



City of
Mountain View

Reach Code Options, Timelines and Next Steps

April 16, 2024

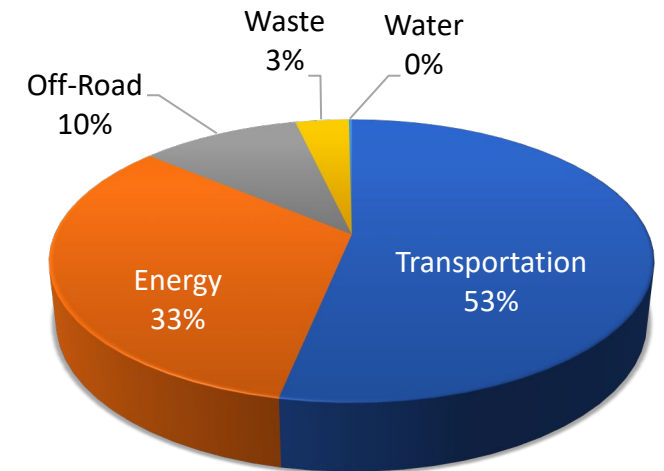
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What are Reach Codes?



- **Reach Codes** are local building code amendments that exceed the State Building Code to achieve community environmental and sustainability goals, including:
 - Increase energy efficiency standards
 - Expand electric vehicle charging infrastructure
 - Water and waste reduction
 - Encourage clean energy through solar or electric equipment
 - Reduce greenhouse gas emissions



2021 Final: 415,114 MT CO₂e

City of Mountain View Reach Codes



- 2019 - City adopts Reach Codes that require all-electric new construction and major renovations
- 2022 – City expands Reach Codes to include more solar and electric vehicle (EV) requirements

Main Components of Our Reach Codes

- *All-electric appliance/equipment requirement, with limited exceptions*
- Install solar to accommodate 100% of annual energy consumption of building
- Greater EV installation and EV ready requirements
- Bird-safe glass required for nonresidential development

Impact of Our All-Electric Reach Code



BUILDING PERMITS FINALED UNDER ALL-ELECTRIC CODE REQUIREMENTS				
DEVELOPMENT TYPE				
YEAR	Single-Family and Duplexes	Townhomes/Rowhomes and Condominiums	Commercial and Mixed-Use Buildings	Total Per Year
2020	49	67	1	117
2021	98	148	4	250
2022	71	89	12	172
2023	72	29	8	109
2024 (Q1 only)	8	1	2	11
			Grand Total	659

Events Leading to Suspension



- **November 2019:** California Restaurant Association (CRA) sued City of Berkeley for all-electric code.
- **July 2021:** District Court rejected lawsuit. CRA appealed.
- **April 2023:** Ninth Circuit reversed District Court rejection; determined local jurisdictions cannot directly or indirectly regulate gas appliances.
- **May 2023:** Berkeley filed a petition for a Ninth Circuit rehearing.
- **January 2024:** Ninth Circuit denied rehearing.
- **February 2024:** Silicon Valley Clean Energy (SVCE) meets with City Attorneys from its member agencies to discuss court ruling and alternatives
- **February/March 2024:** SVCE meets with board members and City staff (3 meetings)
- **Late March 2024:** Berkeley settles lawsuit, will rescind code, and is not seeking review by US Supreme Court

Events Leading to Suspension



- **Ongoing:** City participates in regional groups discussing alternative options:
 - Silicon Valley Clean Energy (SVCE)
 - International Code Council Peninsula Chapter (ICC)
 - Santa Clara County Planning Collaborative (SCAPPO)
 - Bay Area Regional Energy Network (BayRen)
- **Ongoing:** Approximately 80 people have approached City Building staff regarding gas appliances in single-family residential projects to:
 - Modify their remodel permit to include a gas appliance (e.g. stoves, BBQs, and outdoor firepits)
 - Delay the removal of their gas appliance during construction
 - Are unable to pass final inspection due to non-removal of gas appliance
 - Inquiries by licensed professionals preparing to submit for a permit
- **April 9, 2024** – City suspension of natural gas appliance prohibition in Reach Codes; all other components of Reach Codes remain in effect.

Actions by Other Jurisdictions



Suspended Enforcement

Several jurisdictions have suspended enforcement of their all-electric requirements and do not have an alternative option adopted yet, including:

- City of Milpitas
- City of Palo Alto
- City of Half Moon Bay
- City of Menlo Park
- City of Atherton
- City of San Mateo
- City of South San Francisco
- City of Belmont
- County of San Mateo

Continuing to Enforce:

Some jurisdictions continue to enforce all-electric requirements, including:

- County of Santa Clara
- County and City of San Francisco
- City of San Jose

Regional and State Decarbonization Efforts



- **Silicon Valley Clean Energy** provides clean electricity to 96% of residents and businesses
- **Bay Area Air Quality Management District (BAAQMD)** adopted indoor air quality standards that requires water heaters and space heating equipment to be zero nitrogen oxides (NOx) starting in 2027
- **California Air Resource Board (CARB)** will consider setting a zero emissions standard for water heaters and space heating equipment similar to BAAQMD for implementation in 2030
- Current **2022 State Building Code** requires pre-wiring for new single-family homes to be all-electric in the future and prewiring for heating, clothes dryers, and stoves in multifamily residential buildings
- Upcoming **2025 State Building Code** may include additional pre-wiring for multifamily residential; zero-emission standards (zero NOx) are unlikely to be considered in this cycle

Exploring Alternatives to Encourage Electrification



1. Expanded Pre-Wiring Requirement

- Require pre-wiring of electrical line and outlet to all natural gas appliances, allowing for easy transition to electric appliance/equipment in the future
- Include multifamily residential and nonresidential requirements beyond State Code, which currently includes single-family and some multifamily residential
- Amends the CalGreen Code

2. Air Quality Approach

- Regulate air quality emissions from equipment/appliances
- Example is “Zero Nitrogen Oxide (NOx)” equipment requirement
- Amends the CalGreen Code

3. Energy Performance Approach

- Regulate energy performance from equipment at a set percentage above the State Code; can allow gas appliances
- Often referred to as “Single Margin” or “One Margin”
- Amends the California Energy Code, requires Cost Effectiveness Study

Expanded Pre-Wiring Requirements



Minimum State Code Requirements

- Single-Family Residential New Construction:
 - Heat pump water heater
 - Solar
 - Energy storage
 - Stove
 - Clothes dryer
- Multi-Family Residential New Construction:
 - Heat pump water heater
 - Stove
 - Clothes Dryer

Phase 1 Updates

- Use City's existing threshold for new construction (incl. major renovations) to:
- Expand Single-Family and Multi-Family Residential requirements
 - Add Nonresidential New Construction

Phase 2 Updates

- Evaluate beyond City's current threshold:
- Smaller Remodels/Renovations (Residential and Nonresidential)
 - Any residential new gas appliance at time of upgrade (if you touch it, you prewire it)

Air Quality (Zero NOx) – Town of Los Altos Hills



- Adopted in February 2024
- Applies to new construction and major renovations of single-family residential
- Applies to water heater, heating/cooling (furnace), and clothes dryer
 - Does not apply to: indoor and outdoor cooking equipment, outdoor fireplaces, generators, and pool/spa heaters
- If indoor cooking appliance is NOx emitting, must be pre-wired, be “240V ready”, and have a circuit breaker labeled in the panel for easy transition to electric
- Amendment to CalGreen, no Cost Effectiveness Study Required



CONSIDERATIONS

- No gas equipment available on the market that meets Zero NOx
- No example of multifamily residential or nonresidential development in effect
- New York State’s adopted Zero NOx program is a phased requirement over 3-4 years

Energy Performance Program – City of Santa Cruz



- Suspended all-electric requirements in June 2023
- Adopted Energy Performance approach in November 2023; awaiting California Energy Commission (CEC) approval (4+ months) – *not in effect*
- Applies to single-family, multifamily, and nonresidential new construction
 - Does not include existing buildings
- If gas or propane appliance installed, must be pre-wired, have a circuit breaker labeled in the panel for easy transition to electric, and adequate space for appliance
- Amendment to Energy Code, required Cost Effectiveness Study and approval by CEC



CONSIDERATIONS

- Will cost the applicant a little more; may extend City permit review time; more complicated regulation to explain
- Encourages electric as the simpler alternative to preparing an “energy budget”; allows for gas appliances
- Will take staff longer to develop thresholds, particularly for nonresidential and existing buildings

Estimated Timelines



Expanded Pre-Wiring Requirements

Phase 1

Pre-Wiring Using Existing City Thresholds
(No Community Outreach)

Draft & Review <i>(with current workload)</i>	2 to 3 months
Council Adoption	2 months Anticipate Sept. 2024

Phase 2

Pre-Wiring Beyond Existing City Thresholds
(With Community Outreach)

Additional Analysis	1 to 2 months
CSC/Council Direction	May/June 2024
Draft, Review & Outreach <i>(with current workload)</i>	3 to 4 months
Council Adoption	2 months
State Acceptance	1 to 2 months Anticipate Q1 2025

Air Quality Approach

Initial Analysis	1 to 2 months
CSC/Council Direction	May/June 2024
Draft, Review & Outreach <i>(with current workload)</i>	3 to 4 months
Council Adoption	2 months
State Acceptance	1 to 2 months Anticipate Q1 2025

Energy Performance Approach

Initial Analysis	1 to 2 months
CSC/Council Direction	May/June 2024
Draft, Review & Outreach <i>(with current workload)</i>	6 to 7 months
Council Adoption	2 months
State CEC Approval Req.	2 to 4+ months Anticipate Q2 2025

Ongoing Efforts by City Staff



SERVICES OUR CITY BUSINESS AND DEVELOPMENT ENVIRONMENT English WHAT'S HAPPENING

CITY MANAGER'S OFFICE

- Executive Team
- + City Annual Update
- Communications and Outreach
- + Community for All
- Working Together for Our Youth
- Community Resources
- + Human Services
- + Legislative Advocacy and Intergovernmental Relations
- + Multicultural Engagement Program
- Race, Equity and Inclusion (REI)
- Sustainability and Resiliency
- + Get Involved
- Rebates and Resources
- For Residents
- For Businesses
- + Climate Change
- + Energy
- News & Events
- City Plans & Policies
- Water
- Zero Waste
- Transportation
- Urban Forestry
- Archives
- + Wage Theft Ordinance
- Shoreline Park District

Our City > Departments > City Manager's Office > Sustainability and Resiliency > Rebates and Resources >

For Residents

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Below are a collection of rebates and resources that are available for residents of the City of Mountain View. For Multifamily Property resources, please see our [Rebates and Resources for Businesses](#) page.

All-Electric Yard Care Promotion

Enjoy a quieter, cleaner yard care routine

Get \$50 off electric leaf blowers and lawn mowers

全電氣化庭院設備促銷

電動吹葉機和割草機立減 \$50

Promoción para equipo de jardinería totalmente eléctrico

\$50 de descuento en sopladores de hojas y cortacéspedes eléctricos

limpio, silencioso y poderoso

SILICON VALLEY CLEAN ENERGY

New! [Electrify at Home for Mountain View Homeowners](#)

[Electrify at Home for Mountain View Renters](#)

[Cambio a energía eléctrica en casa](#)

[家中改用電能](#)

Electric Vehicles +

Electrification: Switching to electric from natural gas/fossil fuels -

- New! "Quick Start: Home Electrification Rebates" PDF document
 - ["Inicio rápido: descuentos de electrificación de hogares y Más descuentos y recursos" documento PDF](#)
 - ["快速入门: 家庭电气化抵扣以及更多抵扣和资源"](#)
 - ["Краткое руководство: льготы при переводе жилья на электричество, а также другие скидки и ресурсы"](#)
- [Appliances Assistant](#) by Silicon Valley Clean Energy- Search the marketplace showing rebates, models, and pricing.

City of Mountain View
Development Permits

Residential
Non-Residential
About Permits

- ADDRESS CHANGE
- ACCESSORY DWELLING UNITS
- APPLY FOR PERMIT
- BELOW MARKET RATE (BMR) HOUSING
- EXCAVATION PERMIT
- FENCES OR WALLS
- + FIRE SPRINKLERS
- GO ELECTRIC
- HOME-BASED BUSINESS
- LANDSCAPING
- SEWER LATERAL INSPECTION
- + SINGLE-FAMILY HOME/DUPLEX
- + SUBDIVISIONS/MAPS
- TEMPORARY ENCROACHMENT
- + TREES
- WASTE AND RECYCLING
- OTHER RESOURCES

- [Residential Rebates](#)
- [Silicon Valley Clean Energy Rebates](#)

Go Electric in Your Home

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Have you heard about the benefits of electric appliances and equipment? There is no better time than now to consider the benefits:

- Avoid costly upgrades in the future by preparing now for new rules coming into effect in 2027 that will prohibit the sale of gas water heaters and furnaces.
- Reduce fire and life safety risks from earthquakes.
- Reduce the risk of asthma and chronic respiratory illnesses from harmful nitrogen oxides (NOx) that are emitted from gas-fire appliances.
- Take advantage of limited tax credits and Silicon Valley Clean Energy incentives.

INDUCTION COOKTOPS keep a constant desired temperature and heat water 20-40% faster than a traditional gas or electric stove! And, no more burns! Once cookware is removed from the induction top, the burner is safe to touch within a minute. Some induction cooktops even come with battery storage, so you can cook during a power outage.

HEAT PUMPS are 3 times more efficient than gas heating!

- Maximize utility savings with electric appliances, especially when paired with solar and battery storage, and become more energy independent!
- Make everyday earth day with electric appliances, which are greenhouse gas free!

Need help with how to electrify or what incentives you qualify for? Contact a Go Electric Advisor at svcegoelectric@smud.org or call 833-843-2435, or visit the [Go Electric Advisor website](#).

Next Steps



- Continue to work with SVCE in exploring alternative electric requirements
- Increase public education/communication on benefits of electrification and encourage use of electric appliances/equipment
- Add topic to the City's federal and state legislative platform
- Return to Council Sustainability Committee for a recommendation on a path forward in May 2024
- Seek Council direction on a path forward in June 2024



Thank you