



Sunnyvale

Climate Action Playbook Scoreboard

Presentation to Sustainability Commission

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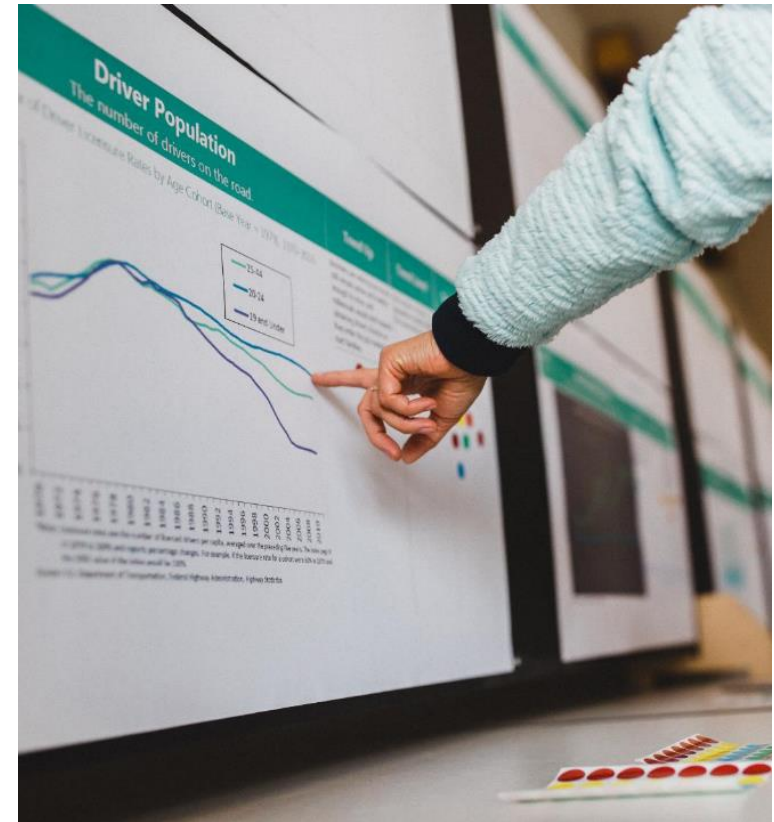


Overview

- Goal of Scoreboard
- Structure of Scoreboard
- Scoreboard page
- Playbook page
 - ◆ Deep Dive: Strategy 3
- S. Commission Feedback

Goal of Scoreboard

- CAP Move 5.G: Implement improvements for climate action data performance tracking and reporting progress to the public (e.g., community dashboard).
- Goals:
 - ◆ Track implementation progress
 - ◆ Improve transparency
 - ◆ Increase availability and accessibility of climate data for the public
- Target audience:
 - ◆ Community members
 - ◆ Boards/Commissions
 - ◆ Councilmembers
 - ◆ Other cities
- Scoreboard vs. Scorecard



Structure of Scoreboard

Scoreboard

- Snapshot of Strategies, Plays, and Moves
- Status of Move progress
- GHG emissions reductions

Playboook

- Storyboard of Playbook
- Deep dive into Plays
- Highlights key metrics
- Includes call to action



Scoreboard Page -- DRAFT

The following slides show screenshots of the Scoreboard that will be reviewed as a live demo at the October 19, 2020 meeting.



Sunnyvale's Climate Action Playbook

Created by and for the Community

The Climate Action Playbook is a plan for how our community can reduce greenhouse gas (GHG) emissions and address climate change. Just as a sports playbook identifies a team's winning strategies for achieving success on the field, the Climate Action Playbook contains winning strategies to meet California's new targets for deeper emissions reductions. We are aiming to reduce emissions by:

- **56% below 1990 levels by 2030** (exceeding the State's 2030 target), and
- **80% below 1990 levels by 2050.**

The Playbook lays out the following path to achieving these targets:

- **Six key Strategies** that outline the overarching approach for bold climate action
- **Eighteen Plays** within the Strategies that identify areas for action and measurable targets to define progress
- **Game Plan 2022**, which contains 46 "**Next Moves**" (specific actions) that the City and community and collectively take to address climate change.

As of 2019, Sunnyvale's community-wide emissions are 25% below 1990 levels. We are making great progress but must keep playing to stay in the game to reach our 2030 target.



GHG Reduction Potential



Local Environmental Quality



Health and Livability



Community Savings



Partnerships

Game Plan 2022

The Climate Action Playbook defines our "Next Moves" between now and 2022. These are not intended to achieve the 2030 targets, but rather to help catapult action and progress towards those targets. The Moves will be updated in alignment with department work plans every five years thereafter, to ensure that climate action priorities are consistently and continually woven throughout City operations.

As we developed these actions, we rated them in terms of their carbon reduction potential as well as the other community goals each would help us achieve. The table below depicts these co-benefits of the each of the Next Moves as shown by the legend to the left. Carbon savings potential is shown on a scale of 1 to 4, where 1 cloud indicates **minimum potential** (e.g., informational or educational action with that supports other Moves) up to 4 clouds which indicates **maximum potential** (e.g., affecting emissions of an entire sector).

Game Plan 2022: Next Moves Implementation Progress

Game Plan 2022 At-a-Glance

The following table provides an at-a-glance view of the status of each one of our actions. Expand each Strategy and Play to find each of the Moves, it's status and the co-benefits it will provide the community as it is implemented.

-  **1. PROMOTING CLEAN ENERGY** 
-  **2. DECARBONIZING BUILDINGS** 
-  **3. DECARBONIZING TRANSPORT & SUSTAINABLE LAND USE** 
-  **4. MANAGING RESOURCES SUSTAINABLY** 
-  **5. EMPOWERING OUR COMMUNITY** 
-  **6. ADAPTING TO A CHANGING CLIMATE** 

Game Plan 2022: Next Moves Implementation Progress -- Detail



3: DECARBONIZING TRANSPORT & SUSTAINABLE LAND USE



Play 3.1

Increase opportunities for and encourage development of mixed-use sites to reduce vehicle miles per person



Play 3.2

Increase transportation options and support shared mobility - [Check the Playbook to see current metrics](#)



Click through to Playbook page

Move	Description	Timeline	Status	Co-Benefits
3.C	Enhance City Transportation Demand Management (TDM) program implementation and monitoring to facilitate further reductions in single-occupant automobile trips, citywide.	FY20 - FY22	Delayed due to COVID 	
3.D	Advocate that regional service providers implement high quality transit service and a robust set of first-and last-mile strategies in over two-thirds of the cross-city corridors.	FY20	On Track 	



Progress Towards Targets

GHG Emissions

Sunnyvale has demonstrated excellent progress since we began our commitment to do our part in eliminating greenhouse gases. When it became clear that we were moving quickly to exceed the State Level 2030 targets, we increased our ambition and set our sights on deeper cuts in the short term. Reducing emissions sooner will not only be more beneficial to a stable climate, but it will position Sunnyvale to make deeper cuts over the 2030 - 2050 time horizon.

So far we've achieved a 25% reduction from 1990 levels, but 2019 has broken our winning streak. By regularly keeping track of our progress we know it's time to huddle up and refocus our efforts.

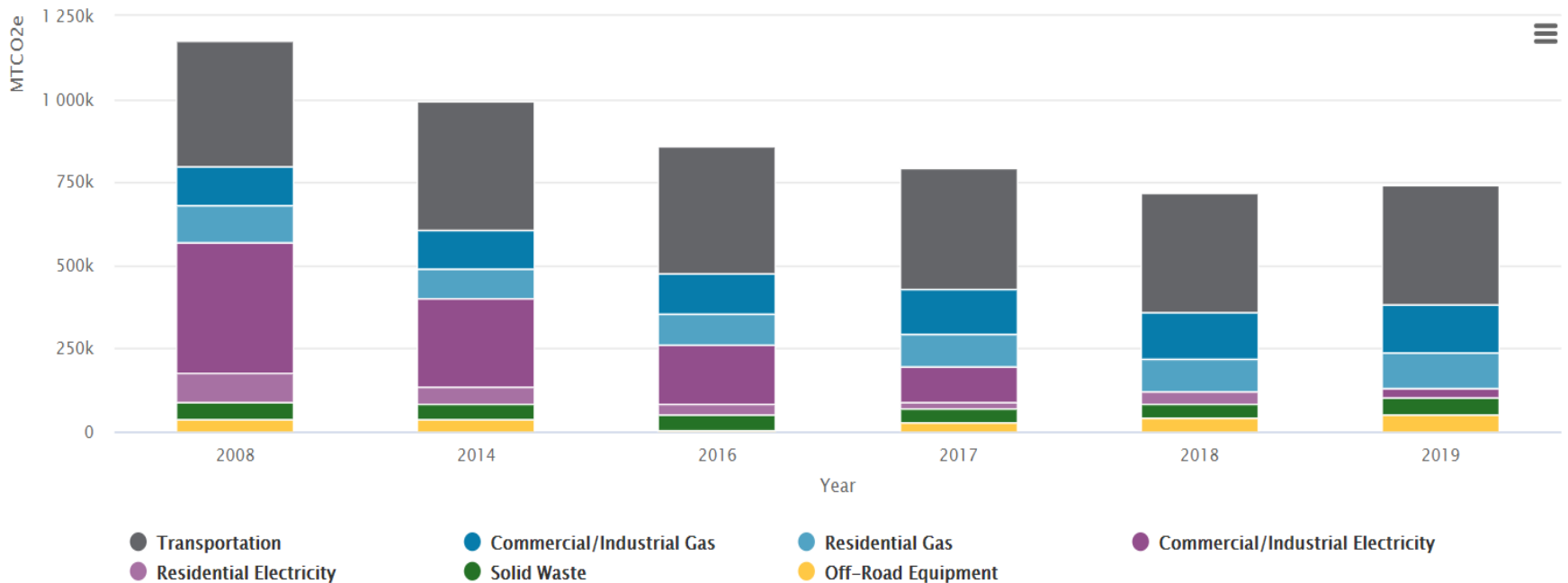


Communitywide GHG Emissions: Trends by Sector and Year

Trends in Total GHGs

Sunnyvale's GHG emissions have been on a downward trend since our first inventory in 2008 and steadily through the past several years of regular inventories.

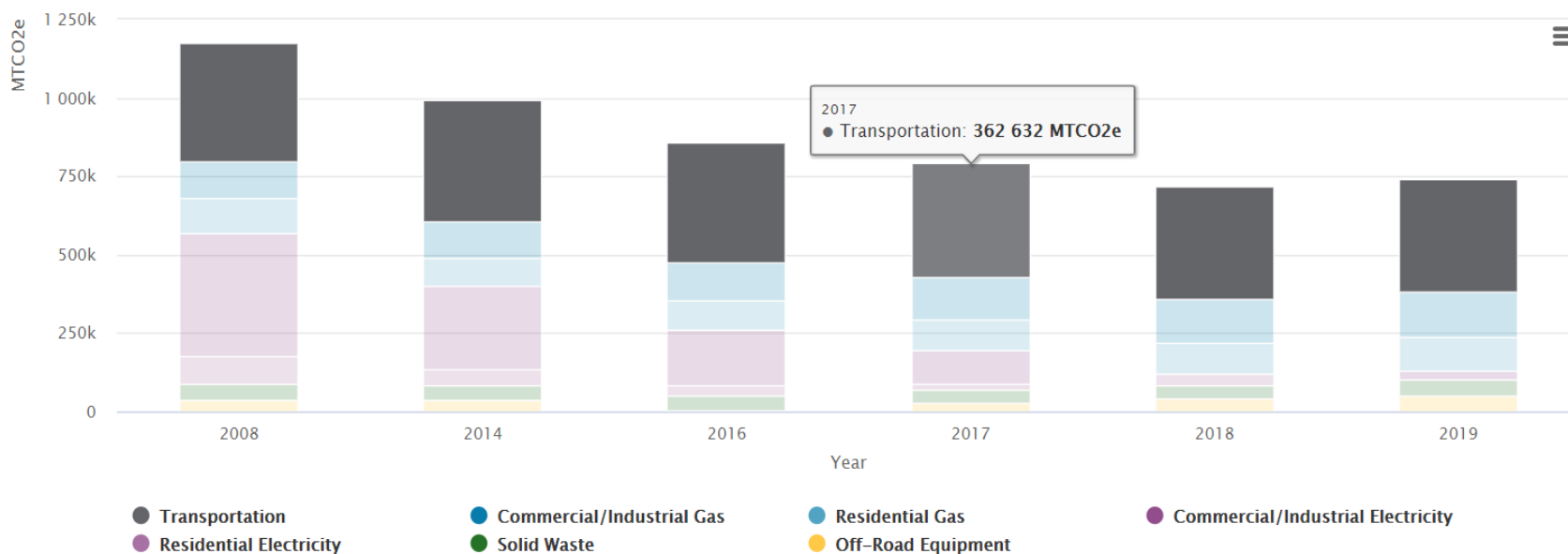
As visible in the chart below, the most dramatic changes have been in emissions associated with the consumption of electricity as we have shifted to greater share of clean energy supply. In 2019, total emissions have increased slightly, the first time since we've been keeping track.



Communitywide GHG Emissions: Trends by Sector and Year -- Detail

Inventory Trends Trends in Total GHGs

Sunnyvale's GHG emissions have been on a downward trend since our first inventory in 2008 and steadily through the past several years of regular inventories. As visible in the chart below, the most dramatic changes have been in emissions associated with the consumption of electricity as we have shifted to greater share of clean energy supply. In 2019, total emissions have increased slightly, the first time since we've been keeping track.





Playbook Page -- DRAFT

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Playbook



Promoting Clean Electricity →

Every year we add enough new local solar to power 245 homes! Is your's next?

What is clean energy? →

GHG emissions from electricity →

Promote 100% clean electricity →

Increase local solar photovoltaics (PV) →



Decarbonizing Buildings →

The energy required to power our buildings make up 38% of our GHG emissions. To reach our goals, they must be powered carbon-free.

What is building decarbonization? →

Reduce energy use in existing buildings →

Electrification of existing buildings →



Decarbonizing Transportation & Sustainable Land Use →

Driving is up, but emissions are going down! Mobility is changing rapidly, lets make sure it's for the good.

Addressing transportation GHGs →

Reduce vehicle miles per person →

Increase shared mobility options →

Decarbonizing Transportation & Sustainable Land Use

Reducing transportation emissions means creating more convenient destinations and investing in a range of safe and healthy ways to get to them.

Addressing Transportation
GHGs



Increase Shared Mobility
Options



GHG Emissions from
Transportation:



Increase Zero-Emission
Vehicles



Reduce Vehicle Miles per
Person



Be Part of the Solution



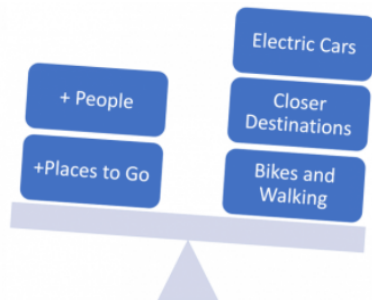


Addressing transportation GHGs

Why is it important to sustainably address the transportation sector?

Transportation makes up 50% of Sunnyvale's total emissions. Sunnyvale's current development, while serviced by existing public transit, still largely reflects a car dependent lifestyle. Dramatic changes to driving habits and accelerated adoption of alternative fuel vehicles will need to work in tandem to achieve steep reductions in transportation emissions.





Targets:

GHG Emissions associated with Transportation:

Each year our transportation GHGs are determined by how many people there are in the city, how much driving each of them needs to do, and how clean the vehicle they are driving is. We expect that population will continue to rise and the climate action plan is designed to address the other factors by reducing transportation demand, expanding options for new modes of travel, and expanding the use of zero emissions vehicles for the remainder of the on-road travel.

Target



2030: 20% reduction in vehicle miles per person
2050: 25% reduction in vehicle miles per person



Play 3.1: Reduce vehicle miles per person

Reduction Targets

Vehicle miles per person per day gives a good overview of how much driving is required to live and work in Sunnyvale. This metric has been very stable over recent years and in order to meet our GHG reduction goals, we will need to create living spaces that are more conducive to car-free living while supporting a range of new mobility options.

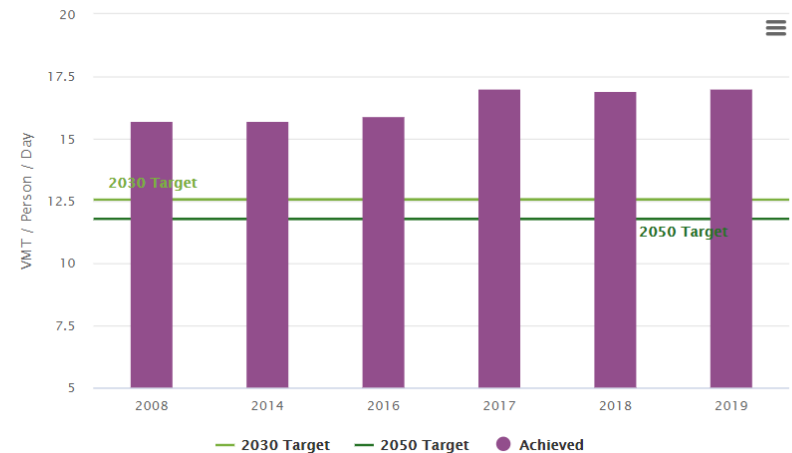


Reduce Vehicle Miles per Person

VMT Per Capita - Our Performance

The average amount of driving each Sunnyvale resident does is a significant factor in how quickly we can bring down transportation GHGs. This metric has not changed much year over year and only between 2016 and 2017 did we see any decrease. [As you can see on the Scoreboard](#), that was also the same period that we saw the biggest overall drop in emissions from the sector, illustrating how important this metric is to meeting our overall GHG reduction targets.

Ultimately the best way to reduce the demand for driving is through better design of our community where fewer trips require a car to accomplish them. Sunnyvale is making plans across the city to accomplish that goal.





Be Part of the Solution



Driving electric saves money! Take charge and lead the way to kick fossil fuels for good!

Take charge and kick fossil fuels for good!



EV Assistant can help you browse and compare cars, discover electric vehicle incentives and savings, and find charging options for home and on the road.

Learn more



Stay up to date on new opportunities for electric driving and more by signing up at the bottom of the page

Sign up



Bike to your desination

Plan your journey with this map of bike routes in Sunnyvale

S. Commission Feedback

Usability/Accessibility and Flow:

- Is the language easy to follow? Is there too much jargon?
- Is it easy to navigate through the Scoreboard Site?*

Content:

- Are there big content pieces or stories that are missing?
- Is there an adequate balance between qualitative and quantitative information? *
- Is the call to action clear and appropriate?

Aesthetics:

- Are the graphical and visual displays helpful in understanding the data? Do some styles work better than others?
- Is all text legible? (Colors and contrast, font size, etc.)

**Note: Some changes are limited by the dashboard template.*