

City of Pinole *Proposed* Reach Codes



Existing Non-Residential



Reach Code for Existing Nonresidential Buildings: Single Zone Rooftop HVAC Replacements and Installations



- **Require energy upgrades when replacing or adding a single zone rooftop HVAC unit**

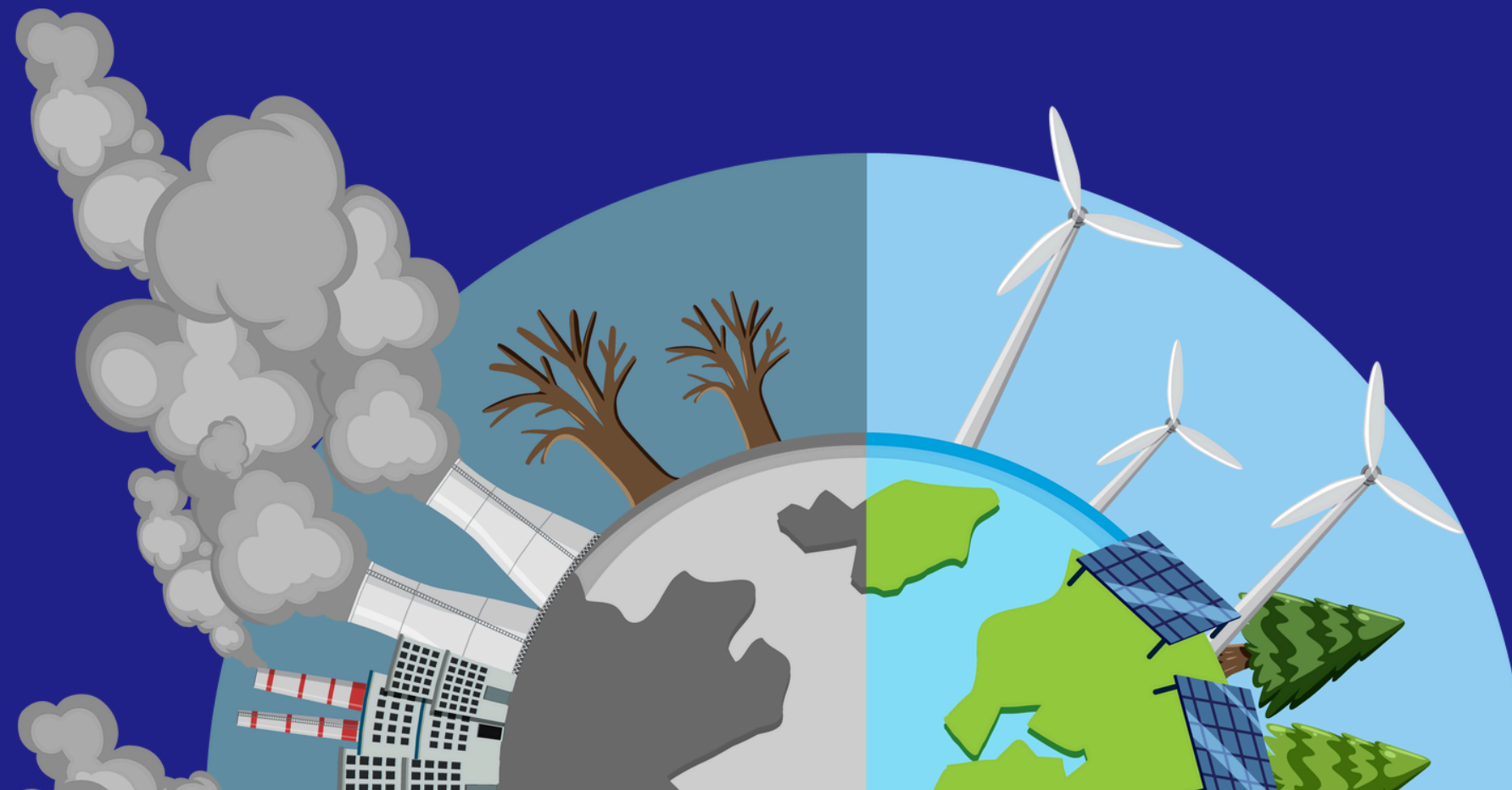
- Upgrade to an electric heat pump space conditioner and comply with State Code
- Install air-cooled air conditioner and make additional energy improvements

- **Meet Federal and State requirements**

- Electric heat pump is not required, but encouraged

Table 2 City of Pinole Community GHG Emissions (2017)

Sector and Subsector	GHG Emissions (MT CO ₂ e)	Percent of Emissions
Energy	33,088	46%
Residential Electricity	3,738	5%
Nonresidential Electricity	5,918	8%
Residential Natural Gas	18,140	25%
Nonresidential Natural Gas	5,291	7%



Building Energy



BE-3

Electrify existing commercial and mixed-use (i.e., combined commercial and residential) buildings to reduce natural gas consumption 18% by 2030 and 100% by 2045.

BE-3b

Adopt a reach code in 2024 requiring all central air conditioning unit installations and replacements be two-way, providing both heating and cooling with a single unit for commercial and mixed-use buildings. The ordinance will be implemented through the building permit process. Track annual progress on commercial and mixed-use building electrification through the same permit tracking program developed for residential building electrification.



adopted 2024

Why heat pumps?

- Heat pumps result in major greenhouse gas emission reductions
- Two to four times more efficient than gas furnaces
- Powered by electricity, which in California, is mostly from renewable energy sources
- Can be both an air conditioner and a space heater
- No on-site combustion of gas
- No risk of carbon monoxide poisoning from the space conditioning system



HVACs in Existing Buildings

- ~250 existing nonresidential buildings with single-zone and multizone HVACs
- ~25 rooftop package units permits issued last 12 months

Policy at a glance

When replacing or adding a single zone rooftop HVAC unit that is less than 20 tons either

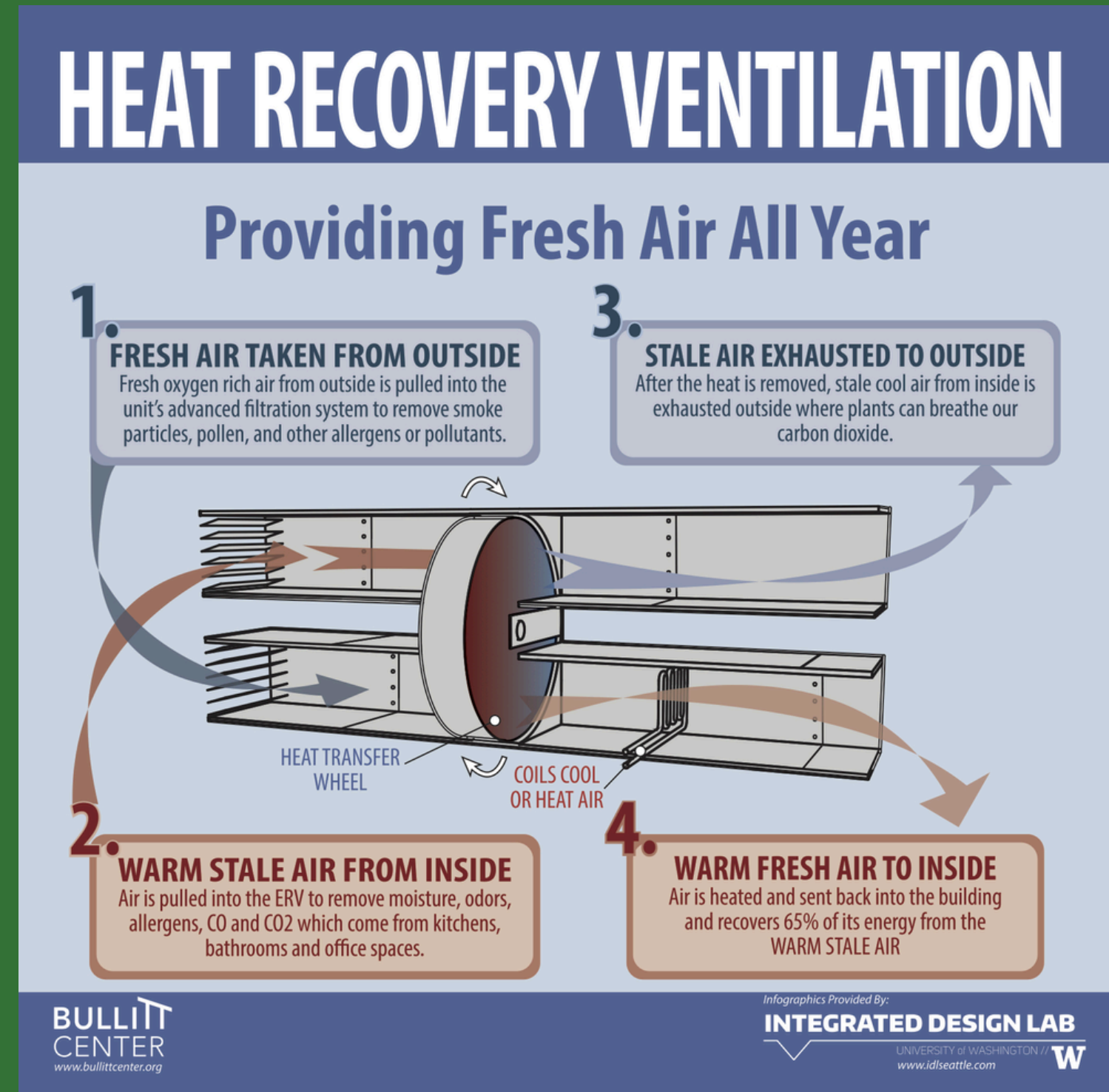
**Install a heat pump
to provide both
space heating and
cooling) and meet
State code
requirements that
apply to the project**

OR

**Install an air
conditioner, meet
State code
requirements that
apply to the project
AND
Install heat recovery
ventilation**

Heat Recovery Ventilation (HRV)

A ventilation system that recovers energy by operating between two air sources at different temperatures. It is used to reduce the heating and cooling demands of buildings.



RTU Reach Codes Framework

Trigger

New or replacement
single zone AC in
existing buildings



Primary Pathway (heat pump)

- Must be cost-effective over 30-year period

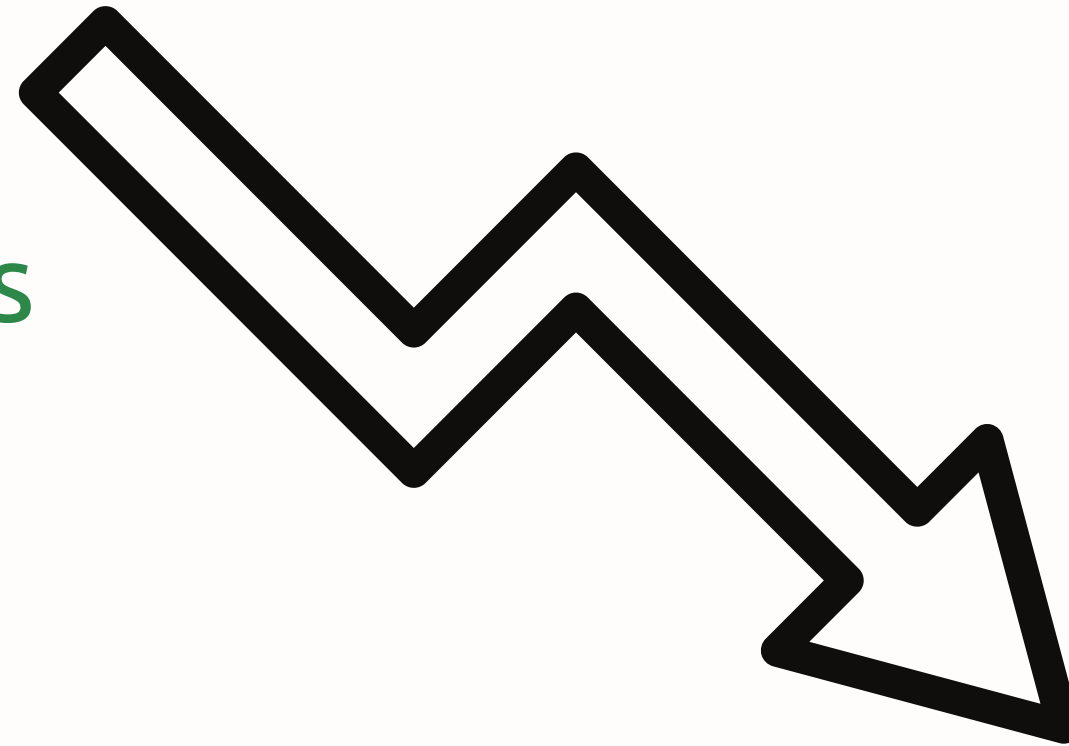
Alternative Pathway (furnace + HRV)

- Must achieve energy equivalency by meeting or exceeding the LSC savings of the primary pathway

Impact

Alternative Pathway (furnace + HRV)

0.3 -3.0 metric tons of
greenhouse gas reductions



Primary Pathway (heat pump)

0.5 -7.4 metric tons of
greenhouse gas reductions

Considerations for Application of Results

- HRV is readily available and easy to install
- HRV is used for energy equivalency, not cost-effectiveness
- All occupancies in Section 141.0(b)2Cii have similar schedules
- Designer will change capacity according to different load intensities
- Precedence for extrapolating results to other building types
- Permit applicants most often use the prescriptive path to document compliance with equipment changeouts.

Exceptions

If the existing main electrical panel does not have the capacity for a heat pump but can support a new or replacement air conditioner

Resources

- **2025 Nonresidential Alterations:**

- Reach Code Study**

- <https://localenergycodes.com/content/resources>

View results for individual jurisdictions
in the **Cost-Effectiveness Explorer**
tool:

- <https://explorer.localenergycodes.com/>

The City of Pinole is a proud community partner for
Marin Clean Energy, our clean energy provider



MCE Small Business Energy Advantage

Benefits

- On-site energy assessment to identify energy saving opportunities
- No-cost and reduced cost upgrades to save money on utility bills
- Independent small businesses with fewer than 5 locations and the following criteria may qualify:
 - Energy threshold below 50kW demand
 - Operate in state-designated priority population
 - [Start the enrollment process](https://mceccecleanenergy.org/small-business-energy-advantage/) to confirm eligibility



Give your small business a boost

Connect with an energy expert for a free assessment and savings

To learn more visit:
<https://mceccecleanenergy.org/small-business-energy-advantage/>

MCE Strategic Energy Management

Benefits

- Site walk-through by an energy coach and engineering staff
- Up to 15% energy savings with little to no capital investment
- Rebates for lighting, motor upgrades, refrigeration, and water heating
- Custom-calculated incentives for complex projects – \$0.15/kWh and \$1.50/therm
 - [Start the enrollment process](#) to confirm eligibility



Lower Operational Costs and Utility Bills

Meet your energy management goals

To learn more visit:
<https://mcecleanenergy.org/energy-management/>

MCE Charging

Benefits

- For workplaces and multifamily properties
- \$3,000 per charging port for 2-20 charging ports
- \$500 extra per charging port for charging stations that have opted up to Deep Green 100% renewable energy
- Free technical assistance for the first 40 projects
 - [Start the enrollment process](#) to confirm eligibility



\$4,000

Per charging
port for 2-20
charging ports

Free technical
assistance for the

40
projects

MCE Green Workforce Pathways

Benefits

- Access to pre-vetted jobseekers and up to \$5,000 in payroll support
 - AND/OR
- Receive \$3,500 each for current staff to attend a comprehensive electrification training
- Residential contractors with businesses located in MCE's service area may qualify:
 - [Start the enrollment process](#) to confirm eligibility



Grow your business and expertise

Receive manufacturing training, onboarding, and payroll support valued up to \$8,800

To learn more visit:
<https://mcecleanenergy.org/grow-your-business-expertise/>

MCE Heat Pump Water Incentive

Benefits

- \$1,500 for each permanent heat pump water heater installed after installing a temporary loaner (gas or electric) water heater
- Residential contractors participating in TECH Clean CA and the following criteria may qualify:
 - See detailed resident and installation criteria on MCE's [website](#)
 - [Start the enrollment process](#) to confirm eligibility



Support your clients with upgrades

Receive \$1500 to help clients switch to a heat pump water heater without disruption

To learn more visit:
<https://mcecleanenergy.org/heat-pump-water-heater-incentive//>

Questions, comments, concerns?

Subscribe to the project page: <https://publicinput.com/t47742>

Email your thoughts: 98732@publicinput.com

Leave your thoughts by phone: 855-925-2801 project code: 11743

Take the community survey: <https://publicinput.com/t47742>

Review and comment on the draft ordinance

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Thank you!

