

Induction Cooking

Retail Guide



NYSERDA
New York State Energy Research
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A Great Way to Improve Energy Efficiency at Home

Induction stoves are a great choice for a safe, more energy-efficient kitchen. They offer energy savings, safety features, and more precise cooking. Here's an overview of how induction stoves work and how they compare to electric and gas stoves.

What are induction stoves?

Induction stoves are electric appliances for cooking that use electromagnetic technology. They are safer and more efficient than gas or electric stoves.

How does an induction stove work?

An induction stove is entirely different from the standard coil stoves you may be used to. An induction stove works by generating an electromagnetic current within specific types of cookware. The pot or pan gets hot, but the surface of the induction stove does not.

Safer, healthier cooking

- Induction cooking equipment can improve indoor air quality compared to gas stoves. Research shows that gas stoves leak methane and carbon monoxide into your home even when they are turned off.
- Because there is no burner, heating element, or flames, pets and small children won't accidentally activate a dangerous surface.
- Since an induction glass-ceramic cooktop does not actually get hot to the touch, you will not burn spilled foods, that potholder you left on the cooktop, or your fingers.
- Many models are "smart" and will shut off if they do not sense a pan.

Performance benefits

- **Rapid heating**
Water boils in about 2-3 minutes and pans heat almost instantly.
- **Immediate and Precise Responses**
Heat levels can be precisely raised or lowered with immediate response and provide more even cooking.
- **Digital controls**
Many models have digital controls, which allow you to accurately set exact cooking temperatures. That means no more trying to judge a flickering flame, or blasts of high heat that cool down then blast again.
- **More precise**
Cooking is more precise and even.
- **Easy to clean!**
Glass-ceramic cooktops that cool down immediately are easier to clean than coils, burners, or grates.

Efficiency benefits

Induction stoves are 85% efficient compared to a standard electric stove, which are about 70% efficient. You'll lower your electric bill by using less energy.

Cookware considerations

Induction stoves use magnetism to heat cookware. That means they work with cookware that magnets stick to. Magnets stick to most cookware, including stainless steel, cast iron, enamel or ceramic-coated iron, and carbon steel. Magnets will not stick to glass, aluminum, or copper. Bottom line: Induction works with most cookware. If a magnet sticks, it will work.

Switching to induction cooking

When making the switch to induction cooking, here are a few things to expect:

- Induction requires a 240-volt outlet. Work with your contractor or a qualified electrician to upgrade your electric service if needed.
- Check with your contractor or gas utility to safely remove any gas or propane infrastructure like connection points, fuel lines, or tanks from your property.
- If you are switching from a standard electric stove, you should expect to see your electric bill go down. If you are switching from gas or propane, your electric bill may go up, but your gas or fuel bill will go down.



Ready to get started?

Visit myenergy.ny.gov/induction to learn more about switching to induction cooking.



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