City of San Mateo Reach Codes Community Meeting

October 1, 2025

6:00 – 7:00 pm

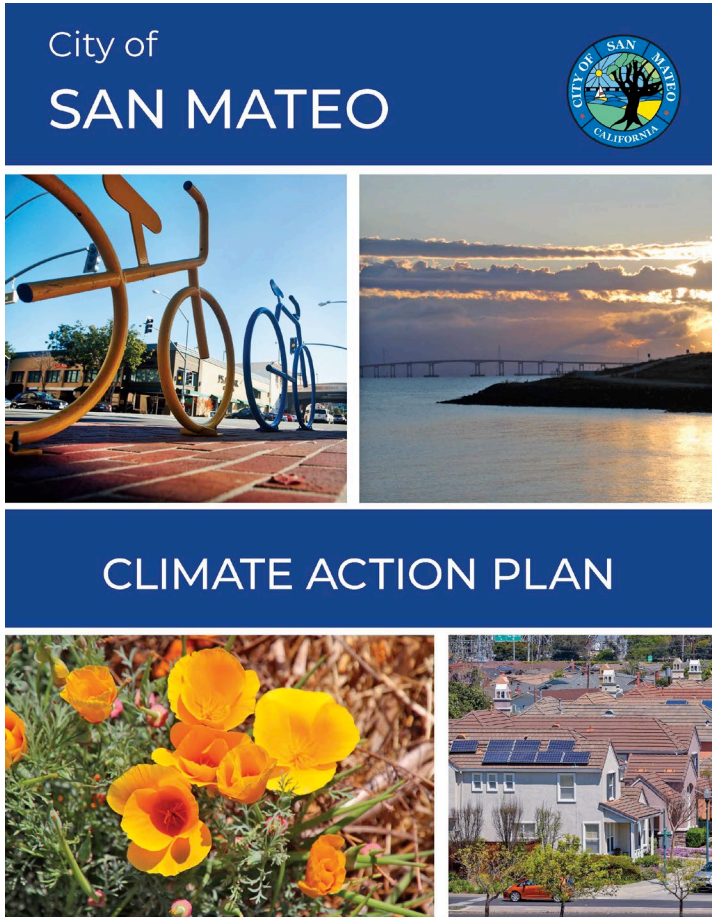
Agenda

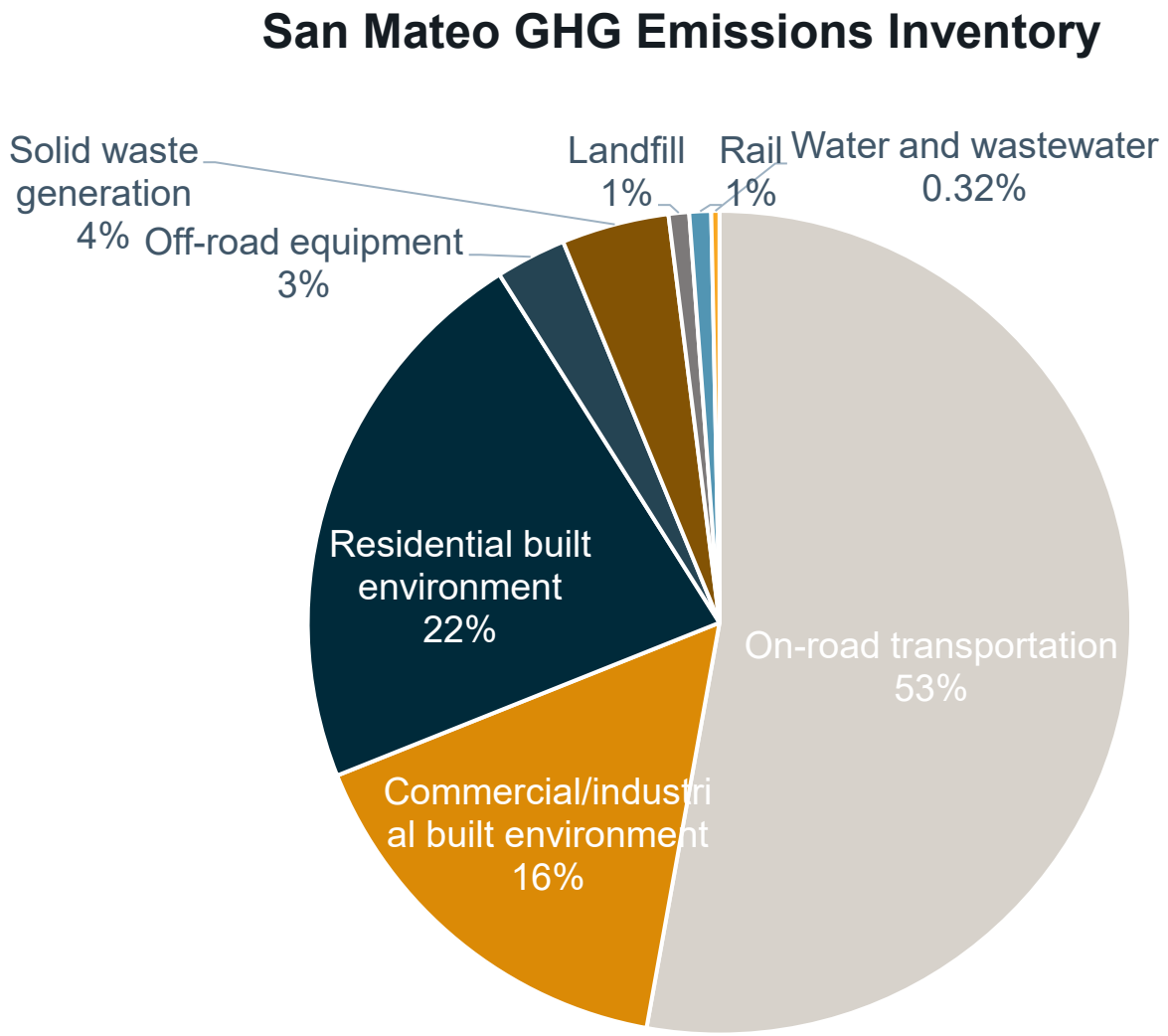
- City of San Mateo Introduction
- Single Family, Duplexes, and Townhomes
  - Cooling Upgrades
  - FlexPath
  - Electric-readiness
- Non-residential Buildings
  - Cooling Upgrades

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





Building Standards and Reach Codes Overview

California Building Energy Efficiency Standards & California Green Building Standards

- Standards are set by the California Energy Commission
- Increase energy conservation and reduce energy costs in buildings
- Adopted every three years

Building Reach Codes

- Increase building code requirements above the current Standards
- San Mateo has adopted reach codes since 2016
- Previous reach codes focused on new construction
- Can be adopted at any time

Reach Code Options Overview

Single Family, Townhomes, Duplex

Cooling Upgrades

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

FlexPath

- *"Time of Renovation"*
- Applies to projects completing major additions or alterations to select 1-3:
  1. Energy efficiency measures
  2. Electrification measures
  3. Solar PV

Electric Readiness

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

Nonresidential

Cooling Upgrades

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

Reach Code Options

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.

~400 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.

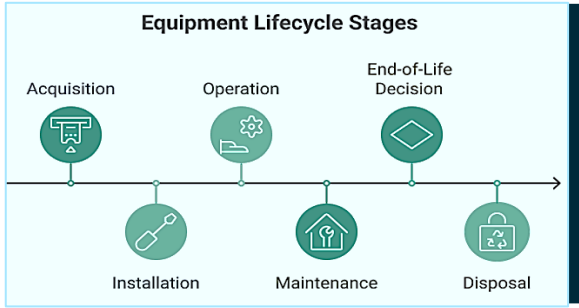
Cooling Upgrades Costs

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.

Sources: Single Family Air Conditioner Replacements Cost-effectiveness Report, Climate Zone 3 & 4
Bill Impacts of Home Electrification Across the Bay Area

Peninsula Clean Energy Rebates

Heat Pump Heating & Cooling

$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

Cooling Upgrades Reach Code

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

1,800 MT
CO2e/yr by 2030

FlexPath Reach Code

Single Family Homes, Duplexes and Townhomes

During remodels of 1,000 square feet and greater, 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 CO2e/yr by 2030

FlexPath Available Measures

Heat Pump Appliances

- Water Heater
- Space Conditioning
- Clothes Dryer

Roof Improvements

- Cool Roof
- Radiant Barrier

Other Electrification

- Induction Cooktop
- All-electric Home
- Solar PV
- Electric Readiness

Envelope Improvements

- Air Sealing
- Attic Insulation
- Wall Insulation
- Windows
- Raised Floor Insulation

Duct Improvements

- Duct Sealing
- New Ducts + Insulation + sealing

Other Efficiency

- Lighting
- Water Heating Insulation

Single Family FlexPath example project

- Remodel of 1,000 ft^2 kitchen and living room
- No existing air conditioning
- Construction cost ~$500,000 ($500/ft^2)
- Flex Path Target Score: 18 for alterations that are 1,000 square feet or larger

How will this comply with a FlexPath Ordinance?

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
Heat Pump Water Heater	12
Heat Pump Space Conditioner	18
Induction Cooktop	1
Heat Pump Clothes Dryer	1
Water Heating Package	2
Duct Sealing	3
Air Sealing	2
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
Solar PV + Electric Readiness	13

Electric Readiness Reach Code

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?

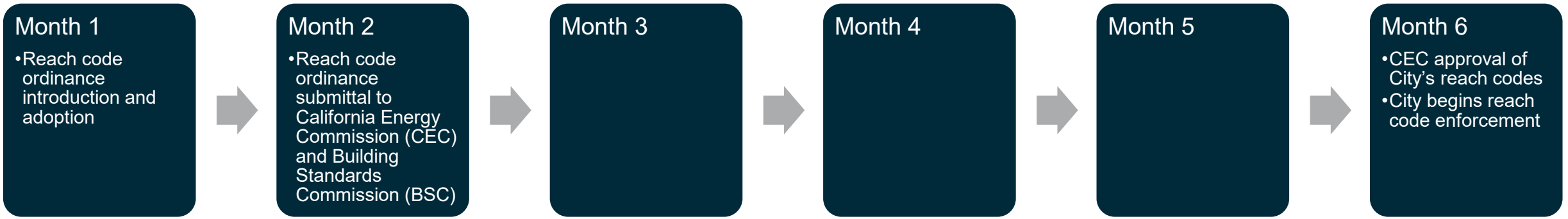
Next Steps

Reach Codes Outreach and Engagement

Date and Time	Location	Meeting
October 8, 2025, 7:00 pm	City Hall and Zoom 330 W. 20th Avenue	Sustainability and Infrastructure Commission
October 21, 2025, 6:30 - 7:30 pm	Zoom	Virtual Community Meeting
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. 20th Avenue	City Council Meeting

Typical Reach Codes Adoption Schedule

**Dependent on City Council Direction



Thank you!

Andrea Chow

achow@cityofsanmateo.org

(650) 522-7007

Taylor Taylor

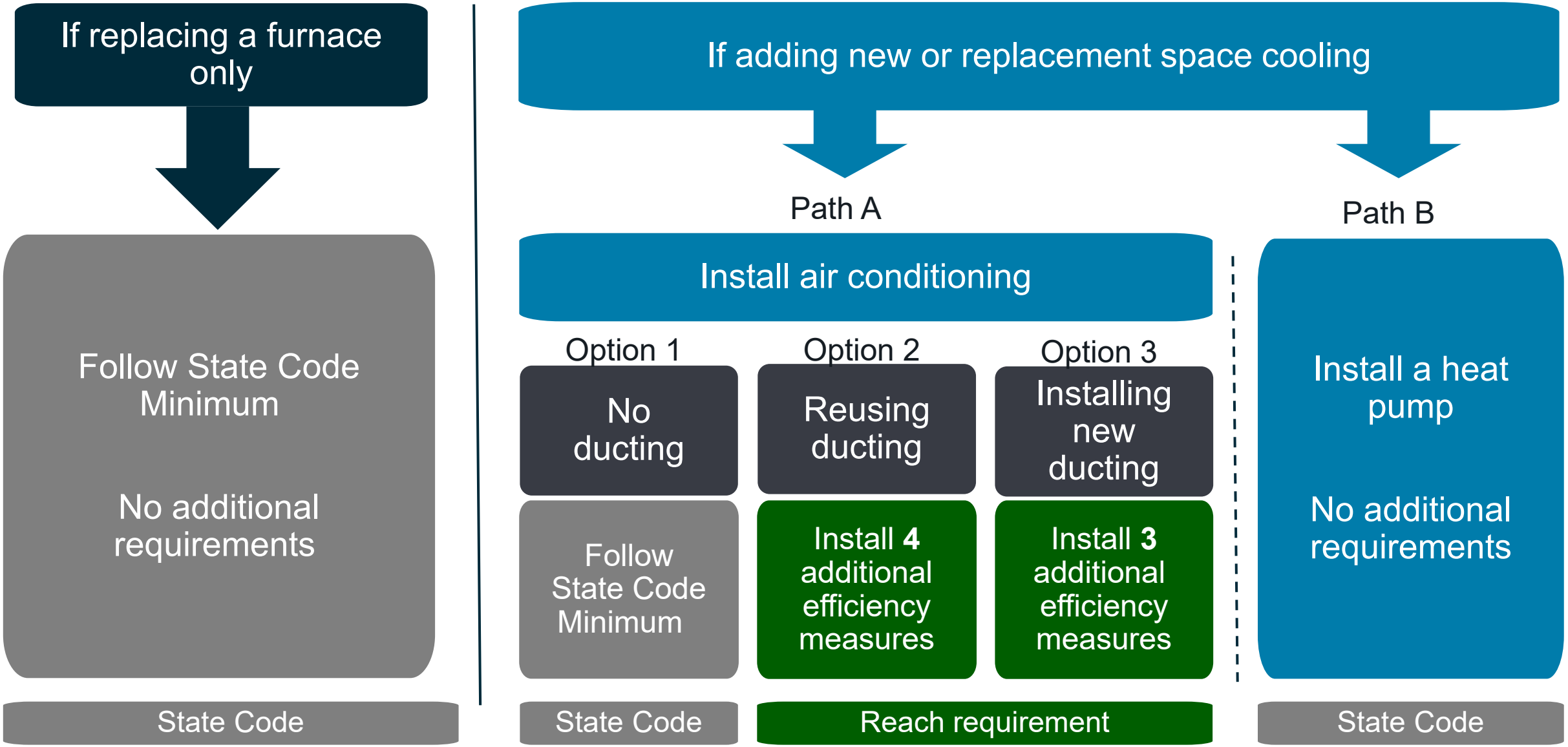
ttaylor@trccompanies.com

(510) 431-8547

PENINSULA CLEAN ENERGY

SILICON VALLEY CLEAN ENERGY

What are the requirements for the Cooling Upgrades policy?



Cooling Upgrades Labor + Materials Costs

2026 equipment costs

- AC + furnace: $13,800
- Heat pump: $14,500

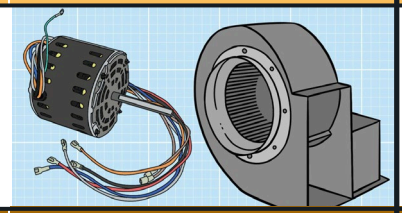
Efficiency measures, upfront, over the state energy code

- **AC only, reusing existing ducts:**
  - $3,800 - $7,500 depending on existing attic insulation
- **AC + furnace and ductwork:**
  - $600 for fan efficacy, refrigerant charge verification

** Rebates and Financing may be available through your utility*

Source: Statewide IOUs C&S: Single Family Air Conditioner Replacements (AC to HP), Cost Effectiveness Study

Lifetime Costs

	PATH 1		PATH 2	
	Scenario	Cost (Present Value)	Scenario	Cost (Present Value)
2026	1. AC fails 2. Install new HP	$12,300	1. AC fails 2. Install new AC	$10,400
				
10 years				
2036	1. Furnace fails 2. Replace fan motor	$900	1. Furnace fails 2. Install new 95AFUE furnace	$5,900
				
5 years				
2041	1. HP fails 2. Install new HP and air handler	$9,300	1. AC fails 2. Install new AC	$6,700
	TOTAL	**$22,500**		**$23,000**