

CLIMATE SMART SAN JOSÉ'S INDUCTION COOKING PROGRAM

FREQUENTLY ASKED QUESTIONS

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How does an induction cooktop work?

Induction cooktops are electric ranges that use magnetism to generate heat. Magnetic coils below the cooktop's ceramic glass surface generate a magnetic field that sends pulses directly to the cookware. These magnetic pulses heat the cookware.

Heat transfers to the cooktop through conduction. Like the heat transfer from a hot pan to a countertop when you set it down to rest. Unlike traditional ranges, induction cooktops only retain heat when in use. The surface gets hot only because of the heated base of the cookware.

Who is using induction?

Induction cooking has the power to revolutionize the cooking experience. Renowned local chefs are using induction ranges both commercially and in their home kitchens. This includes Bay area restaurants Chef Baca at The Shop (San José), Prubechu (San Francisco), and Little Sheep Mongolian Hot Pot (Cupertino).

What are the benefits of switching to an induction cooktop?

Safer: Induction cooktops are safer than gas and electric because there is no open flame or exposed heating element. Reducing the risk of fires and, burn-related injuries, since heating stops when the pan is removed from the cooktop. This is a great benefit for families with young children. Induction technology functions on magnetism versus

gas preventing gas related leaks, igniter fails or gas line breaks. Many models also come with auto shut-off settings for additional safety.

Better indoor air quality: Gas stoves are a major source of indoor air pollution, emitting nitrogen dioxide (NO₂), carbon monoxide (CO), and formaldehyde (HCHO), each of which can worsen respiratory problems, such as asthma, and other health ailments. Switching from gas to an induction cooktop can improve air quality by removing harmful air contaminants, such as carbon monoxide and nitrogen dioxide from homes.

Faster and more energy-efficient: Induction cooktops are the most energy-efficient option when compared to electric and gas cooktops. Using more energy-efficient appliances can reduce both electric bills and greenhouse gas emissions. With induction, no energy is being wasted by heating air around the pan, meaning food heats up and water boils 50% faster than gas or traditional electric cooktops.

More temperature control: Digital controls allow you to set an exact, steady amount of heat without having to judge a flickering flame. Induction cooktops cook faster, simmer more steadily, and respond quicker to temperature changes. This allows for more even cooking since an induction stove heats up the entire pan more evenly than a gas flame or electric radiant coil, which only heat the part of the pan they touch.

Cooler Kitchen: Induction cooking creates a cooler kitchen. With gas or traditional electric cooktops, the burner also heats the air around the stove. Induction cooktops only heat the cookware, which keeps the kitchen cool during meal preparation.

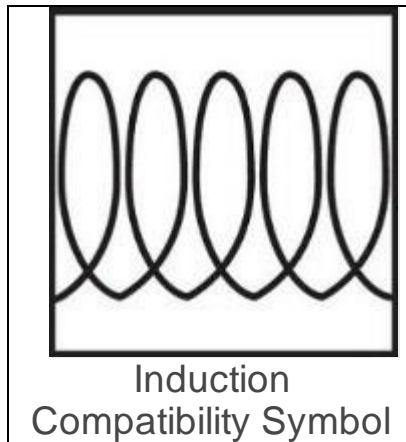
What special equipment do I need to cook with an induction cooktop?

Due to the nature of the cooking process, only certain types of cookware materials work on induction cooktops. Iron and flat bottom cookware are induction compatible. This includes cast iron, stainless steel, carbon steel, and all-clad cookware. Hybrid aluminum or copper cookware may also work. Some compatible cookware will have an Induction Compatibility Symbol located on their underside (see picture below). Compatibility is also determined by holding a magnet to the bottom of the cookware. If the magnet sticks, the cookware will work on an induction cooktop.

Digital thermometers interfere with electromagnetic waves and are not compatible with induction cooktops. The use of an analog thermometer is recommended.

Having the right power is important to ensure your induction cooktop works properly. One- or two-burner portable induction cooktops can usually be plugged into a regular 120-volt wall outlet. A full size four or five burner stovetop with power boost for fastest boil requires a dedicated grounded 240-volt outlet with a 40-50 amp breaker.

Information on required voltage may be found on the bottom of the cooktop or in the user manual. For higher voltage cooktops, check with a licensed electrician to make sure your wiring is ready to handle the load.



Is there anything I can't cook with an induction cooktop?

With induction cooking, no cuisines are off limits. Induction cooktops can cook the same foods as a gas or electric cooktop. Induction technology heats only the pan and not the air, so foods may cook faster.

Are there any health risks associated with induction cooking?

Induction cooktops emit an electromagnetic field of medium-frequency waves. According to the World Health Organization, there is no compelling evidence indicating medium-frequency magnetic fields have long-term health effects. Individuals with a pacemaker, implanted defibrillator or oxygen tank should talk to their doctor before using an induction cooktop.

What types of induction cooktops are available and how much do they cost?

There are different types of induction cooktops to choose from depending on your needs. Induction cooktops can be found at any appliance or home improvement store. They are sold in three different configurations:

- € **Portables:** These one and two element units can be set on a countertop anywhere and plugged in to a standard 120-volt outlet. These generally don't have the power boost option to heat up as fast as the 240-volt models but are still rapid.
- € **Cooktops:** These two to five element cooktops drop into a countertop installation independently from a standalone oven of any variety. They require a 240-volt outlet or may be hardwired into the electrical system.
- € **Range:** These are four to six element cooktops usually paired with an electric convection oven. They require a 240-volt outlet.

Induction cooktops are priced competitively with gas or traditional electric ranges, and prices continue to drop. Rebates are also frequently available to lower costs.

TYPE	COST
Portable Induction Cooktops	\$40 - \$300
Multi-burner Induction Cooktops (Countertop)	\$200 - \$4,200*
Free-standing Induction Ranges (Often with Convection Oven)	\$1,000 - \$4,500*

*Does not include installation/labor costs.

Is there any funding to help me cover the cost of an induction cooktop?

As induction technology continues to grow and become more widely adopted, rebates and incentives become increasingly available. Local organizations frequently offer incentives and rebates or publish information on where you can find them. Visit our webpage for links to each organization or program

- [BayREN](#) – The Bay Area Regional Energy Network (BayREN) offers several energy upgrade rebates & financing options for homeowners, multifamily property owners and businesses.
 - Check out their [induction cooktop rebate](#), to get **up to \$750 cash back** on an induction range or cooktop upgrade.
- [San José Clean Energy](#) – City of San José Community Energy Department supplies clean electricity and frequently updates their website with incentives, rebates and financing options that are available to San José residents.
- [Inflation Reduction Act](#) – Starting in 2023, rebates and tax incentives will be available through a federal law known as the Inflation Reduction Act. Rebates for up to \$840 will be available for induction stoves.
- [The Switch Is On](#) – A collaborative campaign to support home electrification by providing tools, support, and resources to Californians. Search by your zip code to find rebates and incentives available to you in your area. To search specifically for induction cooktop incentives and rebates, select “Cooking” from the drop-down menu after entering your zip code.

I don't live in San José. Can I still check out a cooktop?

Only residents of San José can participate in our induction cooktop checkout program. However, there are other induction loaner programs throughout the Bay Area. See below for a list of programs that are available to select Bay Area residents, and check out for links to each program:

Program	City/ Entity	Audience
PGE Cooktop Loaner Program	PG&E, Frontier Energy	PG&E Customers

EBCE Cooktop Loaner Program	EBCE, Acterra	EBCE Service Area (Residents of Alameda County + City of Tracy)
Palo Alto Cooktop Loaner Program	Acterra	Residents of Palo Alto
San Mateo Induction Cooktop Loaner Program	City of San Mateo	Residents of San Mateo
Piedmont Induction Cooktop Lending Program	City of Piedmont, EBCE	Residents of Piedmont
City of Hayward Induction Cooktop Loaner Program	City of Hayward, EBCE	Residents of Hayward

How do I get started?

There are several ways that you can take the next step toward electrifying your kitchen:

- € Purchase a low-cost portable induction hotplate to use as an alternative to your gas stove burners.
- € Visit an appliance showroom to view induction ranges. Some showrooms even have a try-it-before-you-buy-it test kitchen.
- € Read consumer reviews of induction ranges and cooktops on major appliance dealers' websites.
- € Attend electrification tours of area homes or electrification expos and talk to people who own induction ranges about their experience.
- € Check out the **Resources** section of www.sanjoseca.gov/inductioncooking for more information to help you identify next steps for going induction.

For more information, visit www.sanjoseca.gov/inductioncooking or email climatesmart@sanjoseca.gov.