

Greens and the Greenhouse

Two gatherings, one month apart, in the same venue. The first: Victoria University's Climate Change Conference, with the British Prime Minister (Tony Blair) in a guest video-appearance. The second: the 2006 NZIF Annual Conference dedicated entirely to environmental topics.

The Institute Conference discussed issues of great national importance: soil and water protection, wildlife and biodiversity, biofuels, climate change, and so on. Taken together, these problems seem overwhelming, except that they have (at least in part) the same solution – more trees. But how to generate sufficient public support? One key to forestry's renaissance could be the internationally acknowledged benefits of trees in mitigating global warming. A carbon-driven planting boom would stimulate the Sector to such an extent that many other environmental goals would be met.

If you agree with the above sentence, you will be surprised to note that, at the preceding Climate Change Conference, forestry professionals were as scarce as kauri trees in Kaikoura. I have attended many such meetings over the years but this one was different. Despite the hefty admission fee, the auditorium was totally full. Participants had already thought deeply about the subject, and were obviously keen to proceed beyond steps one and two.

Step One is the acknowledgement that human activity has increased levels of greenhouse gases to the point where the climate is being altered. Hardly any serious scientists now dispute this fact. Residual opposition comes mainly from flamboyant media stars (David Bellamy), sensationalist popular authors (Michael Crichton) or fossil-brained politicians (George Bush). If I'm derogatory about these people, it is because their ability to confuse the public and delay action is inversely proportional to their useful contribution to the debate.

Step Two is the gut-realisation of the major climate disruption that "business as usual" entails. Some shocks are already occurring (eg satellite pictures of ice melting in the Arctic and in glaciers everywhere) and some are not expected to affect humans for a few more decades. Even the mildest scenarios (2° C warming – almost inevitable whatever we do) would have horrific consequences, whereas the most extreme events (10° C or more) would be unimaginably traumatic. It is not a scientific impossibility that human life may indeed, as the Chief Scientific advisor of the UK government recently warned, become restricted to the continent of Antarctica.

Step Three was not properly discussed at the Conference, and cannot be sensibly addressed until there is a more widespread consensus on the first two. It is a strategy for combating the threat. What can we in New Zealand do about it? In formulating solutions, there is plenty of opportunity on the international stage for denial, prevarication or free-riding. It would be hard enough to reach consensus among 180 individuals, but among 180 quarrelsome nations...?

We must stop thinking that there are simple solutions

to be found: for example, supplies of uranium for nuclear fission are far scarcer even than oil; or again, wind-power, under current technology, cannot drive your car let alone an aeroplane. Finally, no individual needs to solve all the problems on their own. All of us must be sufficiently humble to focus on our own tiny part of the world, and on our particular specialist training. What can forestry do to avert global warming catastrophe, and in particular what can New Zealand foresters do? Note that foresters are one of the few professional groups trained to contemplate events many decades into the future – yes, you do have a part to play in all this.

There is no doubt that the world has insufficient plantable land for carbon sinks to offset more than a tiny proportion of the coal that is destined for burning. Using timber in your houses is worthwhile, but will have an even more minor effect. Among the many more promising methods of ameliorating global warming, let's concentrate in these last few paragraphs on wood heating and biofuels.

New Zealand should not waste too much electricity on heating things. Electricity is a high-value form of energy and should be kept for high-value uses. The alternative? Wood pellets. Despite widespread use of cogeneration at some processing plants, New Zealand wastes a King's ransom in wood every day from our 1.8 million hectares of planted forests. With some intelligent planning a wood-pellet stove could be incorporated in every household and factory. There would be no need for new coal-fired power stations and major new transmission lines; instead there would be warm houses and efficient factories that do not add to greenhouse gas concentrations in the air.

Second, until the advent of cheap and functional electric vehicles, we must replace petrol and diesel from fossil sources. Nearly forty percent of New Zealand's CO₂ emissions are from transport. We must use wood, converted into ethanol or methanol, producer gas or synthetic diesel. The various technologies were well reviewed during the 1975 OPEC oil embargo, and should be revisited.

In future years, the link between forestry and the Greenhouse Effect will be so obvious that readers will be amazed that anyone of our generation could have ignored it. Panic over global warming will result in massive subsidised plantations, designed solely to extract carbon from the air and hold it in harmless form on or beneath the earth's surface. Future readers will curse us, not just for our greed, but for our slow response to this imminent and obvious threat.

* *Piers Maclaren is a Registered Forestry Consultant and a former Forest Research scientist. His column appears regularly in the Journal.*

