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**Nature Reports Climate Change**

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# nature REPORTS climate change

the news behind the science, the science behind the news

## COUGHING UP THE CASH

Whether we can avoid the worst consequences of climate change will ultimately be determined by whether we are willing to finance it.

Finding an effective means for financial assistance and investments to flow from north to south could be a make-or-break issue at the UN Climate Change Conference in Bali, Indonesia, where delegates from almost 190 nations have convened to agree on a road map for an international climate agreement to follow the Kyoto Protocol in 2012.

Nongovernmental organizations and delegates from the world's poorest nations, some of which are already beginning to experience the harsh affects of a warming climate, are calling on developed countries to boost funding to help these struggling nations adapt, and to transfer technology that will help them green their economies.

Under the Kyoto Protocol's Adaptation Fund, a paltry US\$163 million has been pledged by rich donor countries to developing nations, and just US\$67 million of this has actually been delivered. Yet the sum needed to finance adaptation and capacity-building in the south is in the region of several tens of billions of dollars, according the World Bank. Oxfam says that the very poorest nations also need an up-front payment of US\$1–2 billion immediately to address urgent adaptation needs.

The fund, which will finance projects such as building sea walls and irrigating crops, is currently derived from a two-percent levy on revenues generated by the Clean Development Mechanism, the scheme that allows industrialized nations to pay for carbon credits produced by emissions-reduction projects in the developing world and apply the credits against their own emissions targets back home. But it now looks as though the UN will have to expand its funding for adaptation, potentially through a direct tax on emissions.

The transfer of clean technologies to developing nations is another goal of the Kyoto Protocol that clearly has not been met. In part, this is owing to lack of funding from the public sector and lack of interest from the private sector, says Yvo De Boer, executive secretary of the UN Framework Convention on Climate Change.

The solution, says De Boer, will require the creation of investment potential through mechanisms such as the carbon market that can send a clear price signal to private investors, who are expected to fund 86% of future clean energy technology projects in the south. It will also require "intelligent financial engineering, to make public and private money go where it has never gone before" akin to "embarking on a Star Trek expedition", says De Boer.

A group of finance ministers is now thrashing out the details in side meetings at the Bali talks. By the end of the conference, it should be clear whether the world's richest nations are willing to cough up their portion of the much needed cash.

OLIVE HEFFERNAN, EDITOR

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