

## **Nuclear Power discussed in Farnham Humanist's annual debate 31<sup>st</sup> October 2008**

Carol Cockburn, former Major of Farnham, introduced the four distinguished speakers to Farnham Humanists' debate on the motion "Britain needs Nuclear Energy". Malcolm Wicks MP, Minister for Energy until the recent reshuffle and now special representative on international energy issues, argued that, although he had taken part as a 15 year old in the 4 day Aldermaston March, he thought it was vital that nuclear energy should be part of the diverse energy strategy for Britain. The two top issues for the 21<sup>st</sup> century are climate change and energy security. The demand for energy is huge and rising and we have to decide where this energy will come from. The biggest threat to the planet is global warming and action is needed now. Everything must be thrown at it – renewables, energy efficiency, carbon capture and storage, zero carbon housing. . . . Mr Wicks wished that renewables could provide the whole answer, but that is a "fantasy world" and nuclear is needed as well. It is clean and green and doesn't deposit carbon dioxide in the atmosphere. Green campaigners such as Professor Lovelock recognise the need and the environmentalist George Monbiot has now suggested that the green movement may be wrong to oppose nuclear.

Nathan Argent, chief spokesperson for Greenpeace on nuclear issues, agreed that the big issues are climate change and energy security but he emphasised that scientific evidence, not dogma, shows that nuclear power is not required. There is still no solution for nuclear waste, whilst the threats from proliferation and terrorism are increasing. Three questions test whether it has a role:- (1) Will it help? No - the ten nuclear power stations after 2025 will only help reduce emissions by 4%. (2) Can it come on time? No – the first nuclear power station is unlikely to be on-line before 2020 whereas it would be needed by 2015. And (3) will it reduce dependency on other fuels? No - nuclear will only provide 3% of all the UK's energy needs (15% of electricity).

Jean Llewellyn, Chief Executive of the National Skills Academy for Nuclear, emphasised that time is running out and we can't leave the decision of nuclear build to the next generation. Everybody objects to something, people don't want wind turbines in their back yard, often the wind isn't right, they don't like the peaks and troughs, nuclear keeps the baseload energy supply going and should be part of the energy portfolio. Her experience across many countries has impressed her with the industry's commitment to safety. She wants a skilled and capable nuclear workforce for the UK.

Antony Froggart, International Energy Policy Consultant, applauded the UK's global lead on agreeing to reduce carbon emissions by 80% by 2050. Currently only 3% of total UK energy consumed is met by nuclear. Therefore in order for it to make a significant contribution its use will have to increase enormously. According to the International Energy Authority's 2050 scenarios, nuclear power, at its best can only ever have a minor role in reducing emissions. Greater supply-and-demand side efficiency, coupled with the greater use of renewables, can provide three quarters of the future emissions reduction. Nuclear power is undermined by plant construction delays and cost over-runs, decommissioning and waste management costs, and finite resources (uranium and plutonium).

The debate was opened up to the floor. France was cited as providing 80% of its energy from nuclear power without accidents or terrorist attacks. This was contradicted by another contributor who pointed out that this refers to 80% of the electricity not of the total energy and an accident is currently under investigation. Pyroprocessing was identified as a new technique, being taken up by the US, which safely converts nuclear waste into fuel suitable for use in liquid metal cooled fast reactors. In this way all of the UK's electricity needs for the next 400 years could be met and the waste problem solved. Another comment was on how wind power is an energy parasite and cannot be relied upon, whilst another speaker observed that waste from the 1950s has still not been safely disposed of; rock formations in England are not stable enough, and the only safe place, involving deep drilling in Scotland, is unlikely to be popular. That half the emissions savings can be

achieved through energy efficiency was questioned by one speaker; heating costs saved through his loft insulation had been spent in other ways like trips to the cinema i.e. not necessarily saving the energy consumed overall.

The guest speakers summed up their arguments with references to the points made from the floor. Malcolm Wicks underlined the importance of not becoming reliant on foreign energy supplies. The Government is now tackling the issue of nuclear waste. He reiterated that renewables and energy efficiency will not be sufficient to meet the requirements of climate change and energy security, nuclear should be part of the mix. Jean Lewellyn highlighted that long term uranium deposits are easily available.

Opposing the motion, Nathan Argent underscored the dangers of nuclear waste and how it is not understood how long it can be contained even in a deep underground site. He questioned the ethics of creating even more waste for the next generation. France is often cited but its 58 reactors only cover 14% of its overall energy needs and per capita it has a higher consumption of carbon fuels. Furthermore, by investing in nuclear, the amount available to be invested in renewables is reduced. Antony Froggart re-iterated that there are not enough energy resources in the world to meet current rates of consumption, so unless we adopt energy efficiency measures and investment in renewables, society will collapse in our children's' lifetimes if not before.

The motion "Britain needs Nuclear Energy" was defeated by just one vote with only six abstentions. A collection of £283 was made for Oxfam and Disability Challengers.