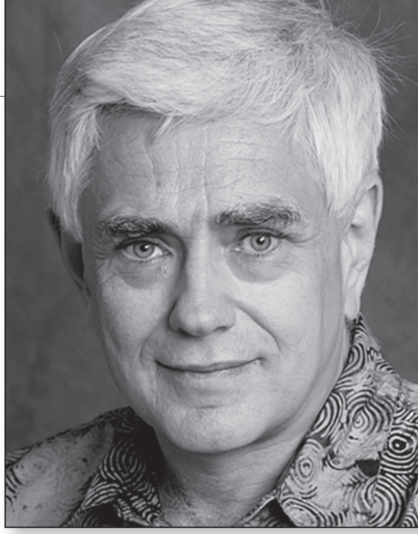

By Bruce Rich

An International Regime in Crisis

Established under the Kyoto Protocol, the Clean Development Mechanism is based on the premise that a ton of greenhouse gas reductions can be purchased more cheaply in a developing country than a rich country. Though in theory the CDM would not reduce overall GHG emissions, it would make the economic burden on industrialized countries more bearable in meeting reduction targets, as well as subsidize climate friendly investments in poor countries.

In February the U.S Government Accountability Office released a report, "Climate Change Issues: Options for Addressing Challenges to Carbon Offset Quality," that identifies three possibly unresolvable problems inherent not just to the CDM but to carbon offsets in general.

First is additionality, which the GAO emphasized, remains "the primary challenge," reiterating a finding in a 2008 report that "it is nearly impossible to ensure that projects are additional." The CDM project pipeline brings home the enormity of the problem. China accounts for 40 percent of CDM projects, and 55 percent of total prospective CDM emission reductions. But China prepared for submission to the CDM virtually every single planned wind, hydroelectric, and gas project — projects it was already committed to do.

CDM transactions take place in developing economies where state intervention in, and manipulation of, energy investment and markets, not to speak of corruption, is rife; determining whether a particular wind farm or hydro plant would or would not have been built but for the CDM subsidy, and whether it would somehow displace a GHG-intensive investment that otherwise would occur, is an exercise in futility—and an invitation to fraud.

The second problem is measurement. Perhaps the biggest scandal of the CDM to date involves the more than 50 percent of carbon credits through 2010 that have come from industrial gas projects, mainly factories in China and India that produce HFC-22, a gas used as a refrigerant and plastic feed stock. HFC-22 factories also produce the super greenhouse gas HFC-23 as a byproduct. One ton of HFC-23 is the equivalent of 11,700 tons of CO_2 in its global warming impact.

The CDM created huge perverse incentives to increase HFC-23 production, since the value of the carbon credits it issued for such projects is between 45 and 75 times the actual cost of abatement. Research by the London based Environmental Investigation Agency found that Chinese factories substantially increased production of this most powerful of GHGs in view of obtaining carbon credits for its abatement. Last August, the CDM suspended five HFC-23 abatement projects, but reinstated four of them in December. And in January the European Union ruled that post-2012 it would not accept any new CDM credits for HFC-23 programs.

The Kyoto Protocol's Clean Development Mechanism is fundamentally flawed

The CDM has a much-criticized protocol for carbon credits for new coal-fired power plants. The plants are supposed to show that the carbon-credit subsidies will make them more efficient. Twenty-nine coal plants are awaiting CDM approval for credits worth $732 million.

The third problem is verification. Independent verification of CDM projects has been vested in companies approved by the CDM. The GAO report points out that every major financial stakeholder — sellers and buyers of carbon offsets as well as the verification companies — has a perverse incentive to undervalue project quality (i.e., real GHG reductions). Market incentives are working here, but not in the way CDM proponents intended.

The CDM suspended in 2008 and 2009 four companies that accounted for more than two-thirds of CDM project verifications. One was approving projects without making site visits. Another was unable to show it had properly verified projects or that the staff was qualified to do so. After several months all were reinstated. In 2009 and 2010 the World Wildlife Fund and the German Oeko Institute released reports rating the top five companies responsible for 80 percent of CDM projects on a scale of A to F. For both years the average grade was E+.

Some problems might be ameliorated through proposed reforms. Project-based CDM could be eliminated and replaced with sector-wide emission reductions from a baseline. Verifiers could be paid through an independent fund established by donors. Credits for problematic projects or sectors could be limited, or even eliminated, as appears to be happening with the notorious HFC-23 projects. Carbon credits could be allowed at a discounted rate, a ton of claimed developing world GHG reductions being worth, say, only a half a ton of GHG credits for the industrialized country buyer.

But enormous challenges would still remain. Perhaps the most dangerous legacy of the CDM is that for the better part of a decade it has created an illusion of progress with very little real impact, or even a negative impact, on reductions of global GHG emissions.

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