

# Shocked by the power

As energy bills soar, **Caroline Scott** asks a meter man how to slash costs (step one: ban halogen lights)

**M**y home visit with Giles Read, a senior energy-efficiency adviser with the Energy Saving Trust (EST), does not begin well. "It's a thermal nightmare!" he yelps, as soon as he crosses the threshold. "Have you just moved in?" I am stung by this. We've been here nearly 10 years, and in that time have made many improvements, including state-of-the-art aluminium folding doors with A-rated low-E glass, costing almost £7,000.

"You lose a huge amount of heat through windows," Read says. Then, eyes glinting, he scans the kitchen for further eco-transgressions. In the time it takes me to make coffee ("Kettles use vast amounts of electricity") he has spotted my mixer tap — "Very fancy"; "No, it's from Wickes" — and found it wanting.

It takes him minutes to fit a tiny restrictor and aerator to all my taps and replace the shower heads, instantly reducing water consumption by 30%. I need him to work the same magic on my energy bills. All the big companies (British Gas, E.ON, Scottish Power and Npower) announced price increases this month of 9%; according to the EST, this comes on top of a rise, in real terms, of 56% in gas prices and 35% in electricity prices since 2005. The only solution for the hard-pressed homeowner in these recessionary times is to use less power.

I live in a leaky 1930s semi in south-west London, where the windows are glazed with wonky pre-war glass. And I have four children, Felix, 17, Indie, 13, Rupert, 10, and Kit, 7, who run a range of energy-guzzling appliances, and to whom the concept of turning off a light is anathema. Even so, I didn't expect to see my direct debit for gas and electricity double, then treble, over the past two years, which is what has happened.

Read looks sympathetically at my single-glazed sitting-room windows, running with condensation. "These houses were built with solid walls, so there's no insulation. There's not much you can do about that, but there's no convection in this room. Putting the radiator under the window would help." Mine is behind the sofa, which is obviously bad. I mention that I lust after underfloor heating. "In this house?" Read says, scanning the open-plan kitchen



Paul Vicente

## Current affairs

**Tumble dryer** 3,800W, 38p an hour  
**Kettle** 3,500W, 35p an hour  
**Fan heater** 3,500W, 35p an hour  
**Washing machine** 2,000W, 20p an hour  
**Dishwasher** 1,400W, 14p an hour  
**Iron** 1,000W, 10p an hour  
**Games console** 185W, 1.85p an hour  
**Computer** 250W, 2.5p an hour  
**TV** 250W, 2.5p an hour



**20 x 50W halogen bulbs** 1,000W, 10p an hour

*The EST offers free home inspections in some areas; call 0800 512012. Compare suppliers at [energyhelpline.com](http://energyhelpline.com); buy LED bulbs at [simplyled.co.uk](http://simplyled.co.uk)*

(very, very bad). "It would cripple you." The boiler (condensing, seven years old) is adequate, but we use it ineffectively. "As you don't have a wall thermostat, you need to turn it up to maximum, then use your radiator thermostats to control the heat in each room individually."

Our gas consumption is not unreasonable — we wear jumpers and this year covered the back bedroom windows with a clear plastic film (3M Window Insulator Kit). Hideous, but it got a thumbs up from Read for its high cost/benefit ratio.

The biggest mystery is our colossal electricity consumption: 5,728 units over 12 months. I had identified Felix's room (and his games console in particular) as the root of all evil. Every morning, I lean over his motionless body and switch things off — iPod and phone chargers, television and speakers, laptop and Xbox. Read disagrees. "Computers and games consoles use far less energy than you think," he says, raising his eyes to the ceiling, where four halogen downlights glimmer in their sockets.

"One halogen bulb uses more energy per hour than leaving this television on standby all week." Oh dear. We count 24 downstairs, six in our bedroom and four in my office. There are four more in the bathroom, all regularly left on. Child number two has four spots and a desk light. Mercifully, children three and four are less conspicuous users. One can't reach the light switch, the other is too idle to bother finding it, gliding from bed to sofa in one smooth movement.

Read has brought an energy monitor that, terrifyingly, shows electricity consumption in pence per hour every time something is switched on. With nothing running but the fridge-freezer, we hum along at 2.5p an hour. The boys are thrilled that two Nintendo DS consoles increase this by just 0.4p. Phones plugged in to charge add 1.5p. Which brings us back to the halogens. We switch on four and the digital display swings upwards wildly. Read trots out a sickening calculation, thoughtfully out of the children's earshot. "You could run a Nintendo DS all afternoon for the same cost as switching on one halogen bulb for an hour. If you run all yours at once (that's 2,250 watts), you're looking at 22.5p per hour." Ouch.

The solution is to switch them all to 4W energy-saving LED bulbs. These are expensive (about £12 each), but the alternative — standard low-energy lights — is depressing. They take an age to light up and you can't see much when they do. Read suggests switching some halogens and removing others. My daughter, permanently occupied with either her Facebook status or her hair, is furious: "Why do we have to live in the dark?" she wails.

Read is adamant that we've got this all wrong. "The early energy-saving light bulbs were naff, they put everyone off," he says. "The new generation are much better." He promises to come back with a 25W spiral bulb (the equivalent of 250 watts in an old light — and the shape is crucial), "I guarantee it will last 50,000 hours and illuminate the kitchen."

As a parting shot, having switched off every light and unplugged every socket in the house, he wants me to observe the soothing sight of the electricity meter standing stock still. Except it isn't. We open the cupboard under the stairs and the wheel is spinning. Whirring off its axis like it's on speed. "What's your husband doing?" Read asks. "I've got the fan heater on," comes a muffled reply from the office. "Well, switch it off," Read barks. "It's the work of the devil, that is!"

✚ [energysavingtrust.org.uk](http://energysavingtrust.org.uk)

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**Caroline monitors energy usage, while efficiency adviser Giles gets to work**