

Climate Change 9:11:09

On Sunday evening at 6:30 p.m., Robert Skelton, a chartered chemical and nuclear engineer, gave us the first of his important talks on climate change, its consequences and what we can do about it. His next talk, on Sunday 6th December, will deal with the topical question of nuclear power, amongst other issues.

Robert showed us how gases, such as carbon dioxide and methane, act like a greenhouse to trap heat in the atmosphere, instead of its being radiated out again into space. As well as warming the earth, this heat is also very rapidly melting the polar ice-caps, which means that less of the sun's heat is reflected away from our planet, thus increasing global warming yet more. Since 1950, greenhouse gases have increased four-fold; sea levels have risen by between 10 and 25 millimetres and global surface temperatures have risen by between a quarter and half a degree in the last century. There have, of course, been temperature changes in the past; it was a change, in this case a cooling of only half a degree, which brought about the 'Little Ice Age', when the Thames froze over and Frost Fairs were held on the river in winter. But, change in the past usually came slowly, whereas, as Robert's graphs showed, we are faced by far more rapid changes in the near future, to which wild life and the natural world will probably not be able to adapt. The difference is that much of the present global warming is man-made.

Robert listed for us some of the effects which this will cause. There will be more floods, such as that in Boscastle, which did fifty million pounds worth of damage. At other times, both here and in other areas, such as Spain, Italy and Sub-Saharan Africa, there will be droughts, leading to changes in agriculture and food shortages. Tropical diseases will spread; we may see a return of malaria to the fens; all around the world, low-lying areas and coastal plains will be flooded, forcing millions of displaced people to migrate to other lands. In order to cope with these problems, we need to act now.

Robert showed us that the United States and Australia have by far the largest greenhouse gas emissions per head of population, partly because they drive longer distances and use more air conditioning. Britain's emissions are less than the USA, but those of France are less still, largely because much of their electricity comes from nuclear power. The E U, in general, produces lower emissions than Britain, because Britain makes less use of renewable sources of energy. East Anglia does better than the British national average.

There are encouraging signs. Cars are now taxed according to their level of pollution. Carbon trading was introduced in 2005; this is good and would be more effective if the price was set higher. Plans have been introduced to fast-track the building of new nuclear power stations. The efficiency of coal-fired electricity generation could be improved by 50 % and China is now investing in clean coal technology. Robert explained how we can use the Internet to calculate our own carbon footprint and that the Energy Saving Trust gives good advice on how to save energy, and emissions, in the home.

What can we as individuals do? The first and easiest thing is to turn down the central heating by a couple of degrees and put on another sweater. Insulating the loft and the cavity walls of one's house is very effective. We can turn off lights and electrical appliances whenever they are not in use. Travel by train is much less polluting than air travel. We can share cars or drive less.

Robert Skelton's next talk will be on Sunday December 6th at 6:30 p.m. at William Westley School hall and will deal with Heating, Lighting, Renewable and Nuclear energy. In the New Year we shall have different speakers on other environmental issues. Look out for the notices in 'Look' and posters round the village.