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Climate policy options in East-west squeeze

With a bold stance on emissions, India can be a leader in clean development

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Last Updated at January 21, 2013 00:54 IST



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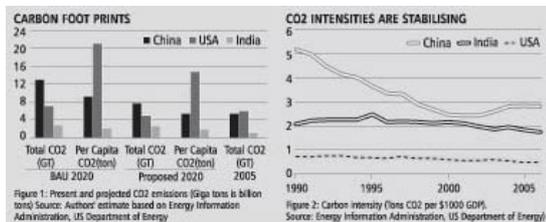
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With a bold stance on emissions and a well-reasoned roadmap for low-carbon growth, India can be a leader in clean development in three or four decades.

The US and China recently announced emissions targets with great fanfare. The US offered to reduce its emissions by 17 per cent by 2020 from 2005 levels. Subsequently, China announced a 40-45 per cent reduction in its carbon intensity during the same period. What are India's options? India's conventional position has been that of common but differentiated responsibility without accepting any mandatory cuts in emissions. Now that China has announced emissions cuts, it puts pressure on India and other developing countries to announce a policy that could lead to an agreement in Copenhagen.



We first examine the

implications of China's announcement. The Chinese economy has been growing at over 9 per cent in the last decade and its energy intensity has progressively declined from over 8 (tons CO2 per \$1,000 GDP) in the 1980s to about 2.5 now. China leads the world in CO2 emissions, with the US in second position; both the nations emit over 6 giga tons each per annum. However, China's per capita emission is 4.2 tons, as against 21 tons for the US. Under a 'Business as Usual' (BAU) trajectory, with a GDP growth varying between 6-9 per cent, China's total emission would reach 13-20 giga tons by 2020; or 9-14 tons per capita. China's announcement of a 40 per cent reduction in the carbon intensity from 2005 levels translates into reducing the emissions to 7.8-12 giga tons by 2020. The per capita emissions would then be 5.5- 8.4 over the same period.

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reduce to about 15, still a very high number.

There are a few important aspects of the above analysis. Notwithstanding the recent announcements, total and per capita emissions of the US and China are still going to be very high in 2020. Further, China's announcement amounts to a reduction of about 40 per cent from BAU where as the US's translates to roughly 20-25 per cent reduction from BAU in 2020. It is important to realise that there is already a steady decline in China's CO2 intensity, following rapid GDP growth rate in the last decade. The trend would have continued further even in the absence of an explicit policy announcement, though not to the extent of 40 per cent reduction as announced. Nevertheless, the US and, in particular, Chinese announcements do amount to significant actual CO2 cuts.

India is presently the fourth largest CO2 emitter — but way behind China and the US. The total emissions are about 1.2 giga tons and per capita emission is 1.2 tons. India's CO2 intensity has been relatively flat at 1.8, marginally declining in the last few years. Under BAU, with GDP growth projections at 6-9 per cent, India's emissions could grow to about 2.8-4.3 giga tons in 2020, or 2.2-3.3 tons per capita. It is noteworthy that even under BAU, India's projected emissions would still be significantly lower than the present US and Chinese emissions of 6 giga tons. India would catch up with these numbers by 2030 only in a reasonably high growth scenario. Further, India's BAU emissions are just a fraction of the projected US and Chinese numbers, even after the announcement of the emissions cut policy.

What should India's response be? "No action" is not an option; India will have to engage and show flexibility in its conventional hard line position. Further, India is already a signatory to the Major Economies Forum declaration in Italy, where it showed commitment to a "meaningful deviation from BAU" and to restrict global warming to 2 degrees C. We believe that India is in a good bargaining position, since its CO2 intensity and per capita emissions are relatively low and stable; at no point has it shown a dramatic carbon-intensive growth. Still, being the world's largest democracy, India is willing to shoulder its responsibility in a carbon deal. In our opinion, India should offer an overall 30 per cent cut in carbon intensity by 2030. It could be a phased reduction: 5-10 per cent in the period up to 2020, and a further 20-25 per cent reduction in 2020-2030. We feel that this is achievable — without imposing a considerable cost on the economy — by pursuing energy efficiency, renewable sources, nuclear power and experiments in carbon capture and sequestration.

In return, India should clearly articulate its technology and financial requirements to move along a lower carbon intensive trajectory. It is regretted that in spite of enjoying bountiful sunshine, India chose not to harness solar energy in a major way till recently. Germany, despite its northern latitude and fewer sunshine days, is the world leader in solar energy. India should earnestly implement the recently announced ambitious solar mission with required investments and policies. This is vital not only for mitigating carbon emissions, but also for India's energy security. With proper planning, India could transform into a global manufacturing hub for solar power.

India's present intransigent position is preventing it from engaging with the world in a constructive manner. It should show flexibility, take a bold stance on emissions and make plans for developing on a low carbon trajectory. With a well-reasoned and responsible roadmap, India can be a leader in "clean development" in three to four decades.

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First Published: Sun, December 13 2009. 00:13 IST

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