



# THE HEAT IS ON

**N**ow that autumn's gentle mists are a long-distant memory, many of us will have turned the thermostat up a notch or two to blunt the sharp bite of winter. In the current era of rapidly rising energy prices and no apparent escape from the clutch of the power companies, you'd be forgiven for dreaming of ways to escape the seemingly relentless drain that fossil-fuelled heating creates on your own and the world's resources. But what are your options? And what can you afford as the recession maintains its stranglehold?

While some of us might dream of solar panels, ground source heat pumps and the other exotica at the top of the green-energy pyramid, there are numerous simple, practical steps that all but the most reluctant can take, at little cost and with the most basic of skills: when did you last need a tradesperson to dig out a woolly jumper for you?

### Where's me jumper?

Let's start with exactly that: wandering around in just your favourite t-shirt while your boiler does an impersonation of Puffing Billy is certainly not the way to lower bills or fewer chills. So be realistic and layer up. And, while you're about it, turn the thermostat down a degree or two. Does your hot water really need to be scalding? And does your living room really need to be Sahara-hot? Do you know that turning down your room thermostat by just one degree could save around £55 and 230 kg of carbon dioxide a year ([www.energysavingtrust.org.uk](http://www.energysavingtrust.org.uk))?

News for those who have used the old trick of putting silver foil behind radiators: it has been superseded by bespoke aluminium-foil heat-reflectors, available at your local DIY store. These slot in between the radiator and wall and send the heat back into the room rather than letting it pass out through the wall and into space. A nice little shelf above your radiator will encourage hot air to circulate the room,



rather than rush straight to the ceiling. Closing your curtains also reduces heat loss – unless they are lengthy items that fall over the radiator, that is. Shortening those lovely, long drapes, and strategically placing a shelf beneath them ensures that the heat doesn't escape, and is an easy step to warm a chilly front room. When you've drawn those re-modelled curtains and enjoyed the view, do remember that planting trees in the northern aspect of your garden will buffer your house against the bitter cold of northerly gales.

Decent insulation and draught exclusion will definitely make a difference to your bills and add to the cosy feel of your home. [www.insulationgrants.info](http://www.insulationgrants.info) will tell you if you qualify for a grant towards loft or cavity-wall insulation – and for how much. Between them these measures can save up to 1270 kg of carbon dioxide emissions per annum. But, even if you can't go the whole hog for loft insulation (and remember you don't even need to own your own home – tenants are eligible too), draught exclusion is simple enough. Special foam-padded tape stuck to the frames of doors and windows will seal them against the breeze, while still allowing you to open them wide come spring. It's less than an afternoon's work to prevent draughts blowing where they don't belong. As a final barrier against those Dickensian gusts, invest in a draught excluder brush strip that screws to the bottom of a door, or go the traditional route with an embroidered "snake" cushion; this may come in handy for resolving domestic disagreements too!

And there are still more simple steps to conserving heat and reducing your bills: filling the gaps

between your floorboards, with either specialist tape or sealants, will reduce the draught factor further. If you like your bed warm you don't need an electric blanket on all night: get a hot water bottle, a loving partner, a dog or a combination of all three for a guaranteed toasty lie-in – although you will be lucky to find all these in a DIY store!

**F**or those with an itch to break out the toolkit there are numerous possibilities for making your home warmer and less environmentally damaging. If you don't already have them fitted, thermostatic radiator valves (TRVs) allow you to control the temperature in individual rooms. You need to be competent with basic plumbing to fit these, as your central heating system must be drained and refilled. Their ability to add temperature control to different areas of your house and reduce energy usage in the process is one reason why they are now a required fitment on new systems. Double glazing, if you haven't already got it, can be fitted by most competent DIY-ers; just remember that you need to get it signed off by building control so check the regulations carefully first. A top tip is to apply these measures in the summer; if you wait until winter to change windows or radiator valves you might just be ever so slightly unpopular with your housemates and put yourself under sustained pressure to get the job done promptly. This is a lesson you will only need to learn once!

### Burn baby, burn

Of course all this intensive green-minded energy and penny-saving labour is great but, as most would agree, the one thing that makes a house feel really warm is a fire – a real fire, that is, not one of the twirly, squeaking, electrically powered ones with the fake coals so loved in the 1970s. The real thing just can't be substituted, but can it be green, practical and economical too? Well, the answer, of course, is yes...and no.

Starting with a traditional open fire, your first problem will be that, in the city at least, you will

only be able to burn authorised smokeless fuel. See [smokecontrol.defra.gov.uk](http://smokecontrol.defra.gov.uk) to find out how to make sure the fuel you choose fits the criteria.

You won't be surprised to discover that your fire will have a well-developed appetite for fuel: the more you like it the more you'll burn, naturally, and the more it will cost. Add to this the fact that fires dispense much of their heat into the atmosphere via the chimney, and the warm glow might not appear quite so jolly. The alternative possibilities are actually quite varied: from a wood burner that looks like a fire in a metal box with a glass window, but has the miraculous power to make your house super-toasty, through a stove/boiler combination all the way to a full biomass hopper-fed system that closely replicates the convenience of conventional gas-boiler heating and hot-water systems. The cost, convenience and green credentials as well as your individual situation are all major factors in a decision to invest in changing your approach.

Starting with the simplest: a wood-burning room heater. Depending on its design, and provided it is an 'exempt appliance' (check the defra site to confirm this), you can burn a variety of materials in it. Don't think you can chuck in any old wood though. For example, there are strict regulations about wood that has been treated, and each device has specified fuels that are allowed. The good news about a wood burner is that it puts out more heat than you can imagine. Compared to a real fire the effect is astonishing, and its ability to ignite logs quickly and efficiently will make maintaining the fire a simple affair.

The main considerations with this system are installation and fuel costs, which can be pretty extensive. Depending on your house/chimney, and all the other variables, you could be looking at a few hundred to a few thousand pounds. The burner itself might be around the thousand pound mark. If you buy ready-to-burn wood to fuel your stove it will be a long time, almost certainly more than a decade, before you are near break-even

Once you've excluded draughts, insulated walls and roofs, and pulled on a extra jumper, Simon Lock believes that installing eco-heating could be the next step in reducing household energy bills.



compared with carrying on with your old system. Ultimately, of course, nature's decreasing resources means that we will all have to move towards renewable fuels and, in that sense, your investment now is for the longer term.

Some of you might decide to go to the next stage and combine the heating and hot water potential of a wood burner, using one of the many stoves that can act as a boiler too. Reader Rachelle went down this route a decade ago, considering it the green option in comparison to a conventional system. She gathers wood locally, often in return for clearing orchards and the like for busy farmers, or she salvages wood from demolition sites (providing the wood is suitable for burning, of course). Rachelle describes her burner as "a lifestyle choice" and says that keen firemakers will need to be patient while the house warms up – about an hour – physically fit to deal with the lumber side of things and prepared for dust, and still more dust. "On the positive side," says Rachelle, "the stove is a magnet for all my guests! It's a romantic feature that brings smiles to the faces of visitors both young and old."

**A**nd there is no doubt that this form of keeping our homes warm feels more closely

connected to nature. One way to save on fuel costs is to buy a Scavenger Licence from the Forestry Commission, for £120pa, which allows you to take wood from the ground from the site specified on your licence or, in some cases, wood that is cut and stacked for you. Check out [www.forestry.gov.uk](http://www.forestry.gov.uk). And for those of you who aren't in a position to gather your own wood, ethically sourced wood can be delivered to your home. Ensure you check the credentials of your local companies before placing an order, and build this into your costings when doing your initial sums.

So, now let's turn to the mother of multi-fuel/wood-burning technology: the wood-pellet fired boiler. If you have the budget,

this is probably the most state-of-the-art device that you can possibly consider. The development of this technology is pushed towards its current limit by using graded wood pellets, of a specific composition and water content, fed via hoppers into the boiler itself. This makes the process as close to an automated, traditional boiler as it is possible to get at present. In fact some of these boilers run at more than 90% efficiency, which means that they compare well with a modern gas combi-boiler. Some models even feature an automated cleaning system. Wouldn't it be great if the whole house had one of those? Of course, as ever, there is the price. The cost of going very green here can range from a few thousand to upwards of £15,000. You might be forgiven for thinking you could buy a lot of gas with that amount of money, but, we know gas will eventually run out, and gas prices have already risen by 30% in the past five years ([www.parliament.co.uk](http://www.parliament.co.uk)). There is no reason to expect a slowdown in that rate of increase either. Looked at in this light, the financial outlay for one of these boilers seems more reasonable. In its desire to reduce the dependence of the nation on fossil fuels for heat, the government has announced a "Renewable Heat Incentive" to encourage just the sort of actions we are considering. The latest details are given at [www.decc.gov.uk](http://www.decc.gov.uk). It seems that going green might not be as expensive as you may have thought.



So, what should the green-minded, energy-conscious consumer, who wants to keep warm this winter, do? There are, of course, plenty of issues to consider – not the least being the cash available. The set-up in your home may be unsuitable for a wood-burner, you will have to be prepared to collect wood yourself, or pay for it to be delivered. You'll need a place to store your wood, a keen interest in dusting and the patience to wait for your heat. Whatever our individual situation, we can all, at least, use some of the house-warming tips to ensure we're keeping the heat inside, where it belongs. And, in return, we'll feel an even warmer glow within – from taking steps which, literally, don't cost the Earth.