ORF ISSUE BRIEF

JANUARY 2015 ISSUE BRIEF # 85

An 'India Exception' and India-US Partnership on Climate Change

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A Unique Dilemma

Climate change has become the major global challenge of this young century. For years, the search for solutions has run up against a sharp North-South divide over the historical emissions of developed countries and the parameters of what is termed, in the climate world, "common but differentiated responsibility" for developing nations. A common appreciation of climate and economic equity between disparate countries and regions remains both critical and challenging for the global climate negotiations process if it is to culminate in a major deal in Paris in 2015, and for implementation beyond that date. The authors believe that the only way to remove this roadblock is to forge an "India exception" in global climate talks; doing so is the only realistic pathway to a global climate deal, and could be a key tool in cementing stronger ties between India and the US, two critical actors in the evolving international order.

The Lima Conference of Parties (COP) in some ways breached the North-South firewall as it sought details of climate action from a larger set of stakeholders, but at another level it reinforced the historic differences between nations on the question of "equity" and "responsibility." Perhaps more important, the 2014 US-China bilateral agreement on carbon emissions constitutes an important breakthrough in the North-South dynamic—as well as showing that great power agreements on climate change can be forged. In the November 2014 agreement reached between Xi Jinping and Barack Obama, three important things happened. First, China accepted that there was a specific timeline wherein its emissions had to peak. Second, both countries accepted that they had greater responsibility than other countries for an effective global climate arrangement, given their outsized contributions to global emissions. And third, the United States accepted that China has the right to energy-intensive industrialisation, as every major developed nation has had before it.

China is in a very specific place: Its growth over the past two decades means that while it is still treated as a developing country in climate negotiations, its economic position and influence far surpass that of any other developing country; for example, its emissions and GDP per capita remain four times that of India, the only other relatively significant developing economy. To get from a US-China deal to a global one, the next challenge is to find the critical path for other major developing states. Of these, India by far remains the largest, although it is at a far earlier stage on its trajectory of industrial development.

In the spectrum of common but differentiated responsibility, India finds itself uniquely situated between nations that industrialised long ago and can now afford expensive renewable energy production and climate adaptation, and those who largely gain their livelihoods from traditional subsistence practices that continue to follow preindustrial low-carbon practices. India is confronted with the dilemma of being between an identity as an emerging power and as one of the least developed countries. It exhibits the economic weight of an emerging power while still containing many hallmarks of a least developed country in its villages and communities.

Furthermore, the sheer size of its population means that India's choices about development and climate/energy carry global consequences to a degree that is far greater than any other developing country.

After two decades of economic development that have begun to lift sections of its population out of poverty, India cannot and will not let its development wait for the eventuality of commercially deployable and cost-competitive renewable energy. More than 300 million Indians still have little or no access to modern energy sources—India's dilemma is that several generations of Indians are on the cusp of prosperity if growth is powered by cheaper energy. The most accessible option is often carbon-polluting coal. In this, India is similar to all previous industrialising nations, from Britain, Germany and the United States in the 19th and 20th centuries to China in the recent past; all powered their industrialisation, rural-urban transition and rise in per capita incomes with fossil fuels.

But India faces a predicament all previous countries that used energy to reduce poverty did not: It stands on the verge of industrialisation just as the world may finally be willing to take multilateral action to reduce carbon emissions. Possessing vulnerable coastlines and reliant on the monsoon and glacial melt, India is as vulnerable as any to the consequences of collective action failure on climate. But for India, the tradeoffs between environment and growth are harsher than perhaps anywhere else. India's overall size in both population and emissions accords it unique attention for a low-income country in the global climate debate; yet its relative poverty and low per-capita energy use compared to every other large emitter creates what Indians view as a justified overriding imperative for poverty elimination.

Figure 1: Climate Inequity

Country/bloc	GDP per capita (US$, 2013)	Carbon emissions (metric tons per capita, 2010-2013)	Carbon Intensity (kg per kg of oil equivalent energy use, 2010-2013)
European Union	$34,290	7.4	2.2
United States	$53,143	17.6	2.5
China	$6,807	6.2	3.3
India	$1,499	1.7	2.8

Source: World Bank

Polluting Below Its Weight

How can India thread the needle between climate disaster and premature economic stagnation? Though the challenge is great, India will be an important enough partner at the upcoming climate talks to articulate a set of red and green lines—what it can and cannot do. India will find it difficult to accede to any deal that will make its ongoing industrialisation the first industrial revolution in history to be nipped in the bud by international restrictions. From the Indian perspective, the Chinese must not be the last ones allowed to become a middle-income nation. Given the uncertain prospect of maintaining a steady double digit growth rate in a post-Lehman Brothers world, Indian poverty cannot be frozen by a dateline. At the same time, India needs action from already-industrialised and wealthier nations—including China, which has leveraged 50 percent of the world's coal consumption to catapult itself to prosperity—to prevent scientists' dire predictions on a 'business as usual' approach to carbon emissions.[1] This would negatively affect India's poorest along with its economic growth.

India also has a set of green lines outlining its contributions to the climate change fight. Even though under the logic of industrialisation India's emission intensity would be expected to rise in the coming decades (see Figure 1), in the last decade the UPA government committed to reducing emission intensity by 20-25 percent by 2020 (from 2007 levels). As India moves from a service- and agriculture-based economy towards greater reliance on manufacturing, rapid urbanisation, more intensive infrastructure development and growth of the transportation sector, meeting this carbon intensity target will be a de facto climate mitigation measure and a mark of India's commitment to climate action.

The recent election of Prime Minister Narendra Modi has created the opportunity for all of India to benefit from the renewable energy-friendly policies he pursued as Chief Minister of Gujarat and has opened up the possibility that India become a leader in cost-competitive renewable energy. India is already the world's largest biomass, third-largest solar and fourth-largest wind energy producer. India would be open to reducing its relative dependence on coal if a climate framework created meaningful funding and technology transfer to accelerate such efforts.

Figure 2: India's Climate Actions

Economy-wide pledges and targets	**Submitted to UNFCCC:** Pledge to reduce emissions intensity by 20%-25% by 2020 submitted to the UNFCCC. Outside UNFCCC: Eight national missions have been introduced under the National Action Plan on Climate Change in 2008 and include mitigation measures focused on promoting solar energy, improving the forest cover of the country and market based mechanisms such as Performance-Achieve-Trade (PAT), which are focused on improving cost effectiveness and energy efficiency in large, energy-intensive industries.
Sectoral/programmatic mitigation actions	**Submitted to UNFCCC:** Agriculture would not be a part of the 20-25% reduction target. **Outside UNFCCC:** Sectoral actions include emission reductions and low-carbon strategies across important sectors such as power, energy and construction. Strategies include policy instruments/measures such as coal tax, feed-in tariffs and energy codes for commercial buildings.
Project-level mitigation actions	**Submitted to UNFCCC:** Clean Development Mechanisms (CDMs) that allow developed countries to promote climate mitigation projects in developing countries. India hosts a total of 2,295 CDM projects.

Sources: Fifth IPCC Report; India's National Adaptation Programmes of Action (NAPA) Profile

India's growth dichotomy is particularly acute. On the one hand, the price competitiveness of coal makes it the preferred choice given India's imperative to eliminate poverty and deliver energy to all. Yet at the same time, India's adoption of renewable energy and low-carbon technology positions it among the global leaders in sustainable growth. Even more significantly, India has a structural frugality to its energy consumption. India's peaking per-capita emissions are unlikely to ever cross the threshold of five to six tonnes per capita that still marks the climate action aspirations of developed carbon-intensive economies. In contrast, China is projected to peak at 12 tonnes per capita.[2] Even without this continued Chinese emissions growth, India would need four times China's population—and ten times that of the US—to achieve total emissions comparable to either country. Therefore, Indian industrialisation, even with its coal component, will be greener than many that have come before.

Given the vagaries of growth, its inescapable linkage to poverty reduction and the compelling need to grow to provide jobs for a youthful demography, India will have difficulty accommodating international demands for a national emissions peaking date. As a pluralistic democracy in the midst of vast anti-poverty and electrification efforts often uncoordinated between states, the Centre and the private sector, a peak date cannot be imposed on a decentralised governance structure by a fiat emanating from a competitively elected and therefore precariously changeable authority of the Centre.

India as an Exception

India's combination of dilemmas and promise on climate change demonstrates the folly of expecting comparable mitigation from India as from China, or from emerging economies as a vaguely defined category. India is the country that most uniquely combines large size, low starting point and high potential over the next few decades. China has moved on and is likely to be a developed country by 2030. Many other countries embody one or even two of these factors, but none combine all three—thus making India the most important prospect for mass poverty elimination in the coming decades, and the defining challenge and opportunity for sustainable development.

This unique position is borne out in the data. When compared to the other largest emitters, China, the US and the EU, India has vastly lower per-capita GDP and per-capita emissions; even on emission intensity it is closer to the United States than China (see Figure 1). But there are many less developed countries in a similar category; what makes India's position different? First, the sheer size of population and scale of the poverty eradication challenge. More profoundly, India's claim to uniqueness comes from the fact that its growth and concomitant industrial revolution is happening now. It is expected to grow more rapidly than any other region of the world in the next few decades to 2040 (see Figure 3). This growth, thus far largely powered by fossil fuels, is the best opportunity to continue the mass upliftment of citizens from poverty that began in China—and an important tool to maintain Asia's regional security balance. India's robust economic growth is itself a compelling contribution to the future, and the world must work together to lift one-sixth of its people out of poverty while also maintaining their environment. India may be one of the countries that is most vulnerable to the effects of climate change, but it is also the country most in danger of losing out on mass poverty elimination and great power status because of a forced transition from fossil fuels.

Figure 3: Relative Economic Growth, 2010-2040

Country/region	Projected Real GDP Growth Rates (average annual percent change)
India	6.1%
China	5.7%
Africa	4.6%
Non-OECD Europe/Eurasia	4.4%
Other Asia	4.3%
Mexico/Chile	3.7%
Brazil	3.4%
South Korea	3.3%
Other Central/South America	3.2%
Russia	2.8%
United States	2.5%
Middle East	2.2%
Australia/New Zealand	2.2%
Canada	2.2%
OECD Europe	1.8%
Japan	0.6%

Source: US EIA International Energy Outlook 2013 With Projections to 2040, pp. 17-18

In short, there are two conflicting imperatives here. On the one hand, if India chooses to grow through the same carbon-intensive pathway that has characterised every other major country's growth, there will be no credible prospect for maintaining progress on global carbon reductions. On 'business as usual' projections, India would add another EU to the world's carbon emissions budget within a few decades. On the other hand, denying India the right to grow and confining hundreds of millions to continued poverty is an untenable proposition.

Within any global climate framework, therefore, the authors believe that India should be accorded exceptional status in light of its mass poverty challenge and imminent growth opportunity. Such an exception should be predicated on a rational and pragmatic framework. The first principle must be to support and sustain the poverty elimination efforts of the country, and in this direction, the goal must be that lifeline energy is available to all at affordable prices. This would necessarily imply ensuring development space (and corresponding carbon space) to India and accepting that a peaking date may not be forthcoming anytime soon. The second principle must be for India's affluent to participate in mitigation efforts globally. And finally, there must be support from countries and communities to equitably share the burden of climate change, based on their current capabilities within and across borders.

Such an exception would have five elements:

- Continuing and supporting India's voluntary emission intensity reduction goals that moves its economy from a 'business as usual' trajectory;
- Focusing the spending of the Green Carbon Fund and similar instruments, including technology transfer, on Indian energy options;
- Following collective but differentiated responsibility within India, requiring rich states and cities to develop innovative mitigation methods, including through "Green Building" Initiatives,

improvement in public transport infrastructure and adoption of energy efficiency schemes by the affluent; each of which is already at various stages of implementation at the central and state level;

- Initiating a universal agreement on corporate emissions mitigation that would involve large Indian companies on equal footing with developed country corporations and mandating sectoral efficiency goals for these large corporations; and
- A decadal review of India's development status, as no exception should outlive its rationale.

Any agreement must ensure India's rich do not hide behind its poor, while also excluding India from Chinese-level obligations that do not befit a country in an earlier stage of its development trajectory. Given India's place in its and the world's history, a global peaking date will depend on other nations taking on mitigation to account for India's exceptional challenge.

An economically invigorated India in several decades can be imagined, one that is powered by broad-based prosperity and a changing energy mix, leading global efforts in environmental adaptation and low-cost renewable energy. But such leadership is only affordable if India's industrial revolution is made possible. India's experience in the years ahead could be a valuable pathway to share with other developing countries as they start grappling with a similar dilemma.

The Washington Angle

India can carry its own water in global climate negotiations, and it can drive its own industrialisation. However, the likelihood of squaring the circle between an effective global climate regime and India's need to develop will increase if the United States plays an active role in helping to forge these arrangements.

There will be predictable opposition. For those motivated primarily by climate change itself, the idea of granting an exceptional status to the world's most populous country will seem injurious to the prospects of mitigating the more disastrous climate scenarios. The rebuttal is to simply point to the reality that for all intents and purposes, India has a veto on a global climate agreement—both in the room, and more importantly in how any deal is implemented. India has already shown that it is willing to walk away from global negotiations if these threaten its core economic interests. And when it comes to implementation, there is no prospect of any deal that holds out meaningful and enforceable costs for "cheating": the only source of pressure for compliance will be information flows about behaviour and mutual pressure between the top powers. That will be outweighed, in India's case, by the imperative of poverty elimination.

Moreover, there is a strong strategic imperative for the United States here, which has to do with India's role in Asia. An India confronted by internationally-imposed restrictions on growth will face serious internal political and democratic challenges. A successful India, in contrast, can play a critical role in stabilising Asia during an otherwise turbulent transition, and can be a critical partner to the United States.

With the US-China deal, and its $3 billion pledge to the Green Climate Fund, the United States has begun to stake out what it gave away in the late 1990s, namely a leadership position on global climate issues. It has also adopted a realistic stance, recognising that when it comes to climate, the most practical thing is to

pursue a back-to-basics approach, which combines a focus on natural gas (which emits carbon at roughly half the intensity of oil), efficiency and joint investment in renewables. In diplomatic terms, it has adopted a "concentric circles" approach to making progress. Here, the concentric circles start with the United States and China, where these two largest emitters will lead the way by reducing carbon emissions. The next obvious focus is India. Helping India navigate a pathway to a more efficient industrialisation is a win-win in terms of climate, international order and US foreign policy.

The US could also make a critical difference in terms of financing more efficient technologies. The math is simple and compelling. India has, as noted, 800 million poor people, out of which 300 million have no access to modern energy—and India's population is set to keep rising.[3] Politicians in India thus feel that they have no choice but to continue to pursue every source of energy, clean or not. India will simply continue trying to grow, and that inevitably means greater energy use in the near term. If India succeeds in doing what China did before, and pulls 300 million people out of poverty, it means adding a population the size of Europe to the overall carbon emissions mix. They are certainly justified in doing this—what possible ethical or moral precepts could justify the OECD countries and some others continuing to emit carbon while 800 million Indians languish in poverty? But this approach will crater any credible efforts to stabilise the climate.

India is of course fully open to adopting a more energy-efficient form of industrialisation and urbanisation if the developed countries provide meaningful financing and access to technologies. A rough estimate of what would be needed for India to adopt more efficient energy pathways during its industralisation is investment of between $50 billion and $100 billion over the next ten years—in natural gas infrastructure, renewables and clean building technologies. Even this sum does not capture the scale of resources necessary when considering what needs to be done at more local levels. As India's rural poor increasingly move to cities, its cities will require new infrastructure; 70 percent of its buildings of 2050 have yet to be built. If these are built with existing building technologies, massive carbon emissions will be built in. The new buildings can be constructed with green technology, but India by itself does not have the resources—financial or technological—to do so.

Granted, India could reprioritise its spending and cut down drastically on its planned naval expansion or other defence spending. But the United States and the world may not want it to. As long as China increases its defence budget, the United States wants India to do so too. As long as China is investing in its blue-water navy, the United States wants India to do so too. It is profoundly in the US interest that there be a strong and growing India, an India that is domestically stable and contributing to a stable Asia and Indian Ocean.

The United States can make a critical difference. It could reapportion part of its international development budget toward India's effort and push for greater allocations by the World Bank and other international institutions. It could create a way for US cities that have successfully used clean building techniques to work with Indian cities. It could invest in Indian education in urban development that is informed by the latest science. As mentioned before, the United States recently pledged $3 billion for the Green Climate Fund—it could work within that Fund, and within the World Bank, to ensure that a large

proportion of that funding goes to India (the most critical case), and use that financing to leverage private sector and city-based contributions.

Of course, there has already been some US investment in renewable technologies in India. The results have been mixed. US investors complain that the returns are inadequate and that Indian policies are not ready for investment at scale. This is in part because of India's decentralised decision-making and uncertainty about the ways in which a global climate framework will limit specific pathways. For Prime Minister Modi, this represents a significant challenge. However, if backed by a US-India deal, and against the backdrop of a global climate framework that accepts an exception for India, the timing would be ideal to intensify efforts at policy implementation and to launch a new phase of what would have to be understood as a generational partnership between the US and India on efficient urbanisation. There are challenges to aligning private incentives of US financiers with public incentives in India, but if this effort is initiated by high-level agreement between Obama and Modi, and public monies are available either through bilateral or multilateral tools, the path can be discovered.

An obvious place to start is clean building technologies, something that President Obama has pinpointed as a central goal for US efficiency efforts. The US and India could form the key building blocks of a global goal on clean buildings and efficient urbanisation, which would be critical for locking in energy-efficient development for India.

If the United States partners with India in navigating towards more efficient industrialisation and supports an "India exception" in global climate talks—not using climate negotiations to pull up the carbon ladder behind it but using bilateral ties and the Major Economies Forum on Energy and Climate Change to offer to help build a clean energy ladder for India—it could be the kind of investment that cements ties between these two countries. From the perspective of a stable international order, it would be a big deal; from the perspective of global climate talks, it is the only realistic pathway forward.

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Endnotes:

1. Fifth IPCC Report.
2. Global Carbon Project.
3. According to latest National Sample Survey data, around 800 million Indians subsist on less than $2 a day, and around 300 million lack access to electricity.

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