



# Reach Codes for Cooling Upgrades and Home Renovations Community Meeting

---

October 23, 2025

7:00 – 8:00 pm

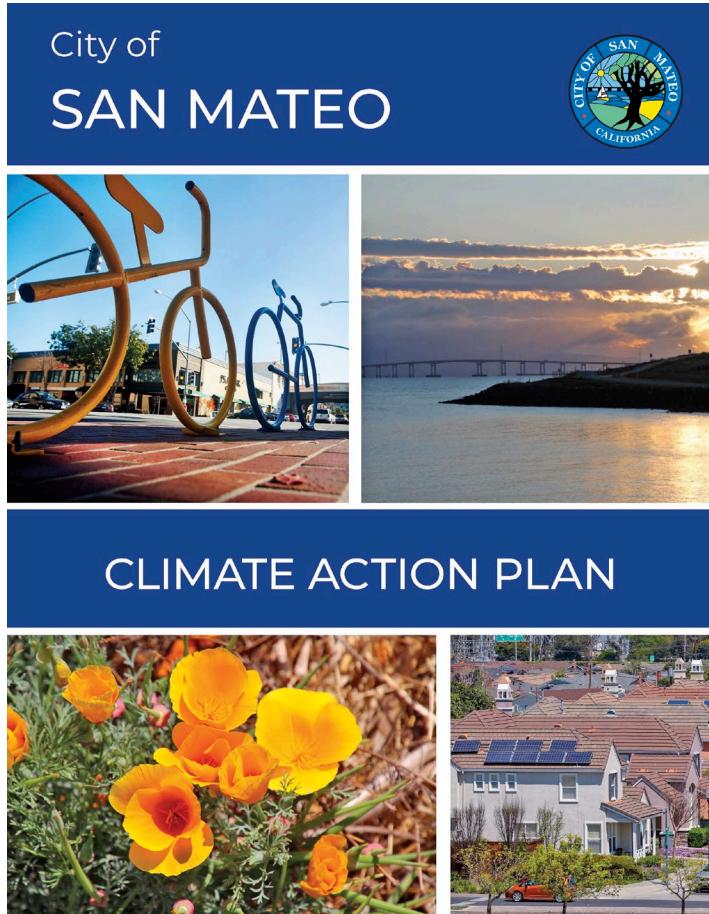


---

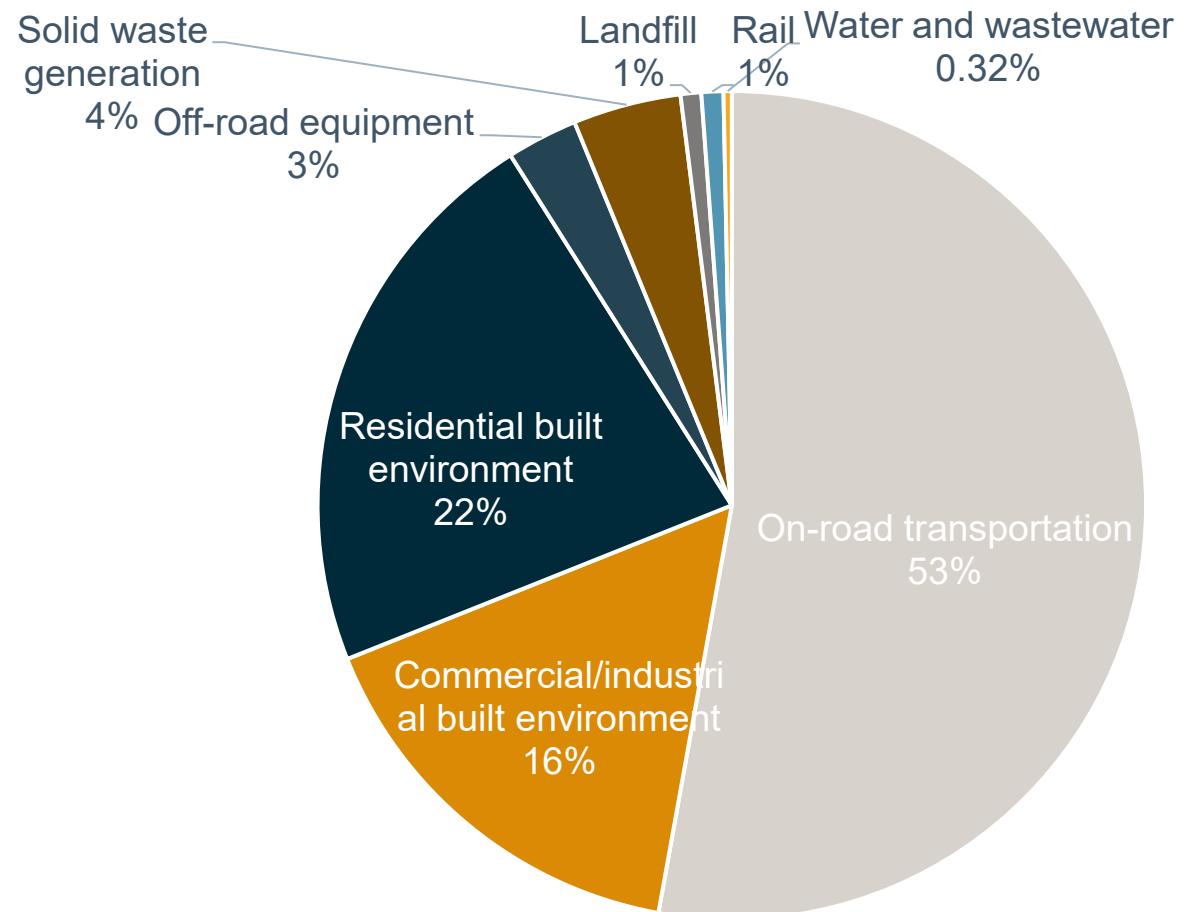
# Who's in the room?

- › Raise your hand if you are a homeowner in San Mateo
- › Raise your hand if you have central air conditioning
- › Raise your hand if you've ever done a major remodel to your home
- › Raise your hand if you've currently planning a major remodel to your home
- › Raise your hand if you work in the building industry

# Climate Action Plan

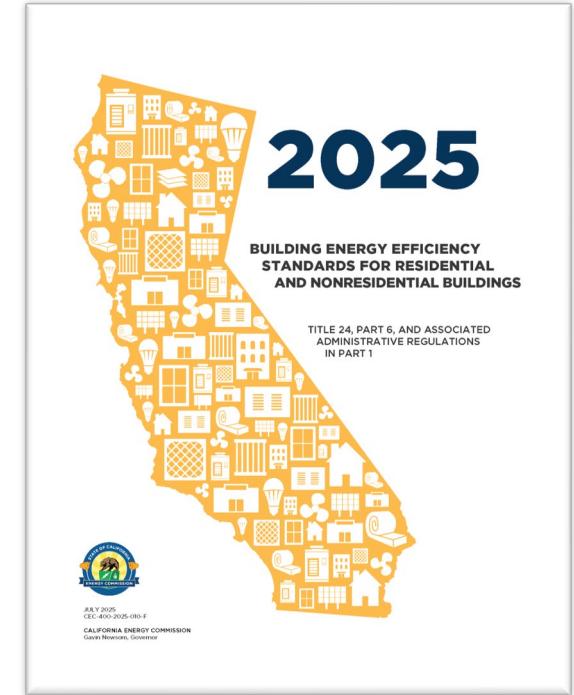


## San Mateo GHG Emissions Inventory



# Title 24 – California Energy Code and CALGreen

- Title 24 California Code of Regulations (California Building Standards Code) standardizes the construction of residential and non-residential buildings in California
- Part 6 Energy Code and Part 11 Green Building Code (CALGreen) of Title 24 govern energy efficiency in buildings
- It is updated every three years, with an intervening code adoption 18 months into each update
- Current code cycle:
  - January 1, 2023- December 31, 2025
- Upcoming code cycle:
  - January 1, 2026 – December 31, 2028



---

## What are Reach Codes?

- Local amendments to the state code that *reach* above the state requirements
- Reach codes must use no more energy than the State Energy Code
- Reach codes must be cost-effective
- Reach codes cannot require equipment that exceeds federal standards
- Reach codes can be adopted at any time

# Reach Code Options Overview

Option 1: Cooling Upgrades	Option 2: Cooling Upgrades	Option 3: FlexPath	Option 4: Electric Readiness
<i>Single Family, Townhomes, Duplex</i>	<i>Nonresidential</i>	<i>Single Family, Townhomes, Duplex</i>	
~257 MT CO <sub>2</sub> e/year by 2030	~427 MT CO <sub>2</sub> e/year by 2030	~730 MT CO <sub>2</sub> e/year by 2030	N/A
			

- › “*Time of Installation*”
- › Requires property owners installing A/C to install either:
  1. A heat pump
  2. Efficiency measures

- › “*Time of Renovation*”
- › Requires projects completing major additions or alterations to select energy efficiency measures, electrification measures or Solar PV.

- › “*Time of Renovation*”
- › Targeted to permit applicants completing a relevant addition or alteration.
- › Requires electric readiness (circuits or conduit).

# Reach Code Options

---

# Option 1: Cooling Upgrades Reach Code Single Family Homes, Duplexes and Townhomes

When **replacing or adding space cooling** choose one of the following:

- › Install a **heat pump** space conditioner at State Code;
- OR
- › Install an **air-conditioner and other energy improvements** that go above State Code.



~257 MT CO2e/yr  
by 2030



---

# Cooling Upgrades Policy Context

## Air Quality Regulations

- › Gas equipment creates NOx emissions
- › NOx emissions create ozone and PM2.5
- › The Bay Area is in “non-attainment” for ozone and particulate matter (PM)
- › **Beginning in 2029, furnace sales will be restricted by California Air Resources Board and the Bay Area Air District.**
- › Future proofing
  - » Installing a heat pump now helps residents get homes ready for upcoming Air District rules.
  - » Upgrading to a heat pump when adding or replacing A/C results in cost savings, both over the lifetime of the equipment, and right away for reduced monthly bills.



# Cooling Upgrades Costs



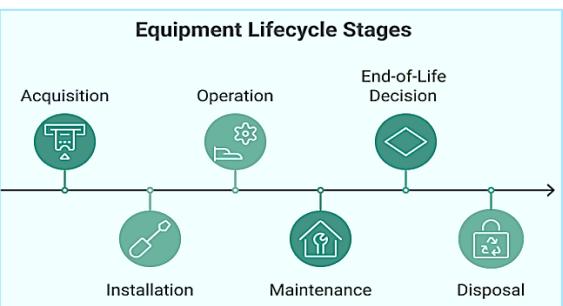
## Up-Front Costs

- Heat pumps can cost \$1,000 - \$3,000 more than air conditioner units. Rebates often cover the gap.



## Bill Savings

- Heat pumps save residents \$200-\$400 per year in bill costs compared to air conditioners.



## Lifecycle Costs

- Heat pumps can both heat and cool a home, so only one piece of equipment needs to be maintained instead of two.

# Peninsula Clean Energy Rebates



Heat Pump  
HVAC  
\$1,500 rebate



Heat Pump Water  
Heater  
\$2,500 rebate



Zero Percent  
Loan  
\$10,000 Loan

Additional: \$1,000 for income-qualified, \$1,000 for electrical panel upgrade

# Option 2: Cooling Upgrades Reach Code for Nonresidential Buildings

When **replacing or adding single zone rooftop HVAC**, choose one to install:

- › A single zone **heat pump** (cooling + heating) and comply with State Code;

OR

- › A single zone **air-conditioner** (cooling only) and a heat recovery ventilator



~426 MT CO2e/yr  
by 2030



# Option 3: FlexPath Reach Code for Single Family Homes, Duplexes and Townhomes

**During remodels a certain size or dollar valuation, install energy improvements from among a menu of options to achieve an established target score.**

Electric appliances are **NOT** required, only encouraged.

Does not include small projects, unpermitted work and repairs.



~730 MT CO<sub>2</sub>e/yr  
by 2030

# FlexPath Menu of Measures

Measure	Point Value
Induction Cooktop	1
Heat Pump Clothes Dryer	1
Water Heating Package	2
Air Sealing	2
Duct Sealing	3
R-49 Attic Insulation	4
Windows	4
R-15 Wall Insulation	5
New Ducts + Duct Sealing	6
R-19 Floor Insulation	9
R-30 Floor Insulation	10
Heat Pump Water Heater	12
Solar PV + Electric Readiness	13
Heat Pump Space Conditioner	18

# FlexPath example project

- › Remodel of 1,000 ft<sup>2</sup> kitchen and living room in a single family home
- › No existing air conditioning
- › Construction cost ~\$500,000 (\$500/ft<sup>2</sup>)
- › Flex Path Target Score: 18 for alterations that are 1,000 square feet or larger

**How will this comply with a FlexPath reach code?**



# FlexPath Example Project Measures: Target Score = 18

## Compliance Path 1

- › Project chooses heat pump space conditioner (18 points) to comply
- › Total compliance cost = \$12,500

2.5% cost increase

*Rebates available to homeowner, not included in FlexPath calculations*

## Compliance Path 2

- › Project chooses water heating package (2) + air sealing (2) + attic insulation (4) + windows (4) + new ducts + duct sealing (6)
- › Total compliance cost = \$21,800

4.5% cost increase

Measure	Point Value
Induction Cooktop	1
Heat Pump Clothes Dryer	1
Water Heating Package	2
Air Sealing	2
Duct Sealing	3
R-49 Attic Insulation	4
Windows	4
R-15 Wall Insulation	5
New Ducts + Duct Sealing	6
R-19 Floor Insulation	9
R-30 Floor Insulation	10
Heat Pump Water Heater	12
Solar PV + Electric Readiness	13
Heat Pump Space Conditioner	18

---

## Option 3: FlexPath Reach Code for Single Family Homes, Duplexes and Townhomes

- For 1,000 SF threshold, average 80-100 permits per year
- ~730 MT CO2e per year by 2030
- Cities with FlexPath ordinances:
  - Menlo Park: \$100,000 or more and projects required to select two measures from list
  - Santa Cruz: 350 square feet or greater, projects required to achieve a target score of 9
  - Palo Alto (under consideration): 1,000 square feet or greater and projects required to achieve a target score of 12

# FlexPath Example Project Measures: Target Score = 12

## Compliance Path 1

- › Project chooses a heat pump hot water heater (12 points) to comply
- › Total compliance cost = \$8,200

2% cost increase

*Rebates available to homeowner, not included in FlexPath calculations*

## Compliance Path 2

- › Project chooses air sealing (2) + attic insulation (4) + new ducts + duct sealing (6)
- › Total compliance cost = \$18,400

4% cost increase

Measure	Point Value
Induction Cooktop	1
Heat Pump Clothes Dryer	1
Water Heating Package	2
Air Sealing	2
Duct Sealing	3
R-49 Attic Insulation	4
Windows	4
R-15 Wall Insulation	5
New Ducts + Duct Sealing	6
R-19 Floor Insulation	9
R-30 Floor Insulation	10
Heat Pump Water Heater	12
Solar PV + Electric Readiness	13
Heat Pump Space Conditioner	18

# FlexPath Example Project Measures: Target Score = 30

## Compliance Path 1

- › Project chooses a heat pump hot water heater (12 points) + heat pump space conditioner (18 points) to comply
- › Total compliance cost = \$20,700

4% cost increase

*Rebates available to homeowner, not included in FlexPath calculations*

## Compliance Path 2

- › Project chooses air sealing (2) + attic insulation (4) + windows (4) + wall insulation (5) + new ducts + duct sealing (6) + floor insulation (9)
- › Total compliance cost = \$37,100

7% cost increase

Measure	Point Value
Induction Cooktop	1
Heat Pump Clothes Dryer	1
Water Heating Package	2
Air Sealing	2
Duct Sealing	3
R-49 Attic Insulation	4
Windows	4
R-15 Wall Insulation	5
New Ducts + Duct Sealing	6
R-19 Floor Insulation	9
R-30 Floor Insulation	10
Heat Pump Water Heater	12
Solar PV + Electric Readiness	13
Heat Pump Space Conditioner	18

# Option 4: Electric Readiness Reach Code for Single Family Homes, Duplexes and Townhomes

When doing **alterations and additions** within three feet of an existing gas appliance or including a new gas appliance:

- Require some electrical infrastructure (e.g., circuits, conduits, reserved breakers)
- Covers the following gas appliances: stoves/cooktops, dryers, and water heaters

## **Cost:**

- › May range from approximately \$150 to \$1,000 per appliance

## **Exceptions:**

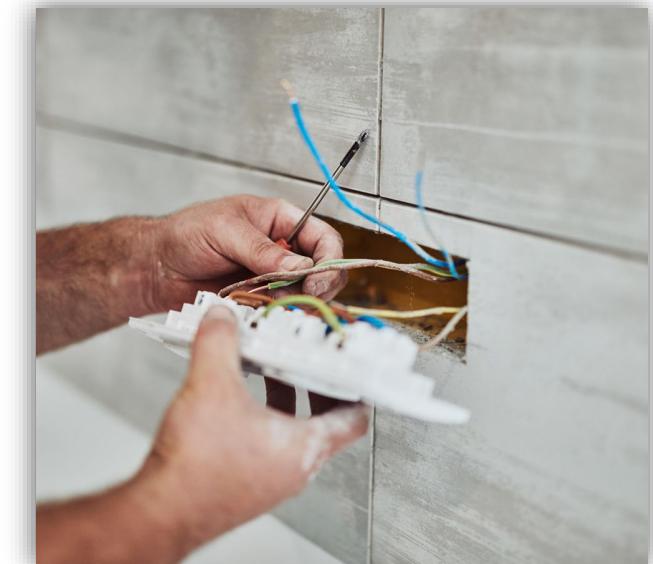
*Triggers electrical permit otherwise not required for the project*

*Triggers electrical service and/or panel upgrades*

*Triggers repairs and/or safety improvements*

*New attached accessory dwelling units*

*Mobile homes, manufactured housing*



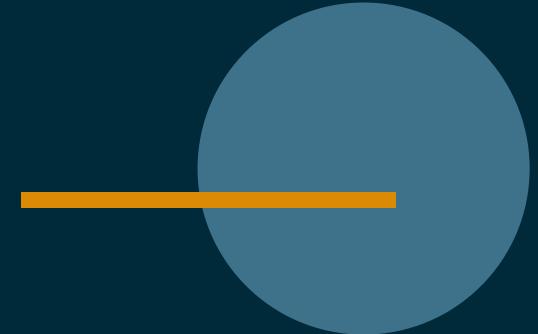
---

Questions?



# Next Steps

---

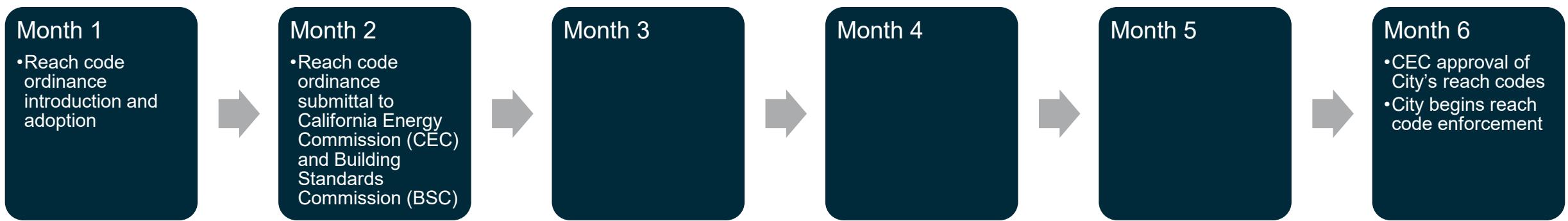


# Reach Codes Outreach and Engagement

Date and Time	Location	Meeting
October 1, 2025, 6:00 - 7:00 pm	Main Library	<i>In-person Community Meeting</i>
October 8, 2025, 7:00 pm	City Hall and Zoom 330 W. 20 <sup>th</sup> Avenue	<i>Sustainability and Infrastructure Commission</i>
October 21, 2025, 6:30 - 7:30 pm	Zoom	<i>Virtual Community Meeting</i>
October 23, 2025, 7:00 - 8:00 pm	Bayside Academy – Old Gym 2025 Kehoe Avenue	In-person Community Meeting
November 3, 2025, evening	City Hall and Zoom 330 W. 20 <sup>th</sup> Avenue	City Council Meeting

---

# Typical Reach Codes Adoption Schedule



# Thank you!

**Andrea Chow**

[achow@cityofsanmateo.org](mailto:achow@cityofsanmateo.org)

(650) 522-7007

---

**Please share whether you support, do not support, or are neutral on each of the reach code options being explored. Your feedback will be shared with the San Mateo City Council at the upcoming November 3, 2025 City Council meeting.**

- 1) Reach Code Option 1: Cooling upgrade requirements for single family homes, duplexes and townhomes
- 2) Reach Code Option 2: Cooling upgrade requirements for non-residential buildings
- 3) Reach Code Option 3: FlexPath for single family homes, duplexes and townhomes
  - a) Defining covered projects
  - b) Selection of a targets
- 4) Reach Code Option 4: Electric-readiness requirements for single family homes, duplexes and townhomes