

Conference review

Greenhouse 2005: Impressions

The fact that the Governor General (his Excellency Major General Michael Jeffery) had offered to open Greenhouse 2005: Action on Climate Change, and the strength of conviction in his speech, made for a very impressive start to the Conference, as did the presentation by Victorian Minister for the Environment, John Thwaites. It was even more interesting to listen to the positive reactions from delegates to these two opening presentations by non-scientists.

Scene-setting overview presentations by Graeme Pearman (Monash University) on day one and Kevin Hennessy (CSIRO Marine and Atmospheric Research) on day two were excellent, as always.

However, my most enduring impression from Greenhouse 2005 was the willing and constructive engagement by industry, business and policy-makers. It was striking how industry and business leaders were in the room and part of the debate, rather than outside the room in a 'wait and see' mode, as they were some years ago. Speakers like Bill Peck (AON Holdings), Fiona Wild (BP), Lorraine Stephenson (Origin Energy) and Sean Lucy (Phillips Fox) were talking about global climate change being 'the new reality'. Their presentations showed they were well informed about the science, accepted the implications of scientific assessments, and were now strongly engaged in what might be done, as well as how business should act in the face of this 'new reality'.

I also enjoyed a number of talks that dealt with options for mitigation, and found the 'wedge approach', where a number of mitigation pathways (wedges) are each explored as to how they might contribute to serious efforts to cut greenhouse gas emissions, very interesting. Segmenting what might be done gives more insight into what is possible (either in theory, or in practice), rather than just looking at the massive task of cutting global carbon dioxide emissions by 50-60 per cent over the next 50 years. It was also striking how often the mantra 'there is no silver bullet' was repeated: strong consensus that there will have to be a multi-pronged approach, as no single technology will save the day.

Stationary energy industry was engaged, but it struck me how long they think it will be for any 'low or zero emission coal' projects to go 'live' (10-15 years plus), leaving me with mixed feelings about how serious this industry is about coming to grips with the 'new reality'. Geosequestration appears to

have a lot to offer, as explained by Peter Cook (CRC for Greenhouse Gas Technologies), but an awful lot is depending on geosequestration being able to deliver the goods.

With respect to scientific presentations, there was a strong sense that the science, despite remaining uncertainties, is actually very robust. Sessions on climate modelling were balanced by sessions on climate observations, and it was clear that climate change impacts and adaptation research is more in the spotlight than ever before. The fact that, despite much more research, the outlook has remained very similar over recent years, illustrates that the earlier predictions are holding up well.

This didn't take away the sense that there may be surprises, as summarised by Will Steffen (Australian Greenhouse Office, now at ANU) in his public lecture, nor the need for more detailed, probabilistic information on future climate change, as requested by a number of speakers and delegates. Much more detail is needed, with the range of indicators covered, as well as time and space scales. Water resources were clearly identified as one of the main areas of impact (as pointed out by speakers from industry, government and science). In the area of climate and Earth systems modelling there was a call for close collaboration from Geoff Love (Bureau of Meteorology), who said that 'cottage industries is not the way to go', when describing the joint CSIRO/Bureau of Meteorology/Universities plan for creating ACCESS (the Australian Community Climate and Earth Systems Simulator).

Using bio-indicators to detect climate change is an emerging (and potentially very informative) area of study for Australia, as pointed out by Lynda Chambers of the Bureau of Meteorology and Marie Keatley of the School of Forest Sciences at the University of Melbourne.

It also struck me that to industry and policy-makers the fact that climate change predictions are now supported by actual observations of climate change is very significant, and an inducement for action.

In contrast to previous greenhouse meetings (Greenhouse 87: Planning for Climate Change; Greenhouse 94: Coping with Climate Change), climate change adaptation is now firmly on everyone's agenda. This was highlighted by Jo Mummery (Australian Greenhouse Office) when she pointed out

that there is a strong need for bottom up sensitivity and vulnerability studies. Jo also pointed out that there still is confusion in the media and in the general community about the state of knowledge about climate change (despite the strong scientific consensus), and that there is still a need for better communication. Environment Minister Ian Campbell used the conference to release two AGO publications about the Australian Climate Change Science Program: 'Major Achievements 1989-2004' and 'Strategic Research Agenda 2004-2008'.

With respect to 'mitigation' versus 'adaptation', it was clear from discussions and presentations that the overall preferred approach is that climate change mitigation is essential to avoid future 'dangerous' climate change, and that climate change adaptation is essential to help society prepare for the climate change that is already committed due to past and current emissions. But I still detected some nervous sentiment that talking about adaptation might lessen the will to tackle mitigation.

A novelty at the conference was an experiment in social polling, conducted by CSIRO's Ben Preston, Roger Jones and Steve Hatfield Dodds. The crowd seemed to like using the voting devices, but also seemed a bit bamboozled by some of the questions. It clearly was more complex than voting for Australian Idol, or evicting someone from Big Brother.

Another striking feature of Greenhouse 2005 was the number of new faces – new faces from industry and business, new faces in science, policy and communication. Sure, there were many who could claim to be veterans of Greenhouse 87 and Greenhouse 94, but there was also a strong sense of the next generation joining up and taking on the challenge.

This was also a conference where the tail was firmly wagging. In particular, the parallel sessions on Climate Change Policy and Climate Change Communication on the fourth and last day of the meeting were very well attended. One outstanding

speaker in the policy section was CSIRO's Steve Hatfield Dodds, with a fast and erudite expose on economics and societal perceptions of wellbeing. Other talks reported on trials with greenhouse gas abatement schemes, carbon credits and carbon trading, and there was a spirited talk by Fiona Wain of Environment Business Australia on how to fast-track action on climate change. In the communication section, CSIRO's Jaci Brown from Hobart made a strong impression reporting on work done with secondary schools.

Having the posters in the main conference area, jointly with exhibitors, where afternoon tea, lunch and coffee were held, gave them excellent exposure. The 'best poster' competition added incentive for delegates to peruse all posters, and my impression was that poster presenters felt very much part of the meeting. The voters' collective wisdom showed up when out of all the voting, five posters clearly stood out as having made a strong impression. The fact that one of them was a policy poster ('Greenhouse Action in Newcastle' by Kristy McIntyre) demonstrated again that the greenhouse debate has now firmly moved on from being about only the science.

The presentations from the conference are available on the conference website, www.greenhouse2005.com.

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(The Greenhouse 2005 conference, 'Action on Climate Change', was held in Melbourne from 13-17 November 2005 – Ed.).