

SAFER, FASTER AND MORE EFFICIENT

The future of cooking is electric



Key Facts

- Electric cooking is much safer for our health and the climate than cooking with dangerous fuels.
- Renewable energy now provides the cheapest power in history, which means electric cooking is also increasingly more affordable than dangerous fuels, even in low- and middle-income countries.
- Electric appliances powered by renewable energy therefore make financial sense for property developers, commercial kitchens and households. This is especially true as gas prices spike, renewable energy prices plummet and electric appliances make massive leaps in energy efficiency.
- Leading chefs say the most sophisticated cooktops on the market are electric. Induction cooktops are faster, more responsive, cooler, cleaner and more energy efficient than gas.
- In Indonesia, the Government is rolling out 300W induction hobs, ensuring households in lower income areas with limited energy supply have access to induction cooking. Electric pressure cookers are already cheaper than LPG in many regions.
- There is a high-performing electric equivalent for all kitchen appliances, from wok burners to fryers, and from griddles to warmers.



What is the Global Cooksafe Coalition?

The Global Cooksafe Coalition (GCC) is an unprecedented alliance of public health, climate, aid and development organizations, billion-dollar property developers and leading chefs, joining forces to call for universal access to safe, sustainable cooking. GCC founding members and corporate partners support the phase-out of dangerous fuels from our kitchens, and urgent action to ensure low-income communities around the world benefit from the renewable energy revolution.

Leading chefs say the most sophisticated cooktops on the market are electric.



ABOUT ELECTRIC COOKING

Energy-efficient electric appliances powered by renewable energy are better for our health, better for our climate, and perform better in the kitchen. They are increasingly more affordable than dangerous fuels, even in low- and middle-income countries.

1 Electric cooking solutions make financial sense.

All-electric kitchens can save a significant amount of money in new construction projects by eliminating the need for gas utility connections and indoor gas plumbing systems.

For real estate developers, electrification reduces the risks of stranded assets and increases the longevity of investments for developers in a net-zero world.

For commercial kitchens, operational savings are significant: analysis found AU\$20,000 per annum in savings when comparing gas to electric food and beverage tenancy.²

2 Electric cooking is now a viable option for low- and middle-income countries.

Historically, electricity had not been considered a practical solution for communities experiencing energy poverty. But expert research shows that solutions like electric pressure cookers and low wattage induction cooktops are cheaper than LPG in many regions.

Expert analysis from Modern Energy Cooking Solutions (MECS) found that, on average, LPG used four times the energy and was three times the price of cooking with an electric pressure cooker.³ This was before recent price spikes in LPG, which have only made electric pressure cookers more competitive.

MECS research in Kenya suggests that electric pressure cookers (EPCs) are capable of cooking 60-80% of popular dishes.⁴ A 100% electric cooking scenario would be to complement the EPCs with a hotplate, infrared stove or induction stove to cook the remaining dishes.

Electrification reduces health and safety risks.

In addition to reducing operational and construction costs, electrification can reduce health and safety risks, whether they are commercial or residential kitchens.

An all-electric kitchen means:

- No open flames
- Electrification mitigates the risk of gas leaks and gas-induced fires Because induction surfaces transfer heat straight to the pan, they provide a cooler cooking environment and are easier to clean, with fewer chemicals required.



Solutions like electric pressure cookers and low wattage induction cooktops are cheaper than LPG in many regions.







ABOUT INDUCTION COOKING

"On almost all counts, induction is faster, safer, cleaner, and more efficient than either gas or electric. And yes, we've done <u>exhaustive testing</u> in our labs to support that claim."

- Reviewed.com⁵

How does induction cooking work?

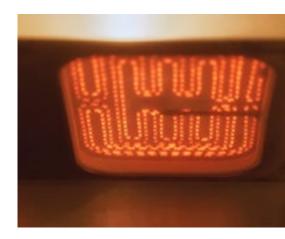
Induction cooking uses electromagnetic energy to heat pots and pans directly. In comparison, gas and electric cooktops heat indirectly, using a burner or heating element, and passing radiant energy onto your food.

2 For chefs, how does induction technology compare to gas for cooking?

Induction cooktops not only heat up much faster, but their temperature controls are also far more precise. US product testing group Reviewed <u>found in lab testing</u> that induction products delivered a time-to-boil of 3 minutes, 7 seconds, compared with 8 minutes, 34 seconds for gas. On average induction cooktops reached a higher maximum temperature of 665.5°F (352°C), compared to just 428°F (220°C) for gas, and a lower minimum temperature of 100.75°F (38.2°C) compared to 126.56°F (52.5°C) for gas cooktops.⁶

Are induction cooktops more efficient?

According to the <u>US Government's Energy Star</u> rating, induction cooktops are also significantly more energy-efficient, transferring energy with approximately 85% efficiency compared with just 32% efficiency for a gas cooktop.⁷









FACTS & FIGURES

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In Australia, analysis found AU\$20,000 per annum in savings when comparing a gas to electric food and beverage tenancy.9

In the US, modeling found US\$3,935 a year in fuel cost savings (based on October 2020 gas prices) when comparing a basic efficiency gas kitchen to a high-tech electric kitchen with advanced energy efficiency.¹⁰

Find out why electric and induction cooking is also better for our health. Health Factsheet

Sources

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