

# Why electric is greener than you think

The expert's view: Jeff Howell, Sunday Telegraph

**B**y now, everyone involved in the building industry should have got the 'green' message. We all have to pull together to improve insulation and efficiency, and minimise waste.

Unfortunately, some within the environmental movement have been spreading the idea that using electricity for domestic space heating is wasteful. This is because only around 35 per cent of the fuel fed into a power station (coal, oil, gas or nuclear) emerges as electrical energy. This figure can be made to look bad when compared with - say - the alleged 85 per cent efficiency of a modern domestic gas boiler.

These figures are not as black-and-white as they might seem, however. Gas boilers need regular maintenance by qualified engineers, and spare parts can be expensive. They also have a limited life, which some experts estimate might be as little as five years.

Perhaps more significant is the fact that modern society needs a constant 24-hour supply of electricity, to power our lights, televisions, computers and other equipment, in homes, hospitals and offices. And since mains electricity cannot realistically be stored, some power stations have to be kept running at all times. Even when they are not generating electricity, the boilers are kept fired-up, and the alternators are in a state of 'spinning reserve'. Nuclear power stations in particular have to be kept ticking-over at all times, as it can take days to start them up and shut them down. This is why electricity companies offer cheap off-peak tariffs, and why using electricity for domestic space heating can be environmentally-friendly.

In most areas, the 'Economy 7' tariff currently works out at around 3p per 'unit' or kilowatt-hour (kWh), which compares favourably with natural gas, oil and LPG. What makes it more attractive than these other fuels, however, is the low installation costs and almost zero maintenance costs of the equipment. The average house can be fitted with Part L-compliant night-storage heaters for between one and two thousand



pounds, with a life-expectancy of 20 years or more, and negligible maintenance and servicing costs. So it is arguable that using off-peak electricity for heating is not only making beneficial use of a resource that would otherwise be going to waste, but also has less long-term environmental impact than other fuels.

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## Biography

Jeff Howell is a Chartered Builder, Chartered Surveyor and construction lecturer, who has been writing about the building industry since 1994. He is the author of the best-selling 'Sunday Telegraph Guide To Looking After Your Property', and editor of 'DIY & Home Maintenance for Dummies'. He currently writes the weekly 'On the Level' feature in The Sunday Telegraph.

