

ELECTRIC OR INDUCTION RANGE

BESO Resilience Upgrade Measure

MEASURE INFORMATION

Credits: 2

Description:

Electric resistance and induction ranges eliminate the need for natural gas, helping to improve indoor air quality by avoiding combustion-related pollutants like carbon monoxide, nitrogen dioxide, benzene, formaldehyde, and particulate matter. Studies have shown that gas ranges contribute to elevated indoor pollution levels, especially in poorly ventilated kitchens, posing risks to respiratory health. In fact, gas stoves leak harmful chemicals even when they are off. In contrast, electric cooking appliances produce no on-site emissions and are generally more energy efficient than gas models, with induction ranges being the most efficient and offering faster, more precise temperature control. Electric cooking is also safer as they have no open flames and can't cause gas leaks. Most electric and induction stoves require a 240-volt circuit but there are some models that are compatible with 120 volts.



Installation Criteria:

Replace a gas cooking range with a fully electric range (must include both stove and oven), using either induction or electric resistance technology. The gas line to the stove must be permanently capped. *May require the installation of an electrical circuit and 240V outlet.*

Required Verification Documentation:

- Permit + approved final inspection – *Include "for BESO compliance" in the scope of work section of your building permit application.*
- Purchase confirmation (receipt or invoice)

Equipment Options:

- **Induction** - Induction ranges use magnetic fields to heat pots and pans directly, offering faster, more precise, and energy-efficient cooking electric resistance models. While most models require a 240V outlet, some 120V plug-in options are available, making it easy to upgrade without electrical panel work. Induction ranges require that pots and pans have magnetic bottoms. Most cast iron, enameled cast iron, stainless steel, and ceramic pans with metal embedded will work.

- **Electric Resistance** - Electric resistance ranges use heating elements to warm cookware. While not as efficient as induction, they still help eliminate indoor air pollutants by avoiding combustion. Most models require a 240V outlet, which may mean an electrical upgrade is needed if one isn't already available.

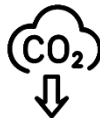
Benefits:



Increase Health
& Safety



Improve
Air Quality



Reduce
Emissions

ADDITIONAL RESOURCES

Permitting Resources:

- For information about the permit process, including permit types and requirements, visit the [City's permitting webpage](#). If you're new to the process or have questions, you can also [schedule an appointment with a permit specialist](#) for personalized guidance.

Rebates and Incentives:

- Check the [Switch Is On](#) for list of available incentives and rebates.
- Thinking of going all-electric? You could be eligible for **more than \$4,000 in incentives** are currently available through the [California Energy-Smart Homes program](#) by replacing all gas appliances—such as the water heater, HVAC, stove/oven, and dryer—with electric alternatives.