EDITORIAL

Changing climate

The science of climate change has had a poor press over the past year. Leaked emails from scientists in dispute over climate data sets, allied to the continuing and predictable outpourings of the fossil fuel lobby, have raised the level of scepticism among the public. Is all this talk about climate change being down to energy use and western lifestyle just a coterie of scaremongering scientists, lobbying for more research funding?

No, a large majority of scientists have concluded that climate change is real, and is caused by greenhouse gas emissions arising from human activity. That is not to say that there is small probability that climate change is cased by underlying long-term trends outside of human influence. Science does not deal in certainty: ideas and hypotheses are tested and proved or disproved based on probability. As Karl Popper pointed out, science is based on the precept that all hypotheses must be capable of being falsified. In other words, what we say must be capable of being tested and then accepted or rejected. However, equivocal scientific language such as 'very likely' has been used by vested interests as evidence that climate change is uncertain, and by implication no action is needed.

The public perception of climate change has not been helped by the failure of the Intergovernmental Panel on Climate Change - the body charged with collecting and assessing scientific evidence for the cause and impact of global warming - to properly rebut mischievous and self-serving comments. It has been too slow to maintain and build broad public acceptance of the need for action.

All of this is of relevance to forest policy and practice. Afforestation and forest management have strong roles in mitigating greenhouse gas levels in the atmosphere. Climate change will impinge upon species and provenance suitability for afforestation, and on the growth and productivity of existing forests. A number of papers in this issue address these themes. Plantation forests planted today will experience a changed climate over their lifetimes – how they respond will depend on species/provenance composition, and the level of change in rainfall, temperature and wind patterns. Natural forests will also be impacted by climate change, depending on their extent and level of connectivity. All forests are growing in a changing climate, assessing impacts on health, growth and yield is necessary to develop effective adaptation policies and measures. Continued funding of the National Forest Inventory and research are therefore essential to detect and quantify these effects, and for the forest sector to respond to the challenges of a changing climate.