

NEWS

Climate deal agreed in Bali showdown

Insults, threats, tears and booing: the latest round of international climate talks made for an entertaining, if gruelling, two weeks in Nusa Dua, Indonesia. These talks may well be remembered for the bold stand that developing countries took against the United States in the push for consensus on how to move forward in negotiating a new international framework on climate change.

Some 10,000 delegates from nearly 190 nations finally agreed on Saturday to a 'Bali roadmap' that will guide negotiations up until the end of 2009, when they will have to decide on a regime to replace the Kyoto Protocol in 2012. But the path to agreement was rocky from the outset, as discussions over individual words in the draft document led to heated arguments, threats of trade sanctions or boycotts, and even tears.

By the middle of the second week, a deal had more or less been reached on some of the key issues that would enable developing nations — including those with budding economies — to

reduce their emissions. The deal entailed providing compensation for reducing tropical deforestation, which accounts for some 20% of greenhouse gases.

That left two thorny issues on the table, both of which the United States objected to. As one of the world's largest greenhouse-gas emitters and the only rich nation not to have ratified Kyoto, the United States became noticeably isolated as developing and developed nations,

led by the European Union (EU), stood strong on the need for richer countries to lead on climate change and to tackle it with emissions targets. In a year that has been punctuated with reports from the Intergovernmental Panel on Climate Change (IPCC) on the urgency of global warming, most delegations agreed that the roadmap should refer to the need for industrialized nations to slash emissions by 25–40% of 1990 levels by 2020.

The EU delegation, headed by commissioner Stavros Dimas, argued that a roadmap without a destination would be pointless. And Portuguese secretary of state for the environment, Humberto Rosa said: "It is crucial for us that we must have an idea where we are heading to — it's not only to science to show us the destination, but the destination must be consistent with the science."

But the United States countered that to include specific numbers would be to "prejudge the outcome" of the process. Following days of intensive negotiations, a compromise was reached by including a



People from around the world campaigned outside the Bali conference centre.

Exchange rate hits US researchers

The weak dollar is affecting US researchers working abroad and threatens American involvement in flagship projects say physicists at the CERN laboratory. Grants paid in dollars to researchers in Europe are now worth substantially less than they were a year ago.

"It's hurting, and people are scrimping and making up for it in other ways," says Mike Tuts, a programme manager for the US collaborators on Atlas, a component of the Large Hadron Collider (LHC) at CERN, which will look for the Higgs boson, dubbed the God particle.

In January 2006, a US dollar bought about €0.83, in January 2007 that was €0.77. Today it is worth only €0.69. Although US researchers at CERN receive adjusted pay to reflect the cost of living, these corrections are not keeping up with the change in exchange rates. "It's already starting to hurt and it's making people nervous," says Joel Butler of the US section of the Compact Muon Solenoid experiment, another part of the LHC.

And it is not just the researchers who are

suffering. Local costs incurred by US teams at CERN have risen significantly. Butler says that additional funding to deal with these expenses will be requested, but it is not guaranteed to be forthcoming. "In the end, if we don't get some relief, we will probably have to reduce the size of the community and do more work remotely," he says.

Similar problems may befall CERN itself, which straddles the border between France and Switzerland. Changes in exchange rates between the euro and the Swiss franc — between 2002 and 2006 — cost the LHC project 40 million Swiss francs (US\$35 million), says Florian Sonnemann, head of resource planning and controlling at the facility. "This Sfr40 million had to come from the contingency we have for this project," he says.

However, at the moment, it is the Americans who are really suffering. "We used a rather poor exchange rate in the budget planning," says Tuts. "Ultimately it will impact on the science." ■

Daniel Crescey

SNAPSHOT Bumper cone crop

The tall conifers of America's Pacific Northwest are experiencing a peculiarly heavy cone-harvest. Ken Bible of the University of Washington in Seattle, who investigates the phenomenon, says: "In normal mast years [when most Douglas-fir cones are produced], we would see four or five cones per branch. Now we are seeing 30."

The cone-production cycle is thought to be driven in part by weather events during the development of tree buds and cones. Bible says that his team is looking closely at temperature, rain, humidity and wind data at several development stages to see if they can work out what caused the super mast.

It seems to be confined to that region. For example, white spruce in Canada are masting normally in Edmonton, Calgary and Banff, reports Jalene LaMontagne, at the University of Calgary in Alberta. ■

Emma Marris



**CLIMATE CONFERENCE**

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footnote reference to the IPCC's fourth assessment report, without mention of the numerical range on reductions. Many feel that this concession amounts to sidelining the science, and risks narrowing the window of opportunity to avert dangerous climate change.

Amid all the drama, the real blows were reserved for a grand finale on Saturday, when worn-out delegates wrangled over one remaining issue — whether rich nations should provide “verifiable, measurable and reportable” technological aid to developing countries. Seemingly inspired by Al Gore's speech on Thursday urging delegates to sidestep the “obstructionist” United States, and following much booing and hissing at the US delegation, Kevin Conrad, Papua New Guinea's ambassador for climate change, stated: “If you cannot lead, leave it to the rest of us. Get out of the way.” In an eleventh-hour turnaround, the United States conceded.

“Bali has delivered what it needed to do,” says Yvo de Boer, the executive secretary of the UN convention on climate change, calling the agreement “ambitious, transparent, and flexible”. Perhaps most importantly, it has succeeded in bringing what may still be the world's largest emitter back to the table. But whether the ‘flexibility’ that was required will ultimately provide a means of manoeuvring out of real emissions reductions remains to be seen. ■

Olive Heffernan

See Editorial, page 1127.



THE SEATTLE TIMES

Q&A: Siti Fadilah Supari

Indonesia has been hit by more human deaths from the H5N1 bird-flu virus than any other country, yet it refuses to share its virus samples with the World Health Organization (WHO). **Declan Butler** talks to Indonesia's health minister.

Why is Indonesia withholding samples that could track the virus's evolution and help produce a vaccine?

Indonesia is open to international collaboration but this must be fair, transparent and equitable. The WHO's Global Influenza Surveillance Network system is obviously unfair and opaque. Samples shared become the property of the WHO collaborating centres in rich countries, where they are used to generate research papers, patents and to commercialize vaccines. But the developing countries that supply the samples do not share in these benefits. In the event of a pandemic, we also risk having no access to vaccines, or having to buy them at prices we cannot afford, despite the fact that the vaccines were developed using our samples.

The above mechanisms can lead to a vicious cycle, in which poor countries become poorer because they have diseases, and industrialized countries become richer at the expense of poor countries. As a consequence, there will be some people who will create diseases and take advantage of the situation. This is a form of neo-colonialism and neo-capitalism.

What would it take to end the deadlock?

Earlier this year, the WHO adopted a resolution accepting the need to ensure fairer sharing of benefits to help developed countries prepare for and respond to a pandemic. Last month in Geneva we agreed concrete steps towards this goal. The first is that the WHO will develop a tracking system for viruses we send abroad. The second recognizes that sharing must respect national laws, which means that Indonesia will be free to assert its rights over samples. We are willing to share viruses for research purposes but if a commercial company wants to create a vaccine from those samples, then it must negotiate with Indonesia, which has rights over the samples.

But the key outstanding concession Indonesia demands is that all shared virus samples be subject to a material transfer



agreement clearly setting out such rights. We already share our virus-sequence data with the Global Initiative on Sharing Avian Influenza Data (GISAID), a body created last year. I consider GISAID has established a fair and transparent mechanism for regulating genetic-sequencing databases because it includes a material transfer agreement.

Why is Indonesia not as successful as its neighbours at controlling H5N1?

Vietnam, as a centralized socialist country, can get high compliance on national policies and so has succeeded, for example, in implementing rapid culling of birds. Thailand's monarchy is well respected, resulting again in good compliance. In contrast, Indonesia is in transition towards a decentralized democracy after three decades of authoritarian national rule. We are still on a learning curve, and compliance of the relatively independent regional authorities with national policies is often poor. Indonesia is made up of more than 17,000 islands, which again complicates compliance.

The cultures are also different. Birds play an important role in Indonesian culture — pet singing birds are considered signs of respectable households, for example. In rural communities, backyard farming is a major income source, and has been a key element in improving nutrition.

But bear in mind that Indonesia has a population of more than 200 million, so one needs to keep in perspective the total of 113 cases of H5N1 — I'd argue that we've been fairly successful in controlling the disease.

But scientists say that Indonesia is still not doing enough.

It is the international scientific community that delays the acquisition of critical knowledge. If they wish to have rapid results, why don't they come to Indonesia and work with our scientists here? We have the necessary facilities, such as biosafety level-3 secure labs and good Indonesian scientists. That would also put an end to disputes over virus sharing. ■

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