



Building Electrification FAQs

Q. Why is building electrification a good idea?

<https://rmi.org/eight-benefits-of-building-electrification-for-households-communities-and-climate/>

- **Improves health:** Gas stoves emit toxic pollutants, cause asthma, and damage lungs (see below).
- **Cools climate:** Buildings account for [28 percent](#) of US greenhouse gas emissions. We can't fight climate change without cutting this source.
- **Saves money:** Building all-electric homes is less expensive than building mixed-fuel homes.
- **Fosters equity:** Fossil gas prices are going up, and low-income communities have the highest energy cost burden to begin with. BE brings the benefits of decarbonized buildings—reduced health risks and lower, more stable energy bills—to lower-income residents.
- **Adds green jobs:** A report by UCLA found that BE in California will boost employment in the construction, energy, and manufacturing industries, supporting more than [100,000 jobs](#)—eight times as many jobs as would be lost in the gas sector as it is phased out.
- **Is a better investment than gas:**
 - * Gas infrastructure costs are soaring; even PG&E wants to transition away from gas.
 - * Building new pipelines will just make the transition more expensive.
 - * It's wiser to invest in expanding the grid and scaling up renewable energy sources.

Q. I'm all for electric vehicles, but I don't see why I should give up my gas range.

<https://rmi.org/gas-stoves-health-climate-asthma-risk/>

<https://rmi.org/all-electric-homes-a-health-professionals-guide/>

You don't have to give up your stove. But it makes sense to stop putting gas stoves in new homes:

- Research shows that gas stoves emit toxic pollutants like nitrous oxide and carbon monoxide
- Children living in a home with a gas stove have a [42 percent increased risk](#) of asthma symptoms
- The gas delivered to stoves [contains benzene](#), a known carcinogen with no safe exposure level.

Q. What's an induction cooktop? What's so great about them?

<https://pirg.org/edfund/media-center/new-consumer-guide-highlights-clean-air-and-cooking-benefits-induction-cooktops/>

Induction cooktops use [magnetism](#) to heat metal cookware. When an induction stove is turned on, electric currents under the cooking surface create a magnetic field within the cookware.

- They're [three times as energy efficient as gas stoves](#) and nearly 20 percent more efficient than traditional electric stoves.
- Other [big advantages](#): they heat up faster, are safer, and allow more precise temperature control.

Q. If we “electrify everything,” won’t that create too much demand and crash the grid?

<https://www.rewiringamerica.org/circuit-breakers/the-grid>

- Growing the grid is key *and* doable; the US grid grew fourfold between 1950 and 1970.
- New “smart grid” technologies deliver more electricity through the same infrastructure.
- New “smart electrical panels” enable whole-home electrification without upgrading upstream infrastructure.

Q. I’ve heard that natural gas is a good “bridge” fuel—cleaner than coal or oil. Don’t we need to continue using it while the grid is being expanded?

<https://www.nrdc.org/stories/natural-gas-101>

- So-called “natural” gas is a **major factor in global warming**. It is a fossil fuel.
- Producing and transporting fossil gas results in methane leaks all along the way.
- Methane is [the second most significant climate pollutant](#), after CO₂.
- Burning gas for energy (in power plants) accounts for 36 percent of energy-related CO₂ released in the US.
- In 2020, the total carbon footprint of gas represented [almost twice](#) that of coal in the United States.

Q. What about renewable natural gas (RNG)?

<https://www.rewiringamerica.org/circuit-breakers/renewable-gas>

“Renewable natural gas” is often proposed as a way to meet climate targets while still investing in fossil fuel infrastructure. RNG usually refers to biomethane created from sources such as wastewater, landfill methane, or agricultural waste and then pumped into the existing gas grid.

- Research shows that when methane leaks are accounted for, RNG emits just as much as fossil gas.
- The available supply of renewable natural gas is tiny, with current production at just **0.2** percent of US gas consumption and maximum technical potential at only 1.3 percent.
- Because it’s chemically similar to fossil gas, RNG generates the same harmful pollutants associated with damaging health impacts, most notably a significantly increased risk of asthma. Even if your stove runs on RNG, it still releases toxins into your home.
- Heating with fossil gas is already more expensive than electric heat pumps in many places, and RNG is two to fifteen times more expensive than this.
- In contrast, electrification is ready to deploy today at scale, actually reduces emissions, saves money, and avoids the harmful health impacts of burning gas in our homes.