



# MORE POWER TO THE VOTERS?

**You might well think that politicians will be generating enough hot air during the election campaign to heat a small city. But whichever party finds itself in charge, one of the factors that will have influenced its supporters will have been its energy policies. Registered Gas Engineer takes the pre-polling pulse.**

**There's one** thing that all the mainstream parties agree: energy consumption and carbon emissions have to fall. But although by how much varies from party to party – and how they intend to achieve it – gas will still remain a major fuel for the future.

While improvements in insulation may well reduce the amount of gas used, the number of gas installations is unlikely to fall. However, the kind of work gas engineers will do may well change somewhat. What is likely to increase – perhaps substantially – is micro-generation.

## Feed-in tariffs

All the parties are keen to encourage the use of micro-generation plant and it is obvious that most of the mainstream political parties currently in opposition realise that changes to feed-in tariffs are at the heart of any increase in micro-generation. After all, few people will invest the extra money required to replace conventional boilers with micro-generators unless the income they get from supplying back to the grid is sufficient to give them a reasonable return on that investment. The government has gone through

a complex consultation over feed-in tariffs (FITs) and is set to introduce them from this April. The tariffs will vary according to the type of equipment generating the electricity. Labour say the tariffs are to be set through consideration of technology costs and electricity generation expectations at different scales, and are set to deliver an approximate rate of return of 5-8 per cent.

Of course, some technologies – wind generation, for example – lend themselves to farm-scale electricity production where the domestic consumption may be a relatively small proportion of that produced.

But for microCHP boilers in the home, the proportion of electricity fed back into the grid may be quite small. Under the Labour proposals, householders could sell back their surplus electricity at a guaranteed price of 3p per kilowatt hour exported, or they may opt out of the export tariff and sell their electricity on the open market.

Conservative proposals are somewhat different in that a householder would be paid for the total amount of electricity they generate but

then pay for the electricity they use.

The Conservatives' intention is that the tariffs and contracts will be long term – as much as 20 years – so that finance packages can be constructed that will cover a large part of the initial cost of the equipment. At the time of writing, though, they have not announced actual tariff levels.

The Liberal Democrats shadow secretary of state for energy and climate change is Simon Hughes MP, who says: "We have been campaigning for feed-in tariffs for many years now. But the scheme announced by the government lacks ambition. We would seek to set the feed-in tariff at a rate that would deliver a 10 per cent return on investment. We believe that this will triple the amount of micro-generation that could come online by 2020."

According to the LibDems, the UK is almost bottom in Europe on renewable energy. Many European countries already deliver more renewable energy from their FIT schemes than the UK is proposing to deliver over the next decade.

The Green Party is more specific. Their energy conservation spokesman



Andrew Cooper says: "We would ensure that FITs for renewable power are high enough to encourage capital financing of household renewables."

Scottish National Party energy and climate change spokesperson Mike Weir MP adds: "We have strongly supported the idea of a FIT that would be a major driver to the installation of small-scale renewable energy projects," he says. "However, we do not believe that the level being proposed in the UK is sufficient to give the market a sufficient boost. It is much lower than the very successful scheme in Germany. We would look to set the tariff at a level that would encourage development."

It would appear, therefore, that pretty much regardless of who you vote for, FITs are coming. The devil will be in the detail – and the actual tariff rates.

### **Reducing carbon emissions**

Micro-generation is only a small part of the energy policy equation. In spite of recent press articles debating the rate of global warming, there's no doubt that it does exist, and that it's caused by carbon emissions – and all the

major political parties have pledged to reduce emissions.

The Green Party, predictably, is perhaps the most ambitious. Andrew Cooper says: "The scientific evidence on climate change indicates the need for a 90 per cent reduction in emissions by 2030. These are the targets we would work to, rather than the plans of Labour and the other larger parties, who are supporting an 80 per cent reduction by 2050.

"We will have a comprehensive approach to reduce carbon emissions across all sectors, with no opt-outs for industries such as aviation. We would, of course, seek multilateral agreement on the reduction in emissions but we will not use this as an excuse for slowing up policies to reduce emissions in the UK.

"We need to recognise the need of poor countries to develop while emissions are reduced. To achieve this, we will seek policies which both contract the total amount of emissions over time but also enable the convergence of individual countries' per-capita emissions."

In practical terms, the Green Party would immediately initiate a scheme to provide free cavity wall and loft insulation for all households in the UK. "This scheme," they suggest, "would save millions of tonnes of emissions in a very short space of time, while creating thousands of green jobs. We would also provide householders with the means to install renewable energy to heat and power their homes and usher in a new age where people are not simply consumers of energy but generators and producers."

Perhaps the Green Party can afford to be ambitious because they are unlikely to win a majority of seats and form a government. But the fact remains that they do have a following and are dictating policy in some parts of the country, such as Kirklees Council in Yorkshire. If the general election were to result in a hung Parliament and the resulting power-sharing, then the Greens could well have a bigger influence.

The same argument could be applied to the LibDems. In fact, a power-sharing scenario could see them become the party of greatest influence, certainly in England. They want to set a target for 30 per cent of the UK's electricity to come from clean, non-carbon-emitting sources by 2020, rising to 100 per cent by 2050. They want a 40 per cent reduction in UK greenhouse gas emissions and a 30 per cent energy efficiency saving, relative to 1990 levels.

Their specifics include promoting

## **Householders could sell back their electricity at a guaranteed price of 3p per kilowatt hour exported or sell their electricity on the open market**

transitional technologies such as carbon capture and storage, the rejection of a new generation of nuclear power stations and, on the vehicle front, working to introduce mandatory UK/EU average vehicle emissions targets of 120g CO<sub>2</sub>/km by 2015, 95g/km by 2020, and zero carbon for all new cars by 2040.

In Scotland, the influence of the SNP is much more direct than at national level, where they currently have seven MPs. However, on their home turf they claim to have passed the world's strongest climate change legislation, with a target of reducing emissions by 42 per cent by 2020.

"In Scotland we have proposed and put into the Climate Change Scotland Act 2009 a series of initiatives to meet this target, expanding the use of renewable energy – both large scale and at micro level," says Mike Weir. "We are proposing to build a commercially viable renewable heat industry, to work with the oil and gas industry to transfer their skills to new markets, such as offshore renewables. We hope to see carbon capture and storage (CCS) develop in Scotland – initially at Longannet power station in Fife – and have consistently lobbied the UK national government to speed up its funding for CCS technology.

"We are also working to develop more sustainable transport with major investment in improving rail networks in Scotland and trials of electric and hydrogen vehicle technology."

The Conservatives have said that they will introduce a so-called Green Deal, where all householders can access money to undertake work that will improve energy efficiency in their homes. The plan is that there would be no up-front cost to the householder but the costs – less any grants available – will be repaid over 25 years via the regular electricity bill.

The aim is obviously to reduce carbon emissions and, while insulation of roofs and walls is likely to be the main thrust, the installation of more energy-efficient heating will presumably also qualify. ■