India's challenge

Leena Srivastava believes India should not have to sacrifice its economic growth for the sake of 'unfair' commitments to reduce greenhouse gas emissions called for by industrialized countries

ndia, in recent times, has come under tremendous pressure to make commitments to reduce its greenhouse gas emissions. The arguments are essentially two-fold: One, that the country's emissions are likely to increase substantially in the future thereby offsetting any gains (thus far invisible) that may arise from actions of the developed world to mitigate emissions. The second argument essentially centres on the competitive disadvantages that industry in the developed world may face if key developing countries like India do not assume emission reduction targets.

Both the above arguments are flawed. By shifting the focus to the future, the Annex 1 (industrialized) countries are shving away from their historical responsibilities and are refusing to be held accountable for the damage that they have already inflicted on the earth's climate system. The uncertainty of the future is starkly apparent in the unanticipated financial crisis that the world is going through. What we need to develop is a mechanism by which historical responsibilities are fixed in a dynamic manner, integrated over the lifetime of the greenhouse gases and weighted by their populations. Countries should then be required to assume commitments that are proportional to their historical responsibility, as defined above, in contributing to the problem of climate change. Such a mechanism would be fair and equitable and provide the space needed by countries such as India to develop in a responsible manner.

The argument on competitive disadvantages that may be inflicted on industry in the Annex 1 countries is untenable as the UN Framework Convention on Climate Change holds countries accountable (and not sectors) and expects that the countries which gained at the cost of the climate system would pay the costs of addressing the problem created—the philosophy behind the 'polluter pays' principle. As such. Annex 1 countries could not realistically have expected the corrective actions to be free! Nor should they expect those countries which did not create the problem to be altruistic and help create a level playing field now when none existed earlier! It is the poetic justice of time that is providing a small window of opportunity to the less developed countries to nurture their growth—this opportunity cannot be encumbered by bearing, once again, the burden of the rich.

India has, undoubtedly, been experiencing a rapid rate of growth. But in this growth story the world tends to forget that the experience is still recent and the base, on which the growth is being measured, small. India's per capita income is currently approximately USS 2,400 and is expected to be less than USS 5,000 even by the year 2020. Even its per capita energy consumption level is a mere 350 kgoe (kilogrammes of oil equivalent) and will

increase to 800 kgoe by 2020. Compare this with an average world per capita income of US\$ 8,755 in 2005 (US\$ 30,000 for OECD countries) and an average per capita energy consumption of 1.800 kgoe (5.000 for OECD countries) for 2005. Some of this increase in energy consumption would be to fuel the annual growth of 8% that India is targeting for this period, despite the efficiency improvements that are inevitable. Some of the increase would also be to bring the millions of people who are currently out of the energy net into the supply chain. India today has around 650 million people who burn traditional biomass for cooking and about 400 million people who have no access to electricity in their homes or for work.

Despite the low levels of energy consumption that India has, its current low levels of access and infrastructure development offers a great opportunity to ensure a shift to a low carbon pathway. We estimate that nearly 80% of India's infrastructure needs up to 2030 are vet to be put in place. Key elements of this include the infrastructure to meet mobility needs and for power generation. On mobility, the government has a difficult choice-encouraging public transport would not only affect industrial growth (nationally and globally) through its impact on the automobile sector, but would also increase the financial burden on its scarce budgetary resources that would be called upon to support a larger public transport infrastructure. For meeting the demand for electricity-derived services, India needs to quickly acquire experience with large-scale solar-based technologies to serve the urban populations and with Decentralized Distributed Generation solutions at a national level. One critical element to support this transformation would be developing and managing 'smart' grids. The challenge here, of course, is how can India achieve this while keeping costs sufficiently low for those 400 million people with no electricity connections to gain access? Instead of feeling threatened by the growth opportunity of India, Annex 1 countries should enthusiastically participate in its transition to a low carbon path!



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