

TIME

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Sunday, Mar. 26, 2006

The Impact of Asia's Giants

How China and India could save the planet--or destroy it

By BRYAN WALSH

If everyone lived like the average Chinese or Indian, you wouldn't be reading about global warming. On a per capita basis, China and India emit far less greenhouse gas than energy-efficient Japan, environmentally scrupulous Sweden--and especially the gas-guzzling U.S. (The average American is responsible for 20 times as much CO₂ emission annually as the average Indian.) There's only one problem: 2.4 billion people live in China and India, a great many of whom aspire to an American-style energy-intensive life. And thanks to the breakneck growth of the two countries' economies, they just might get there--with potentially disastrous results for the world's climate.

The International Energy Agency (IEA) forecasts that the increase in greenhouse-gas emissions from 2000 to 2030 from China alone will nearly equal the increase from the entire industrialized world. India, though behind its Asian rival, could see greenhouse-gas emissions that rise 70% by 2025, according to the World Resources Institute. But the nearly double-digit growth rates that are responsible for those nightmare projections also present an environmental opportunity. "Anything you want to do about clean energy is easier to do from the outset," says David Moskowitz, an energy consultant who has advised Chinese officials. "Every time they add a power plant or factory, they can add one cleaner and better than before." If China and India can muster the will and resources to leapfrog the West's energy-heavy development path, dangerous climate change might be averted. "China and India have to demonstrate to other countries that it is possible to develop in a sustainable way," says Yang Fuqiang, vice president of the Energy Foundation in Beijing. "We can't fail."

The Kyoto accord on climate change did nothing to slow growth in China and India because as developing countries they are not required under the protocol to make cuts in carbon emissions--and that is not likely to change after the agreement expires in 2012. Both countries are desperate for energy to fuel the economic expansion that is pulling their citizens out of poverty, and despite bold investments in renewables, much of that energy will have to come from coal, the only traditional energy source they have in abundance. Barbara Finamore, director of the Natural Resources Defense Council's China Clean Energy Program, estimates that China's total electricity demand will increase by 2,600 gigawatts by 2050, which is the equivalent of adding four 300-megawatt power plants every week for the next 45 years. India's energy consumption rose 208% from 1980 to 2001, even faster than China's, but nearly half the population still lacks regular access to electricity--a fact the government is working to change. "They'll do what they

can, but overall emissions are likely to rise much higher than they are now," says Jonathan Sinton, China analyst for the IEA.

Environmentalism inevitably takes a backseat to development in China and India, but even among many green advocates there, climate change is seen as a less pressing problem than air and water pollution. There is also a widespread feeling that the developed world, which grew rich while freely spewing carbon, should take most of the responsibility for climate change. "Our issue is that, first and foremost, the U.S. needs to reduce its emissions," says Sunita Narain, director of the Center for Science and Environment in New Delhi. "It is unacceptable and immoral that the U.S. doesn't take the lead on climate change." The Bush Administration, in turn, has rejected Kyoto partly because developing countries were exempt from emissions cuts.

The standoff between the U.S. and the Asian giants has stymied international climate-change efforts for years, but that is beginning to change--and some of the push is coming from Beijing. For most of the recent Montreal climate conference, the U.S. resisted any serious discussion of what should be done after Kyoto expires. But several major developing countries, including China as a quiet but present force, supported further talks and helped break down U.S. opposition. "At the moment, China seems more interested in engaging on this issue internationally than the U.S. does," says Elliot Diringer, director of international strategies for the Pew Center on Global Climate Change.

That's because China and India increasingly see climate-change policy as a way to address some of their immediate problems--such as energy shortages and local environmental ills--while getting the international community to help foot the bill. Thanks to poorly run plants and antiquated power grids, China and India are extremely energy inefficient. China uses three times as much energy as the U.S. to produce \$1 of economic output. But that means there is a lot of room for improvement, and saving energy by cutting waste is less expensive than building new coal plants. It also reduces dependence on foreign energy and comes carbon and pollutant free. "Efficiency really is the sweet spot," says Dan Dudek, a chief economist at Environmental Defense. Beijing agrees: the government aims to reduce energy intensity--the amount of energy used relative to the size of the economy--20% by 2010.

Making ambitious pledges is easy--that is what five-year plans are for--but finding the will and the funds to make them stick is trickier. One source of funding is the Clean Development Mechanism, a part of the Kyoto Protocol that allows developed countries to sponsor greenhouse-cutting projects in developing countries in exchange for carbon credits that can be used for meeting emissions targets. Those projects don't require any technological breakthroughs. A 2003 study by the consulting firm CRA International found that if China and India invested fully in technology already in use in the U.S., the total carbon savings by 2012 would be comparable to what could be achieved if every country under the Kyoto Protocol actually met its targets.

But that window of opportunity is closing rapidly. Every step forward that these countries take today (such as China's move to make its auto-emission regulations stricter than the

U.S.'s) risks being swamped by growth tomorrow (for example, China could have 140 million cars on the road by 2020). What China and India really need to ensure green development is what the world needs: a broadly accepted post-Kyoto pact that is strict enough to make it economically worthwhile to eliminate carbon emissions. Though actual cuts are off the table for now, Beijing and New Delhi seem willing to discuss softer targets, such as lowering carbon intensity. But they feel that Washington must take the lead. "It is possible for these countries to achieve the growth they deserve without wrecking the climate," says Diringer. "They just can't do it on their own. It has to go through the U.S."

Maybe we can begin by living a bit more like the average Chinese or Indian--before they start living like us.

With reporting by With reporting by Susan Jakes, Jodi Xu/ Beijing