



Sunnyvale

DRAFT

Climate Action Playbook Progress Updates + 2022 Greenhouse Gas Inventory

March 18, 2024

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Agenda



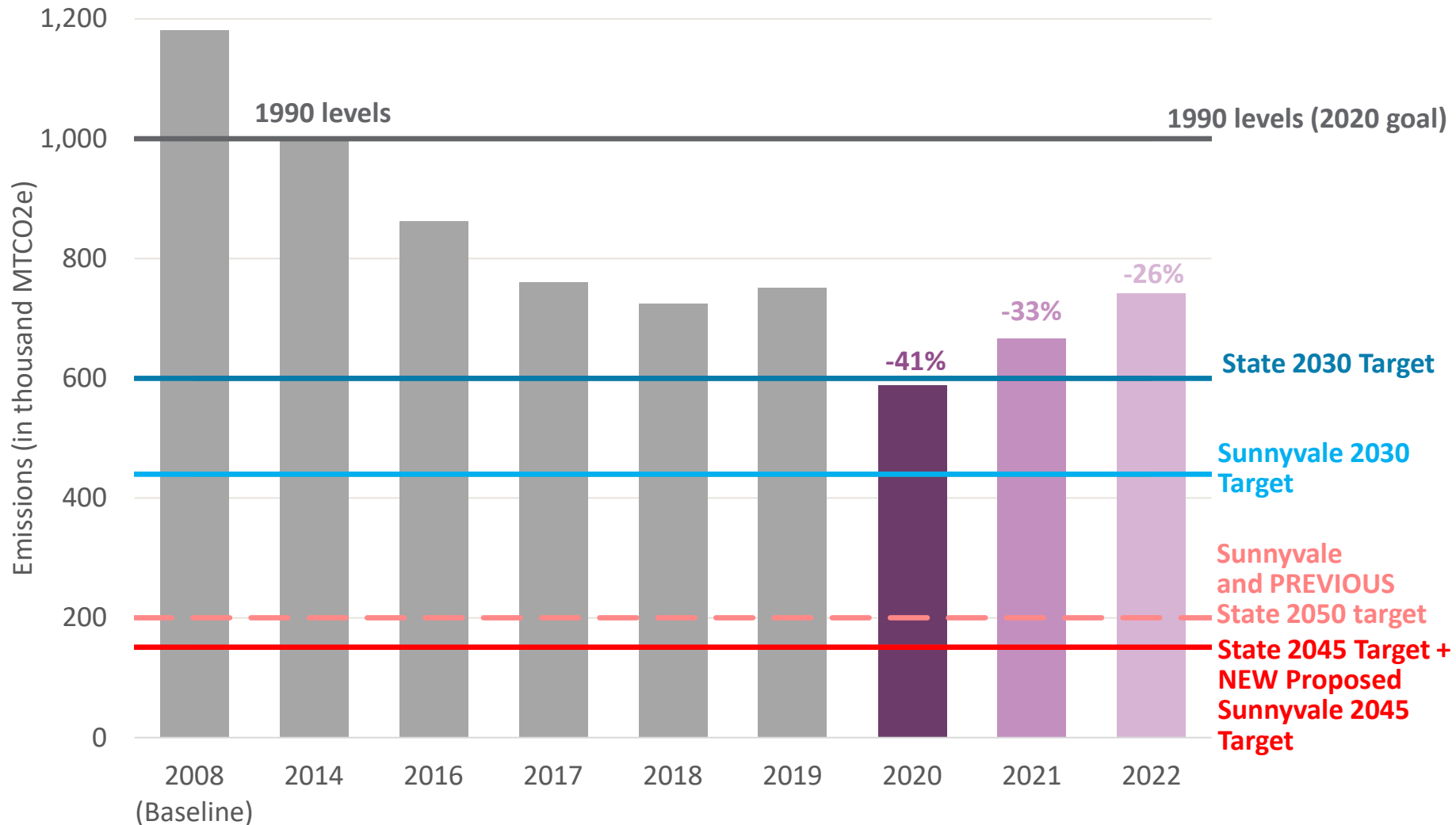
2022 GHG Inventory

CAP Progress Updates

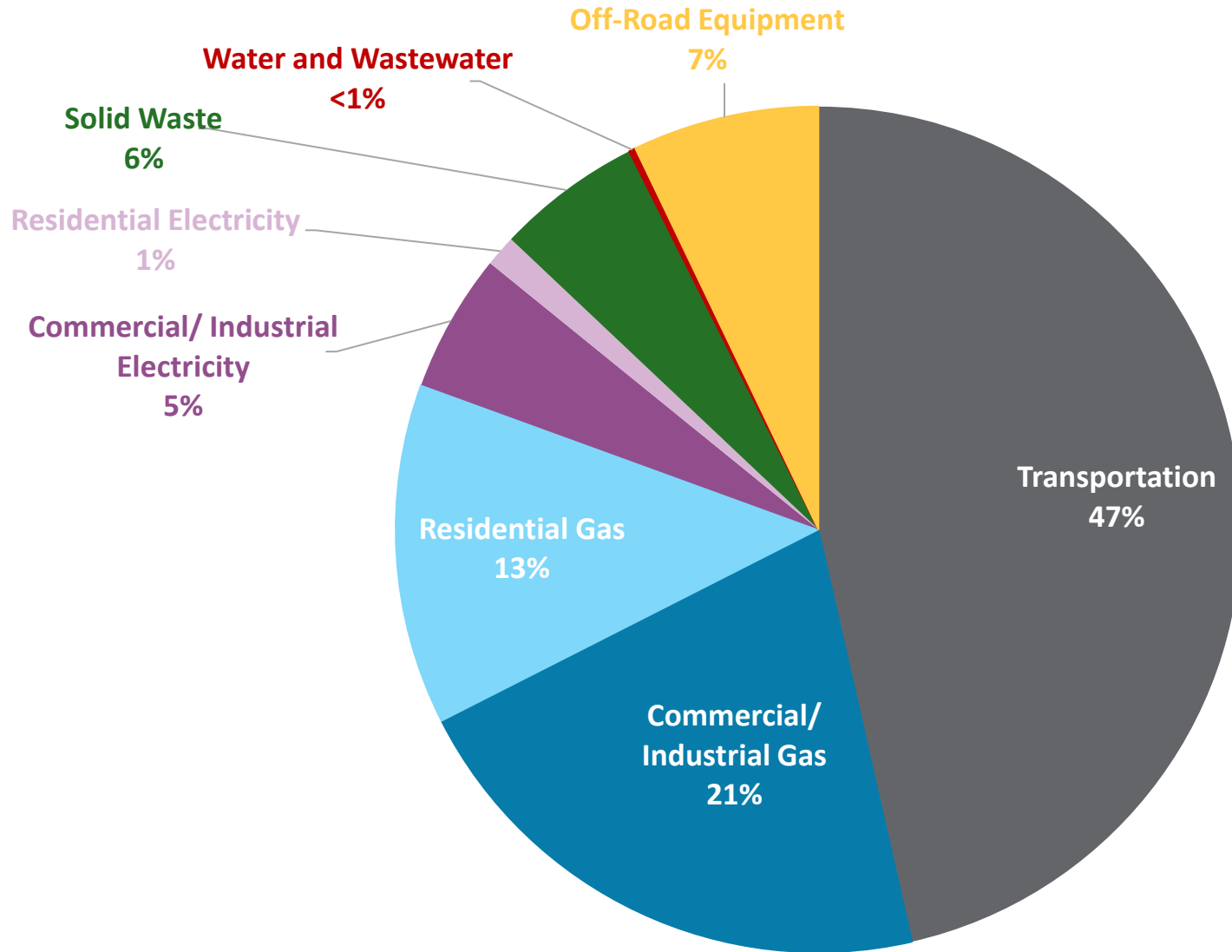


2022 Annual Greenhouse Gas Inventory

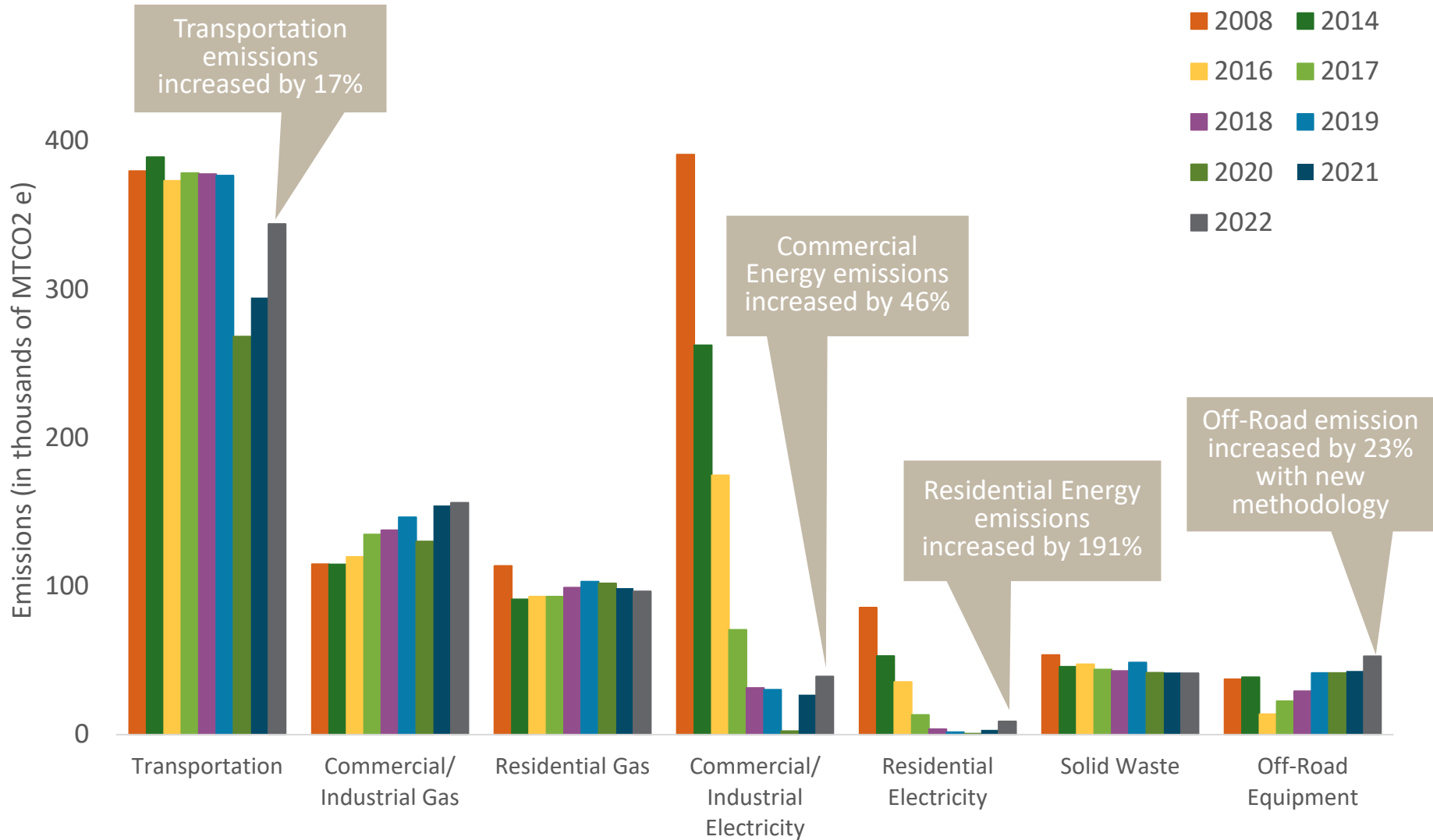
Total Emissions by Year



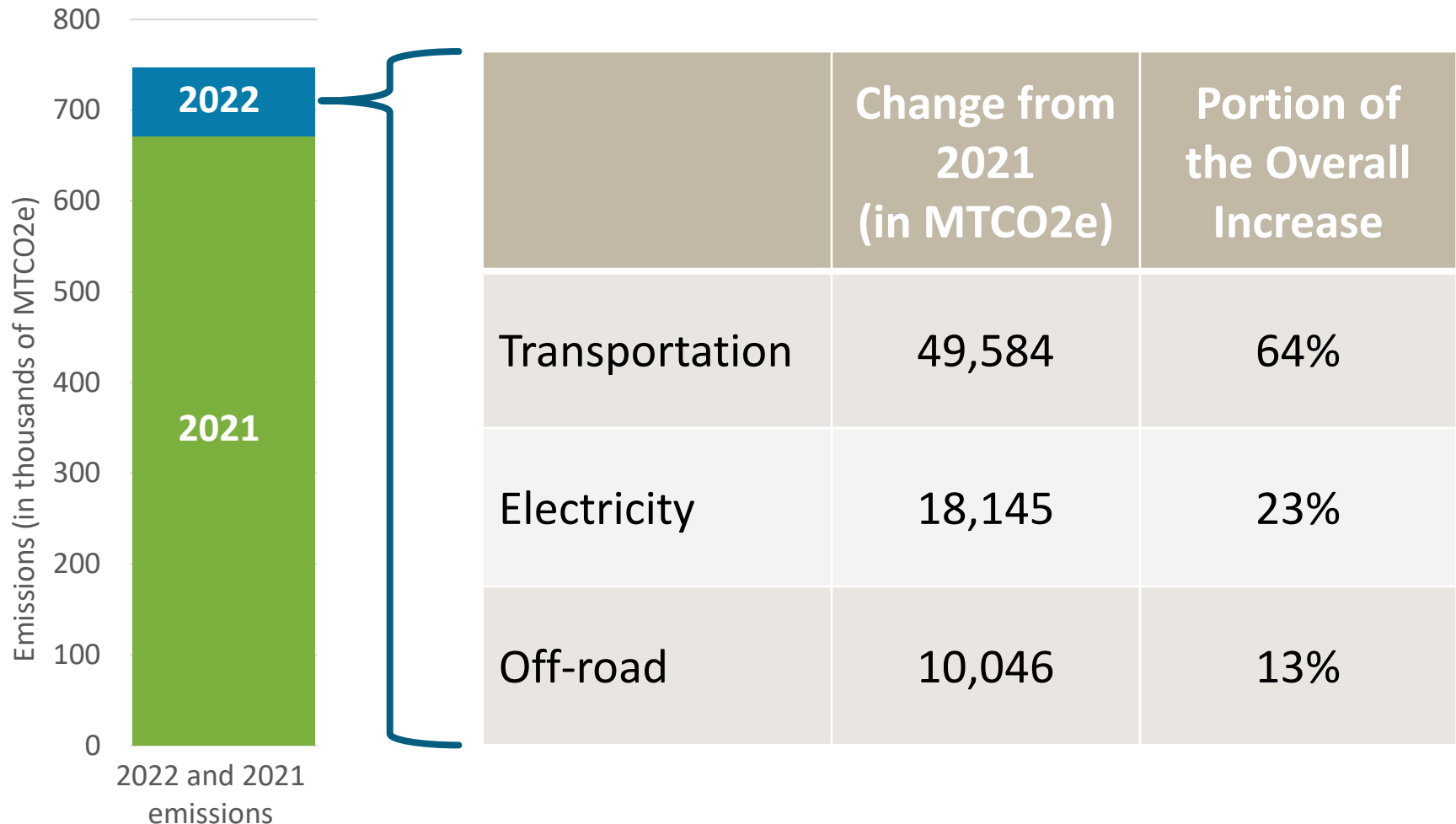
2022 Emissions by Sector



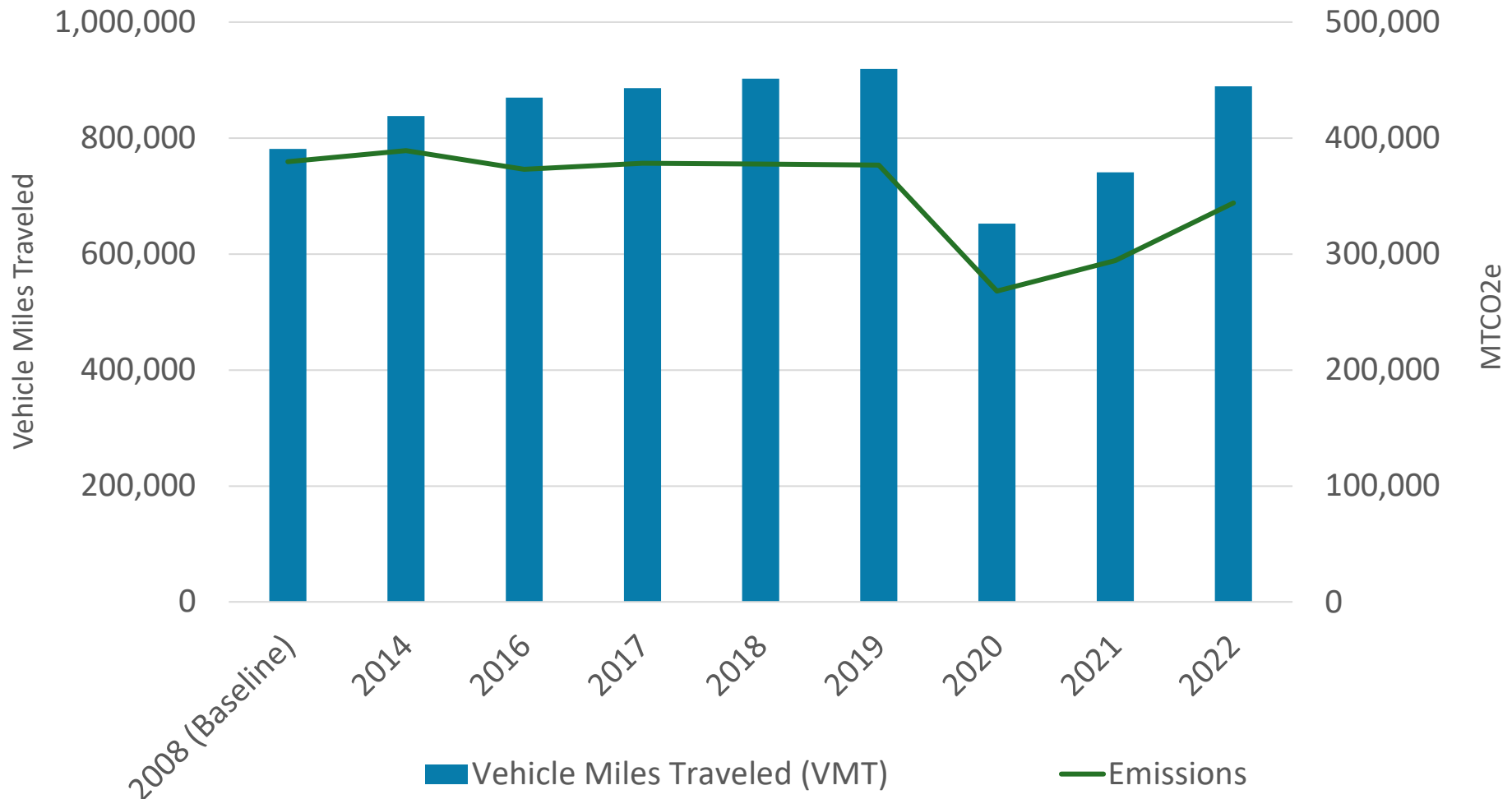
Emissions from 2008-2022 by Sector



Key Drivers in 2022 Emissions Increase

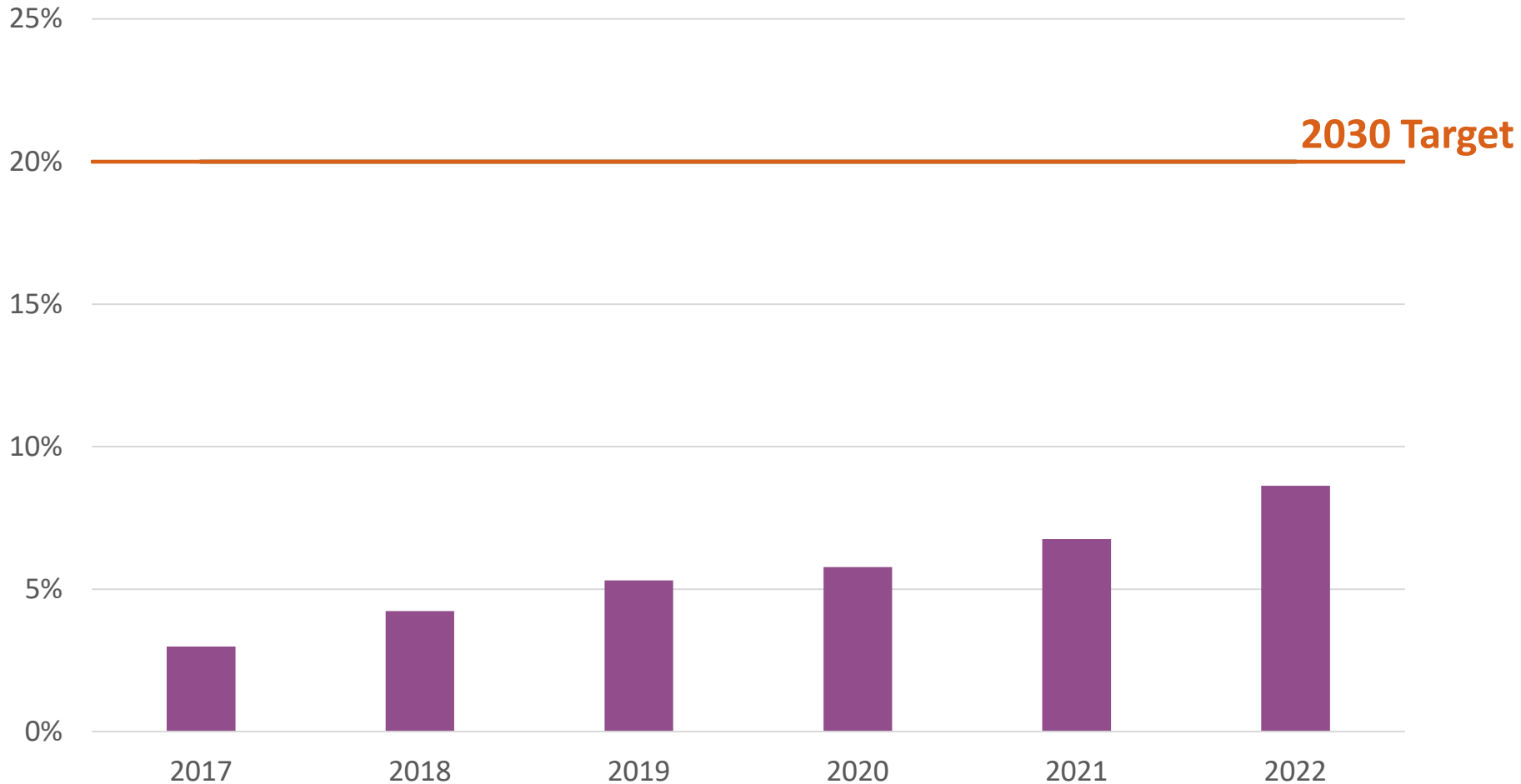


Transportation Emission Trends



2022 CAP Metric #8

Percent Zero-Emissions Vehicles in Sunnyvale

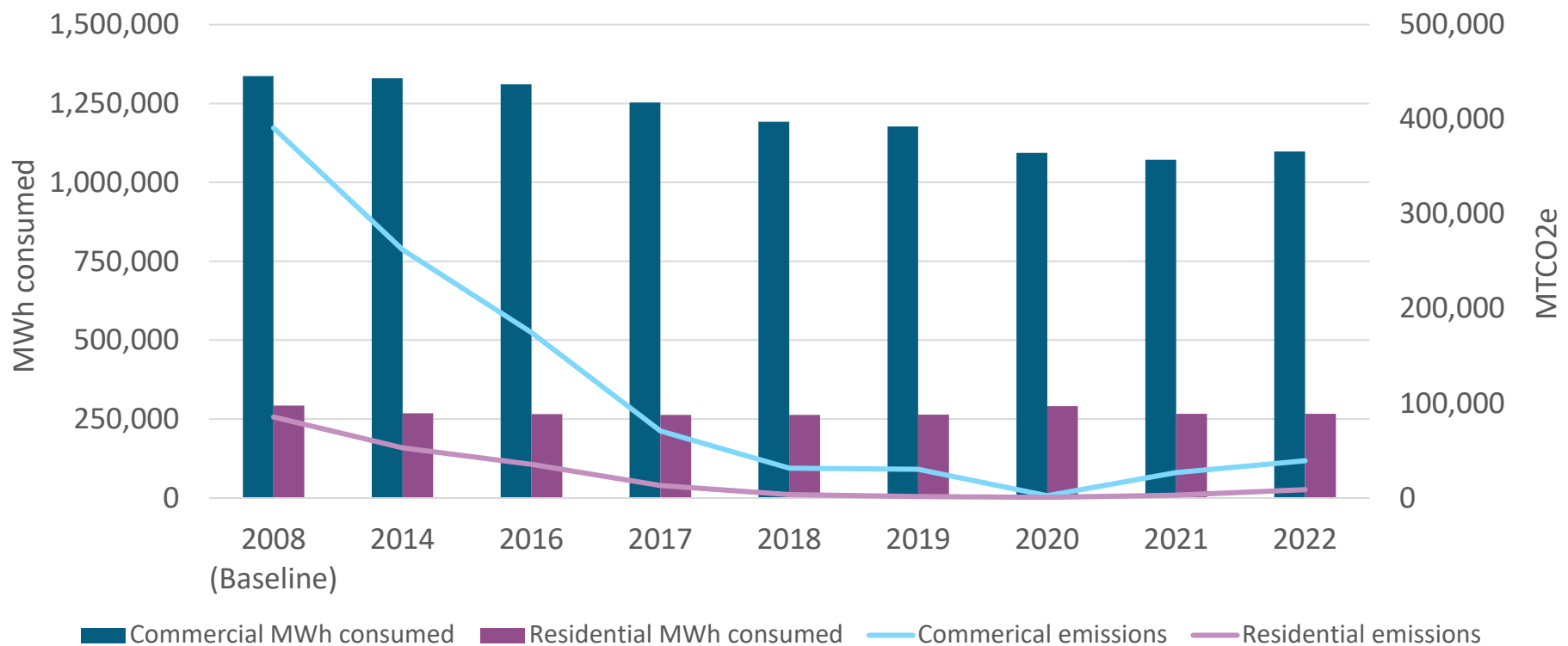


Electricity Sector Emission Trends

Emissions = [Electricity use in kWh] x
[Emissions Factor]

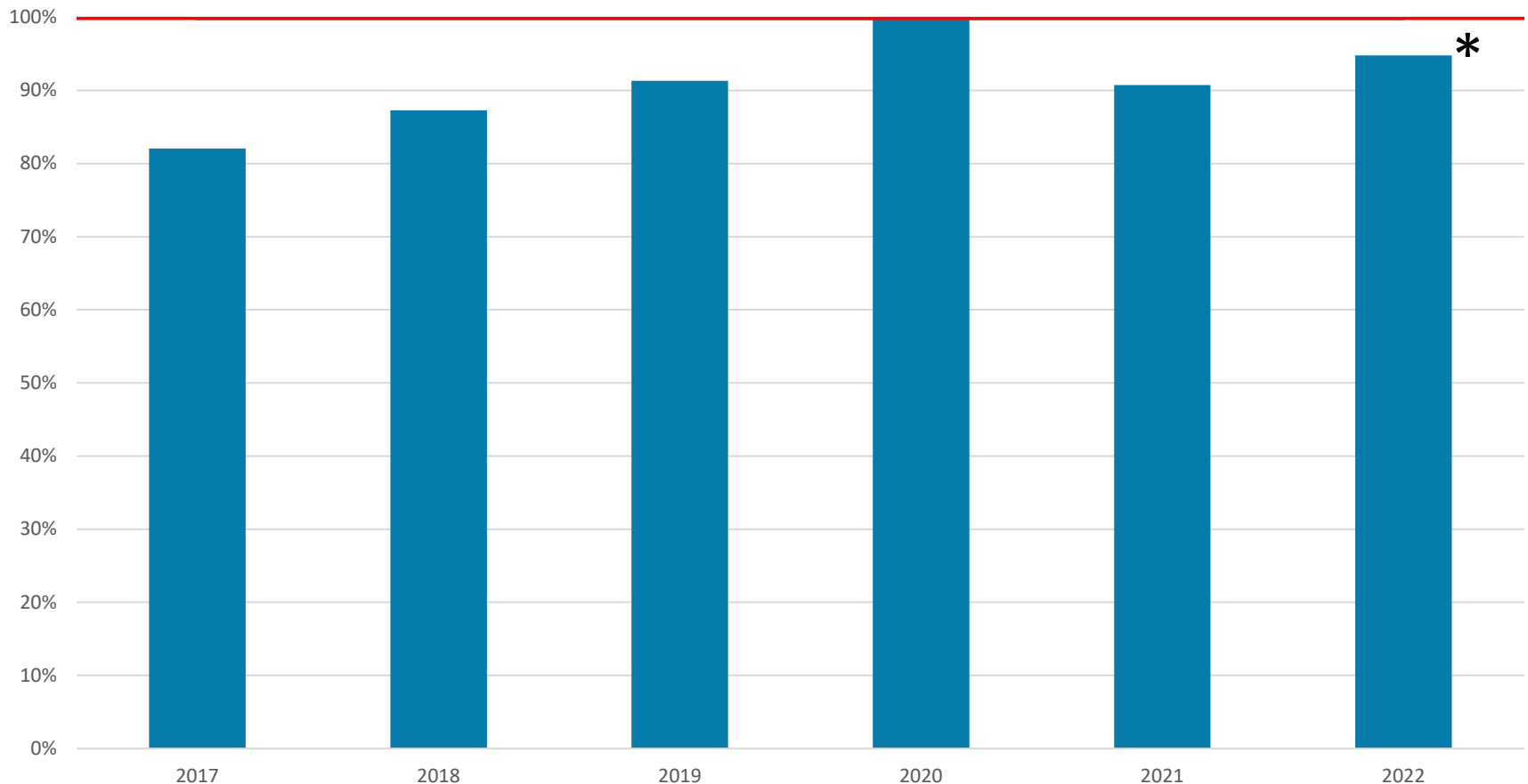
Emissions Factors (lb CO₂/MWh)

	2020	2021	2022
SVCE	5.26	18	72
PG&E	2.68	160	98



2022 CAP Metric #1

Percent of Electricity from Carbon Free Sources



Off-Road Emissions

- Change to Methodology

- Original inventory: = [# of existing housing units] x [emissions factors for lawn/garden equipment], Construction emissions = [# of new housing units built] x [emissions factors for construction]

- New methodology = [total fuel consumption] x [OFR emissions factor]

Off-road Vehicle Categories

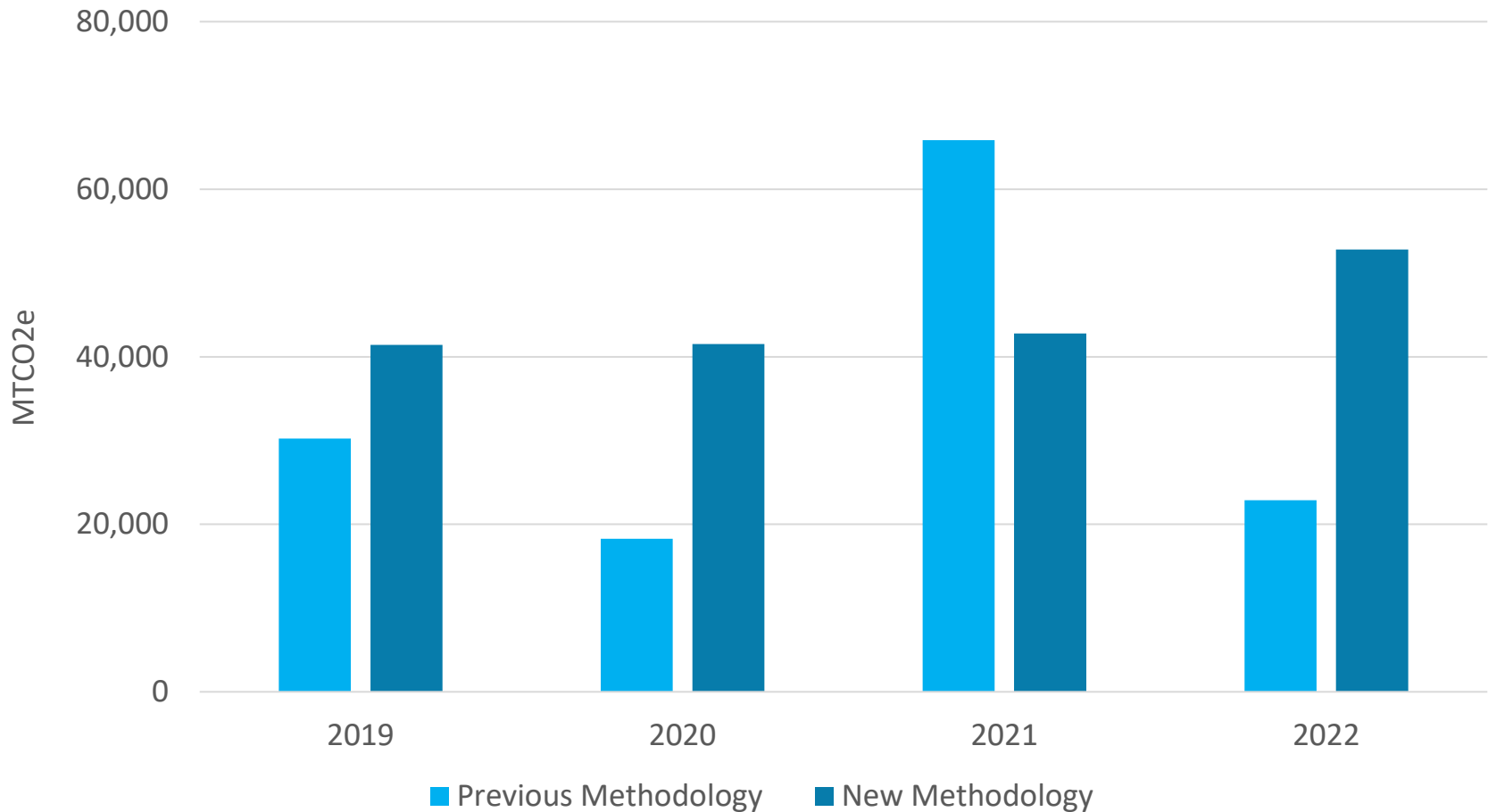
Construction and Mining (excavators)	Pleasure Craft (boats)
Industrial (forklifts)	Recreational (golf carts)
Lawn and Garden (edgers)	Portable Equipment (generators)
Light Commercial (air compressors)	Transport Refrigeration (trailers)

Sunnyvale inputs

Factor calculated from EMFAC OFFROAD2021 v.1.0.3

Off-Road Sector Emissions

- Change Between Methodologies



CAP Metric #11

Net Number of New Trees Planted

2019



+79

2020



**Data Not
Available**

2021



+92

2022



+56

* Accounts for trees removed



CAP Progress Updates

FY 23/24 Progress Update

Key Accomplishments

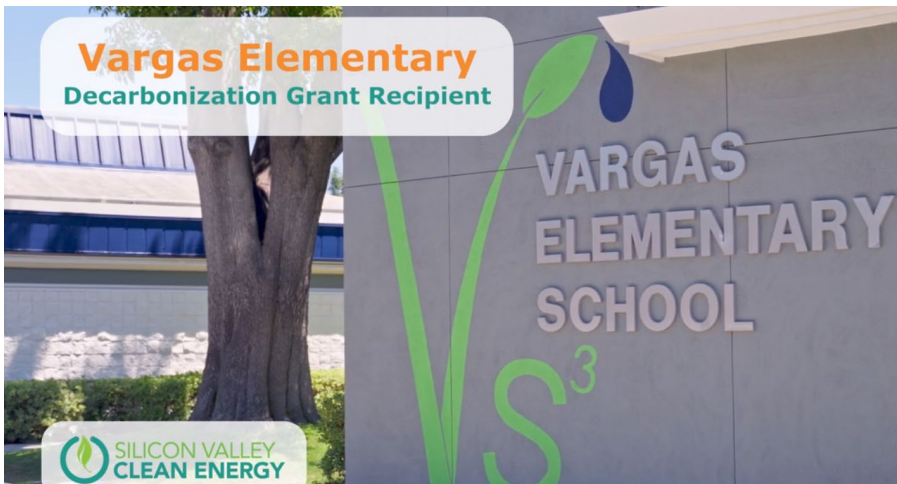
Strategy 1

- Move 1.A: Sunnyvale community received ~ \$3M in funding from various SVCE grant opportunities and rebates

Lakewood Branch
Library = \$500,000

Vargas Elementary
School = \$500,000

Four off-grid EV
chargers at city
facilities = \$327,680



FY 23/24 Progress Update

Key Accomplishments

Strategy 2

- Move 2.C: SVCE FutureFit Homes program and Cool Cooktops program



Borrow an induction cooktop from the Sunnyvale Library through the

Cool Cooktops Program!

Now introducing even more kits!

Kits include a portable induction cooktop, induction-ready cookware and more.

[Click here to place a hold on a cooktop with your Library card](#)

Metrics

Sunnyvale = 27%
of HPWH installs
58 HPWHs

Sunnyvale = 23%
of HP HVAC installs
74 HP HVACs

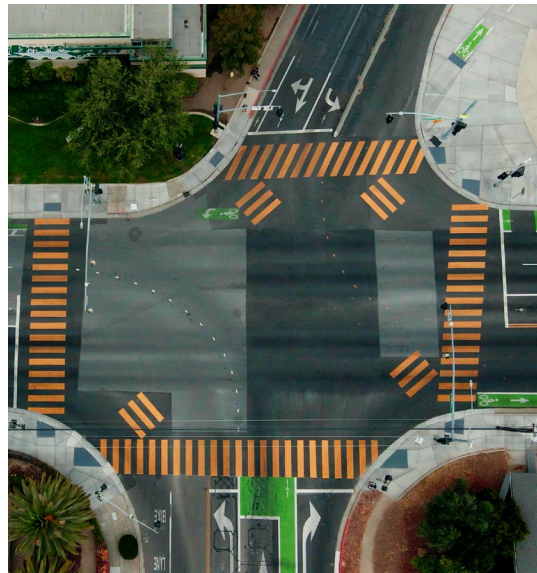
297 Kit Uses

FY 23/24 Progress Update

Key Accomplishments

Strategy 3

- Move 3.E: Staff continue to seek funding to implement ATP projects. 43 active projects = ~ \$110M
- Move 3.K: Sunnyvale Drive Electric



Metrics

13 current Bike/Ped safety projects

~ 90 miles of proposed bikeway projects
~ 34 miles implemented

64 Webinar attendees
252 Test Drive attendees in 2023

FY 23/24 Progress Update

Key Accomplishments

Strategy 4

New Program Updates

- 19 Sunnyvale businesses are participating in the Reusables Pilot Program
- 491 businesses begin organics recycling services under SB1383



FY 23/24 Progress Update

Key Accomplishments

Strategy 5

- Move 5.C: Sunnyvale Environmental Services created an Instagram.
- Move 5.D: 145 community members attended the two SSS events.



sunnyvale_environment

Follow

Message

...

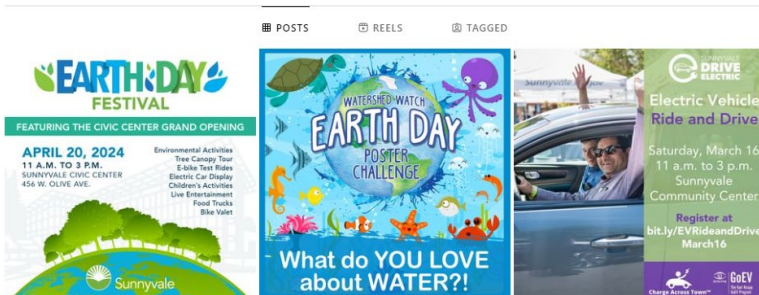
85 posts 242 followers 105 following

Sunnyvale Environmental Services

Government organization

The official Instagram for the City of Sunnyvale Environmental Services Department.

🌐 sunnyvale.ca.gov/your-government/city-initiatives/sustainability



Strategy 6

- Move 6.E Consultant hired to develop the Severe Weather Annex to the Emergency Operations Plan.





Thank you!