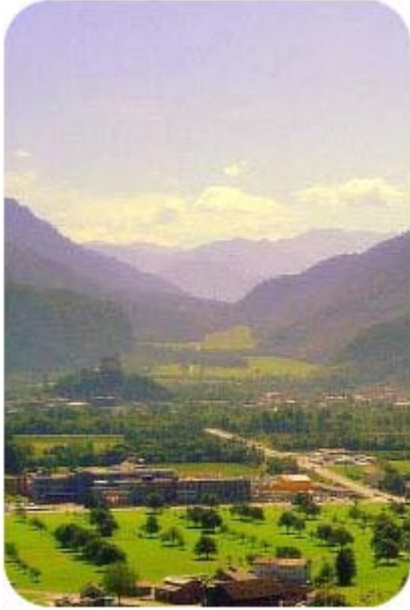


CHASING OFF GEORGE'S DRAGON



Thank goodness Jeremy Leggett stepped in to correct some of the inaccuracies in George Monbiot's 'comment' piece in Tuesday's Guardian. The errors, however, are even more extensive than Jeremy highlighted.

It isn't often that George Monbiot manages to get the politics, the details and the practicalities of an argument all wrong at the same time. He managed to do so, however, in his attack on the government's Feed-in Tariff proposals for renewable energy. There are grounds for criticising the scheme that has been introduced (which I shall come on to), but George gets so many of the fundamentals wrong that we just have to take the argument back to a different starting point.

The most dishonest of the claims made in his article is that Germany has "decided to sharply reduce the tariff it pays for solar PV on the grounds that it is a waste of money." Ask the Germans. They will tell you that the reduced tariff rates for new installations are simply because the scheme has been a runaway success. In the four years since their introduction the tariffs have created 300,000 new jobs and driven down the unit cost of solar panels to the point where they were starting to pay for themselves within a period of five to seven years.

The whole purpose of FiTs is to develop a momentum for renewable energy technologies that will quickly turn them from innovations to mature market technologies. Far from being a waste of money they have become one of the most powerful engines of German economic regeneration. Instead of having energy bills that pay for the import of non-renewable fossil fuels, Germany is now paying its own citizens to produce, install and maintain their own renewable energy systems.

George whinges that the scheme would cost up to £8.6 billion. But this is the cumulative figure for up to 2030 not 2020. For households, the actual figure is far less. Industry picks up a much larger slice of the cost than domestic energy consumers. In any case, we should look at these numbers in a different perspective.

UK citizens currently pay £3 billion per year towards the disposal and storage of nuclear waste. Moreover, the government has agreed that at least £9.6 billion will be allocated towards four pilot Carbon Capture and Storage schemes (CCS) for new coal power stations. How this is to be split between the taxpayer and the bill payer remains unclear. The odds are that the figure itself will turn out to be an opening bid. The final bill will be much larger, irrespective of whether CCS turns out to work or not. With or without any of this, average household energy bills are projected to quadruple (to around £4,760 per year) by 2020. Analysts are already predicting that by the end of 2010 oil prices will be back over the \$100 a barrel level.

Even on conventional grounds, Feed-in Tariffs will turn out to be an astute act of self-interest rather than a colossal waste of public money. In December 2009, Deutsche Bank published a global review of the mechanisms being used to promote a shift into renewable energy. These are not muesli eating Good-

Lifers. They are hard-nosed investment bankers with an interest in what works. Not only did they come to a view that FiTs are amongst the best ways of driving the energy transformation agenda, they also produced a very different number crunching of the German experience.

Over the three year period from 2004-07 the effect of FiTs in Germany was to add €2-3 to the average monthly electricity bill. Look at the changes in your own domestic electricity bills during this period and decide which you would prefer. The most staggering of the Deutsche Bank conclusions, however, is that the savings made by the scheme outstripped the total cost of payments made to households. Between 2004 and 2006 German FiT payments came to a total €8.6 billion. Deutsche Bank then looked at what it would have cost for this amount of electricity to have come from additional, conventional generation. What they found was that the avoided costs (of fossil fuel energy generation) came to €9.4 billion. These are straightforward cash savings. They don't even begin to convert the cash into carbon.

In Germany, as in the UK, the major energy companies have an inbuilt loathing of Feed-in Tariff schemes. They like systems where taxpayers and bill payers shell out large amounts of money to build up their corporate empires. What offends them most is that FiTs are not just about energy, they are about power. FiTs shift democratic power away from the corporation and in favour of the citizen. Local ownership becomes a critical element in explaining why the rest of continental Europe is so far ahead of the UK. Big energy companies are often required to be the partners of municipally owned local energy companies. Community ownership of wind turbines transforms the political agenda about their location and acceptability. Already, German cities are looking at dispersed generation of energy as an alternative to new power stations.

George may find comfort in the McKinsey report suggesting that it would only cost £8 to save a tonne of CO₂ by building a nuclear power plant, what he ignores is the convenient juggling of the figures to get there. The cost of nuclear requires lots of hidden bills to be picked up by other people. These are not just to be found in government underwritings of nuclear disposal, liability and insurance costs. Some of nuclear's fiercest advocates have been encamped in parliament's cafeterias over the last year pressing a simple argument on gullible MPs - "You must not make renewables too successful. It will undermine the market price for carbon and destroy the case for nuclear." Carbon trading is to provide the new hidden subsidy, without which nuclear will never be viable.

There is a strong case for having a full and open debate about what carbon emissions trading is going to deliver. My belief is that it is an intellectual and economic scam. The only people likely to benefit from creating a speculative market in a virtual commodity are the same speculators who have taken us into the current crisis. Anyone seeking to blame Feed-in Tariffs for the short comings of the EU-ETS is simply inhaling the wrong substances.

The real criticisms of the UK government's FiTs scheme are to be found in its lack of ambition, rather than it being a sop to the middle classes. In the end, the government caved-in to industry lobbying, for a framework which was going to deliver a little transformation... but not a lot. Treasury officials were instructed, from the start, to work backwards from a 2020 target figure. They wanted FiTs to deliver no more than 2% of the UK's renewable energy by 2020. Tariff rates were worked backwards to deliver down to that figure, rather than reach beyond it.

I would have been happy if George had decided to lambast the government scheme because it had

reduced the ambition level from the original 6TWh of additional electricity generation by 2020, to 2.8TWh. It would have been legitimate to complain that the cost of halving the ambition level was to be delivered at £8.6 billion, when the estimate for delivering twice that was only £8.7 billion. He could have derided the fact that, in doing so, the government was saddling itself with a scheme for renewable energy generation that was going to cost £200 per MWh, rather than the original £100 per MWh, projected only six months earlier. All this was done as a sweetener to Big Energy rather than middle England.

The one important point to be addressed in George's article is how a shift into renewable energy can best include the poor. For the last four years I have been working on this in a scheme in Nottingham. It begins from the poor in the inner city and emerges as a model that might be worth replicating elsewhere. The Meadows area of Nottingham has now formed itself into a community owned Energy Services Company (MOZES). This came out of the community's aspiration to turn itself into a zero carbon energy zone. This month we are installing the first 55 solar roofs on the houses of the poor. The scheme is kicked off with a government grant, but the roofs will be installed for free.

Tenants and households will get to keep the full benefit of the electricity they generate – cutting household electricity bills by over a third. The income stream from tariff payments will come back to MOZES. This money will, in turn, provide a self replenishing pot that will pay for the free installation of further roofs. We also have planning permission for a community-owned wind turbine on the banks of the river Trent, at the edges of the Meadows estate. It will be an iconic symbol of a community determined to deliver a large slice of its own energy security.

Homeowners who want to own their own solar roof will be able to access soft loans or put down a proportion of cash, and take a proportion of the tariffs, if they wish. The key, however, is to deliver renewable energy systems (not just PV) to every household, every school and community building on the estate. The perverse conclusion we have already drawn is exactly the opposite of George's. To get an energy or commercial sector partner for MOZES, you have to assess tariff rates that make it feasible to 'gift' these changes into low income estates. If the tariff rates are too low only the middle classes will be able to buy-in. If you want the poor to be included, the tariffs have to be set at a more ambitious level. This is what you can raise the capital loans against.

A whole series of environmental groups had been pressing the government for such a framework. They knew that it was in easy reach for the scheme to deliver not 6 TWh by 2020, but an extra 25 TWh. They knew too that, by the time we reached the first 'review' period (2013), this would have added just £1.08p each year to the average household energy bill. Even George's piggy bank could have taken the strain.

Of course it is right to argue that demand reduction – better insulation, low energy equipment, LED lighting, etc – is even cheaper. The 'export bonus' in the government scheme was designed to drive this process. You get the bonus when the energy you generate exceeds the amount you consume. The criticism of the government scheme is that, with wholesale energy prices being around 5p/KWh, paying households only 3p/KWh, the buy-back price gives energy companies an unearned dividend. Why should they buy from the public at prices less than they pay in the wholesale market?

None of this, George, is a "fashion accessory". The only bit of eco-bling in the scheme is probably in roof-

top wind turbines. The decision to offer the most generous tariffs in the universe for turbines that deliver next to nothing, was an intentional sop. Energy companies had fought tooth and claw to prevent decent tariffs extending to the community wind turbines you find in Denmark, Holland, and Germany. Why? Because Big Energy makes big money out of the government's current Renewables Obligation scheme – in which only the big guys get to play. They don't want FiTs to knock over their feeding trough.

These are the dragons you need to be chasing, George, not the illusory ones, lurking around the rooftops of middle England. Feed-in Tariffs are not a waste of money but a 'get out of jail' card. Britain does not have a renewables industry, it has survivors; firms that continue to exist despite UK policy rather than because of it.

Germany has thrown money into FiTs, not because they like to proliferate. It has given them 15% of the world market in renewables, and underpins their intention to be 100% self-sufficient by 2050. Every visit I have made to German towns and cities brings home one towering point: German citizens feel that they own (and drive) the transformation agenda. We don't.

Germans do not fall out in disputes about individual technologies, or about particular stages of their development. They see the issues as being ones of energy security, job security and environmental stability...and so should we.

It would be tragic if, at this point, George went off chasing the wrong dragons.