Aganomics

The guide to AGA home economics

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It's a changing world

Existing owners love their AGAs and prospective owners fall in love with them as much today as they ever did, but naturally they want to know how much their AGA will cost them to run and whether it suits their lifestyle. With rising energy costs and changing lifestyles, these are perfectly reasonable questions.

We're sensitive to this, and have worked hard over many years to address concerns about running costs, and continue to do so. The truth about today's modern AGA is that it can play its part in managing the household budget. In fact, thousands of customers have already discovered that their AGA costs them no more to run than a similar conventional cooker home.

And we've kept up with modern lifestyles too. Almost 60% of all AGAs sold today are programmable – meaning that they sleep when you sleep, holiday when you holiday, and put their feet up while you're at work - saving up to 25% on running costs.

AGA's iconic design and proud British heritage make the brand instantly recognisable. But just like today's lifestyles, AGA heat-storage cookers are not one-size-fits-all. What is guaranteed from every AGA model is the incomparable excellence of cast-iron, radiant heat cooking. Each model looks as good and cooks as good as the next. This is as important today as it was when the first AGA was invented in 1922.

What May surprise you about AGA

AGA offers ever more flexibility and choice

Many people are surprised at the variety of choice AGA offers, from fuel type to functionality to programmability. An AGA can be a great companion for even the most environmentally conscious lifestyles. There are AGAs powered by electricity, diesel, natural or propane gas, or oil. There are AGAs which store cheap off-peak electricity to use at peak times. Programmable AGAs, (featuring AIMS - the AGA Intelligent Management System) can be turned up and down in the day and slumber at night. Also from AGA Rangemaster, the company's Rayburn cookers run on wood, coal, peat, natural or propane gas or commercial kerosene – depending on the model chosen. The Rayburn also offers the capability to heat water and provide central heating to the home.

There is even an AGA ready that can be quickly converted to run on bio-fuels, if and when these fuels become commercially available.

AGA is dedicated to raising home energy efficiency and lowering running costs

AGAs are famed for the ongoing gentle background warmth they provide. This warmth is why so many people have grown up loving their AGA like a member of the family. But the benefit of this warmth goes far beyond cosiness. If used in a considered way, an AGA home can operate as economically as a standard domestic home, and needn't cost any more to run.

While individual preferences and lifestyles vary, the vast majority of AGA owners say that they don't need radiators in the kitchen (and elsewhere in many cases) when there's an operating AGA in the house. The programmable AGA radiates up to 1.5kW per hour into a kitchen when at full

cooking temperature, and around 1kW per hour when in slumber mode. This is comparable to a standard wet system household radiator which typically radiates between 1 and 1.5kW per hour into a room. The consistent warmth of the AGA is considered more effective than on/off wet radiator systems in keeping a space warm.

Warming the kitchen is only the beginning. There are also a number of ways in which owners can potentially link the AGA's warmth into natural air flows in the home. For instance, some owners have inventively linked their AGA up to a heat recovery system to make use of the residual heat. This means the AGA has scope to be central to new home energy management systems.

Additionally, AGAs are inherently multi-functional, which also saves energy costs from other appliances. For example, an AGA toasts bread in a distinctively delicious way, eliminating the need for a toaster. In addition to its superb cooking abilities, the AGA is useful when it comes to pressing small items such as tea towels and napkins, air drying clothes, making grilled sandwiches and of course boiling the kettle. Some imaginative owners have taken this energy further in a myriad of ways, from sprouting seeds to incubating newborn pets and farm animals.

Did you know? The Aga is a natural heat storage device. This, in combination with its ability to collect off-peak electricity for later use creates an even deeper potential for savings and a more environmentally friendly way of life, and makes the Aga the biggest domestic battery one can buy!

Did you know? Over 30 years, an Aga owner can save as much as £5000 by not having to buy or replace electric appliances such as kettles, toasters and tumble driers.

AGA is 100% dedicated to a more sustainable future

When it comes to R&D for now and the future, absolutely everything that the AGA R&D team undertakes is about seeking to improve energy efficiency, and environmental sensitivity. We're working enthusiastically with academic research institutions to explore future technologies, believing that developments in micro-generated electricity need a greater natural link in the home. The AGA's ability to store energy is a distinctive and valuable feature which has led the company to working enthusiastically with solar, wind, heat pump and boiler companies to investigate how to make their products even more economic in the home.

When it comes to next generation AGAs, models in development are expected to break new boundaries in marrying the classic AGA attributes with groundbreaking flexibility and technological innovation.

Every AGA is made from 70% recycled materials such as gearboxes, guttering, old machinery parts, drain covers and much more. Every AGA is recyclable. That's just plain good for the environment. The lifespan of an AGA is at least 3 times longer than a conventional cooker, with countless models passed down from one generation to the next. This is a refreshing antidote to an increasingly 'throwaway' consumer marketplace.

AGA is a proudly British company. Manufacturing is done entirely here in the UK, which helps minimise its carbon footprint.

Did you know? The 30-amp Aga charges up overnight with off-peak electricity, which itself is around half the cost of daytime electricity, and can mean savings of up to 40% against other fuel types.

What won't surprise you – AGA is a kitchen classic

Ask any AGA owner and they will say they couldn't imagine life without it. It has its own unique styling, exceptional cooking performance and exudes warmth which makes it the heart of the home. For hundreds of years, cast iron has been known to accumulate heat and then release it steadily and consistently. Today's AGA still does exactly that, but it has evolved to meet the demands of responsible contemporary living. For the next generation, AGA continues to be a smart choice, adding value to the home and quality to life.

The myths and the facts

Myth: An Aga is expensive to run
Fact: An Aga home need not cost any more to run than a conventional cooker home.
The Aga radiates up to 1½ kilowatts per hour (kWh) into a kitchen when up to full cooking temperature and up to 1 kW per hour in slumber mode. A medium sized household radiator in a wet system emits between 1 and 1½ kW per hour into a room. Larger radiators may emit over 2 kW per hour into a room.

In most kitchens with an Aga running, radiators are not normally needed and will turn themselves off if they have thermostatic valves fitted – even in the depths of winter. The Aga therefore provides a straight energy saving on central heating costs. The gentle warmth of the Aga provides an efficient way of heating a room by using the useful energy from the Aga - similar to the warmth provided by underfloor heating systems.

Of course, the better insulated a home and the more that draughts are reduced in the home, the more the Aga reduces the dependence on radiators to keep a house warm (not just in the kitchen but often in adjacent rooms too) – acting as a cooking and heating heart to the home. It's amazing how far through the home an Aga's background warmth can spread in a well insulated home.

- The 2-oven 13-amp Aga uses weekly around 220 kilowatts (kW) of electricity;
- The 3-oven 13-amp Aga, 240 kW;
- The 4-oven 13-amp Aga, 270 kW.
- This can typically be reduced further by using the AIMS feature, to 190 and 200 kW respectively.

An Aga home need not cost any more to run or use any more energy than a standard home with radiators or underfloor heating and using other everyday kitchen energy consuming products.

Myth: An Aga is on all the time
Fact: Almost 60% of Agas sold today are programmable.
The Aga intelligent management system (AIMS) enables you to programme your Aga to suit your lifestyle. So whether you're out at work all day, only home at the weekend, or you have a houseful of kids, dogs and friends all day, the programmable Aga will bring your Aga up to temperature for precisely when you need it, and slumber or switch off altogether when you don't.

The table below shows the typical energy usage of a conventional cooker home with a family lifestyle similar to many AGA owners, based on case studies. Of course, lifestyles and appliance usage patterns vary, so energy usage could be higher or lower

Kitchen appliance	**Energy usage per week (kW)**
Gas fired wet system radiators or electric underfloor heating (equivalent to 2 radiators running at least 10 hours a day or operating an underfloor heating system in normal usage)	140 – 280
Kitchen appliances such as a standard cooker, tumble dryer, electric kettle, extractor hood, microwave, toaster, breadmaker, sandwich maker, etc.	54 – 77
Total energy usage per week	**194 – 357 kW**

Assuming gas heating and electric appliances in the above example and using gas and electricity prices at August 2008 tariffs, running costs for this home would run from around £12.00 up to about £20.00. With electric underfloor heating instead of radiators, this could be more. The economics of an AGA Home show that it does not need to use more energy than the standard domestic home or cost more to run – depending on your lifestyle.

The multi-functional nature of the AGA operating at the heart of the home, meets contemporary needs. A further advantage of the AGA is its natural relationship as an energy storage product to micro-generation and renewable energy supply and to off-peak electricity. This makes the AGA an exciting product for the future as well as an icon with a remarkable history.

Did you know? An Aga never needs an extractor hood, as cooking smells are gently vented straight outside from the oven with very little loss of heat or energy use. A conventional extractor hood, on the other hand, not only uses as much as 5kW of electricity per week, it can extract up to 160 litres of air from the kitchen per minute! That's an awful lot of hot air disappearing outside – air that's been heated by your central heating when the weather is cooler and potentially a waste of energy.

Running costs by product

Running costs vary based on fuel type, but there's an AGA for everyone in the line up. With the AGA's natural ability to offset energy usage elsewhere in the home, whatever your energy costs are, the AGA can still help with the economy drive in every home.

The table below shows energy consumption and running costs based for the main fuel types. Of course, energy costs are market priced, and go up and down, so the actual running costs per week will change. Energy costs are published on all energy company's websites and updated regularly.

AGA type		Weekly energy consumption	Cost per unit Pence	Cost per week £
2 ovens				
Electric	13 amp	190 kW*	10.55	20.04
	30 amp	227 kW	4.39	9.96
Gas (Natural)		340 kW**	2.61	8.87
Oil		40 litres	37.15	14.86
3 ovens				
Electric:	13 amp	190 kW*	10.55	20.04
Gas (Natural)		340 kW**	2.61	8.87
Oil		40 litres	37.15	14.86
4 ovens				
Electric	13 amp	200 kW*	10.55	21.10
	30 amp	270 kW	4.39	11.85
Gas (Natural)		422 kW	2.61	11.01
Oil		51 litres	37.15	18.95

** Includes AIMS reduction of 25%*
*** Includes AIMS reduction of 20%*
Typical, actual savings using AIMS is dependent on the program set by the user in addition total units used with or without AIMS is dependent on the cooking demands of the household.

Prices based on EON Standard (13Amp) and N Power Dual Fuel (30Amp & Gas) package for the Midlands -April 2009
Sources: ***Electricity and Gas energy costs – www.comparethemarket.com***
Oil costs (April 2009) – www.bolierjuice.com

Think energy! Ways to get the most out of your Aga

- √ Always close the lids when not using the hotplates
- √ Use the ovens for as much of your cooking as possible
- √ Use the warmth of the Aga overnight to dry damp clothes
- √ Use the warmth of the simmering plate lid to save on ironing
- √ Use Aga cookware - its designed to ensure performance is optimised