Reach Code Community FAQ

Monterey County Sustainability Program, October 2022.

The Basics:

Q-1: Does this reach code mean I have to give up my gas stove or appliances?

A: No, this reach code only affects New Construction. Staff have discussed potential strategies for electrifying existing buildings with the community, but need more engagement and planning before recommending an existing building reach code.

Q-2: Are there exemptions to this reach code?

A: This reach code has exemptions for public interest use cases and for when there is not an electric alternative so the building cannot be built without gas.

Q-3: Since the Building Code is moving towards all-electric, what's the point in limiting gas now?

A: While we will likely see an all-electric Building Code soon, there are major benefits to acting now:

- Climate goals: The County must meet our state climate goals of 40% greenhouse gas (GHG) reductions by 2030 and carbon neutrality by 2045, and allowing new buildings to be built with natural gas is moving the wrong direction. In fact, only the buildings required by the updated housing element planned to be built this code cycle from 2023-2026 would increase residential GHG emissions in the County by 17%.
- Cost: Building electrification is a major challenge in the State, and it is an expensive problem. Every new building with gas infrastructure adds to the cost of electrifying Monterey County in the long run. Limiting gas now prevents that bill getting more expensive for residents down the line.
- Lifespan: The infrastructure for new gas infrastructure lasts at least 30 years, often much longer. The 2019 California Building Decarbonization Assessment finds that we need to electrify all buildings by 2030 to meet State goals and pay for carbon offsets after 2030. It simply doesn't make sense to build infrastructure that lasts 30 years to pay to get rid of it in 8 years.

Kitchen Questions:

Q-4: But I like cooking with gas, and aren't gas stoves more efficient than electric?

A: Try out induction stove before you judge electric! They're more efficient, easier to control, and safer than gas stoves. They're much better than the electric coil stoves of the past and a growing number of chefs prefer cooking with induction. Check out this <u>short video</u> or this

<u>longer video</u> for more information on cooking with induction directly from a chef. Also don't forget, this reach code is only for new construction.

Q-5: Are gas stoves really that big of a deal?

A: Yes! Your kitchen should be a place to cook up love and nourishment, not toxins:

- Gas stoves burn methane that releases <u>NOx</u>, <u>Carbon Monoxide</u>, <u>Formaldehyde</u>, and <u>more</u>. <u>Even when off</u>, gas appliances leak harmful pollutants.
- Children who grow up in homes with gas stoves are <u>40% more likely</u> to develop asthma. Plus, air pollution <u>disproportionately affects</u> marginalized groups.

Q-6: How will this reach code affect commercial kitchens and restaurants?

A: This reach code will not impact existing commercial kitchens or restaurants. For new commercial kitchens, applicants can apply for an exemption to the reach code if necessary. However, there are electric options for essentially every piece of cooking equipment for a restaurant. For more information, please see <u>this video from 12:39-20:29</u> for a discussion on how all-electric cooking is compatible with preserving cooking and culture.

Even though this policy doesn't not affect existing kitchens, all-electric kitchens are better for kitchen staff and business utility bills. Kitchen workers in gas kitchens are routinely exposed to unsafe temperatures and air pollution. Please see the same <u>video</u> for a chef's perspective on these health impacts.

Q-7: Ok, I hear what you're saying about induction stoves, but I'm still hesitant without trying the technology. Is there anything the County can do?

A: Glad you asked! The Sustainability Program is interested in hosting workshops to help familiarize the community with induction stoves and other sustainable technology. If this would be helpful, please email <u>climate@co.monterey.ca.us</u> to let staff know.

Cost Questions:

Q-8: Aren't electric appliances more expensive than gas?

A: Electric appliances are cost competitive with gas appliances. Here's a <u>guide to learn</u> <u>more</u> with a breakdown of specific appliances. Plus, you can pair solar energy and energy efficiency upgrades to make going all-electric even more cost friendly.

Q-9: Are there resources available to help me switch to electric appliances and have a healthier home?

A: Yes! <u>The Switch is On</u> is a user friendly website for incentives that reduce the cost of going electric by thousands of dollars. Also, if you wait until after December 31, 2022 the Inflation Reduction Act provides an annual <u>25c Energy Efficient Home Improvement Credit</u>

between \$1,200-\$2,000 to upgrade to electric appliances or improve home energy efficiency. This is even available to renters and energy audits are an applicable deduction.

Resiliency Questions:

Q-10: Can the grid handle moving to all-electric buildings?

A: Energy utilities are required to meet our electricity demand as jurisdictions transition to all-electric. Adopting reach code policies to limit gas helps utilities like PG&E better plan to meet those needs. Additionally, moving away from gas infrastructure allows PG&E to save costs that can be invested into upgrading electric infrastructure. In fact, all-electric buildings combined with batteries, solar energy, and electric vehicle-to-building technology can support <u>a</u> more resilient grid.

Q-11: Aren't gas appliances more resilient during a blackout?

A: No! All-electric homes are more resilient for the following reasons:

- It's true that gas stoves can be lit with a match to boil water during an emergency, but without the electric vent hood toxic pollutants can fill up your home in a matter of minutes.
- All-electric households combined with solar energy, battery storage, and/or an electric vehicle with a vehicle-to-building charger can power every device in your home during a blackout. Now that's what resilience looks like.
- Modern gas appliances with pilot lights are illegal, so they won't work without electricity. Attempting to light a gas water heater or space heater by hand is extremely dangerous.
- Natural gas is major risk factor during earthquakes and is responsible for <u>20% to 50%</u> of post-earthquake fire ignitions. In the 1994 Northridge 6.7-magnitude earthquake, 50% of the fires were caused by natural gas.

Electric Vehicle (EV) Questions:

Q-12: Why is the County increasing EV charging requirements?

A: To meet State climate goals in transportation, the <u>State has mandated</u> that all vehicles sold in California by 2035 will be zero-emissions vehicles. The County is acting now so that our residents aren't left behind during this transition to EVs.

Q-13: Can EVs really meet the needs of rural residents and urban residents?

A: Yes! In fact, rural drivers have <u>more to save</u> from switching to an EV because they often drive further than urban drivers. Additionally, rural households are the perfect scenario to combine an EV, solar energy, and all-electric appliances for a resilient home. For an example, check out the <u>resiliency benefits of the F-150 Lightning</u>. This vehicle-to-building technology is now mainstream, see page 84 of this <u>guide</u> for chargers that turn any EV into a home battery.