



THE FACTS ABOUT RENEWABLE NATURAL GAS

MYTH

"Cooking with natural gas causes indoor air pollution."

FACT

Both electric and natural gas stoves should be used with proper ventilation. The emissions from cooking food—not from the burner—are the main source of concern when it comes to indoor air quality.¹ Even toasters release toxic particles into the air the moment they are turned on, according to research by The University of Texas, Austin.² When cooking indoors, these pollutants can be easily addressed with good kitchen ventilation.³

MYTH

"Natural gas use in California homes is a major cause of greenhouse gas emissions."

FACT

The use of natural gas in homes creates about 6% of greenhouse gas emissions in California, and its use in commercial buildings adds another 3%.⁴ By comparison, tailpipe emissions from cars, trucks and shipping are responsible for 40% of greenhouse gas emissions.⁵ Simply replacing less than 20% of traditional natural gas with renewable natural gas (RNG) will achieve the same greenhouse gas reductions as electrifying 100% of buildings by 2030.⁶

MYTH

"There is not enough RNG to replace 20% of traditional natural gas to meet the needs of Californians."

FACT

According to two separate studies by EFI Global and the Gas Technology Institute, more than a third of the supply needed to switch 20% of our natural gas to RNG can come just from California's dead trees⁷, which experts say must be cleared.⁸ Further, municipal organic waste diversion plans will provide a great deal of RNG from waste that is currently going to landfills. Analysis shows Los Angeles County municipal operations could displace 100% of its current traditional natural gas with RNG by 2025 by converting food and paper waste to biogas.⁹

MYTH

"Switching to all-electric appliances will make energy less expensive for Californians."

FACT

Proponents of switching homes and buildings to all-electric appliances cite a study claiming cost savings for consumers. That study fails to account for the greenhouse gas reductions of renewable natural gas, it unfairly compares expensive high-tech electric heat pumps with conventional natural gas heating systems, and it doesn't factor in policies and programs expected to increase electric rates—such as wildfire mitigation programs or new transmission lines needed to move the additional renewable electricity to population centers.¹⁰

By contrast, using RNG to achieve emissions reductions would cost 2-3x less than mandating electricity only.¹¹ A study last year by the California Building Industry Association found that the initial cost of replacing natural gas appliances for electric ones, including the necessary electrical upgrades, would cost about \$7,345. And higher electricity bills would increase household expenses by as much as \$388 year.¹²

MYTH

"All-electric homes don't have any greenhouse gas emissions."

FACT

Because solar and wind power are not available 24/7 to meet demand when people need electricity, at least 40% of the electric supply does not come from renewable sources. Thus, homes that use only electricity still create GHG emissions.¹³

MYTH

"Getting rid of natural gas appliances is the only way to reduce greenhouse gas emissions from homes and commercial buildings."

FACT

By replacing 16-20% of traditional natural gas with renewable natural gas, we can achieve the same GHG reductions by 2030 as switching all homes and buildings to electricity only and at one-third to one-half the cost.¹⁴ This is because RNG, created with waste from dairies, farms, wastewater and landfills, takes more emissions out of the air than are created when it is used. In fact, state law requires 40 percent of methane from California's landfills and farms to be captured, with provisions to deliver that energy to customers.¹⁵ A report from former Energy Secretary Ernest Moniz notes that the only way to reduce emissions from agriculture is with RNG.¹⁶

MYTH

"The natural gas pipeline system leaks lots of methane."

FACT

A major Washington State University study noted new emission factors for natural gas distribution systems result in an emission rate for SoCalGas' system at 0.12% of all natural gas delivered.¹⁷

MYTH

"SoCalGas® just wants to keep delivering fossil gas, doing business as usual. To get rid of fossil fuels, California must get rid of its pipeline system."

FACT

SoCalGas supports California's carbon-neutrality goals and has committed to replacing 20% of its fossil natural gas supply with renewable natural gas by 2030. As noted in a report from former Energy Secretary Ernest Moniz, carbon-neutral or carbon-free fuels such as renewable natural gas and hydrogen will be necessary tools to achieving deep decarbonization along with a broad range of solutions. This will require the leveraging of the existing pipeline network and workers to reach California's climate goals.¹⁸

Using RNG to **achieve emissions reductions** would **cost 2-3x less** than mandating an all-electric approach.

1. <https://www.arb.ca.gov/research/indoor/cooking/cooking.htm>
2. <https://www.thetimes.co.uk/article/toast-is-more-toxic-than-traffic-fumes-wm6pb6c8z>
3. <https://scopeblog.stanford.edu/2018/03/06/use-your-range-hood-for-a-healthier-home-advises-indoor-air-quality-researcher>
4. The ARB GHG emissions inventory includes hydrofluorocarbons, adding 1-2% to total.
<https://www.arb.ca.gov/cc/inventory/data/data.htm>
5. <https://www.arb.ca.gov/cc/inventory/data/data.htm>
6. https://www.socalgas.com/1443741887279/SoCalGas_Renewable_Gas_Final-Report.pdf
7. According to the Gas Technology Institute, there are enough dead trees today in California to produce 78.3 billion cubic feet of RNG annually for 30 years.
8. <https://www.gov.ca.gov/wp-content/uploads/2019/04/Wildfires-and-Climate-Change-California%E2%80%99s-Energy-Future.pdf>
9. Based on SoCalGas' analysis and discussions with L.A. County's Internal Services Department and Public Works Department, which were highlighted in SoCalGas' comment letter to the County's Sustainability Plan.
10. <https://epic.uchicago.edu/research/publications/do-renewable-portfolio-standards-deliver>
11. https://www.socalgas.com/1443741887279/SoCalGas_Renewable_Gas_Final-Report.pdf
12. <https://efiling.energy.ca.gov/GetDocument.aspx?tn=224498&DocumentContentId=55045>
13. https://www.energy.ca.gov/almanac/electricity_data/total_system_power.html
14. https://www3.socalgas.com/1443741887279/SoCalGas_Renewable_Gas_Final-Report.pdf
15. https://leginfo.ca.gov/faces/billTextClient.xhtml?bill_id=2015201605B1383
16. https://energyfuturesinitiative.org/s/EF1_CA_Decarbonization_FactSheet.pdf
17. https://www3.arb.ca.gov/fuels/lcfs/regamend14/scgattachment_04062015.pdf
18. https://energyfuturesinitiative.org/s/EF1_CA_Decarbonization_FactSheet.pdf