

The heat is on

At December's climate-change meeting, everyone can agree on one thing: it is make-or-break time.

Next month's United Nations Climate Change Conference in Bali, Indonesia, is charged with drawing up a clear and convincing road map that will lead to a robust international climate-change agreement to succeed the Kyoto Protocol. That is a momentous challenge but, given the right approach from participants, not an insurmountable one.

Evidence is fast mounting that time is running out for nations to unite in a credible response to climate change. The International Energy Agency said last week that energy-related emissions of carbon dioxide are set to grow from 27 gigatonnes in 2005 to 42 gigatonnes by 2030 — a rise of 56%. Other estimates project even higher growth, and also reveal, alarmingly, that 'carbon intensity' — the level of carbon emissions required to sustain a given level of economic activity — is actually growing again.

Bad faith still clouds the implementation of the 1997 Kyoto Protocol, which expires in 2012. US withdrawal from the agreement and the treaty's subsequent failure to make much noticeable impact on its signatories' emissions leave ample scope for ugly and fruitless recrimination.

Yet the timing of the Bali meeting is, politically, rather more auspicious than was the case at Kyoto ten years ago. A new politics of climate change is unfolding in Australia (see page 336) and the United States (see page 340), two of the nations where opposition to effective international action has been strongest (see also pages 333 and 342). This is the context for a new international agreement that must transcend the Kyoto accord by setting in motion a vision that is more broadly based and more ambitious than the cap-and-trade principle of the original agreement.

If the cap fits

The road map that will emerge from Bali need not cling to cap-and-trade as its mainstay. Indeed, cap-and-trade has yet to be fully tested as a mechanism for reducing emissions. It was originally conceived to deal with sulphur emissions from power stations — an issue in which the costs and benefits are relatively small — but doubts are emerging about its ability to cope with the far larger issue of greenhouse-gas emissions. Nevertheless, it should not be abandoned, but other approaches, including the direct imposition of carbon taxes, may ultimately prove to be equally as potent in raising the cost of burning fossil fuels.

In addition to striking the right balance between Kyoto-type targets and fresh approaches to global action on climate change, the Bali road map will have to cover territory that the previous accord was unable to reach. For example, it will have to set terms for the direct involvement of developing nations in the international push to reduce carbon emissions. That means the participation of nations such as India, Brazil and China — the last of which has, the International Energy Agency believes, this year surpassed the United States as the world's largest emitter of carbon dioxide.

The poorest countries cannot be expected to be part of this push here, but they must benefit from assistance for their efforts to adapt to

the effects of climate change. Several wealthy nations, such as the Netherlands, are forging ahead with sophisticated adaptation strategies. But for the most vulnerable societies, adaptation to climate change ultimately boils down to poverty alleviation. Such a requirement must co-exist with the politically awkward fact that the new accord must take into account substantial contributory factors that were excluded from Kyoto — including emissions from air transport and the huge impact of deforestation.

A long-term international commitment to reduced emissions will also involve far greater collaboration between nations on the research and development programmes needed to come up with

more alternative-energy sources. Already, market forces are pulling a diverse range of solar and wind options through to more cost-effective operation. But there are major energy problems, such as carbon capture and sequestration, that will require substantial public-sector investment to move forward.

Thinking big

All of this is a tall order for the representatives of more than 180 nations expected to gather at Bali on 3–14 December. A great deal will hinge on the approach taken by the two largest emitters, China and the United States.

There will be a temptation for China to assume a stance as defender of the poor nations against the malign interests of the rich. It would certainly be politically feasible for it to point to the failure of the United States to fulfil its earlier agreement that developed nations should act first, and to argue that there is no moral case for China to do so when its per capita emissions are so much lower than those of other countries.

Fortunately, there are signs that China knows better than to adopt this dead-end strategy. There are clear signs that Beijing is fully aware of the threat posed to China's future development by climate change and, as usual, its leadership will be taking the long view. Despite the rampant construction of coal plants in the past few years, China knows that its energy balance has to change, and it can use the Bali meeting to assert itself as a global power, offering to lead, rather than to follow.

The outlook for the US delegation is less promising. Its negotiators will include ideologues who will stop at nothing to derail the humble progress the rest of the world has managed to make through the Kyoto accord. The only thing that can save them from themselves is President Bush's possible desire to end his reign on a slightly more positive note than the salutary one on which he began it, with his March 2001 decision that the United States would withdraw from the Kyoto agreement. The next American president is, thankfully, likely to take a more constructive approach to global warming after 2009. The Bali meeting is the global community's chance to prepare for the opening that this should provide. ■

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