Lake Oswego Sustainability Network



Induction Cooktops

A major reason chefs prefer gas over electricity for cooking is the ability to quickly get heat and to control changes more quickly than you can with electric resistance heating coils. However, studies are showing that there are serious health effects using gas and they don't disappear when you turn off the gas burner. Fortunately, there is a better answer – electric induction stove tops.

Why induction cooktops are better for the environment

Up to 90% of natural gas is methane. Over 20 years, methane is 80 times more powerful than carbon dioxide as a greenhouse gas. From the time methane is fracked until it is used in your kitchen, about 3% leaks into the atmosphere. Methane accounts for up to one third of current global warming. Unfortunately, methane leaks into your kitchen even when the stove is off. Methane leaking from stoves in the US has the <u>same climate impact as about 500,000 gasoline powered cars</u>.

Induction stoves are better for the environment than traditional electric resistance stoves because they are more efficient—primarily because less heat is lost to the air around the pots and pans. Induction stoves are 85-90% efficient, gas stoves are 32% efficient and traditional electric resistance stoves are 75% efficient in how effectively they transfer energy into heat for cooking. Efficiency helps meet our climate goals of reducing the overall demand for electricity.

How do they work?

An electric induction stovetop uses electromagnetic energy to agitate iron in the cookware which results in the pan becoming hotter--essentially turning your pots and pans into their own heat source. This is different than other electric stoves in which the burner first heats up first and then transfers heat to the pan. Also, when the pan is removed, the transfer or energy stops immediately and the stovetop cools rapidly and becomes safe to touch.

Gas stoves are dangerous!

A growing body of evidence shows that cooking with gas is bad for our health - especially concerning is the association between natural gas and childhood asthma. Nitrogen dioxide and other toxic fumes can lead to indoor air pollution that would be illegal outdoors. Induction cooking is safer because it produces none of the harmful emissions and pollutants.



Click https://youtu.be/7p6buePWKII

Co-Benefits

As more people make the switch to induction cooking, they are seeing some real benefits:

- Instant heat
- Precise control
- Safer to touch
- Easy to clean
- Attractive, sleek models.
- Electricity cost savings

Other considerations

Induction cooktops do have some drawbacks. They are currently more expensive than other types of cooktops, though the costs are likely to come down as they become more common. A single burner induction hob (hot plate) costs under \$100. Also, because they work through magnetism, induction cooktops require pans that have iron in them—some pans only have aluminum.

Professional Chefs Love Cooking With Induction

Not only household cooks but a growing number of professional chefs are making the shift to induction. Here what they have to say:



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The sleek, modern design of induction cooktops is why they have now become a recommended option by interior decorators in new homes and kitchen remodels.



Check out our Resource Page

Our <u>Resource</u> page has more information on the adverse health aspects of using gas and a deeper understanding of induction cooking.

Try It Out For Yourself

If you want to discover the benefits of induction cooking for yourself, consider checking out an induction hot plate from the Lake Oswego <u>Library of Things</u> or you can purchase one locally at Lowes, Home Depot or Best Buy for less than \$100.

The same stores also have complete induction cooktops. When that time comes you will want to add one to your kitchen check out this <u>Induction Buying Guide</u> to help you with your decision.