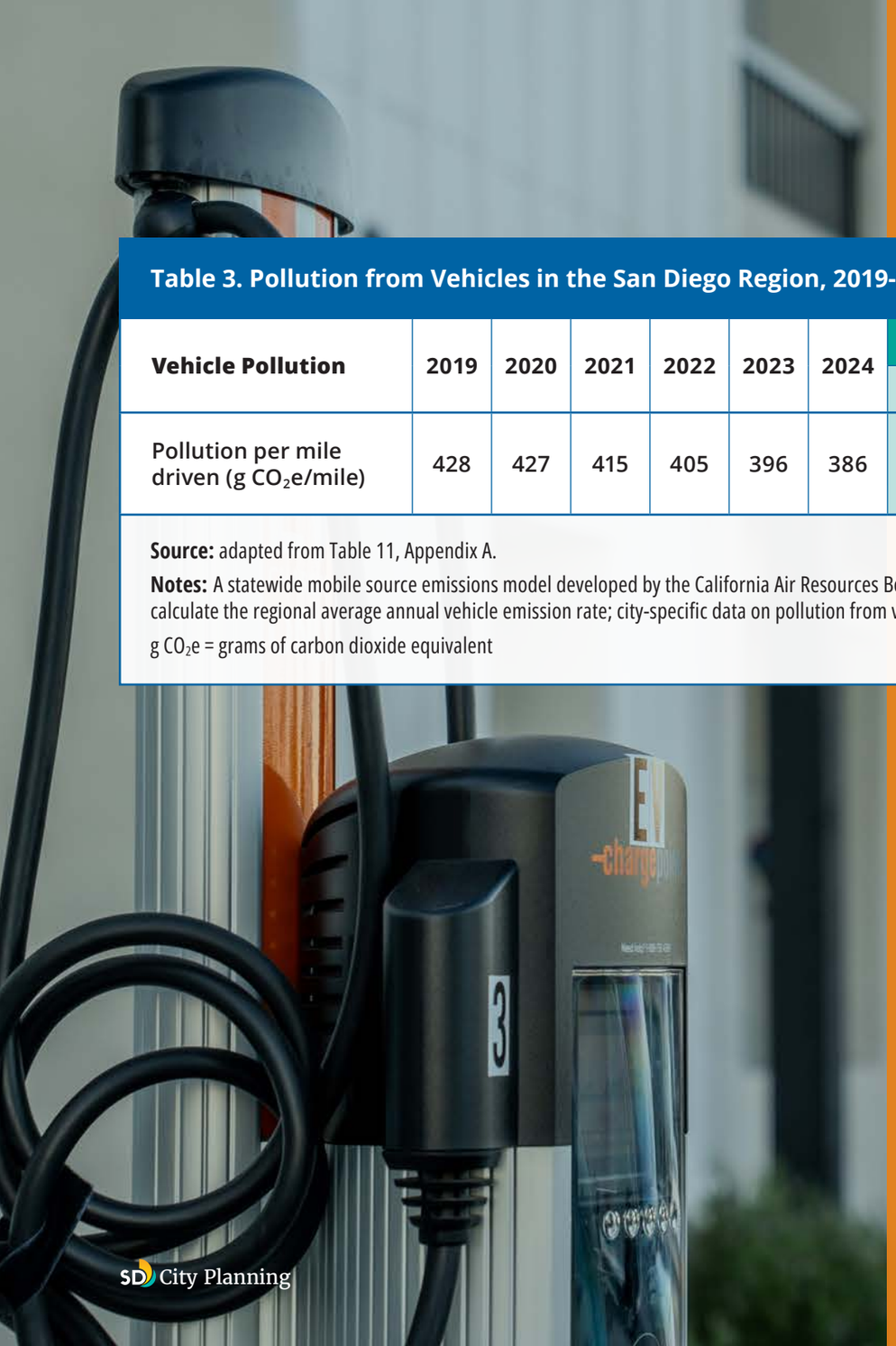


Table 3. Pollution from Vehicles in the San Diego Region, 2019-2024

Vehicle Pollution	2019	2020	2021	2022	2023	2024	Percent Change	
							2019-24	2023-24
Pollution per mile driven (g CO_2e/mile)	428	427	415	405	396	386	-10%	-3%

Source: adapted from Table 11, Appendix A.

Notes: A statewide mobile source emissions model developed by the California Air Resources Board was used to calculate the regional average annual vehicle emission rate; city-specific data on pollution from vehicles is not available.

g CO_2e = grams of carbon dioxide equivalent

Bringing Public Electric Vehicle Charging to San Diego Neighborhoods

The City is making it easier to charge electric vehicles by adding public chargers at City sites at no cost to taxpayers. A private company pays to install and maintain the chargers in City parking lots in exchange for a percentage of the revenue generated from use of the chargers. In 2025, the first full year of the program, 58 old or broken chargers were replaced with new, working ones at 12 sites, including recreation centers, pools and libraries, bringing EV charging to more neighborhoods across the city. Visit the Public Electric Vehicle Charging Program website to learn more: **sandiego.gov/general-services/energy/zev/evcharging.**

Table 4. Public Transit Use in the San Diego Region (Passenger Boardings and Miles Traveled), 2019-2024

Public Transit Use	2019	2020	2021	2022	2023	2024	Percent Change	
							2019-24	2023-24
Average weekday regional transit boardings	315	159	163	243	270	298	-6%	10%
Average weekday regional transit passenger miles	1,734	680	836	1,406	1,528	1,522	-12%	<-1%

Source: adapted from Figure 17, Appendix A.

Notes: Data includes bus and rail transit services operated by Metropolitan Transit System and North County Transit District; city-specific data on public transit use is not available.

More people in the San Diego region[3] used public transit in 2024 than the year before (as measured by passenger boardings) and the distance traveled stayed about the same (as measured by miles traveled by passengers). In fact, more people have been using public transit each year since the height of the COVID-19 pandemic in 2020, although 2024 boardings and miles traveled in the region were 6 percent and 12 percent , respectively, below pre-pandemic (2019) levels (Table 4). Trends are similar for the Metropolitan Transit System (MTS): the amount of people getting on the bus and Trolley has increased each year since the low point in 2020, including a 10 percent increase from 2023 to 2024, but were still 9 percent below pre-pandemic (2019) levels in 2024 (Appendix A, Figure 18). In 2025, MTS passenger boardings climbed 2 percent from the prior year and were 7 percent below 2019.

The City is helping make transit more accessible, allowing people to drive less, by providing more opportunities for new homes to be built in Climate Smart Village Areas – neighborhoods close to transit and other everyday needs. Over the past several years (2021–2025), 32,954 new homes were permitted in these areas, representing about 90 percent of all new permitted homes. During the same period, 6,849 new affordable homes were permitted, with about 95 percent located in Climate Smart Village Areas. In 2025, an even larger share of new homes was permitted in these areas: 95 percent of the 7,630 new homes and 99 percent of the 2,050 new affordable homes.

[3] City-specific data on public transit use is not available.

Planning for More Homes and Jobs in Climate Smart Village Areas

The General Plan was updated in 2024 to strengthen its alignment with the Climate Action Plan.[4] Central to the update is the Village Climate Goal Propensity Map, which establishes a data-driven framework to guide future opportunities for jobs and housing near transit, services, shops, schools, workplaces and parks and public spaces. This strategy was designed to reduce the need for driving, optimize public transit investments, and foster sustainable, equitable and connected communities. Areas designated as Climate Smart Village Areas are identified as having the highest potential to shift commuter behavior away from driving and making it easier for people to walk, roll, bike and ride transit. Planning for more homes and jobs located near transit in these areas is intended to help reduce climate pollution primarily attributable to driving.

While the Climate Smart Village Areas serve as a citywide guide for locating future employment and housing mixed-use villages, final designations are tailored to the community contexts and determined at the neighborhood level through the Community Plan Update process. The most recent community plan updates adopted by City Council – College Area and Clairemont – added opportunities for 32,000 new homes in Climate Smart Village Areas. Updates are also underway for Mid-City Communities, Rancho Bernardo and Otay Mesa-Nestor.

[4] Making Progress Towards Mode Share Goals – General Plan Update (Blueprint SD) overview: www.sandiego.gov/sites/default/files/2024-05/blueprint-sd-memo031424.pdf

Using Cleaner Vehicles in City Operations

As of 2025, about 8 percent of the City's 5,037 municipal vehicles were zero or near-zero-emission, including 230 fully electric vehicles and 126 plug-in hybrids. The City also has 382 regular hybrids. In 2025, the City replaced 21 gasoline or diesel-powered vehicles with electric vehicles – including one electric fire truck - with 17 being fully electric pickup trucks.

The Climate Action Plan aimed to switch most of its vehicles to zero-emission models by 2030 (75% of all cars and 50% of all light-, medium-, and heavy-duty vehicles). As of 2025, approximately 11 percent of cars, 5 percent of light duty-trucks, 4 percent of medium-duty trucks and less than 1 percent of heavy-duty trucks were zero and near-zero emission models (Table 5).

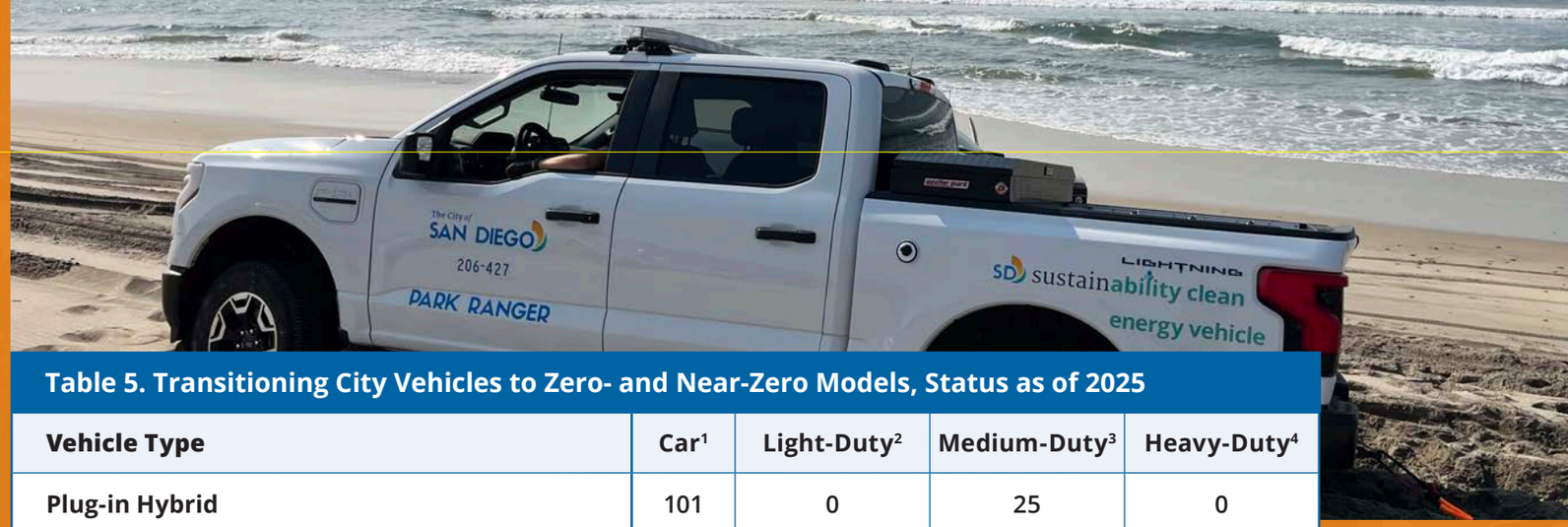


Table 5. Transitioning City Vehicles to Zero- and Near-Zero Models, Status as of 2025

Vehicle Type	Car[1]	Light-Duty[2]	Medium-Duty[3]	Heavy-Duty[4]
Plug-in Hybrid	101	0	25	0
Electric Vehicles	32	79	0	1
Percent Zero and Near-Zero Emissions	**11%**	**5%**	**4%**	**<1%**

Source: adapted from Figure 11, Appendix A.

Notes: This table excludes carts, motorcycles, trailers and other off-road equipment.

1. Examples of cars include sedans and small sport utility vehicles.
2. Examples of light-duty vehicles include vans and pickup trucks (e.g., F150 and F250).
3. Examples of medium-duty vehicles include flatbed trucks and larger pickup trucks (e.g., F350 and F450).
4. Examples of heavy-duty vehicles include dump trucks, fire engines, garbage trucks, street sweepers, backhoes and vactors (sewer cleaning trucks).

Progress is moving forward but limited because there are not yet many suitable larger vehicles on the market and additional charging infrastructure is needed. The City continues to review available vehicle options to identify compatible replacements.

To support more electric vehicles, the City is focusing on adding additional charging stations at its fleet locations. A first review of charging needs has been completed, and the City has released a Request for Proposals for charging services and is looking for a partner to install new chargers in fleet parking lots.

The City continues to create more places to safely walk, roll and bike (Table 6). Since 2019, the City has installed over 270 miles of new bike facilities and improved over 260 miles of existing bike facilities. Since 2022, the City has constructed 1.5 miles of new sidewalks and repaired or replaced over 67 miles of existing sidewalks.

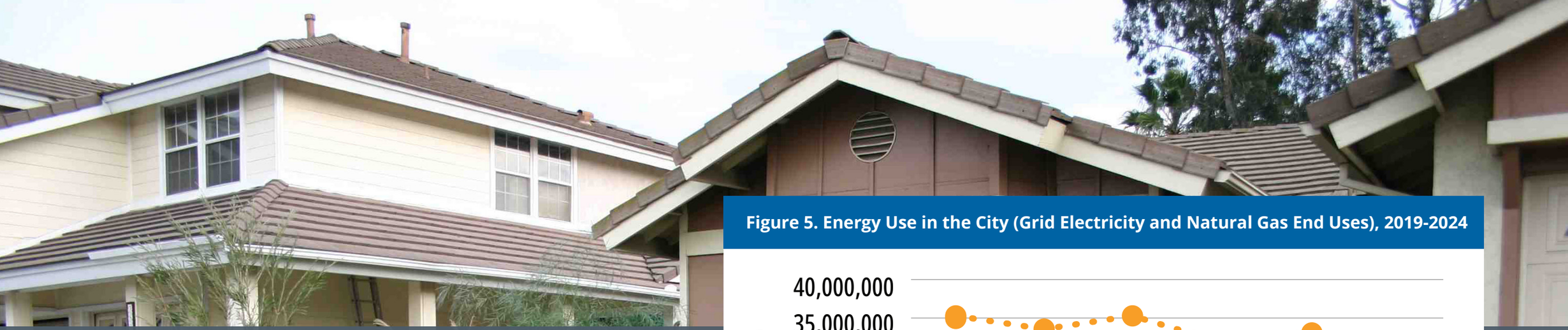
Table 6. Walking, Rolling and Biking Infrastructure Improvements, 2019–2025

Bike Facilities	**2025**	**Total, 2019-25**
New Bike Paths (Class I)[1] (miles)	6.1	10.4
New Bike Lanes (Class II)[2] (miles)	10.2	142
New Protected Bikeways (Class IV)[3] (miles)	7.5	121.6
Existing Bicycle Facility Improvements (miles)	21.5	264.7
Sidewalks[4]	**2025**	**Total, 2022-25**
New sidewalk constructed (miles)	0.2	1.5
Sidewalk repaired/replaced (miles)	21.8	67.4

Source: adapted from Tables 12 and 13, Appendix A.

Notes:

1. Class I Bike Paths: paved right-of-way for exclusive use by bicyclists, pedestrians, and those using non-motorized modes of travel. They are physically separated from vehicular traffic and can be constructed in street right-of-way or exclusive right-of-way. Bike paths provide critical connections in the city where streets are absent.
2. Class II Bike Lanes: one-way facilities on either side of a street for exclusive or preferential bicycle travel. Bike lanes are defined by pavement striping and signage.
3. Class IV Protected Bikeway: includes separation between the bikeway and through vehicle traffic. For exclusive use by bicycles.
4. Sidewalk data was not collected prior to 2022.

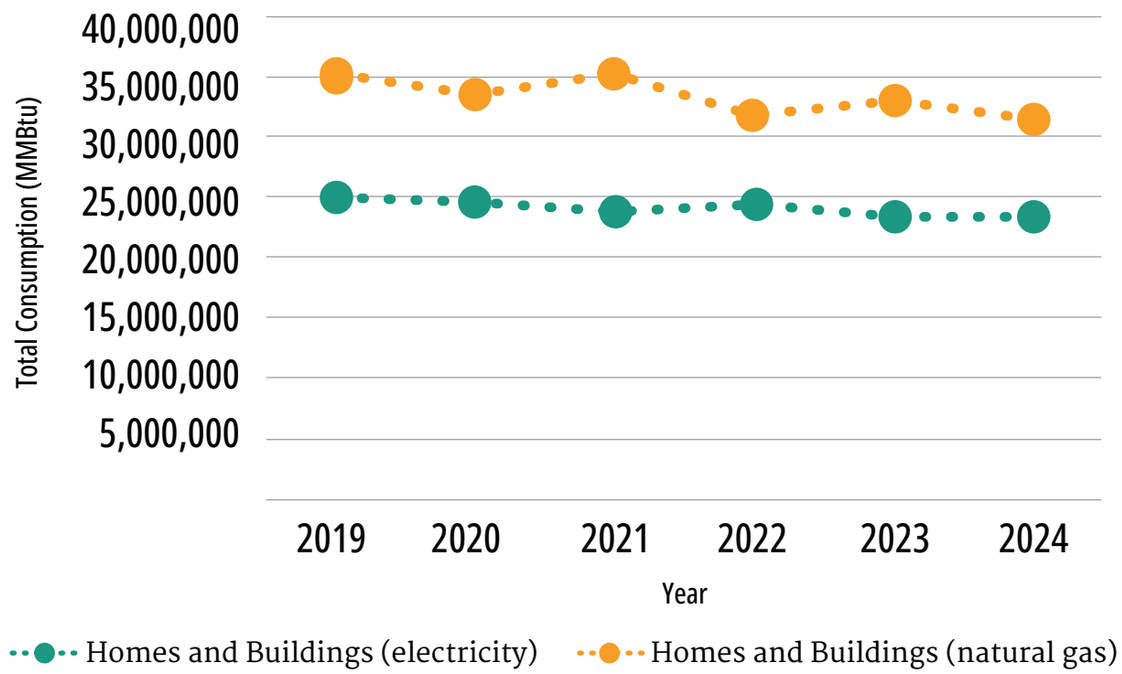


Energy Use in Homes and Other Buildings

How much energy people use and the sources of that energy are the biggest contributors to emissions from homes and other buildings. Natural gas is generally used for space heating, water heating, cooking and other gas appliances like clothes dryers. In 2024, businesses (commercial and industrial accounts) in the city used 62 percent of natural gas, while homes (residential accounts) used 38 percent. Electricity, which is delivered from the power grid and produced with on-site solar, provides power for air conditioning, lighting, refrigeration, appliances, cooking, electric vehicle charging and more. In 2024, businesses used 71 percent of the electricity from the grid and homes used 29 percent.

Natural gas use in the city in 2024 was 11 percent lower than in 2019 and 5 percent lower than the prior year (Figure 5). Use of electricity from the grid was also down 6 percent from 2019 but about the same as the year before.

Figure 5. Energy Use in the City (Grid Electricity and Natural Gas End Uses), 2019-2024



Source: adapted from Table 3, Appendix A.

Notes: Natural gas units (therms) and electricity units (kWh) have been converted to MMBtu to allow comparison on a single axis.

kWh = kilowatt hour

MMBtu = million British thermal units

One reason for the lower use of electricity from the grid is the large increase in people making and using their own electricity with on-site solar power (also referred to as "behind-the-meter" solar because the solar energy is made and used on the customer's side of the meter and does not pass through the utility's meter).

Compared to 2019, the amount of electricity from on-site solar in 2025 was significantly larger: homes (residential) used 124 percent more on-site solar energy in 2025, while businesses (commercial, industrial) used 122 percent more (Table 7). Electricity produced by on-site solar in 2025 was also more than the prior year: a 5 percent increase for homes and 13 percent increase for businesses.

Of all the electricity used in the city in 2024, about 16 percent was from on-site solar.[5] That's up from 8 percent of all electricity in 2019, and 14 percent the prior year.

Table 7. Electricity Generated by On-Site Solar Systems, 2019-2025

Customer Type	Electricity Generation (GWh)							Percent Change	
	2019	2020	2021	2022	2023	2024	2025	2019-25	2024-25
Residential	450	523	610	734	889	956	1,006	124%	5%
Commercial, Industrial	169	190	230	250	280	332	375	122%	13%

Source: adapted from Figure 9, Appendix A.
Notes: GWh = gigawatt-hour

[5] 2024 is the latest year for which data is available for both on-site solar systems and electricity supplied through the power grid.

Additionally, electricity from the power grid was much cleaner in 2024, with emissions 37 percent lower than 2019 and 7 percent lower than the prior year. These lower emissions are mostly because more solar and other clean energy sources are being used to power the electric grid.

Overall, the amount of electricity from emissions-free sources in 2024 was nearly double the 30 percent emissions-free sources in 2019 and is about 3 percent higher than the prior year. On average in 2024, about 56 percent of grid electricity delivered to city customers was from emissions-free sources (Table 8).

Under San Diego Community Power's "PowerOn" plan, which supplied about 69 percent of grid electricity in 2024, 55 percent of the electricity was from emissions-free sources. For "direct access" providers,[6] which supplied about 24 percent of grid electricity in 2024, 59 percent of the electricity was from emissions-free sources. About 4 percent of grid electricity was supplied by SDG&E and 3 percent by Community Power's "Power100" plan. Less than 1 percent was supplied under Community Power's "PowerBase" plan.

When accounting for grid-electricity and on-site solar, about 64 percent of electricity used in the city in 2024 was from emissions-free sources.

Table 8. Electricity Supplied with Emissions-Free Sources, 2019-2024

Electricity Supplier	Percentage from Emissions-Free Sources[1]					
	2019	2020	2021	2022	2023	2024
San Diego Gas & Electric	31	33	47	45	42	41
San Diego Community Power (Power 100)	-	-	100	100	100	100
San Diego Community Power (PowerOn)[2]	-	-	67	67	55	55
San Diego Community Power (PowerBase)	-	-	-	-	-	45
Direct Access	25	29	34	35	43	59
Total, All Suppliers[3]	**30**	**32**	**50**	**57**	**53**	**56**

Source: adapted from Table 6 and Figure 10, Appendix A.

Notes:

1. Emissions-free = renewable sources (biomass and biogas, geothermal, eligible hydroelectric, solar, wind) plus large hydroelectric and nuclear.
2. Large hydroelectric provided about 12% and 13% of electricity under PowerOn in 2021 and 2022; for 2023 and 2024, large hydroelectric decreased to 4% and 2%.
3. Total for all suppliers is based on average percentage from emissions-free sources for each supplier, weighted based on how much electricity each supplier delivered.

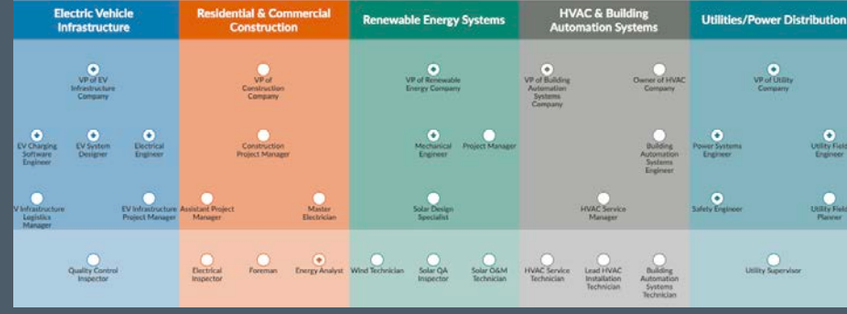
[6] Direct access electricity customers are non-residential (commercial/industrial) users that purchase electricity from non-utility suppliers known as energy service providers. Energy service providers deliver their electricity to customers through the power grid.

Reducing Emissions from City Operations

City operations produce emissions from electricity and natural gas used to power buildings and facilities and fuels like gasoline, diesel and natural gas used in City vehicles.

Energy use in City buildings was 7 percent higher in 2024 than in 2019, though it declined 8 percent compared to 2023. Over the five-year period, electricity consumption rose 22 percent while natural gas use fell 11 percent, resulting in a net increase in energy use. This is due to the opening of new City facilities, more employees working in City facilities and the City's transition to electric equipment and appliances under the Zero Emissions Municipal Buildings and Operations Policy.

Despite rising energy use, emissions from City operations have fallen sharply and are down 70 percent since 2019 and 12 percent since 2023. This progress is primarily due to the City's enrollment in San Diego Community Power's Power100 rate tier, which supplies electricity from zero-emission sources, combined with reduced natural gas consumption.



City Building Electric Energy Upgrades At No Upfront Cost to the City

The City has contracted with Willdan Energy Services to increase energy efficiency and transition from natural gas to electricity use at municipal facilities with no upfront cost. Under the agreement, Willdan will retrofit 40 City-owned buildings, primarily libraries and recreation centers, with efficient HVAC systems, lighting, water heaters, and transformers. Select buildings will also receive new solar panels and batteries for onsite energy generation and storage. Additionally, approximately 39,000 streetlights will be upgraded to energy-efficient LEDs. The cost of these improvements will be repaid through the energy savings they generate, while also reducing GHG emissions from City operations.

Supporting Clean Energy Careers for San Diegans

In spring 2025 the City released the San Diego Clean Energy Career Map (sdcleanenergy.careerpathplatform.com/map/) an easy-to-use, interactive tool intended to help people start or grow their careers in the clean energy industry. It highlights a range of jobs across five main sectors including opportunities for different skill levels. The map also shows how people can move from one job to another, making it easier to identify next steps and plan a long-term career path.

How You Can Save Energy

At home

- ☑ Replace old lightbulbs with LED bulbs.
- ☑ Choose appliances that use less energy (look for the Energy Star label).
- ☑ Install a smart thermostat so your heating or cooling automatically adjusts when you are asleep or away.
- ☑ Do a home energy checkup (you can hire a professional or do it yourself) and fix things like drafty windows and doors, low attic insulation or leaky ducts.
- ☑ When your gas water heater wears out, replace it with a more energy efficient heat pump water heater.
- ☑ When your gas furnace or central air conditioning needs to be replaced, switch to a more efficient heat pump system.

At work

- ☑ Turn off office equipment when you're not using it, or set it to power down automatically. Smart power strips can help by shutting things off when no one is around.
- ☑ Create a company policy to buy only Energy Star-certified equipment, like computers, monitors, and printers.
- ☑ Use efficient lighting and make sure lights are off when spaces are empty. Motion sensors help and may cut lighting costs by up to 40 percent.
- ☑ Install programmable thermostats. In warm months, set them to 74 degrees or higher when the building is in use. After hours, set them to 85 degrees or turn them off.
- ☑ Add shading or window film to reduce heat from the sun and use roof coatings that help block heat.
- ☑ Keep heating and cooling systems well-maintained so they run more efficiently.

Other Emissions Sources and Activities

Other sources and activities produced about 4 percent of citywide emissions in 2024, including sending organic waste to the landfill, producing water for drinking and reuse, making wastewater safe to release or reuse and using construction equipment. Other activities, like planting and caring for trees and protecting natural areas, help lower emissions in the atmosphere by storing them in plants and soil.

Managing Organic Waste (Solid Waste)

Solid waste emissions are produced when organic materials such as food scraps and landscape trimmings are put into the trash and sent to the landfill. When organic materials break down in a landfill, a powerful greenhouse gas called methane is released into the atmosphere.

Since 2024, the City has used green bins to collect organic waste and keep it out of the landfill. Nearly 195,000 tons of organic waste were collected and sent to the Miramar Greenery or similar facilities in 2025, an increase of 2 percent from the prior year (Table 9). This represents about 10 percent of total solid waste generated in the city.

The amount of extra food received by food recovery organizations has increased significantly in recent years.

Table 9. Organic Waste Diverted from Landfill (All Waste Haulers), 2024-2025

Organic Waste Diversion	2024	2025
Organic waste diverted from landfill to Miramar Greenery or other composting facility (tons)	190,795	194,723

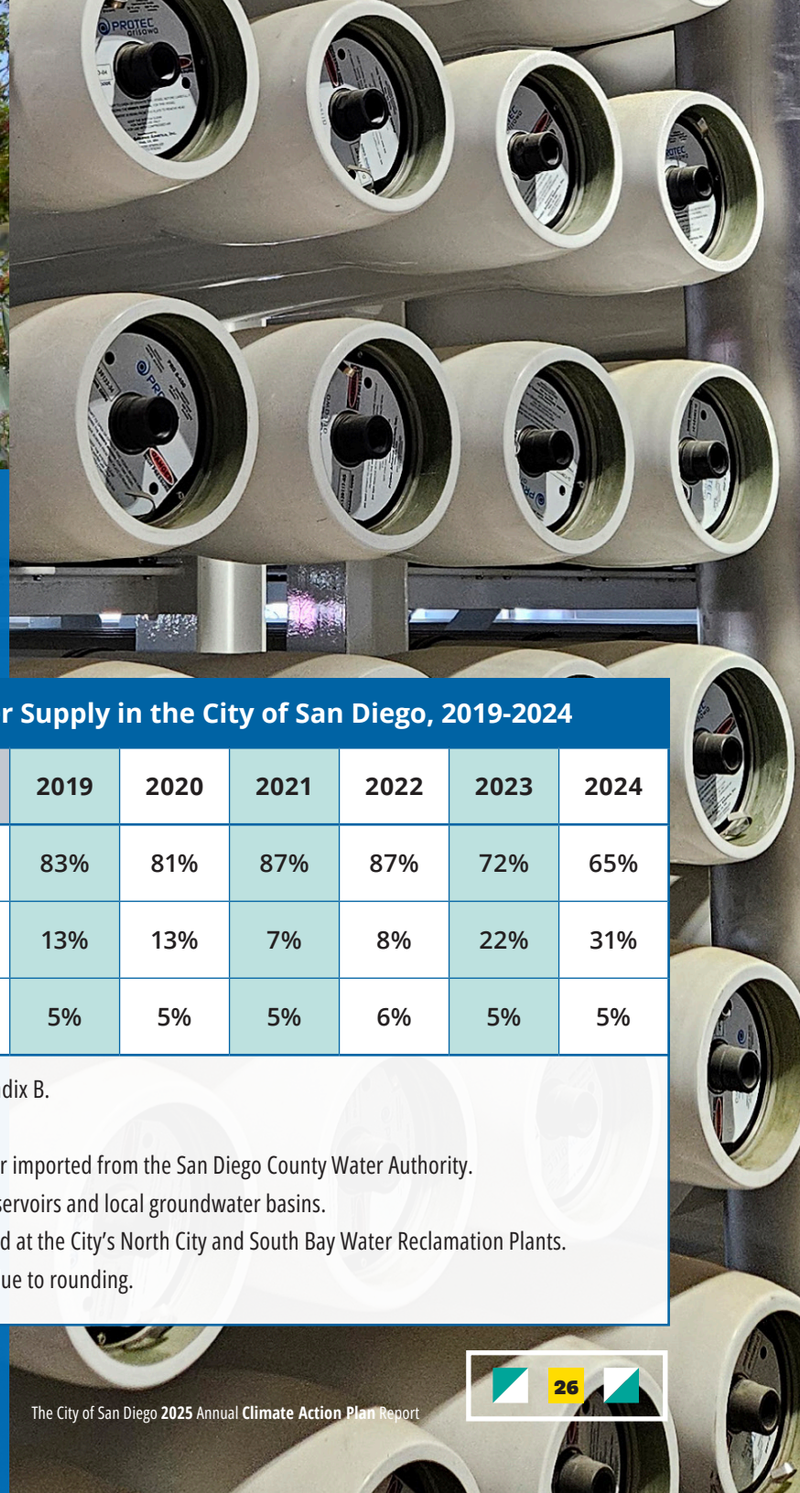
Source: City of San Diego Environmental Services Department, 2026.

These organizations redistribute extra food to people in need, which reduces the amount of food sent to the landfill. In 2024, over 24 million pounds of food were received by recovery organizations, a 190 percent increase from the over 8 million pounds in 2022, the first year of the program (Table 10). The amount of food recovered in 2024 was also 21 percent higher than the prior year. This means not only lower climate pollution, but also more people fed and less food wasted.

Table 10. Food Collected or Sent to Food Collection Services, 2022-2024

Food Recovery and Collection	2022	2023	2024
Total food received by Recovery Organizations or collected by Recovery Services (million pounds)	8.3	20.2	24.4

Source: Adapted from Table 17, Appendix A.
Notes: Data collection began in 2022.



Providing Drinking and Recycled Water (Water Treatment)

Emissions from drinking water and recycled water mainly come from the energy used to bring the water to the city, clean it and deliver it to homes and businesses. When the energy used in the equipment comes from fossil fuels, emissions are produced.

Different water sources require different amounts of energy. In general, water imported to San Diego from outside the region requires more energy use than water recycling and getting water from local sources. As a result, emissions can go up and down from year to year depending on where the city gets its water from.

Water emissions fluctuate from year to year depending on annual rainfall and other factors, and were 51,000 MT CO2e in 2024, which is a 16 percent decrease since 2019 and a 11 percent decrease since the previous year.

As shown in Table 11, two-thirds of the City's drinking water is imported from other places. The share of imported water in the total supply has declined, however, falling 10 percent from 2023 to 2024 and 22 percent since 2019. Over that same period, the share of local water has grown substantially: up nearly 50 percent from 2023 to 2024 and more than 130 percent since 2019. Recycled water, which is wastewater treated to a level suitable for irrigation, manufacturing, and other non-drinking purposes, has held steady at approximately 5 percent of the total water supply since 2019.

Table 11. Sources of Water Supply in the City of San Diego, 2019-2024

Water Source	2019	2020	2021	2022	2023	2024
Imported (drinkable)[1]	83%	81%	87%	87%	72%	65%
Local (drinkable)[2]	13%	13%	7%	8%	22%	31%
Recycled (not drinkable)[3]	5%	5%	5%	6%	5%	5%

Source: adapted from Table 15, Appendix B.

Notes:

1. Includes treated and untreated water imported from the San Diego County Water Authority.
2. Includes water from local surface reservoirs and local groundwater basins.
3. Includes non-potable water produced at the City's North City and South Bay Water Reclamation Plants.

Totals may not add up to 100 percent due to rounding.

Making Wastewater Safe to Release or Reuse (Wastewater)

Emissions from wastewater mainly come from organic materials like food waste and human waste, which release powerful greenhouse gases like methane when they are broken down during the treatment process, and from energy used by equipment at treatment plants. When the energy comes from fossil fuels, emissions are produced.

Most wastewater in the city is sent directly to the Point Loma Wastewater Treatment Plant (88%), which uses equipment called digesters to capture the methane gas produced in the treatment process and then uses that gas to make electricity that powers the equipment that runs the plant. Wastewater is also processed at the North City (8%) and South Bay (4%) water reclamation plants, where it is turned into recycled (non-drinking) water. Solids collected at the reclamation plants are transferred to the Point Loma plant for treatment and processed through the digesters. The City captures nearly all of the methane gas (99.9% capture rate) produced during treatment of the city's wastewater and uses it to generate electricity to power the Point Loma plant.

Emissions from wastewater treatment in 2024 were 12,000 MT CO2e, which is 54 percent lower than 2019 and 8 percent lower than the previous year. The lower emissions are the result of replacing landfill gas with cleaner energy sources to help power operations and equipment.

Using Construction Equipment (Off-Road Transportation)

Operating the equipment and vehicles needed to build homes, other buildings, roads and other infrastructure uses energy. When the energy comes from fossil fuels, emissions are produced. Compared to 2019, construction emissions were about 17 percent lower in 2024 because cleaner and more efficient equipment and vehicles are being used. Construction emissions in 2024 were about the same as the prior year.

Table 12. Tree Planting and Maintenance by the City, 2020-2025

City Tree Activities	2020	2021	2022	2023	2024	2025
Number of trees planted	1,863	1,707	1,649	1,586	1,978	5,381
Number of trees pruned	33.254	35,206	61,655	48,754	55,829	27,832
Number of trees removed[1]	1,824	2,151	2,004	2,827	1,169	1,853

Source: adapted from Table 20, Appendix A.

Notes:

1. Tree removal includes dead trees, diseased trees, trees that are immediate safety hazards and, where necessary, trees removed to prevent damage to infrastructure or to allow infrastructure to be repaired.

Planting and Caring for Trees and Protecting Natural Areas

Planting and caring for trees and protecting natural areas like habitat and open space benefits people, wildlife and the environment in many ways. Trees and natural areas are homes for native plants and animals, help clean the air and water, provide shade, cooling and lower energy costs, reduce flooding and erosion, provide places to spend time outdoors and support the economy. Trees and natural areas also reduce climate pollution because healthy plants, wetlands and soils absorb emissions from the atmosphere. Protecting habitats, open space and trees from being damaged or destroyed prevents the carbon stored in the plants and soils from being released back into the air. The portion of the city shaded by trees has increased over the last decade, from about 13 percent in 2014 to about 15 percent in 2024. The Climate Action Plan includes a goal of 28 percent urban tree canopy cover by 2030. From 2020 through 2025, the City planted over 14,000 new trees (Table 12). In 2025 alone, the City planted over 5,000 new trees.

Trees for Communities

The Trees for Communities project has completed its planting phase, which provided about 2,900 trees in vacant areas and installed more than 160 new tree wells in previously paved parkways along City streets within Communities of Concern. The program also includes three years of tree watering, which will conclude by December 2028. The program was created to support the City's goal of expanding the urban tree canopy and improving quality of life.

Ready, Set, Grow San Diego

The tree planting phase of the Ready, Set, Grow San Diego initiative ended on Arbor Day in 2026. Since the initiative began in 2024, more than 5,000 trees have been planted in neighborhoods such as Bay Terraces, City Heights, Linda Vista, Oak Park, Otay Mesa-Nestor, Paradise Hills and Encanto. The initiative also includes a three-year tree watering period to help young trees establish and thrive. The next phase of the program will focus on protecting existing trees and redesigning sidewalks to promote long-term tree health and longevity.

The City continues to expand conserved natural areas to support biodiversity, protect sensitive habitat and animals, and enhance quality of life. As part of the BiodiverseSD program, the City conserves a network of habitat and open space areas that includes core biological resources; this network is call the Multi-Habitat Planning Area. The City has a goal of 52,727 acres conserved by 2047. The City adds land to the Multi-Habitat Planning Area through land acquisitions or by placing long-term protections on land. As of 2024, combining land already conserved with land committed for future conservation, the City has achieved over 99 percent of its overall goal (Table 13). The City also strives to protect natural habitat outside the Multi-Habitat Planning Area and has conserved an additional 2,440 acres that does not count toward the 2047 goal.

Table 13. Progress Toward Land Conservation Goals, 2019–2024

Progress toward the City's land conservation goal within the Multi-Habitat Planning Area, 2019-2024

	Habitat Land Conserved (acres, cumulative[1])					
	2019	**2020**	**2021**	**2022**	**2023**	**2024**
Land conserved in MHPA (existing)[2]	36,002	36,259	36,403	36,544	36,608	37,519
Land obligated for conservation in MHPA (future)[3]	14,932	14,932	14,932	14,932	14,932	14,932
Total, land conserved in MHPA	**50,934**	**51,191**	**51,336**	**51,476**	**51,540**	**52,451**
% of goal (52,727 acres)	96.6%	97.1%	97.4%	97.6%	97.7%	99.5%

Source: adapted from Table 19, Appendix A.

Notes:

1. Cumulative = running total of conserved land in given year plus previous years.
2. Land already protected and managed for conservation purposes.
3. Land required to be conserved by a formal commitment (e.g., permit condition, mitigation requirement, legal instrument).

Building Stronger Communities Through Climate Action

The 2025 Annual Climate Action Plan Report shows that San Diego continues to make steady progress reducing climate pollution and building healthier, more sustainable communities. Overall emissions continue to go down as more homes and businesses use their own solar power, the power grid gets cleaner, more people drive electric vehicles and more charging stations become available. Transit use also continues to recover and the City is continuing to focus new home development in neighborhoods close to transit, jobs, shops and other everyday needs, which results in people spending less of their time driving, more time with family and friends and reduced emissions. Progress in these and other areas, including planting trees, building new facilities for people to safely walk, roll and bike, and redirecting surplus food to our communities, shows how climate action can make everyday life better for San Diegans.

At the same time, this report shows that more progress is needed in some areas to meet climate goals. Looking ahead, the City will begin updating the Climate Action Plan in 2026, with the process expected to conclude in 2028. During development of the updated plan, the City will continue annual reporting on the current Climate Action Plan to track progress, learn what's working, identify areas for improvement and help guide future actions. The updated plan will continue to support State goals for reducing emissions while focusing on actions that also improve daily life for San Diegans, including better health, lower costs, more homes near everyday needs and stronger, more resilient communities.

Appendices

Appendices are provided as separate PDF files. Click a title below to open the file.

Appendix A

Tracking Progress Towards Climate Action Plan Performance Targets

Appendix B

City of San Diego Greenhouse Gas Emissions Inventory Methodology and Updates

OUR CLIMATE OUR FUTURE