

India-U.S. Track II Dialogue on Climate Change and Energy
Enhancing Bilateral Cooperation Between India and the US

December 6 – 8, 2017
New Delhi, India

India and U.S. Joint Statement

Seventh Meeting of the India-U.S. Track II Dialogue on
Climate Change and Energy

On December 6-8, 2017, the India-U.S. Track II Dialogue on Climate Change and Energy held its seventh meeting in New Delhi, India. Convened by the **Ananta Aspen Centre**, India, and the **Aspen Institute**, U.S., this dialogue, since its inception in 2010, has brought together a diverse array of thought leaders from India and the United States – including former senior government officials, industry leaders, and heads of civil society organizations – to inform and encourage India-U.S. partnership at a strategic level and on climate and energy issues. This meeting of the dialogue focused on the clean energy transitions occurring in both countries at the national and sub-national level. This is the first time the group convened since the 2016 Presidential Election in the U.S. In this joint statement, we propose the following high-level actions on topics we discussed:

- **Risks and Opportunities Under the Paris Agreement:**

The Paris Agreement is an historically important global agreement, and the fruitful, long-standing bilateral relationship between the U.S. and India was vital to finalizing the agreement in 2015. While we are deeply disappointed by President Trump’s announcement that he intends to withdraw the U.S. from the Paris Agreement, we are encouraged by the substantial commitment of subnational actors representing 49% of the U.S. population, 54% of GDP, and 35% of emissions to strive to fulfil the U.S. commitment to Paris. India is now on a path towards a clean energy revolution with significant accomplishments in achieving its pledge to the Paris Agreement. It is in the interest of India and the U.S. to fulfill their commitments under the Paris Agreement diligently and with robust transparency. India, U.S. sub-national actors, and the international community should continue to bring attention to the risk of downgrading the U.S. Nationally Determined Contribution (NDC). It is very important that we preserve and defend the Paris Agreement in its essence and spirit through national and sub-national cooperation. The international community will be keenly following the US and India’s role on climate action in support of Paris in key forums such as the G20 and COP23.

- **Continue U.S.-India Bilateral Programs on Clean Energy and Climate Change**

India and the U.S. have enjoyed a fruitful bilateral relationship over the last many years on clean energy, scientific research, climate resilience and other issues of mutual importance. There are currently more

than 15 bilateral programs on climate change and energy between India and the U.S., including the **Partnership to Advance Clean Energy (PACE)**, and the Clean Energy Finance Taskforce. Because the future of these programs is uncertain in the light of the U.S. administration's stated priorities on these issues, India should indicate to the White House its intention and desire to continue with these existing programs and make further efforts to expand this array of U.S.-India partnerships. We urge the Trump Administration to reconsider its proposed cuts to energy and climate programs that support bilateral cooperation between India and the United States and further urge Congress to appropriate sufficient funds to allow these programs to continue and expand. This should include expanding the U.S.-India Partnership for Climate Resilience, working collectively towards the global Sustainable Development Goals, fully launching the bilateral program on air quality, creating a broader U.S.-India Climate Scholars network for the Fulbright Kalam Climate Fellowship Program, continuing the longstanding technical support and cooperation on conservation issues between the U.S. Fish and Wildlife Service, the U.S. Forest Service, and their Indian partner and continue funding for the research programs under the highly successful US-India Partnership to Advance Clean Energy (PACE), particularly in the solar and building efficiency tracks of the research program (PACE-R), as well as the deployment program (PACE-D). It is also vital that the Trump Administration reconsider its proposed cuts to important Earth science programs at NASA, NOAA, USGS, and other federal agencies, and that Congress appropriate sufficient funds to support these agencies and programs. U.S. data and scientific research contributes to the diplomatic relationship between the U.S. and India, and is also a public good relied upon by the entire global community. In addition to these programs, the two countries must identify new platforms and avenues to share the lessons learned by local actors and businesses with each other at national and state levels in order to . Despite the de-emphasis on climate change at the national level in the U.S., India and the U.S. should continue to work together productively as leaders to address the challenges and opportunities in clean energy and climate change.

- **Renewing Power Distribution Systems in India:**

There is significant work that can be done at the sub-national level between the U.S. and India on clean energy. Greater steps should be taken to organize and map sub-national organizations' efforts to most efficiently use resources and improve coordination between actors. In India, certain steps are essential for advancing energy efficiency measures: conserving energy, renewing the power distribution system, developing storage technology, deploying local decentralized solutions for energy efficiency, and further non-governmental action. A cohesive and holistic approach between the relevant national and sub-national actors is necessary for an effective clean energy transition in India. India and the U.S. should continue knowledge-sharing on effective clean energy transition mechanisms and take steps to map the work of sub-national actors.

The U.S. should collaborate with India to conduct an assessment, like the *Renewable Electricity Futures Study* (2012) conducted on the U.S. electricity system, to explore the implications and challenges of increased renewable electricity generation levels in India given the goal to incorporate 175 GW of renewable energy in the national grid by 2022. The objective would be to improve confidence in the technical and economic feasibility of increasing India's ambitious RE goals by charting pathways towards deep decarbonization of the power sector. At high levels of RE penetration, quantifying the unique spatiotemporal properties of RE electricity generation will be critical to analyse least-cost pathways that maintain reliability.

- **Enhancing Cooperation on Electric Vehicles:**

Decarbonizing transportation requires deployment of low carbon technologies, such as electric vehicles (EVs). The key components to develop EVs include: mobility-oriented development, mobility as a service, vehicle-grid integration, and electric vehicle deployment. Policy incentives combined with deployment of cost effective technology and fuel efficiency requirements can contribute towards creating a thriving EV ecosystem. In order to boost the EV market, India must first focus on introducing EVs in the public transport system, such as railways, to offset the upfront operational costs by saving on fuel. Currently, the lithium batteries and powertrains used in EVs are being imported from China, therefore India would also need policies to support production of the whole supply chain. There is tremendous potential for cooperation between India and the U.S. on research & development of EVs, especially in producing cost efficient technology, electrochemistry, and manufacturing. Together, India and the U.S. could create a program focusing on developing competing technologies such as hydrogen-powered vehicles which, because of its high-performance and the convenience offered by fast refueling, may complement the EV market evolution. We encourage US philanthropies to invest in efforts on EV development and the future of mobility in India.

- **Assessing Cost Effectiveness of Carbon Pricing:**

Major approaches towards curbing carbon emissions are cap and trade, command and control regulation, government subsidies of alternative energy, green energy policies, and carbon taxes. Among these, various approaches to carbon pricing are under discussion in both India and US, albeit in different ways, creating scope for sharing knowledge. In India, there are ongoing experiences with measures that have the effect of taxing carbon, such as the Coal Cess, and with reducing subsidies on liquid fuels, there is a need for robust tracking, measuring, and analyzing mechanisms to assess the efficacy of these measures and their mitigation effect. While the U.S. is not currently considering a national carbon tax, some U.S. states are considering implementing a state-wide carbon tax, e.g. Washington state, and other states may follow. In addition, a growing number of states are pricing carbon through cap-and-trade programs. California has adopted a robust, economy-wide cap-and-trade mechanism, Oregon is debating creating a cap-and-trade program linked to California's, and the Regional Greenhouse Gas Initiative cap-and-trade program for power sector emissions in the Northeast is expected to grow as the new governors of New Jersey and Virginia have expressed their intent to join the nine other states currently in the agreement. A cooperative program or forum between those stakeholders in the U.S. and India interested in such programs could create a platform to share knowledge on implementing a regional or state-level carbon tax and scale efforts up in the future.

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