

India's Climate Diplomacy: Balancing Development and Environmental Imperatives

Introduction

As the world grapples with the urgent need for collective action to mitigate the impacts of climate change, India's role in climate diplomacy has become increasingly vital. Owing to vast population, rapidly expanding economy, and vulnerability to climate change related risks, India finds itself at the intersection of environmental stewardship and developmental imperatives. Despite navigating through a complex landscape of challenges, negotiations, and commitments, India has emerged as a key player in international climate negotiations. The evolution of India's climate diplomacy reflects a nuanced interplay of domestic priorities, global obligations, and geopolitical dynamics. From its early engagement with the United Nations Framework Convention on Climate Change (UNFCCC) to its pivotal role in the Paris Agreement negotiations, India's stance has evolved from one of cautious participation to proactive leadership. Over last few years, India's stance on climate actions has led it to perform better and achieve 7th position¹ in the Climate Change Performance Index 2024. It reflects India's sincere efforts to address climate change while balancing its developmental aspirations. From several national policies to forging partnerships with other

nations for driving innovation in climate change mitigation and adaptation methodologies, India's journey towards climate resilience offers valuable insights into the evolving dynamics of environmental governance. In this article, we delve into the intricacies of India's climate diplomacy and their evolution at both domestic and global stage, and the challenges it faces in navigating the complex terrain of international climate negotiations.

Evolution of India's Climate Diplomacy and Commitments

India's stance on climate change negotiations has evolved significantly since the inception of international climate agreements. Initially, India emphasized an equitable principle of "common but differentiated responsibilities (CBDR)", arguing that developed nations, which historically contributed the most to greenhouse gas emissions, should bear the primary responsibility for addressing climate change. However, in recent years, India has adopted a more proactive approach to climate diplomacy, recognizing the urgency of the climate crisis and the need for collective action and for this India has transitioned to be recognized as a "conciliator" and a "bridging" nation. Since the

ratification of Paris Agreement (2015) is considered a milestone in global climate negotiations, we have taken it as reference point to highlight India's stance in form of their initiatives and policies before and after this historic agreement.

Before the Paris Agreement that brought nations together in a unified effort to combat climate change, India had been grappling with the intricate balance between economic growth and environmental sustainability. As one of the world's largest and developing country, India's approach to climate action has been shaped by its unique socio-economic context. Despite these challenges, India has taken significant strides towards addressing climate change through a range of initiatives at both domestic and international levels.

India stands out as one of the pioneering nations to enact the Energy Conservation Act in 2001 which was recently amended in August 2022 with the introduction of the Energy Conservation (Amendment) Bill 2022. The National Action Plan on Climate Change (NAPCC), launched in 2008, outlines comprehensive strategies for climate mitigation and adaptation in eight areas i.e., solar energy, energy efficiency, sustainable habitat, Himalayan ecosystem, sustainable

¹ <https://ccpi.org/country/ind/>



agriculture, green India, and strategic knowledge. In line with NAPCC, thirty-four states/union-territories prepared their State Action Plan on Climate Change (SAPCC) in 2009, outlining sector-specific and cross-sectoral climate actions. The Indian Network for Climate Change Assessment (INCCA) was launched in 2009 to enhance knowledge about the impacts of Climate Change at the national and subnational level. A National Clean Energy Fund (NCEF) was launched in 2010 for supporting national climate actions. Along with this, India's leadership in renewable energy deployment has been particularly noteworthy, with ambitious targets set for solar and wind power capacity expansion. The government's initiatives, such as the Jawaharlal Nehru National Solar Mission (2010) and the National Wind Energy Mission (2015) were launched, aiming to accelerate the transition towards a low-carbon economy and reduce dependence on fossil fuels.

Later, the Government had reconstituted the Prime Minister's Council on Climate Change (PMCCC) in 2014 (initially constituted in 2007) to evolve a coordinated response to issues relating to climate change at the national level. Then a central-sector Scheme titled "Climate Change Action Programme (CCAP)" was launched in 2014 with objectives of building and supporting capacity at the central and the state levels for assessing Climate Change impacts and simultaneously a National Adaptation Fund on Climate Change (NAFCC) were launched in 2015.

India has been a significant gainer from the Clean Development Mechanism (CDM). The CDM is one of the "flexibility

mechanisms" defined in the Kyoto Protocol. This flexibility mechanisms were designed to allow Annex B countries to meet their emission reduction commitments with reduced impact on their economies. The CDM allows a country with an emission-reduction commitment to implement an emission-reduction project in developing countries which can earn saleable Certified Emission-Reduction (CER) credits. By the year 2014, a total of 1541 (out of 7589 projects) registered by the CDM Executive Board were from India.

India has played a pivotal role in shaping the international climate agenda highlighting the "climate justice" since the inception of climate change negotiations in the Rio Earth Summit of 1992.

India in Conference of Parties (COPs): Since the inception of the Conference of the Parties (COP) in 1995 under the UNFCCC, India played an important role in representing the interests and perspectives of the developing and least developed countries and strongly advocated the principles of CBDR entrenched in the fact that developing countries have relatively negligible contributions to total cumulative emissions and have much lower per-capita emissions. Later, India pushed for climate finance, technology sharing, and establishment of an adaptation fund to accelerate climate action in developing countries and protect the least developed countries from the worst effects of climate change. The Intergovernmental Panel on Climate Change (IPCC) carries out important work on methodologies for estimating and reporting GHG emissions that lays foundation for climate change related negotiations at COP meetings. Under the

leadership of Rajendra Kumar Pachauri, the IPCC was awarded the Nobel Peace Prize in 2007 and delivered the Fifth Assessment Report, the scientific foundation of the Paris Agreement.

Since the landmark Paris Agreement, the global community has intensified its efforts to combat climate change and limit global warming to 1.5-2°C above pre-industrial levels. Amidst this collective endeavour, India, as one of the world's largest and fastest-growing economies, has assumed a critical role in shaping the trajectory of international climate action. In 2015, India and France jointly launched the International Solar Alliance (ISA) which is also the first treaty-based international government organization to be headquartered in India. India submitted its first nationally determined contributions (NDCs) in 2015 and achieved few of them before expected time and simultaneously updated its commitment in 2022 which also included national statements, encapsulated in the "Panchamrit" given by the Hon'ble PM Shri Narendra Modi at COP26 (2021) Summit in Glasgow that also included 2070 net zero target. The updated NDCs are as follows –

- Reduce emissions intensity of its GDP by 45 percent by 2030, from 2005 level
- Achieve about 50 percent cumulative electric power installed capacity from non-fossil fuel-based energy resources by 2030
- Create an additional carbon sink of 2.5 to 3 billion tonnes of CO₂e through additional forest and tree cover by 2030
- Mobilize domestic and new & additional funds from developed countries



- Build capacities, create domestic framework and international architecture for quick diffusion of cutting-edge climate technology
- Better adapt to climate change by enhancing investments in development programmes in sectors vulnerable to climate change
- Adopt a climate friendly and a cleaner path
- Propagate a healthy and sustainable way of living through a mass movement for 'LIFE'– 'Lifestyle for

Environment'. Mission LiFE is an India-led global mass movement to nudge individual and community action to protect and preserve the environment.

Target (for 2030)	First NDC (2015)	Updated NDC (2022)	Progress
Emissions intensity with respect to GDP relative to 2005	Reduce carbon intensity of its economy by 33–35% compared to 2005 levels	Reduce the carbon intensity of its economy by at least 45% compared to 2005 levels	24% reduction achieved in 2016 itself. 33% reduction is achieved in 2019 ²
Non-fossil fuel-based electricity generation capacity	Target to install 40% electricity generation capacity from non-fossil fuel-based energy resources	Target to install 50% electric power capacity from non-fossil fuel-based energy resources	43.81% cumulative electric power installed capacity by October 2023 ³
Renewable generation capacity	Increase renewable generation capacity to 175 gigawatts (GW) by 2022, driven by solar growing to 100 GW.	Increase renewable generation capacity to 500 GW	India has installed capacity of 174 GW as of June 2023 ⁴
Carbon Sink	Target of create an additional carbon sink of 2.5–3 billion metric tons of CO ₂ equivalent through additional forest and tree cover	India reiterated its target to create an additional carbon sink of 2.5–3 billion metric tons of CO ₂ equivalent (Same as earlier)	No data available

India has proactively initiated efforts to unite not only developing nations but also developed ones on a unified platform, aiming to foster collective climate leadership. These efforts include –

- Launch of the international coalition for Disaster-Resilient Infrastructure (CDRI) at the UN Secretary-General’s Climate Action Summit in New York in September 2019. Its mission

statement underscores that a significant portion, up to 66%, of public sector losses in recent weather and climate-related disasters are related with infrastructure damage.

- India with Swedish government co-chairs the Leadership Group for Industry Transition (LeadIT) since its establishment in 2019. LeadIT emphasizes on pivotal industries such as iron, steel, etc. and prioritize industry

transition and the exchange of knowledge. Further, India launched LeadIT 2.0 on the side-lines of COP28 in Dubai with a focus on inclusive and just industry transition.

- At COP 26 (2021), India launched new initiatives such as Infrastructure for Resilient Island States (IRIS) and Green Grids Initiative – One Sun One World One Grid (GGI-OSOWOG).

²<https://pib.gov.in/PressReleaselframePage.aspx?PRID=1989495#:~:text=As%20on%2031st%20October,cumulative%20electric%20power%20installed%20capacity.>

³<https://pib.gov.in/PressReleaselframePage.aspx?PRID=1989495#:~:text=As%20on%2031st%20October,cumulative%20electric%20power%20installed%20capacity.>

⁴ <https://www.energypolicy.columbia.edu/cop28-assessing-indias-progress-against-climate-goals/>



- At COP27 in 2022, India unveiled the "Long-Term Low Emissions Development Strategy (LT-LEDS)" document, reaffirming its commitments.
- In September 2022, India established the Circular Economy Cell within NITI Aayog to provide dedicated focus to the Circular Economy Mission. India has also prioritized "Resource Efficiency and Circular Economy" as one of the three core themes for deliberations in the recent G-20 forum. At G20 meeting in India, the Global Biofuel Alliance was an important step towards more research and delivery of alternative energy sources for a world still dependent on fossil fuels.
- As India is expected to focus on climate finance, energy security and green hydrogen, pushing for the provision of finance and technology as critical enablers for achieving the Paris Agreement climate goals, India has recently launched National Green Hydrogen Mission in 2023 with an aim to make India a hub for manufacturing and use of green hydrogen.
- At the most recent COP28 (2023), India launched the Green Credit Initiative to create a participatory global platform for exchange of innovative environmental programs and instruments.

Several other initiatives and policies on climate action and sustainable development are on way as evident by India's investments in renewable energy, climate-resilient infrastructure, and adaptation measures. While India continues to advocate for an equitable global climate governance, recent climate actions from India are more holistic and align with changing negotiation

contours pushing for symmetrical treatment of developing and developed countries.

Overcoming the challenges – way forward

India's developmental priorities and energy needs have posed significant challenges to its climate action efforts. With a growing population and rising energy demand, India has relied heavily on fossil fuels, particularly coal, to fuel its economic growth and meet its energy needs. The expansion of industries, transportation infrastructure, and urban centres has led to increased greenhouse gas emissions and environmental degradation, exacerbating the challenges posed by climate change. Balancing the need for economic development with environmental sustainability has remained a central dilemma for policymakers, who seek to uplift millions out of poverty while addressing the urgent threats posed by climate change.

The Global Climate Risk Index 2021 calls India the 7th most affected nation due to climate change. However, despite of these challenges and being home to more than 17% of the global population, India's per capita carbon emissions are significantly low at 2.29 tons compared to the global average of 6.3 tons. This comparatively low emission rate underscores India's proactive efforts in balancing economic development with environmental stewardship. This trajectory provides a solid foundation for India's climate diplomacy, showcasing its potential to spearhead innovative solutions that prioritize both prosperity and planet. Despite its commitment to climate action, India faces several challenges in addressing

climate change effectively. As a rapidly developing economy, India faces pressure to sustain its growth trajectory while simultaneously reducing greenhouse gas emissions and adapting to the impacts of climate change. Moreover, the country grapples with issues of energy access, poverty alleviation, and sustainable development, which further complicate its climate agenda. India's growing economy and population present unique challenges in reducing emissions while ensuring inclusive growth. Another challenge is securing adequate financial and technological support from developed countries to implement climate mitigation and adaptation measures. India requires substantial investments in renewable energy, infrastructure, and climate-resilient agriculture to transition to a low-carbon economy and enhance resilience to climate impacts. Negotiating equitable agreements in international forums amidst diverse national interests presents yet another technical challenge, necessitating adept diplomacy and strategic engagement. Despite the many ups and downs, India remains committed to advancing its climate agenda and contributing to global efforts to combat climate change. As India navigates the complex challenges of climate change, it remains committed to advancing sustainable development, prioritize climate action, promoting renewable energy, strengthen domestic climate policies, and enhance international cooperation to achieve global climate goals. By leveraging its diplomatic prowess and leadership, India can contribute significantly to shaping a more sustainable and resilient future for all.

