



Sunnyvale

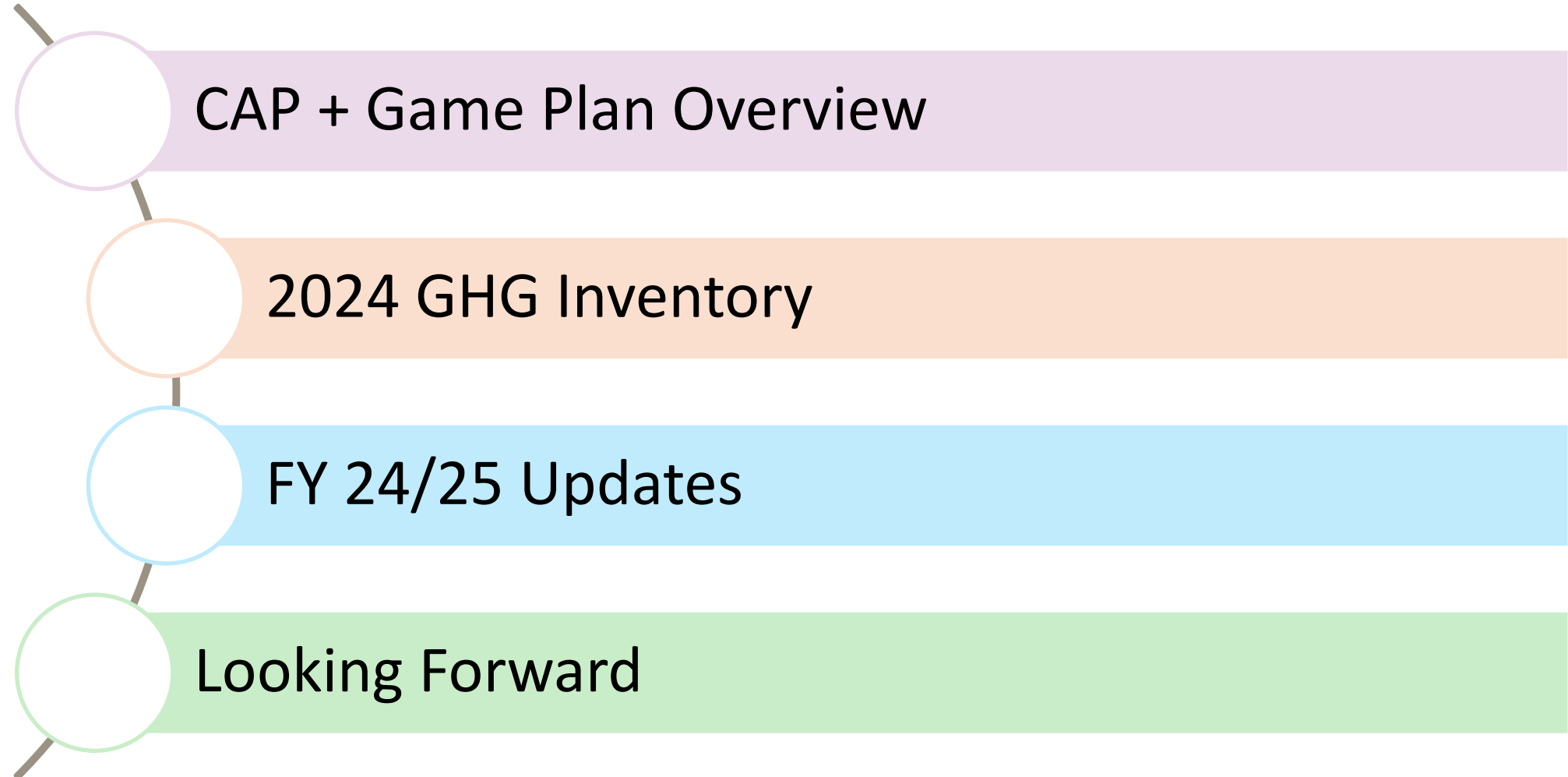
Climate Action Playbook Annual Update

October 28, 2025

Environmental Services Department



Agenda





CAP + Game Plan 2028 Overview

Sunnyvale's Climate Action Playbook



Six Playbook Strategies for the Win



PROMOTING CLEAN
ELECTRICITY



DECARBONIZING
BUILDINGS



DECARBONIZING
TRANSPORTATION &
SUSTAINABLE LAND USE



MANAGING RESOURCES
SUSTAINABLY



EMPOWERING OUR
COMMUNITY



ADAPTING TO A
CHANGING CLIMATE

How the Playbook is Organized



Strategy 1: Promoting Clean Electricity

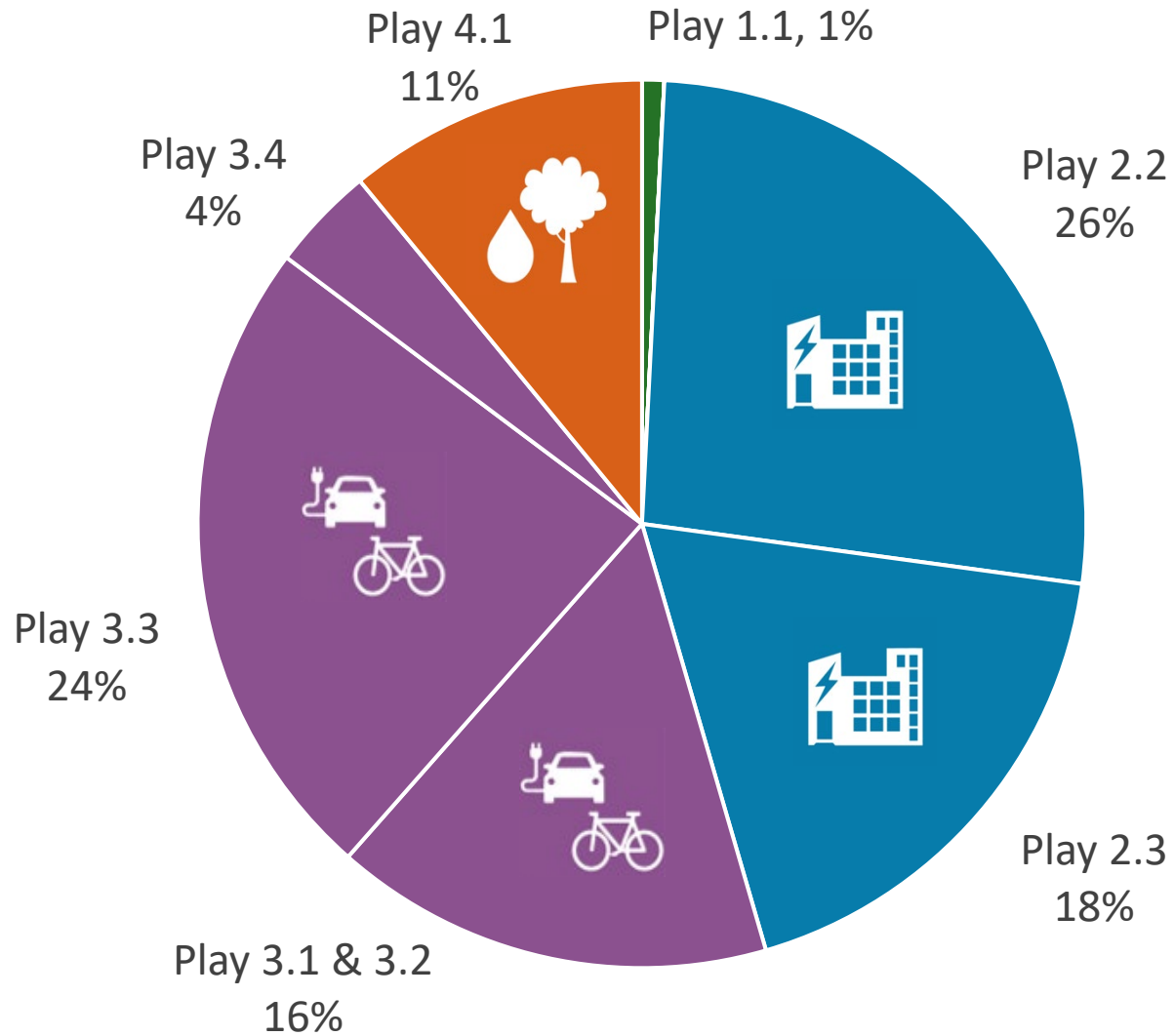
Play 1.1: Promote 100% Clean Electricity

<i>Metric: % Participation in Clean Electricity</i>		2030	2045
		100%	100%
Move 1.A	Continue to support and steer Silicon Valley Clean Energy (SVCE) in providing clean power and decarbonization programs.		

Playbook Metrics

	2030	2045
	Strategy 1: Promoting Clean Electricity	
	Play 1.1: % Participation in Clean Electricity	100%
	Play 1.2: % Electric Load from Solar	3%
	Play 1.3: % Electricity Demand in Local Battery Storage	2%
	Strategy 2: Decarbonizing Buildings	
	Play 2.2: % Reduction in Residential Natural Gas Use	44%
	Play 2.2: % Reduction in Non-residential Natural Gas Use	38%
	Play 2.3: % All-electric New Buildings	100%
	Strategy 3: Decarbonizing Transportation and Sustainable Land Use	
	Play 3.1: % Reduction in Vehicle Miles Traveled (VMT) per person	20%
	Play 3.3: % On-road Zero Emission Vehicle Adoption in Sunnyvale	42%
	Play 3.4: % Off-road Zero Emission Equipment Adoption	30%
	Strategy 4: Managing Resources Sustainably	
	Play 4.1: % Reduction in Landfill Organics	75%
	Play 4.1: Reduce Landfilled Garbage (Pounds per person per day)	1 lb

Breakdown of Game Plan 2028 Reductions by Play



Total Emission
Reductions by 2030
412,374 MTCO₂e

2025 CAP Reporting Calendar

Q1

Jan	Feb	Mar
	Complete Dept Check Ins (meetings)	

Q2

Apr	May	Jun
Progress Update to Sustainability Commission (SC) (4/21)		Complete 2024 Annual CAP Progress Updates

Q3

Jul	Aug	Sep
Annual Citywide CAP Imp. Team Meeting	Complete 2024 CAP Metrics Complete 2024 GHG Inventory	Publish 2024 Updates to CAP Scoreboard

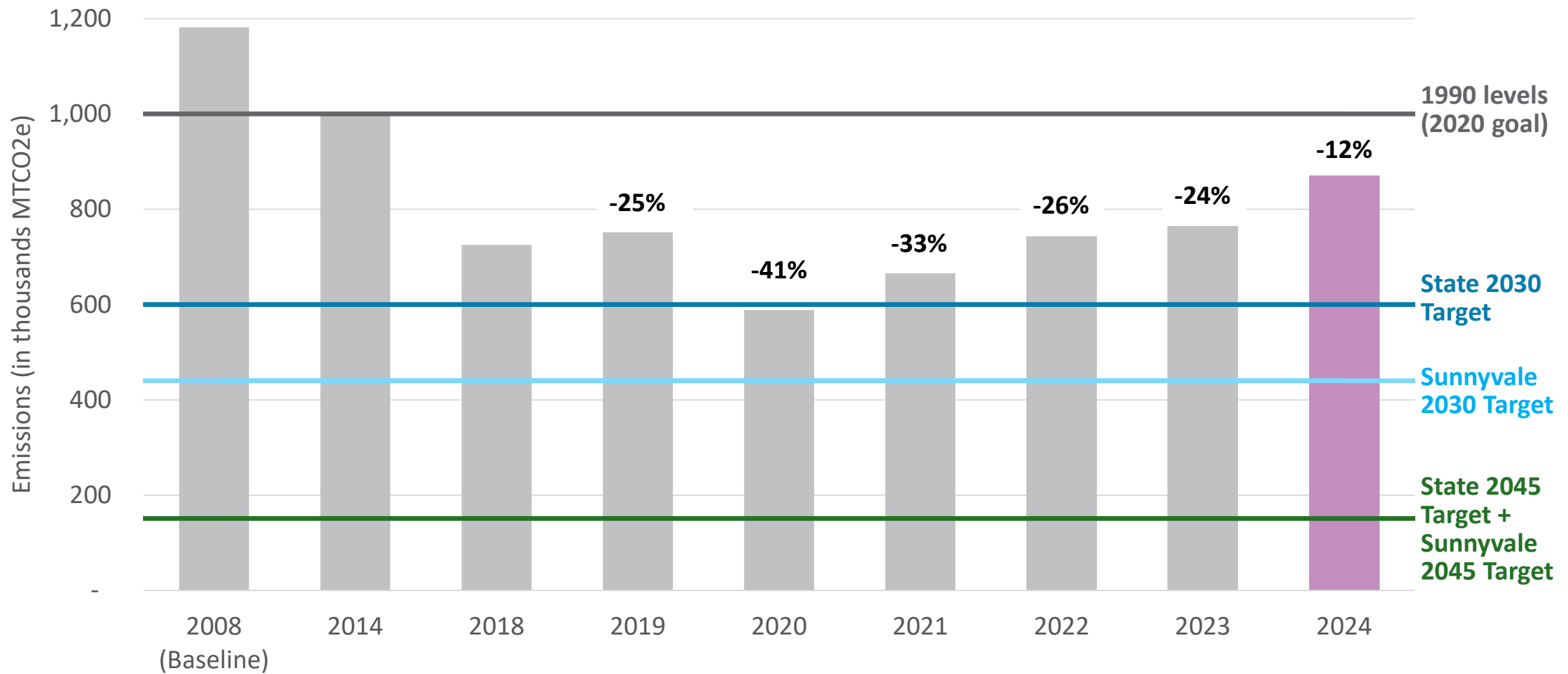
Q4

Oct	Nov	Dec
 2024 Annual Update to City Council (SS, 10/28) SC + BPAC Joint Study Session Complete Dept Check Ins (email updates)		

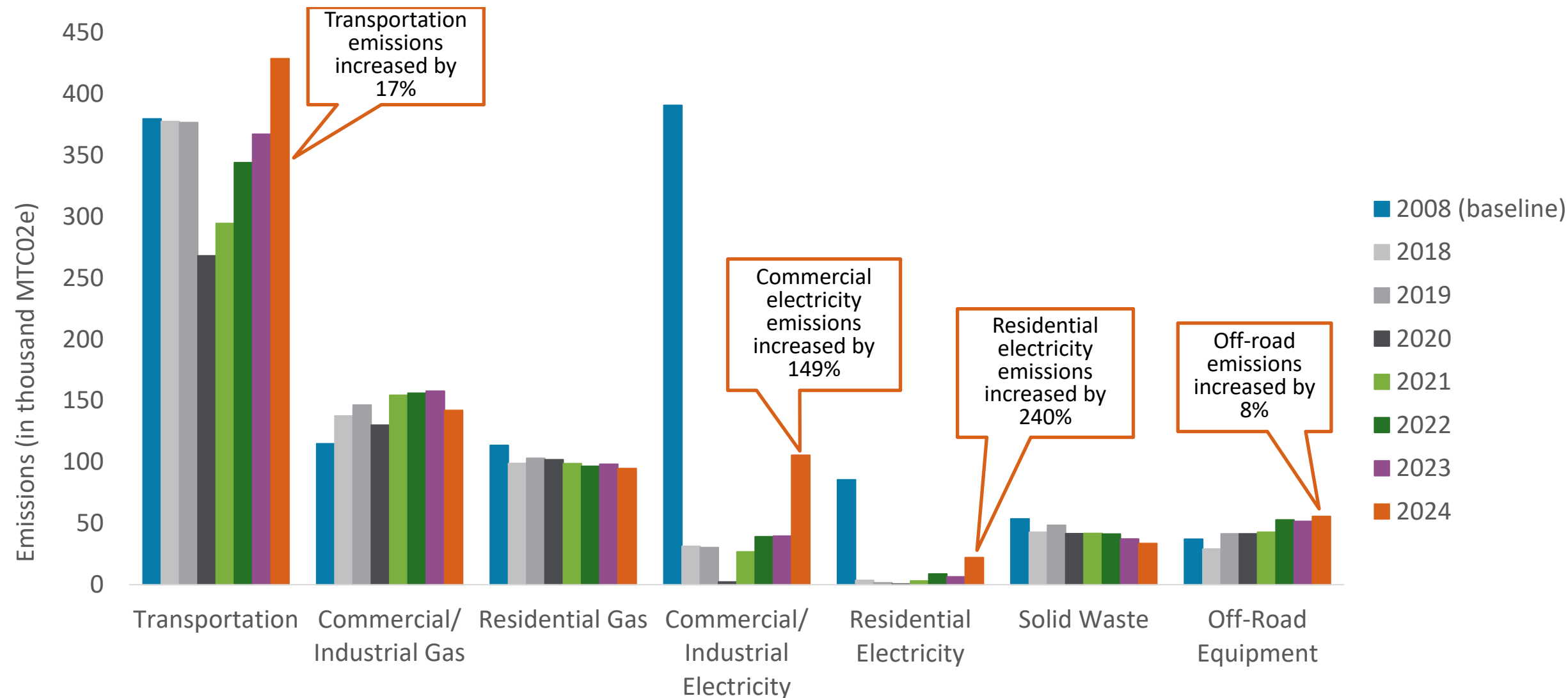


2024 Greenhouse Gas Inventory

Total Emissions by Year



Emissions Overtime by Sector



Key Drivers

Electricity

SVCE expected to return to carbon free in 2025

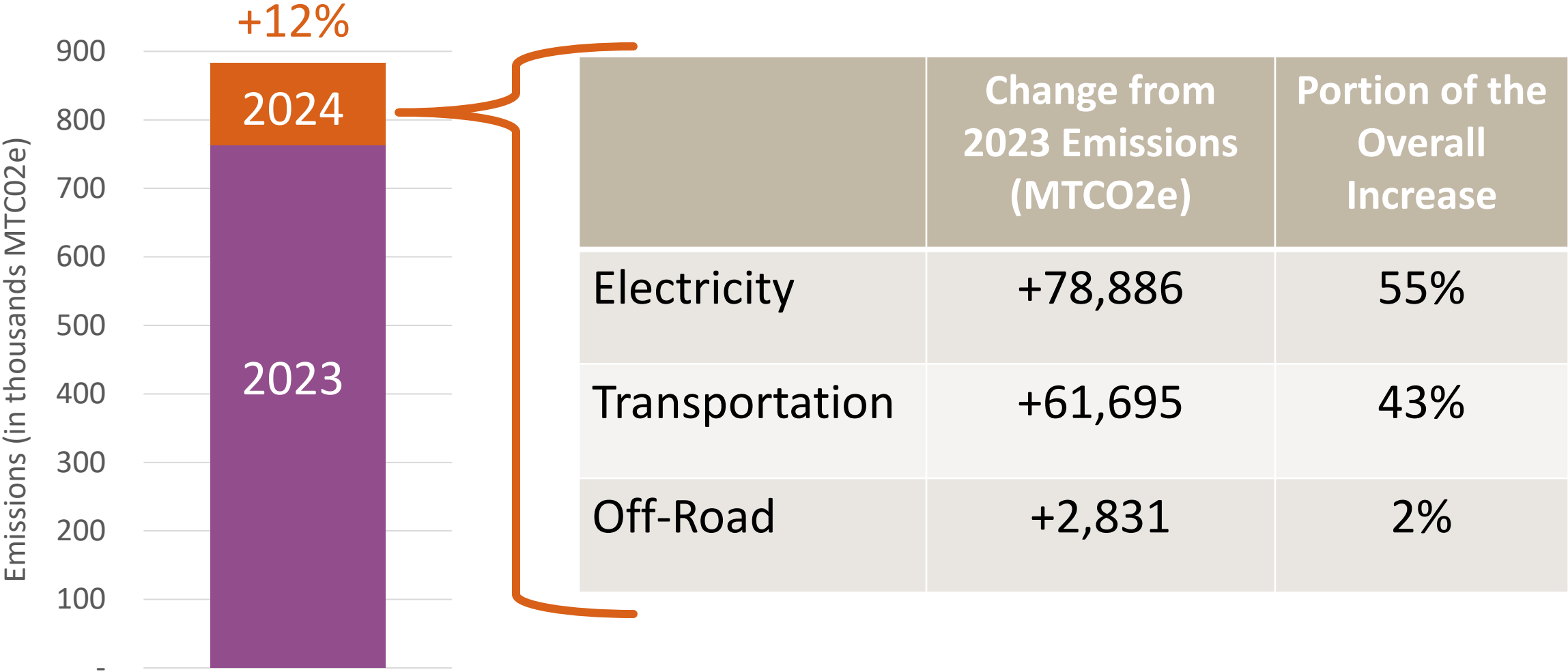
Electric Power Generation Mix*	PG&E	SVCE
		GreenStart
Specific Purchases	Percent of Total Retail Sales (kWh)	
Renewable	23%	43%
• Biomass & Biowaste	3%	3%
• Geothermal	0%	11%
• Eligible Hydroelectric	1%	0%
• Solar Electric	14%	21%
• Wind	4%	8%
Coal	0%	0%
Large Hydroelectric	12%	36%
Natural Gas	2%	0%
Nuclear	63%	0%
Other	0%	0%
Unspecified Sources of Power**	0%	21%
TOTAL	100%	100%

Transportation

CARB EMFAC Model Updated

- County-based data includes more heavy-duty vehicles
- Skews results toward higher fuel use and less fuel-efficient vehicles. Increase in fuel use between EMFAC 2021 and 2025:
 - Gasoline increase: 12%
 - Diesel increase: 26%
- Doesn't reflect Sunnyvale's strong EV adoption

Change from 2023 to 2024



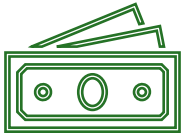


FY 24/25 Updates

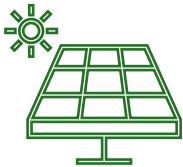


Strategy 1: 100% Clean Electricity

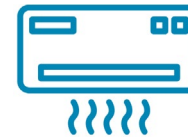
SVCE Programs Impacts



\$6,811,600 in on-bill savings in Sunnyvale; 64,210 households served; \$779,290 in rebates claimed



\$215,790 in cash payments to customers generating solar in Sunnyvale



282 heat pump HVAC Upgrades



177 pre-wired circuits for electrification



121 EV Chargers Installed



169 heat pump water heaters installed



Strategy 1: 100% Clean Electricity

FY 24/25 Moves Status			
Complete or Ongoing	In Progress	On Hold	Delayed
75% (3)	0	25% (1)	0

Strategy 1 Metrics	2024 Metric	2030 Goal
Metric 1: % Clean Electricity	90%	100%
Metric 2: % of Electricity from Solar	6.1%	3%
Metric 3: % of Electricity from Battery	N/A	2%





Strategy 3: Decarbonize Transportation

Drive Electric Program Attendance



*FY24/25 - 424 attendees

*FY 24/25 is the first-time hosting three in-person events (one EV Expo and two EV Ride & Drive). Fiscal years prior had two



FY23/24 - 292 attendees



FY22/23 - 256 attendees



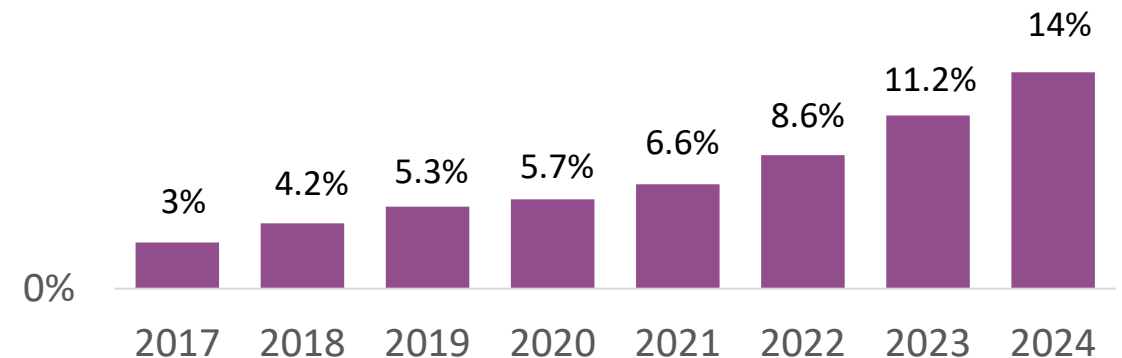
FY21/22 - 166 attendees

Percent Zero-Emissions Vehicles in Sunnyvale

2030 Target

40%

20%





Strategy 3: Decarbonize Transportation

FY 24/25 Moves Status			
Complete or Ongoing	In Progress	On Hold	Delayed
31% (4)	38% (5)	8% (1)	23% (3)

Electric Vehicle Infrastructure (EVI) Updates

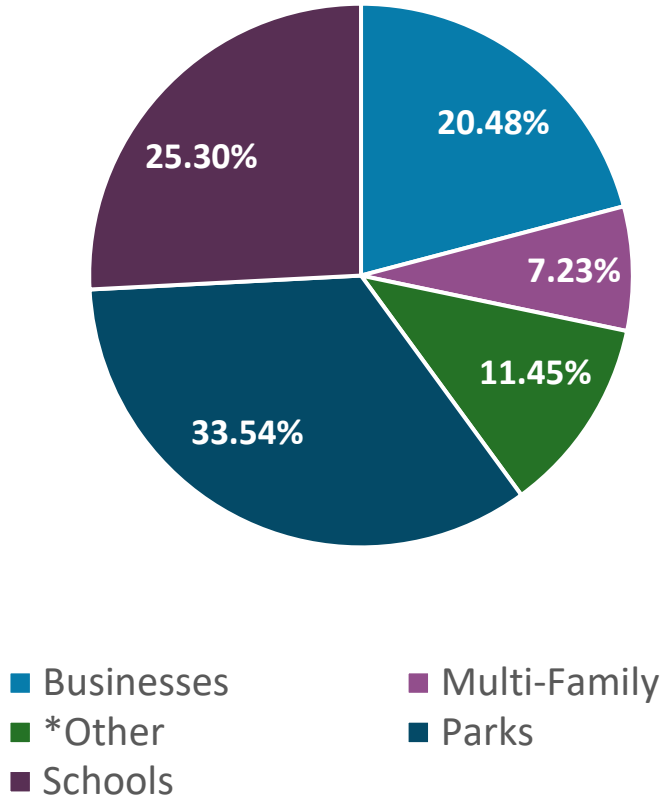
430 Publicly Accessible EV Chargers, 22 Chargers at City Facilities

Municipal Fleet increased from 22 EVs in 2024 to 56 EVs in 2025

Community Feedback: suggest additional EV Chargers should be at Parks, Schools and Businesses

City participation in Bay Area Charging Smart Cohort

Community feedback on placement of EVI



*City Facilities, Caltrain Station, near Single Family Homes



Strategy 3: Decarbonize Transportation

Safe Routes to School Improvements at San Miguel Elementary and Columbia Middle School

Constructed Multi-use Path on Moffett Park Drive

Buffered Bike Lane on Borregas Avenue

Converted Portion of Part-time Bike Lane to Full-time on Homestead Road

Began Evelyn Avenue Class I Trail Design

East Channel Trail Study Underway

Launched Peery Park Rides in March 2025

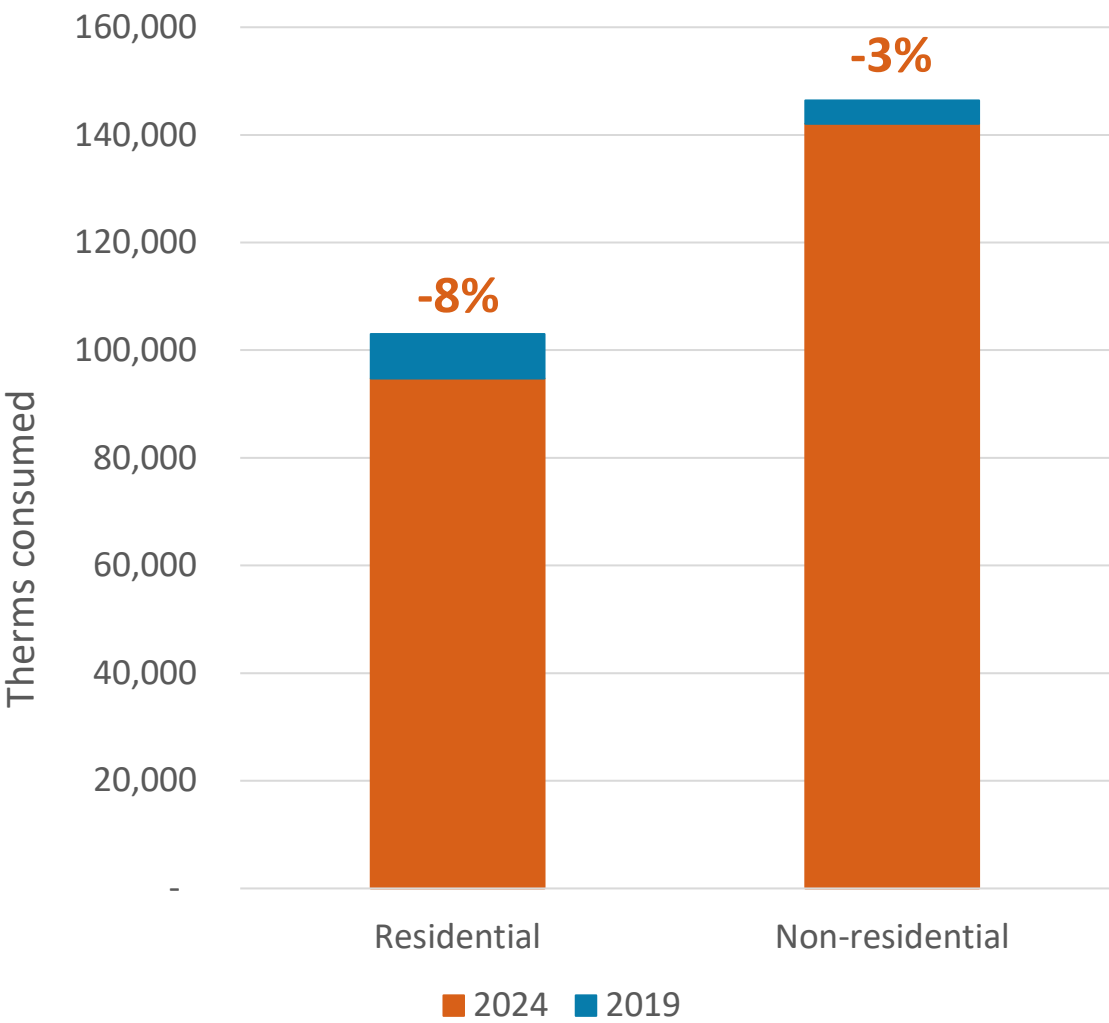




Strategy 2: Decarbonize Buildings

Strategy 2 Metrics	2024 Metric	2030 Goal
Metric 4: % of existing businesses (major remodel) meeting CALGreen and LEED Silver % of existing homes (major remodels) meeting CALGreen	100%	100%
Metric 5: % of natural gas use reductions for residential and non-residential buildings	Res -8%	Res -44%
	Non-res -3%	Non-res -38%
*Metric 6: % of new buildings (with final permits) that are all-electric	N/A	100%

* Reach Codes suspended mid-2024





Strategy 2: Decarbonize Buildings

FY 24/25 Moves Status

Complete or Ongoing	In Progress	On Hold	Delayed
24% (2)	63% (5)	0	13% (1)

Move 2.D: Cool Cooktops – 437 uses since launch

- 94 kits uses
- 9 positive reviews
- 5 transitioned to cooking

Move 2.E: Electrify Municipal Facilities

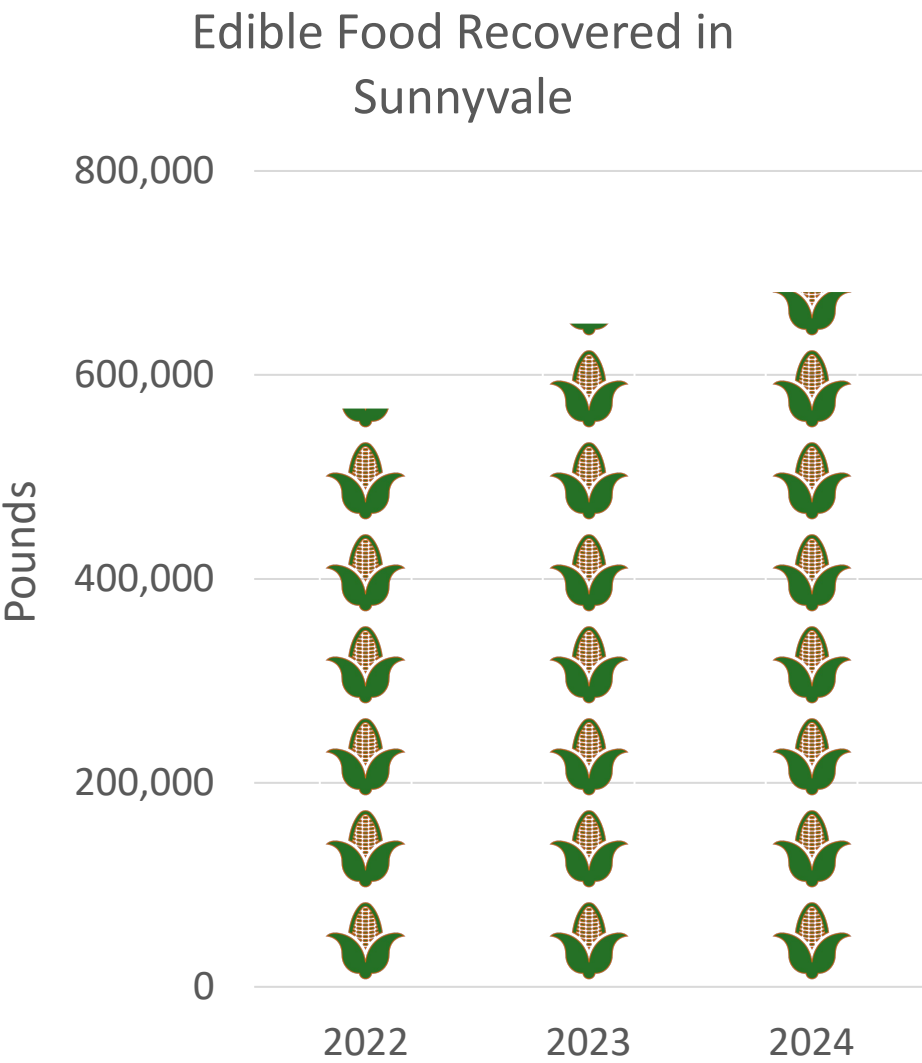
- Lakewood Library construction underway
- Fire Station 2 to receive solar + battery storage





Strategy 4: Managing Resources Sustainably

FY 24/25 Moves Status			
Complete or Ongoing	In Progress	On Hold	Delayed
38% (5)	46% (6)	0%	15% (2)
Strategy 4 Metrics	2024 Metric	2030 Goal	
Metric 9: Achieve Zero Waste goals for solid waste	2.6 lbs per person per day	1 lbs per person per day	
Metric 10: % Reduction in Water Consumption	- 19%	N/A	
Metric 11: Net Number of New Trees on Public Lands	+389 trees	N/A	
Metric 12: Acreage of Land Treated by Green Stormwater Infrastructure	1,576 acres	N/A	

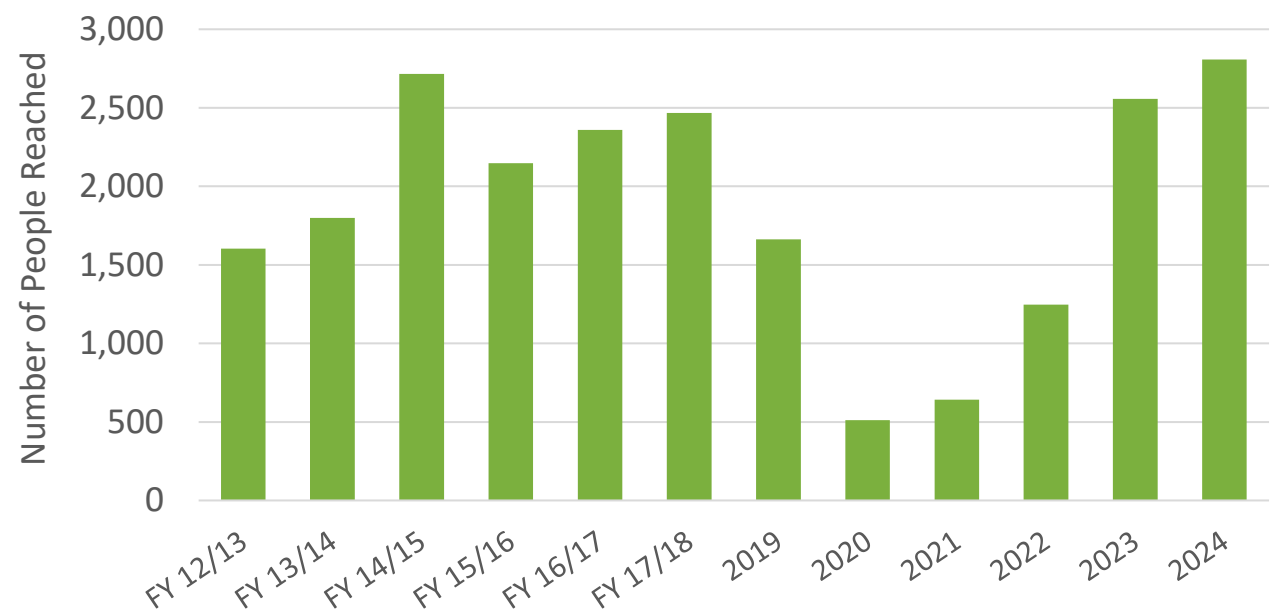




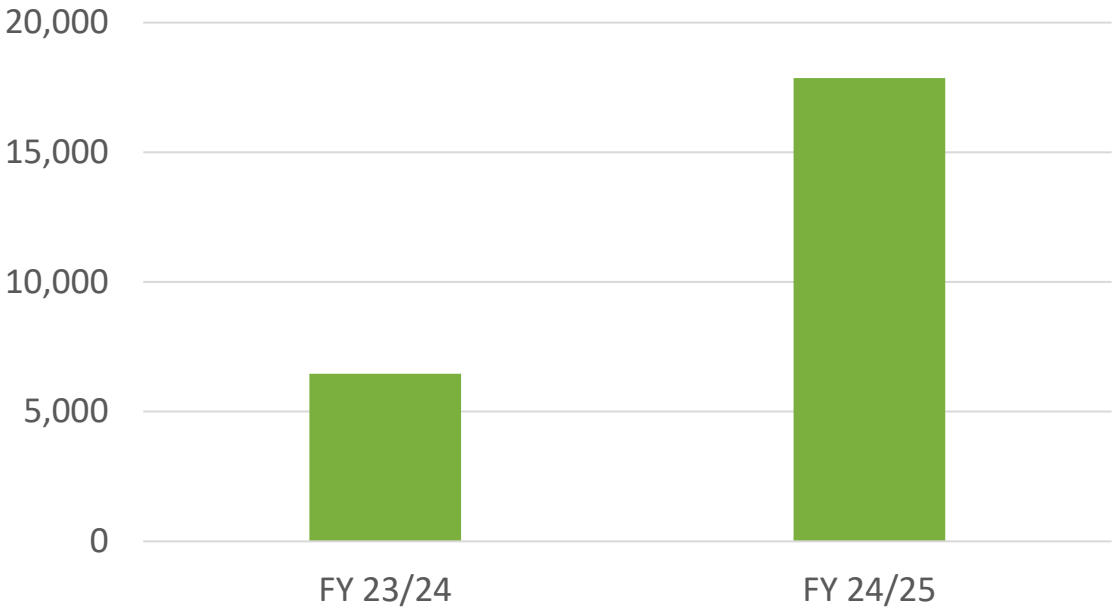
Strategy 5: Empowering our Community

FY 24/25 Moves Status			
Complete or Ongoing	In Progress	On Hold	Delayed
44% (4)	44% (4)	0	11% (1)

ESD: People Reached Tabling at Events



ESD Instagram Reach





Strategy 5: Empowering our Community

Move 5: Collaborate with Youth

- SVYCA Civics Summit Day + City Hall Tour
- SSN “Stories from Students”
- Quarterly check-in with SVYCA + ESD + LRS

Move 5.G: Sustainable Librarian

- 31 sustainability-themed programs with 1,049 attendees

Move 5.F: “Electrify your Life”

- 73 attendees across 3 events



Earth Day 2025





Strategy 6: Adapting to a Changing Climate

Move 6.A: Regional Collaboration

- Santa Clara County Climate Collaborative (SC4)
- Attend working groups on sea-level rise and flooding, urban forest, and heat and air quality

Move 6.B: Shoreline Protection

- Continuing to meet with Valley Water
- USACE progressing with first year of study while awaiting budget approvals

Move 6.D Update Emergency Preparedness plans for climate-related impacts

- Complete

Move 6.E: Community Resilience Plan

- Regional Shoreline Adaptation Plan grant application prioritized. Baseline research on municipal Resilience Plans conducted.

FY 24/25 Moves Status

Complete or Ongoing	In Progress	On Hold	Delayed
50% (2)	50% (2)	0	0

Grants

Awarded

Amount	Project/Program	Organization	CAP Strategies
\$1,000,000	Fire Station 2 solar+ battery storage (ESD led, DPW support)	SVCE	 
\$100,000	Electrification Engagement (ESD led, LRS support)	SVCE	 
\$2,631,383	Regional Shoreline Adaptation Plan for Multijurisdictional region: Will support compliance with SB 272. (ESD led)	Ocean Protection Council (OPC)	
\$199,020	Energy Efficiency and Conservation Grant Block Program: Purchase of 5 electric fleet vehicles	Department of Energy (Federal)	

Applied, not awarded

Amount	Project/Program	Organization	CAP Strategies
\$74,678	Community Preparedness and Environmental Stewardship (LRS led, ESD support)	Valley Water	 

FY 2024/25 Annual Update

Game Plan 2028 Staff Hired!



Environmental Program Manager - Stormwater

Environmental Program Specialist – Water Conservation

Environmental Program Specialist - Sustainability

Librarian – Sustainability (LT)

Senior Engineer – CIP/Transportation



Looking Forward

Big Ticket Items FY 25/26

Strategy 2

- Building Electrification Strategy
- Green Building Program Update
- Municipal GHG Inventory
- Energy Benchmarking and BPS strategy

Strategy 3

- Metrics to support VMT reduction
- Fleet Electrification
- EV Charging Infrastructure

Strategy 5

- Earth Day
- Youth Engagement
- Business Engagement
- Library Programs
- Move 5.A

Strategy 6

- Shoreline Protection
- Community Resilience

Recap & Big Picture Takeaways

Measuring Progress

- Emissions increase is not reflective of our progress
- We continue to build on CAP Metrics

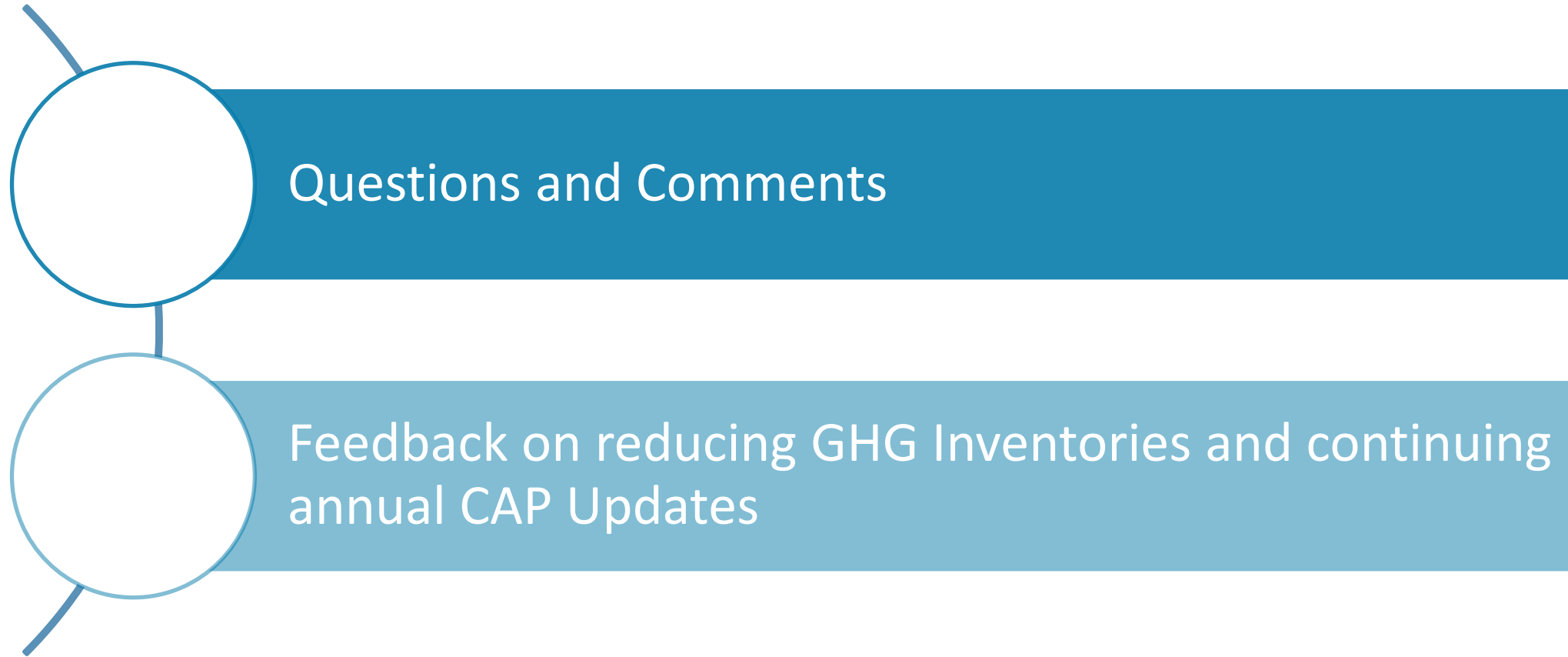
Resource Commitments

- A lot of important work is happening in each of the CAP Strategies
- ~4 months spent on annual updates

Moving Forward

- Reduce GHG Inventory to every 2 years
- Assess alternative data sources or models for VMT
- Maintain CAP Update Annually (Moves statuses + CAP Metrics)

Discussion





Thank You for Making Sunnyvale a Sustainable City!