



# Cooking with electricity – a guide to electric stove tops

Cooking equipment is one of the highest energy users of all common household appliances. Having an efficient electric stove top can help you reduce energy costs and greenhouse gas emissions. This guide provides information on the different types of electric stove tops, how they work and their benefits.

## Understanding electric stove tops

Electric stove tops use coils to heat the surface of the stove top to transfer heat directly into the cookware. Many modern electric appliances have radiant elements installed beneath a smooth glass surface that has the added benefit of being easy to clean. They heat evenly and quickly without the use of an open flame, ensuring more heat is used directly in cooking, with much less risk of burns or fires.

## Why switch to electric?

Gas cooking releases carbon emissions into the atmosphere, while the process of mining gas is also destructive to the environment. The ACT is powered by 100% renewable electricity and switching your home to electric appliances will help reduce emissions while also reducing household energy costs.

Modern electric stove tops are just as good or better than gas stove tops. They are cheaper to run and can provide greater thermal control and efficiency. The open flame of a gas stove top can also present a potential safety concern for burns, while combusting gas inside your home can also cause air quality issues indoors if not properly ventilated.

The Sustainable Household Scheme can be used to help you upgrade to an efficient electric stove top for your home. If your gas stove top is the only remaining gas product in your home, upgrading to an electric stove top will give you the opportunity to disconnect your gas supply and eliminate the supply charge – saving you over \$350 annually.

## What types of electric stove top can I install?

Under the Sustainable Household Scheme existing gas stove tops can be upgraded to an efficient electric ceramic or induction stove top. You can upgrade a combined gas stove top/oven to a combined electric stove top/oven. Range hoods are not included.

### Ceramic stove tops

Ceramic stove tops use coiled metal elements that sit under a smooth top made from tempered ceramic glass. The coils heat the ceramic glass surface which warms the pan. Features and benefits of ceramic stove tops include:

- They have a smooth, flat surface that makes them easier to clean.
- Safety features such as pause and lock buttons makes ceramic stove tops much safer, especially around children.
- Some models will turn the heat off when there is a spill, or an empty pot is sitting on a cooking area to reduce burn risk and increase safety.

### Induction stove tops

Induction stove tops use electromagnetic coils beneath a ceramic glass surface and transfer energy directly into metal cookware. The cookware itself becomes hot, not the stove top, resulting in excellent efficiency and safety.

Features and benefits of induction stove tops include:

- Excellent energy efficiency, as over 90% of energy is transferred as heat to the cookware, in comparison to about 50% for gas.
- Cooking is incredibly fast and will bring a large pot of water to the boil faster than the best gas stove tops due to their direct method of heating.
- They are very safe. It is impossible to accidentally leave your induction stove top switched on after you've removed the cookware.
- They have a smooth, flat surface that makes them easy to clean.

Induction stove tops do require certain types of cookware to work with the electromagnetic fields. There is a wide range of induction ready cookware available to purchase, or you can test your existing cookware with a magnet to see if it will work with induction. If the magnet sticks to the base of the pan, it should work on an induction stove top.

## Power supply considerations

Electric stove tops simply drop into an appropriately sized hole in your kitchen benchtop. There may be different installation requirements than a gas stove top and your electrician will ensure the stove top is installed in accordance with Australian Standards. Electric stove tops need a dedicated electrical circuit rated to the power requirements of that stove top, which can be up to 40 amps for some induction stove tops. This may be a significant amount of power for homes connected to single phase and could require electricity connection upgrades. Your installer will be able to inform you on any of these requirements. Any installation costs can be included as part of your Sustainable Household Scheme loan.

## How to apply for a loan under the Sustainable Household Scheme

Firstly, check you are eligible to participate by reviewing the [Scheme Guidelines](#). It's also a good idea to review the Scheme [terms and conditions](#). If you've decided an electric stove top is right for you, follow these easy steps to apply for your zero-interest loan:

- Get your quotes from suppliers accredited with our loans provider, Brighte. Information about accredited suppliers can be found on Brighte's [website](#). We suggest seeking more than one quote.
- Select your preferred quote and your chosen supplier will initiate the loan process with Brighte.

### Some important things to note

- You can bundle products from the list of eligible products available under the Scheme, with a maximum of \$15,000 loan available to each household.
- There is no product list for electric stove tops, however installations need to meet Australian standards.
- Removal of a gas stove top may require both an ACT licenced plumber/gas fitter and electrician.
- Installation fees can be included as part of your loan.
- If your stove top is your last remaining gas appliance you will be able to disconnect your gas supply, either through plugging the line or completely decommissioning the meter. The cost for residential gas network disconnection through ActewAGL is \$136.90 (as of September 2021) and can be included under the loan. Doing this will also save you about \$350 annually as you will no longer need to pay a gas connection charge, so disconnecting is recommended if you will no longer have any gas appliances.
- To be eligible for the loan you must be upgrading from an existing gas stove top to an electric ceramic or induction stove top.
- New builds are not eligible for a loan to install a stove top.

### Need some free advice?

Contact the Actsmart team for general and free energy advice on 1300 141 777 or email [actsmartadvice@act.gov.au](mailto:actsmartadvice@act.gov.au).



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