

LETTER

IDEOLOGICAL U-TURN

The 'steady' drip of converts to the "nuclear renaissance" continued as four prominent environmental activists in UK-touted themselves as having found a heart for nuclear. In an *Independent* February 23 article, Stephen Tindale, former director of Greenpeace; Lord Chris Smith of Finsbury, chairman of the Environment Agency; Mark Lynas, author of the Royal Society's science book of the year, and Chris Goodall, a Green Party activist and prospective parliamentary candidate announce a policy u-turn.

However, while they claim that climate change is the reason for their atomic shift, they fail to explain how nuclear power can contribute to the current global efforts to combat climate change.

Before getting into any analysis of nuclear power, it is important to look at what the challenge of climate change is. According to the officially accepted scientific advice of the UN Intergovernmental Panel on Climate Change (IPCC), greenhouse gas emissions need to peak by 2015 and start to decline thereafter if people are to have any chance of limiting warming to 2 degrees and, thus, preventing dangerous, runaway climate change.

The IPCC advice to policymakers is that industrialized countries should reduce their emissions by 25-40% (based on 1990 levels) to have a 50:50 chance of preventing 2 degree warming (which new research suggests would be too great an increase anyway). A lot of the more recent peer-reviewed science goes far beyond this, calling for much more deep and immediate reductions. Clearly a 40% reduction by 2020 is the very least the European Union (EU) can credibly commit to as part of a meaningful international climate agreement.

So, there are 10-11 years to act. What can nuclear power contribute to this urgently-needed emissions reduction effort in the EU?

Very, very little.

The nuclear industry in the EU is in decline. The number of nuclear reactors being operated in EU member states stood at 146 at the end of 2007, having decreased from 177 in 1989. The average age of those reactors still operating continues to rise, with the result that many will be decommissioned over the coming years.

Coupled with the fact that the nuclear "fleet" is ageing and being retired, there is the long lead-in for any new build and the lack of skilled workers. The average lead time for a new reactor is 8-10 years. So, even if the decision were made today to build 50 reactors in Europe to ensure a growth in nuclear power, they would not be online in time to contribute to Europe's 2020 emissions reduction targets.

The flagship project of the European (French) nuclear industry is the new European Pressurized Reactor (EPR) currently being built at Olkiluoto in Finland. However, the latest estimates suggest that it will be delivered more than three years past deadline.

A major nuclear expansion would only be possible with the required amount of workers with relevant skills to operate these reactors. However, even the nuclear industry has expressed concern about "competence renewal", with an ageing workforce and low numbers of graduates in the relevant disciplines to this highly specialized field. Long story longer, who will man these reactors?

All of this, of course ignores the unresolved issues of proliferation, safety, cost and so on. This is not because they have gone away or because they are not important.

Clearly, any increase in nuclear power would increase the risk of proliferation. The question of how to deal with the highly dangerous radioactive nuclear waste is no closer to being resolved (while reprocessing is also responsible for radioactive contamination and is unviable). The huge costs associated with nuclear power - such

as on liability and decommissioning - that are inevitably borne by the taxpayer are also unchanged.

The main purpose is merely to point out that, regardless of what these new nuclear acolytes claim, if nuclear power is the answer, the question has nothing to do with climate change.

European Greens