

RANGEmaster

ENERGY
EFFICIENCY
IN THE KITCHEN





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TOP 10 ENERGY-SAVING TIPS IN THE KITCHEN



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With the cost of energy on the rise, there's never been a better time to learn how to reduce your usage – and your bills! We have put together some handy tips to help you and your family cut your energy usage.



01



If you have a 90cm range cooker, use the right-hand tall, fanned oven as it uses less energy than the main multifunction oven.

05



Always choose the right size of pan for the amount of food you are cooking – if the pan is too small, it will be overcrowded and require more energy to cook the food properly. Alternatively, if it's too big you will be heating a bigger surface when you don't need to.

03

Similarly, when you've selected your pan, make sure you use the appropriate zone. If cooking on a gas hob, a bigger burner will waste energy and a pan that's too big for a burner will take longer to get to the right temperature.



When using water to boil pasta in a pan, make sure that you only use as much water as is needed to cover the amount of food you're cooking – one of the most common forms of energy wastage is boiling water you don't need.



05

It's the same with kettles – only boil the water you need. Overfilling the kettle wastes water, money and time.



Put a lid on your saucepan – water will boil faster and use less energy. Plus, you can reduce the power level when the liquid starts boiling – most food can be left to simmer instead.



07

Cook meals in batches to save time and energy. You can eat what you need on the day, then portion off the rest and freeze it for lunches or dinners.



Don't leave appliances on standby. Dishwashers, microwaves and washing machines all use electricity when left on standby – turn them off at the plug to save energy. You can also unplug small appliances, such as kettles and toasters, when not in use.

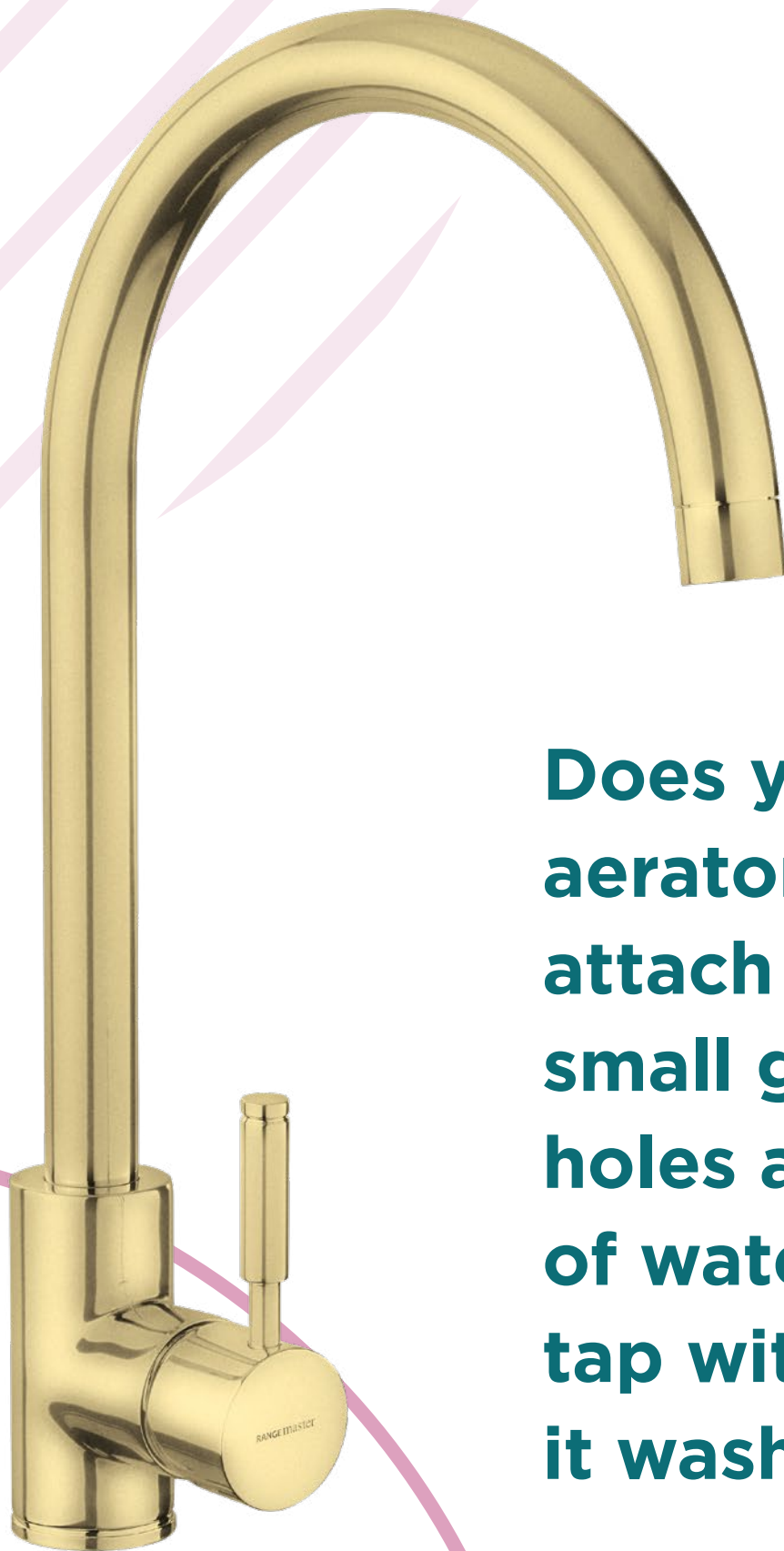


09

The eco mode on a dishwasher uses less water and energy per cycle, you can save even more by only running a wash when the dishwasher is full.



10



Does your kitchen tap have an aerator? If not, you can easily attach one to the spout. The small gadget has lots of tiny holes and reduces the amount of water that flows out of the tap without affecting how well it washes or rinses items.

DID YOU KNOW?

Our Nexus SE and esprit range cookers have an integrated slow cooker in the top right cavity. The 21-litre, 1kW oven is dedicated to slow cooking offering temperatures from 80°C to 140°C.



FROM 'A' TO 'G' – ENERGY LABELS HAVE CHANGED!

Old appliances typically use more energy than newer versions, so if you're looking to replace an older model, it's worth understanding the new energy ratings and labels introduced last year.

For fridges and freezers, dishwashers, wine cabinets, washing machines and washer dryers, the previous ratings ranged from A+++ (most efficient) to D (least efficient). There were so many appliances in the A+++ to A categories that it became harder to tell which dishwasher or fridge was more efficient. However, this was replaced with a new A to G scale.

Don't worry if you don't see any A- or B-rated models for a while – the new labels have been created to make room for exciting innovations and even more energy-efficient technologies.

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HOT TOPIC: WHY COOK WITH INDUCTION?



Induction hobs are increasingly popular thanks to the minimal energy they use and the safety benefits they offer. The technology works by heating the pan rather than the surface with a magnetic field between the induction element and the base of compatible cookware placed on top.

It is a safer option for all members of a household as there aren't any heating elements or flames that might cause tea towels to catch on fire, or risk burning little hands. As well as being energy efficient, induction can also deliver a very high heat to rapidly boil water, yet it can be gentle enough to melt chocolate directly in the pan without a bain-marie. Plus, the flat glass surface makes it much easier and safer to wipe clean spills – during and after cooking – than gas or ceramic hobs.

Adaptable and powerful, the next-generation induction system from Rangemaster has everything that we love about this safe, efficient way of cooking. Ideal for all types of cooks and kitchens, our range cookers with the next-gen hobs also feature a bridging function that allows two cooking zones to be combined





into one large surface area for bigger pots, pans and fish kettles.

Importance of zones

On our Elise range cooker, for instance, the two left-hand zones can be bridged together using the two control dials – simply turn both to power level nine then hold them together to activate the bridge zone symbol, which looks similar to a lowercase ‘n’. You then turn the left control dial down to the level you want to cook at.

To ensure excellent cooking performance, it’s important to use the right size pan for the zone but it’s vital to have the correct type of pan. The base must be completely flat all the way across, including the middle, so avoid ones with any raised spots or circles, more than one visible material or an indentation in the centre.

Battle of the fuels: Induction vs gas

If you have ever debated whether to choose a range cooker with an induction or gas hob, you might have wondered which uses more energy. Using our carrot and lentil soup recipe as an example, we compared the energy usage of our Elise 110cm range cooker in induction and gas.



The next-generation induction hob on the Elise has five zones (three 1.85kW and two 1.15kW) while the gas hob on the dual fuel version has six burners (two 4kW wok burners, two 1.7kW, one 3kW and one 1kW auxiliary burner).

The recipe requires a total cooking time of 20 minutes, on the induction hob the usage is approximately 37kWh (on zone four - 1.85kW) and the gas is 60kWh (burner four - 3kW). This is calculated by multiplying the wattage of the zone by the total number of minutes the hob will be used. In this example, the induction hob uses almost half as much energy as gas. However, it's worth considering that the national average unit rates for electricity are higher than gas, 34p per kWh and 10.3p per kWh respectively (at time of writing).



TOP 3

INDUCTION TIPS

1

Pots and pans should have thick, completely flat bases without any raised dots. Unsure your pan is induction friendly? Grab a magnet and see if it sticks to the base – if it does, the pan will work on an induction hob.

TOP 3

INDUCTION TIPS

2

You can check the performance of your pans using a 1.85kW zone on your hob. Fill an unlidded pan with 500ml of room temperature water and turn the zone power to level 9. The water should boil within three-and-a-half minutes. Boiling times outside of this may suggest the pan construction isn't providing the best performance.

TOP 3

INDUCTION TIPS

3

Rangemaster's next-generation hobs have three helpful temperature settings, in addition to nine power levels. L1 will stay around 40°C – perfect for melting chocolate directly in the pan; L2 maintains a temperature of 70°C for hot holding/keeping food warm once cooked, such as curry or chilli; L3 is ideal for rapid boiling pasta and rice at 94°C.

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WARMING, ENERGY-EFFICIENT RECIPES



Energy prices are on everyone's minds, so we wanted to share some of our recipes that save time and energy in the kitchen by cooking on a hob, instead of heating up an oven.

Top tip: An induction hob uses energy more efficiently than a gas or ceramic hob. This is because no energy is wasted, heat is only generated when a pan is placed within a zone and it is transferred directly to the pan. Induction hobs also offer speedier cooking times and they are incredibly responsive. Plus, our models are equipped with useful functions, such as dedicated settings and automatic switch-off, and specialist features, including griddles, to make cooking easier.

CARROT AND LENTIL SOUP

26

<https://www.rangemaster.co.uk/cooking/recipes/mains/carrot-and-lentil-soup>

Hob | Vegetarian

A fantastic versatile soup that is so quick to prepare – no chopping needed, just a grater and a saucepan. Brilliant for using store cupboard ingredients and for a last-minute healthy lunch that can be on the table in 20 minutes.

Method

1. In a large saucepan dry-fry the cumin seeds and chilli flakes
2. Add all of the remaining ingredients, bring to the boil then simmer for 15 minutes
3. Blitz with a stick blender or in a food processor

Ingredients

1 teaspoon cumin seeds

1/2 teaspoon dried chilli flakes

600g grated carrots
(around 6 medium carrots,
no need to peel)

140g split red lentils – rinsed well

1 litre veg stock

125ml milk – any kind e.g. whole,
skimmed, almond, soy

1 tablespoon olive oil



CHICKEN FAJITAS

27

<https://www.rangemaster.co.uk/cooking/recipes/mains/chicken-fajitas>

Hob

A family favourite! Warm up the tortillas in a dry frying pan and keep them warm wrapped in foil.

Serves

4

Ingredients

Glug of rapeseed oil

1 red pepper cut into strips

1 red onion sliced thinly

1 chicken breast cut into strips

2 teaspoons smoked paprika

1/2 teaspoon ground cumin

A teaspoon of finely diced red chilli (optional, leave out if you don't like it hot)

Half a lime, juiced

Pack of small tortillas

Method

1. Mix all the ingredients together in a bowl and then cover and refrigerate for at least an hour but if you have time up to 24 hours
2. Take a large non-stick frying pan and put on a high heat
3. Add the fajita mixture to the pan and cook stirring occasionally. It will take around 5 to 6 minutes for the chicken to be cooked through. Remove a piece from the pan and cut it in half to check that it is cooked thoroughly. Once cooked remove from the heat
4. Place one or two small frying pans on a high heat and dry fry the tortillas one at a time in the pan. Covering them over with foil on a plate will help keep them warm while the remainder are cooked
5. Serve warm straight from the pan with all your favourite accompaniments!



SHAKSHUKA

28

<https://www.rangemaster.co.uk/cooking/recipes/vegetarian/shakshuka>

Hob | Vegetarian

A simple and delicious Shakshuka recipe, perfect for a weekend brunch.

Serves

2

Ingredients

1 tbsp olive oil or a few sprays of oil alternative

2 red onions, chopped

1 red chilli, deseeded and finely chopped

2 garlic clove, sliced

Small bunch coriander stalks and leaves chopped separately

2 cans cherry tomatoes

1 tsp caster sugar

4 eggs

Method

1. Heat the oil in a frying pan that has a lid, soften the onions, chilli, garlic and coriander stalks for 5 mins.
2. Stir in the tomatoes and sugar, then simmer for 8-10 mins until thick.
3. Make 4 small wells in the sauce, then crack an egg into each one. Put a lid on the pan, then cook over a low heat for 6-8 mins, until the eggs are done to your liking.
4. Scatter with the coriander leaves and serve with crusty bread or pitta bread for a lighter alternative.



PROSCIUTTO-WRAPPED ASPARAGUS

29

<https://www.rangemaster.co.uk/cooking/recipes/starters/prosciutto-wrapped-asparagus>

Hob

This tasty appetiser only has three ingredients, making it quick and easy to prepare.

Serves

4

Ingredients

6 ounces sliced prosciutto, halved horizontally

1 pound asparagus, trimmed

1 tablespoon olive oil

Method

1. Working one at a time, wrap halved prosciutto slices on each asparagus spear at an angle, covering the entire length of the spear. Repeat with remaining prosciutto and asparagus.
2. Heat olive oil in a large skillet over medium high heat. Add asparagus and cook until prosciutto is crisp and asparagus is tender, about 2-3 minutes.
3. Serve immediately.



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COOKING ON GAS?
GET READY FOR
HYDROGEN!



Dual fuel range cookers using electricity and gas are energy-efficient appliances. Their larger capacity, multiple ovens make it possible to cook or bake as much as possible in one go, while using less energy. Perfect.

That's right, these innovative appliances also offer the best of both worlds when you're cooking. After all, each fuel type is better suited for different parts of the cooker, providing greater flexibility and control. Gas hobs, in particular, are more responsive than electric ceramic hobs, providing instant, controllable heat perfect for even the most complex cooking processes.

But wait – they still use gas. And fossil fuels (including gas) used for heating and cooking contribute around **30% of the UK's carbon emissions**. Now, you may be aware that a UK government target of net zero carbon emissions has been set for 2050. That's 0% carbon emissions. So, what does this mean for gas-powered cooking appliances? Is this the end of cooking as we know it?

Don't panic. There is a simple solution to the gas dilemma: Hydrogen.





Hydrogen has already been identified as a low-carbon alternative to natural gas in the home heating market – and now the BSI has certified that all Rangemaster dual fuel range cookers are already compatible and can benefit from this green fuel.

The concept of using hydrogen in the kitchen is further supported in a report by the Heating & Hot Water Industry Council (HHIC), in a section headed 'Hydrogen-Ready Domestic Cooking Appliances'. This stipulated: "A gas cooker of any type (Free-standing or Built-In cooking appliance) that "out of the box" is ready to be connected to the Natural Gas Network and, following a conversion and re-commissioning process in situ, can then operate effectively, safely and efficiently using hydrogen."

As a result, you will start to see more and more home appliances labelled as 'Hydrogen ready'. This indicates products are able to run on up to a 20% hydrogen blend, although initially configured to run on natural gas. These appliances then may require a minimum number of components to be changed at the point of switchover but will have been specifically developed to help with this process. However, Rangemaster's dual fuel range



cookers are already compatible and can just connect to the supply.

Because hydrogen is a gas, it has the potential to be distributed using the existing network, which 85% of UK homes are already connected to. Indeed, earlier this year, Energy Networks Association (ENA) published a plan outlining how that blending 20% hydrogen into the gas grid will reduce carbon emissions by the equivalent of 2.5 million cars a year.

This is clearly fantastic news when it comes to futureproofing our kitchens; we can still enjoy the many benefits dual-fuel range cookers have to offer, but with the added reassurance we're doing our bit for the environment. So, all Rangemaster dual fuel range cookers can still be enjoyed by amateur and professional cooks alike, while complying with UK Government guidelines. When running from a 20% hydrogen blend, our products will still boast a quick response and precise level of heat when the control knobs are adjusted.

Thanks to their compatibility with hydrogen-blend, dual fuel range cookers will continue to offer the best of both worlds as part of a sustainable, net zero future.



DID YOU KNOW?

In 2025, the first UK village will swap from natural gas to hydrogen to show how the UK can be more environmentally friendly when heating homes and cooking with gas. This builds on the progress of 'H2/20% Hydrogen Ready' and takes the industry one step closer to the UK Government's target of 0% carbon emissions.