



# COMMUNITY GREENHOUSE GAS EMISSIONS

## 2017 & 2018 Update

*June 2020*



Sunnyvale

# Sunnyvale Continues to Exceed State's 2020 Target

Sunnyvale's community-wide greenhouse gas (GHG) emissions were first estimated in 2008. The City's first Climate Action Plan, adopted in 2014, aimed to reduce emissions to 1990 levels<sup>1</sup> by 2020.

With newer, more ambitious statewide emissions targets on the horizon, the City adopted the [Climate Action Playbook](#) (Playbook) in 2019. The Playbook establishes new targets for Sunnyvale to reduce its emission to:

- 56% below 1990 levels by 2030, and
- 80% below 1990 levels by 2050.

The Playbook lays out six Strategies that outline the approach for bold climate action and a [Game Plan 2022](#) with specific, tactical actions to implement in the next three years.

With the adoption of the Playbook, the City will assess GHG reduction progress annually to

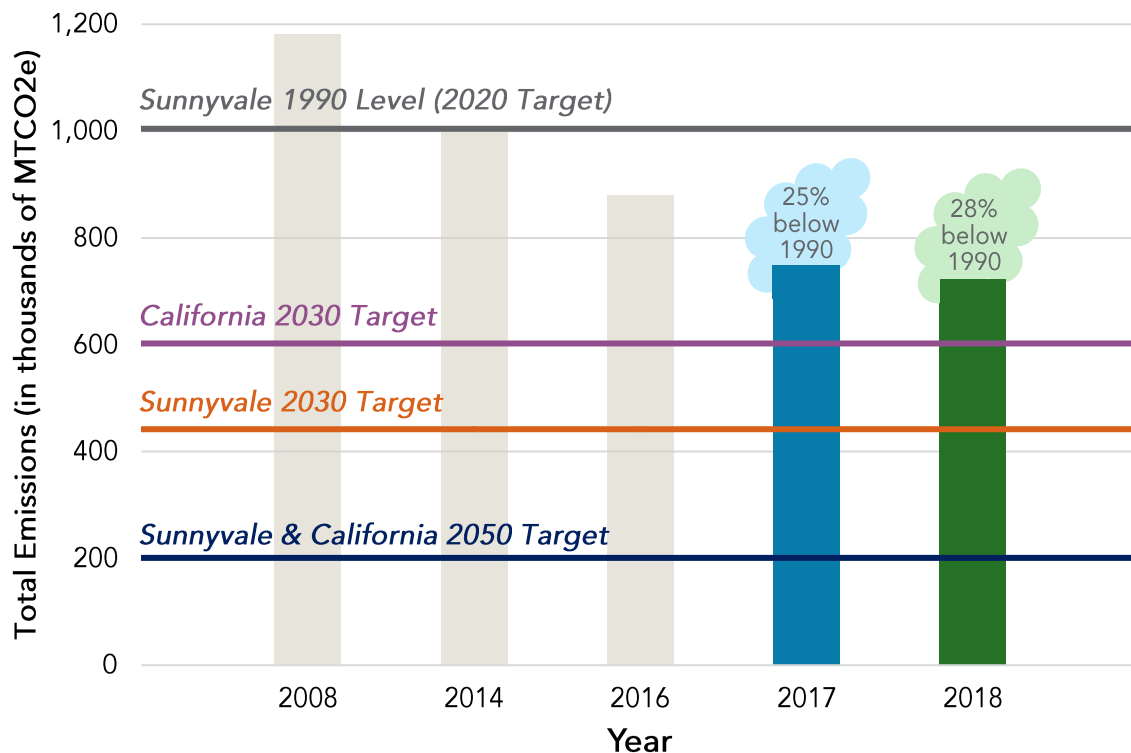
demonstrate its commitment to reporting progress on climate action to the community. This denotes a shift from the previous biennial reporting. Thus, two annual inventories for 2017 and 2018 are summarized in this report.

Sunnyvale has successfully reduced emissions over time through local climate action, state regulations and market growth in clean technologies. As of 2014, the City had successfully achieved its 2020 target and further reduced emissions to 12% below 1990 levels by 2016.

Sunnyvale's community-wide emissions have continued to decline. **Emissions in 2017 and 2018 were approximately 25% and 28% below 1990 levels, respectively.** This big shift from 2016 emissions is largely attributed to significantly cleaner electricity provided by SVCE and PG&E.

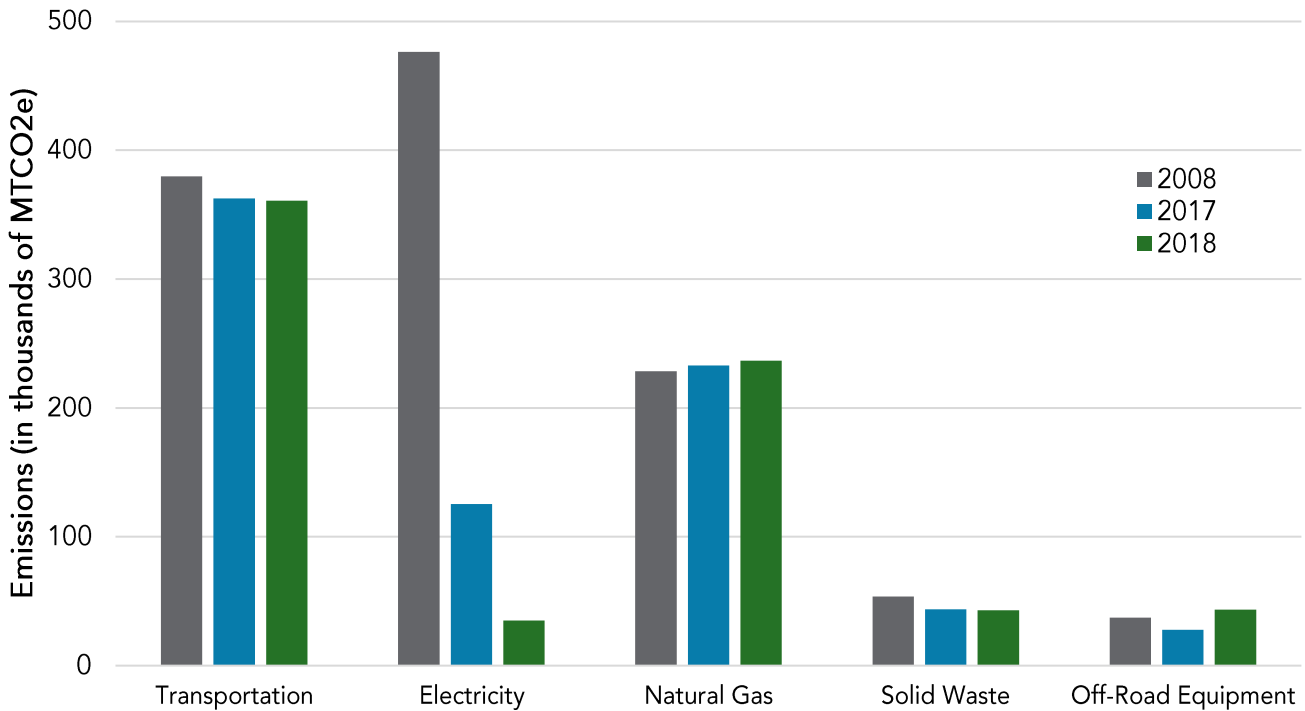
<sup>1</sup> 1990 level emissions is equivalent to 15% below the 2008 baseline as defined by State of California (Assembly Bill 32). The 2008 baseline is referenced in lieu of 1990 throughout this report.

## Sunnyvale's Historic Emissions and Targets



# Emissions Sources and Trends

## Emissions by Sector

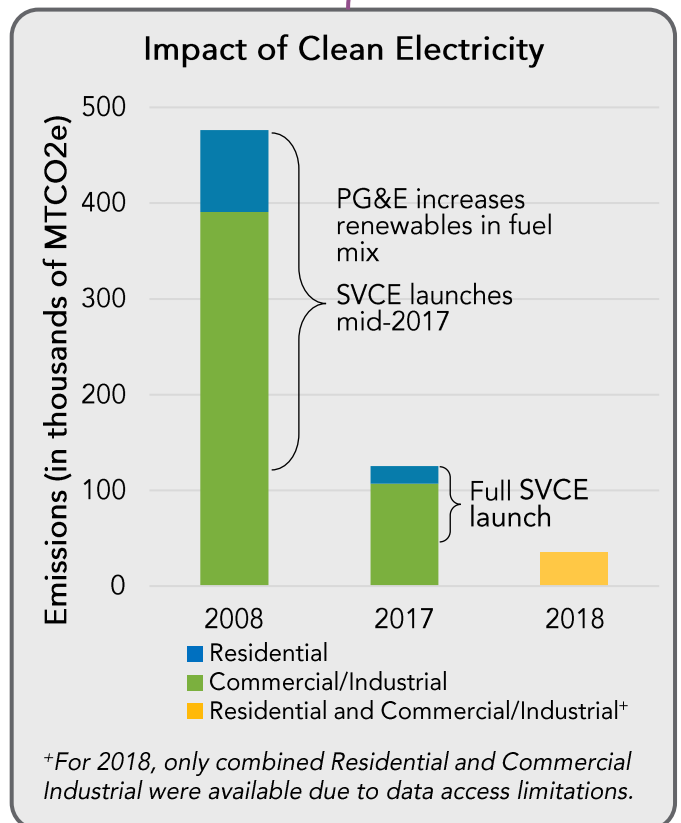


Emissions from Caltrain, water treatment and distribution, and wastewater treatment are <1% of total and, therefore, not shown here.

## Key Emissions Trends

Key changes in emissions in 2017 and 2018 relative to 2008 were:

- **Transportation** emissions decreased by 4% and 5% in 2017 and 2018, respectively, despite increases in miles traveled. The drop in emissions is likely due to increased use of electric vehicles, which run on clean electricity. Transportation still contributes to roughly half of Sunnyvale’s total community-wide emissions.
- **Electricity** emissions decreased dramatically by 82% and 93%, respectively. PG&E increased its carbon-free electricity supply from 69% in 2016 to 78% in 2017 and 85% in 2018<sup>2</sup>. Further, [Silicon Valley Clean Energy](#), a new community choice energy public agency, began supplying 100% carbon-free electricity to nearly all Sunnyvale homes and businesses in April 2017. This transition to clean electricity has catapulted Sunnyvale’s significant reductions in electricity emissions.
- **Natural gas** emissions increased, likely due to increased residential and commercial building stock and colder days.
- **Off-road equipment** emissions increased due to more housing construction.



# Demographic Drivers

Sunnyvale’s emissions are greatly influenced by our community’s demographics, including population growth, available jobs and housing, and development. Emissions are also influenced by available technologies, energy procurement practices, and individual behaviors. Since 2008, Sunnyvale has continued to experience significant growth in population, jobs and construction. Some emissions trends can be explained by these growth patterns. 2017 and 2018 growth rates are presented relative to 2008.

## 2018 Population: 153,900



## 2018 Jobs: 100,370



## 2018 Housing Units: 59,170



## 2018 Commercial Space: 55 million sq. ft.



### Legend

- 20,000 people
- 20,000 jobs
- 10,000 housing units
- 10 million sq. ft. commercial space

# Be A Climate Champion!



**Separate your food scraps.** Collect your food scraps for curbside collection or start your own backyard compost pile.



**Walk and bike more.** It’s good for the air and your health!



**If you must drive, go electric.** With a range of prices and models available, opt for an electric vehicle next time you buy a car.



**Electrify your water heater.** Participate in [Silicon Valley Clean Energy’s FutureFit Heat Pump Water Heater rebate program.](#)

# Contact

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