



BUILD ELECTRIC TECHNICAL BRIEF

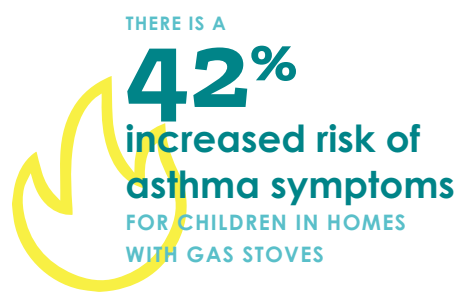
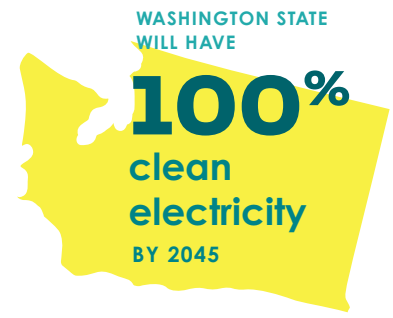
# High Efficiency Electric Induction Cooktops

for residential buildings

Induction cooktop technology is highly energy efficient and the quickest, most even heating on the market. Powered by clean electricity, induction cooktops offer climate and health benefits compared to gas stoves, in addition to excellent performance in the kitchen.

SIGNIFICANT OPPORTUNITY

Induction cooktops cook **faster, more safely, and use less energy**—without the risks of indoor air pollution from gas stoves.



BENEFITS



**Fast & Efficient**  
Use less energy than gas or standard electric cooktops, and boil water twice as fast.



**Healthy**  
Clean electric induction cooktops don't rely on combustion of gas, removing a major source of indoor air pollution.



**Safer**  
No open flame and very little residual heat on the surface, dramatically reducing risk of fire or burns.



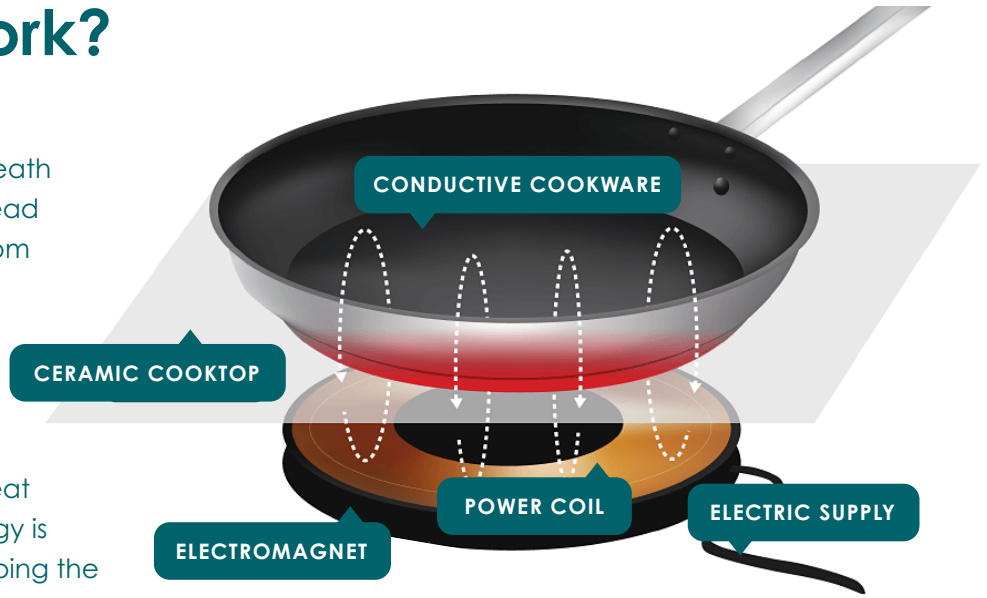
**Better Control**  
Digital controls allow setting temperature precisely without having to judge a variable flickering flame.



**Easy to Clean**  
Food doesn't get burned onto the smooth surface, just wipe clean.

# How do they work?

Induction cooktops are electric, but heat up pans using magnetism beneath an easy-to-clean glass surface. Instead of burning gas or transferring heat from a metal coil, induction technology moves a magnetic field back and forth very rapidly, heating up the cookware directly. This magnetic field can be precisely controlled, giving you exactly the amount of heat you want in less time. Very little energy is wasted heating surrounding air, keeping the kitchen cool. The surface remains cool to the touch, reducing risk of burns and fire—safer for everyone, especially children.



INDUCTION IS  
**85%**  
efficient  
WHILE GAS STOVES ONLY  
DELIVER 32% OF THE FLAME  
HEAT TO THE PAN.

**0** direct emissions

### CONSIDERATIONS

#### Cookware

If a magnet sticks, the pan will work. Induction cooktops work with all iron cookware, most stainless steel, and blue steel. Aluminum, copper, and glass work if the manufacturer has added an iron or steel plate to the bottom.

#### Appliance Options

Induction cooktops can be found at any appliance store or home improvement center. They are sold in three configurations: range paired with electric oven, cooktop, and small portable countertop units—which start around \$70.

#### Power Source

A small 1-2 burner portable cooktop plugs into any common 110-volt outlet. A full-size, 4-6 burner cooktop requires a 240-volt outlet with a 40- or 50- amp breaker.

## components of an all electric home

INSULATE &  
AIR SEAL



HEAT PUMP  
WATER HEATER



HEAT PUMP  
SPACE HEATER



INDUCTION  
COOKTOP



LEARN MORE

Going Induction Guide from  
Building Decarbonization Coalition

[tinyurl.com/hr4n3unx](https://tinyurl.com/hr4n3unx)

Build Electric Washington

[buildelectricwa.org](https://buildelectricwa.org)