
NUCLEAR POWER: Will more nuclear power actually reduce India's greenhouse gas emissions? *(Tuesday, September 23, 2008)*

Lisa Friedman, *ClimateWire* reporter

The proposed nuclear energy agreement between the United States and India will be good for climate change, according to a leading Indian Parliament minister.

Parliamentary Affairs Minister Vayalar Ravi, speaking to business leaders in Washington recently, said pending landmark legislation opening nuclear energy cooperation between the United States and India will create a stronger relationship between the two countries. India, he promised, would continue a moratorium on nuclear testing.

"Success in this effort will also have a positive impact on the problem of global warming," Ravi predicted.

But some doubt whether it would seriously slow India's fossil fuel consumption. Nuclear power generation does not produce carbon emissions. If Congress votes to approve the deal this week, the United States would reverse more than three decades of policy and permit the shipping of nuclear fuel to India in return for international inspections of the country's civilian reactors (*E&E Daily*, Sept. 19).

India emits far less carbon dioxide per person than the United States or Europe, yet its rapid economic expansion and coal-dominated energy generation have made it one of the fastest-growing sources of emissions. According to the World Bank, India is the fourth-largest emitter of CO₂ after the United States, China and Russia. The country's emissions rose 46.8 percent between 1990 and 2003.

Currently, nuclear power accounts for less than 4 percent of India's energy makeup. But the country has an ambitious target of raising nuclear generation tenfold over the next 25 years. According to various reports, India hopes to raise nuclear generation capacity to 20 gigawatts by 2020 and 40 gigawatts by 2030.

Harold Feiveson, a senior research policy scientist at Princeton University's program on science and global security, said that plan has the potential to prevent more than 50 million tons of CO₂ annually from entering the atmosphere.

Doubts about India's nuclear expansion plans

"That's not peanuts," Feiveson said. But, he added, "Can they expand at a rate that will make a big impact? I'm skeptical."

Feiveson and Council on Foreign Relations fellow Michael Levi noted that India still has a poor transmission infrastructure, which would severely hamper its plans to expand its nuclear generation. Moreover, they questioned whether nuclear power would actually replace coal in India, or simply add to the country's energy capacity.

"Reliable access to energy is very important for India," Levi said. According to the International Energy Agency, more than 412 million people in India still have no access to electricity.

"India is fueling its growth primarily using coal and oil. To the extent it can shift to other sources, including nuclear, it will be able to reduce its emissions," Levi said, but he stressed that climate concerns should not "tip the balance" on one's opinion about the agreement.

"It's way too early to know what the implications might be," he said.

India in June unveiled a [national action plan](#) on climate change that essentially was its first attempt to formulate a formal, written policy for addressing its role in combating global warming. While stressing the country's need to continue on a path of strong economic growth and insisting that industrialized countries like the United States bear top responsibility for reducing emissions, leaders also acknowledged that India has a role to play helping to avert the most disastrous consequences of global warming.

Under the plan, the government proposed eight initiatives, with a heavy focus on pumping up solar and renewable energy.

Indian expert thinks electricity from fossil fuel will remain dominant

M.V. Ramana, a senior fellow at the Centre for Interdisciplinary Studies in Environment and Development in Bangalore, India, said in an e-mail that he thinks India's energy generation will continue to be dominated by fossil fuels "with or without the nuclear deal."

"The climate change benefits of nuclear power in India could be, at best, small. At worst, over-emphasis on a costly technology like nuclear power might lead to financial and political neglect of other, cheaper options for mitigating emissions," he said.

Supporters of the nuclear deal are pressing Congress to ratify the agreement before Sept. 26, when it is set to adjourn.

While there is broad support for the agreement in both parties, it faces strong opposition from anti-proliferation groups. India has been denied access to civilian nuclear technology ever since it tested a nuclear bomb in 1974. It is not a party to the Nonproliferation Treaty and has insisted upon the right to test nuclear weapons, though India's leaders say they have no plans to do so.

And while some working on the deal tout its benefits for climate change, few appear to be looking at the issue together with the agreement. Indeed, several climate change experts, when asked about the nuclear agreement, said they were not familiar with the details. Meanwhile, several experts on the India deal said they

are not familiar enough with climate change to discuss the implications.

Levi called the disconnect between climate change and other international policies troubling, and said he encounters it in everything from trade to global capital flows.

"Climate change is being sequestered away from other foreign policy issues, and that's dangerous," he said.

"Climate has the potential to enter into dimensions of foreign policy at a very high level."