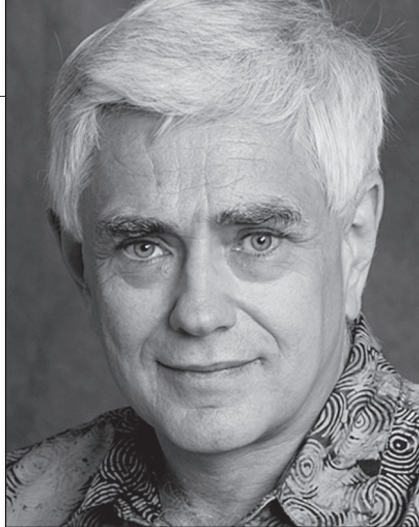




By Bruce Rich

The Coming Coal Catastrophe

Last September, former Vice President Al Gore proclaimed to loud applause at the Clinton Global Initiative Annual Meeting, "I believe we have reached the stage where it is time for civil disobedience to prevent the construction of new coal plants that do not have carbon capture and sequestration." NASA climate scientist James Hansen wrote President-elect Obama in December that "coal plants are factories of death." Why are respected statesmen and scientists speaking with the fervor of Greenpeace or Earth First! activists? Quite simply because a rapid increase in world coal use is fueling climate change to near the point of no return, a crisis which the United Nations Development Program calls the "defining human development issue of our generation."

Numerous authorities now attribute most of the recent rise in CO₂ emissions to the rapid growth of new coal-fired generating power plants in developing nations, especially in Asia. Coal is the most carbon-intensive of all fuels, and new plants lock in CO₂ emissions for up to half a century. The International Energy Agency reports an accelerating "re-carbonization" of world energy production since the 1990s. Global coal use, mainly for power plants in emerging economies, grew at 4.9 percent a year between 2000

and 2006, faster than any other fossil fuel or renewable source.

An ongoing study by the Environmental Defense Fund has identified massive support of new and expanded coal fired plants by the World Bank, Asian Development Bank, other multilateral development banks, and industrialized countries' export credit agencies for coal-fired power over the past 15 years: some \$37.04 billion, mobilizing a total of over \$100 billion from other sources, to support 88 new coal plants and expansion of existing plants.

Since most export credit agencies are not transparent and do not release detailed information on transactions, these figures probably significantly understate the actual level of public international finance for coal. These plants will add some 792 million tons annually of CO₂ emissions for decades to come. In other words, while conducting negotiations to reduce global warming over the past 15 years, richer OECD countries have given financial support for coal-fired power plants abroad that have added a carbon footprint equal to 77 percent of the footprint of existing EU coal-fired power generation.

If current investment trends do not change, 97 percent of the increase in world energy-related CO₂ emissions between 2006 and 2030 will occur in developing nations. Without a reorientation of international energy investment, the entire industrialized world could reduce its CO₂ emissions to zero by 2030, but the planet would still overshoot irreversibly past the point of no return for dangerous global warming.

There is a growing consensus that the tipping point for climate change that would endanger world economic and social stability is warming greater than 2° Celsius, which would be likely with an atmospheric

concentration of CO₂ greater than 450 parts per million. (Current concentrations are around 387 parts per million.) Some scientists, such as Hansen, argue that the danger point has already been passed, and the world must make more drastic reductions, back to a level of around 350 parts per million.

The International Energy Agency states that "preventing catastrophic and irreversible damage to the global climate ultimately requires a major decarbonization of world energy sources." Yet, the United Nations Development Program concluded in its 2007/2008 *World Development Report* that "current investment patterns are putting in place a carbon-intensive energy infrastructure, with coal playing a dominant role." The World Bank and other agencies continue to argue that by financing new coal plants which are more modern and efficient — with lower CO₂

emissions — they are actually helping to reduce emissions that would have otherwise occurred if cheaper, dirtier plants had been built instead.

The UNDP calls it "the defining human development issue of our generation"

This must stop. The world cannot achieve an unprecedented overhaul of the energy sector by continuing to invest in the most carbon-intensive of all energy sources. To justify new investments in coal on the grounds they are marginally more efficient is, from a climate perspective, folly. The opportunity cost of not using relatively scarce public international finance for scaling up investments in renewables and energy efficiency is huge. Every public international dollar invested in coal is a dollar diverted from supporting the inevitable long term transition of developing economies to a low carbon future.

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