Gas Stoves vs. Electric Stoves

By Jonathan Katz, EAC Member



Most people love cooking and since the pandemic, the number of people cooking meals at home has risen from pre-pandemic levels. This means more people are in their homes cooking more meals each day. Of course the primary tool when cooking is your oven and stove and there is debate out there over which stove, gas or electric, is better for you and for the environment. And in addition to gas and electric, there is also the growing popularity of the convection oven which, spoilers aside, is the most efficient and environmentally friendly of all.

So let's start with the Gas stove. Gas stoves have received a bad wrap lately because they have been known to emit methane and nitrous oxide even when they are not in use. These gases are known to trap heat in our atmosphere which contributes to rising temperatures. The impacts of global warming on our environment and planet have been well documented but in short, the higher temperatures lead to melting ice caps, rising sea levels, habitat destruction, and more. In addition to harming our planet. Nitrous oxide has been known to cause breathing problems, especially to those with asthma, and could impact your lung health. So it seems gas stoves can have both an environmental and health impact just from sitting in your kitchen.

Electric stoves on the other hand have their own issues. During cooking, electric stoves can emit 3x as much carbon dioxide as gas stoves, which again is a gas known to harm our planet. To their credit, the electric stove does not emit gas when idle so there are more health benefits to you and your family. Gas stoves do require less energy when cooking but lose out on the

efficiency gained due to the gas leak because electric stoves are essentially harmless to you and the environment when not in use. In short, both stoves have advantages and disadvantages and it might just come down to your individual habits. If you cook a lot, perhaps the gas stove is best for you. If you cook rarely, you may want to rely on Electric stoves.

Our last option for home cooking is the Convection oven. These ovens are most comparable to electric ovens. These ovens, on average, use 20% less energy than electric stoves due to their fan which circulates hot air rather than continuously producing more and more heat. If you plan on replacing your stove with an electric or convection one you should look to switch only when your gas stove needs to be replaced. Switching too soon can lead to more waste and a greater carbon footprint. So be careful when you decide to make a switch if any!

If you would like to learn more, check out some of these great articles below:

https://www.nytimes.com/wirecutter/blog/dont-need-ditch-your-gas-stove-yet/

https://time.com/6142988/gas-stoves-methane-emissions/

https://www.edf.org/climate/methane-research-series-16-studies

https://www.epa.gov/indoor-air-quality-iaq/nitrogen-dioxides-impact-indoor-air-quality

https://slightlyunconventional.com/greener-gas-or-electric-stove/

https://www.constellation.com/guides/appliances/energy-efficient-ovens-stoves.html