Traditional electric stoves create heat by simply resisting the electric current, but newer induction cooktops use electricity to create a magnetic field.

The electrons inside pots and pans that contain iron try to align with the magnet, vibrating tens of thousands of times per second, creating friction and heat.

The result is better energy efficiency, faster cooking, and no combustion fumes.

The main ingredient of natural gas is methane, and research shows burning it in a kitchen can be harmful to human health because it triggers a reaction between nitrogen and oxygen, which creates nitric oxide and nitrogen dioxide, pollutants collectively known as NOx gases.

They can cause all sorts of cardiovascular and respiratory illnesses, including asthma.

They have caught on in commercial kitchens in Europe and Asia, but in the US, chefs are skeptical.

- So rest of the world is looking at us going, "What are you complaining about?"

Because effectively we're arguing about how to get a piece of metal hot so we can cook.

The fossil fuel industry has done a good job at inducing resistance.

♪ Cooking with gas ♪

♪ Cooking with gas ♪

- We all remember the rap in the '80s.

♪ We all cook better when we're cooking with gas ♪

- It's cringeworthy.

♪ Cooking with gas, cooking with gas ♪

♪ We all cook better when we're cooking with gas ♪

- There's a lot to unpack there.

♪ I cook with gas 'cause the cost is much less ♪

♪ Than electricity ♪

- But you know what, that was effective.

What was said in there still gets said today.

Cooking with gas is cheaper, it's more precise.

All these things, which are just not true.

♪ We're cooking with gas ♪

- Today, Chris is an independent consultant who travels the country promoting induction in commercial kitchens.

He gave me a quick demonstration.

Okay, so this has been in the freezer?

- Correct.

So this is just to show how quickly things come up to temp.

So we're gonna dump this.

- Oh yeah, it's cold.

- So just getting the water off.

You can tell things are hot.

How hot?

- All right, that was in the matter of, what?

- Seconds.

- Yeah.

- Right.

And so there's no more preheating.

It's just straight hot and it doesn't take long.

All right, shrimp, got some good color on it.

Add our sauce.

And there you go.

That was dinner in about two minutes.

- In a fraction of the time.

And here's a beautiful thing, we just did all of that, not a sweat on you.

Nothing gets hot except for the pan itself.

So it's time for us to evolve, to get together, and say what's better for our world, and cooking with a flame is not.