

India's Leadership in the climate crisis battle

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The world is racing against nature, human greed and more critically, time, to limit global warming to 1.5 degree Celsius by 2100. The United Nations COP26 conference in Glasgow has been a seminal moment in this race. As expected, there was a palpable anxiety amongst the climate activists regarding the position that India, an emerging economy and a highly significant stakeholder, would ultimately take. As COP26 came to a close this Friday, eminent global experts are applauding India's historic proclamations to fight climate change.

Gerry Rice, the Director of IMF declared that India's significant investment in renewables and climate change adaptation policies suggest that it is well-positioned to take further steps to reach this new target. Lord Nicholas Stern, a leading voice on climate action and a world renowned economist proclaimed that India's updated climate targets demonstrate real leadership, which is based on a track record of action and ambitious targets. These targets can deliver on both economic development and climate change. He added that the rich world must respond to Prime Minister Modi's challenge to deliver a strong increase in international climate finance.

Global accolades are flowing towards India after Prime Minister Narendra Modi presented his five-point agenda or the "Panchamrit" while delivering the National Statement at the COP-26 conference in Glasgow. The first is to raise the non-fossil fuel based energy capacity of the country to 500 GW by 2030. Also, by 2030, 50% of the country's power requirements would be met using renewable energy capacities. While reducing the total projected carbon emission by one billion tonnes between now and the year 2030, the carbon intensity of the economy would also be reduced to less than 45% by 2030. Finally, India would achieve net zero emissions by the year 2070.

These targets assume a unique value, especially when it comes to climate justice. The UN Emission Gap Report 2020 had evaluated India's progress, and based on 6 out of the 7 independent studies, it concluded that India is well on its way to achieving its NDC targets with current policies, even as many developed countries dropped the ball. As of September 2021, Climate Action Tracker had assessed India to be the only G20 nation whose NDCs were compliant with the 2°C global warming target. It is worthwhile to note that the US, EU, Russia, Canada, and Japan are responsible for 60% of cumulative carbon emissions between 1751- and 2017. Today, if one were to consider the 1.5°C scenario, only 14% of the carbon space available is available for the entire world. In addition to total carbon emissions, per capita emissions of developed countries are high. Historically, least developed and lower middle income countries recorded low per capita emissions, despite having large populations to sustain. Clearly, in the context of developing nations, their miniscule historical contribution to global carbon space makes a compelling case for demanding a fair share of remaining available carbon space and the right to develop. Specifically, for India, its historical utilisation of carbon space since pre-industrial times is only 51.94 GtCO₂e. India has used only 1.3% of total carbon space (2°C warming scenario) and 1.8% of total carbon space (1.5°C warming scenario). If the global community accepts the principle of dividing the carbon space equitably across nations on a per capita emission basis, India's share would be 17.5% of the total space, or 700 Gt (2°C warming scenario) and 490 Gt (1.5°C warming scenario).

In order to enhance transparency on carbon space utilisation, India launched the Climate Equity Monitor- the first ever such initiative by developing nations to track and monitor utilisation of carbon space. India placed on record that BASIC (Brazil, South Africa, India and China) countries support strong, credible domestic mitigation actions by developed countries without undue reliance on cheap offsets to maintain their high carbon, unsustainable lifestyles. India has also indicated that the updated NDCs (Nationally Determined Contribution) are conditional, that is, subject to the availability of \$1 trillion in climate finance. Through this hard negotiation, India has also shouldered the responsibility to use its track record and global standing to provide thought leadership on behalf of the developing world.

Domestic Push

India's ambitious targets in COP26 should be studied in the context of India's consistent domestic push towards clean technologies. India is investing billions of dollars in electric vehicle subsidies, ethanol blending in gasoline, solar PV and battery manufacturing. While many nations are pursuing a twin-pathway of supporting both blue and green hydrogen, India is setting up an exclusively green and zero-carbon green hydrogen mission. Indian Railways has already set a Net Zero target of 2030.

Forging International Partnerships

Clean-technologies are notorious for their capital heavy development pathways. Any one nation cannot single handedly scale-up demand in cost-effective ways. India has created meaningful partnerships to drive coordinated scale-up of clean technologies. This week, The US joined the International Solar Alliance (ISA), pioneered by India and France, becoming the 101st country to join the world's most important future energy alliance. Under ISA, India and UK signed the solar power initiative, One Sun One World One Grid (OSOWOG), that envisions an interconnected transnational solar grid. To date, steel and cement — which each represent around 7-8% of energy-related emissions globally — have remained out of reach in the pursuit to mitigate carbon emissions. A coalition of governments and organizations, led by the United Kingdom (UK) and India, launched the new Clean Energy Ministerial's Industrial Deep Decarbonization Initiative (IDDI). With steel and cement among the most carbon-intensive commodities on the planet today, over the next three years, the coalition wants at least 10 countries to commit to purchasing low-carbon versions of these essential materials. Technologies such as green hydrogen will play a critical role in deep-decarbonisation. Surrounded by countries that are most vulnerable to climate change, India has led the formation of the Coalition for Disaster Resilient Infrastructure (CDRI).

Investing in Emerging Technologies

With ambition and intent in place, now is the time for action, innovation and implementation. Majority of long term targets by most countries depend on technologies that are not mature yet. The technologies like green hydrogen, green metals, carbon capture, solid-state batteries, electric-fuels, heat pumps and next generation solar PV would be critical to reach global climate targets. India should invest in mainstreaming of cutting-edge clean technologies to help the world transition from an era of climate promises and usher in the era of climate compliance. This would require a new kind of industrial revolution where countries like India (unlike the developed world of today) can industrialize without the need to carbonize.

As a large developing country with over 1.3 Billion people, Prime Minister Modi's COP26 declaration, as well as the actual on-ground initiatives taken by India are not just transformational for India, but for the entire planet. Indeed, nations must strive to emulate these actions. India's climate leadership is not only key to the successful climate fight of developing nations, it is essential for the global race to 1.5 degree Celsius as the majority of energy growth is expected in developing nations. As Prime Minister Modi underlined in COP26, there is a need for 'mindful and deliberate utilization' instead of 'mindful and wasteful consumption'. This clean industrialization era should be complemented by a global shift in our way of life. This sustainable and equitable way of life should guide the world towards a global net-zero, before it is too late. Together, we can.

(The author is CEO, NITI Aayog. Views expressed are strictly personal).
