COP30 CONVERSATIONS

COP30 BRASIL AMAZÔNIA BELÉM 2025 | BELÉM CLIMATE SUMMIT

Editorial Note

As countries gather in Belém, COP30 marks a historic turning point in global climate action for many reasons. Firstly, for the first time, a COP convenes in the heart of a rainforest, where the planet's largest carbon sink faces simultaneous pressures from reforestation pledges and accelerated fossil fuel activity. It is also the first COP tasked with operationalising the Global Stocktake of the Paris Agreement, which reveals that current national pledges deliver only a 10 per cent reduction by 2030, far below the 60 per cent necessary to keep 1.5°C within reach. Third, and critically for national security, COP30 marks a geopolitical realignment. With the US delegation absent from high-level negotiations, India and China are now expected to shape the discussions on climate multilateralism.

This briefing series, developed by the Emerging and Deep Technologies vertical at the Centre for National Security Studies, adopts a non-traditional security lens to analyse the conversations and outcomes at COP30. Rather than treating climate negotiations as isolated environmental policy discussions, this approach examines how climate outcomes, technological solutions frameworks, and financial mechanisms create cascading effects on national security and long-term strategic resilience of countries. The series aims to help researchers and policy analysts interpret the security and diplomatic consequences of COP30 and understand how the emerging conversations may shape India's climate position and long-term strategy.

What to Expect from the "COP of Truth"?

COP30, repeatedly framed as the "COP of Truth," is marked by a commitment to scientific integrity amidst trends of climate denial. Importantly, the summit is expected to provide robust and transparent mechanisms to scale up climate finance through the proposed Baku-to-Belém finance roadmap that aims for USD 1.3 trillion annually for developing nations. Protection of the Amazon and attention to indigenous rights are also important part of the action agenda. The summit's success will depend on whether it translates rhetoric into accountable action, setting a new precedent that sees impactful, equitable outcomes in line with science and public trust.

The COP of Implementation: Democratising Climate Innovation

The COP30 started with the Brazilian President Luiz Inácio Lula da Silva's warning that "We are moving in the right direction, but at the wrong speed," reflecting the urgent reality that despite progress since the Paris Agreement, global climate action remains insufficient to contain planetary warming. The summit was also framed as the COP of Implementation, marked by its potential to transform commitments into concrete action. The first day of the COP established the transformative agenda of 'implementation, inclusion and innovation' with three major technological initiatives launched to democratise climate solutions.

First, the Green Digital Action Hub was formally operationalised at the first of COP30, building on the foundational Green Digital Action Declaration adopted at COP28 in Dubai and endorsed by 82 countries at COP29 in Baku. The Hub is designed as a global cooperation platform anchored in Brazil, aiming to drive sustainable digital transformation. It provides developing nations with the tools, data, and expertise to independently adopt and adapt green technologies, which reduces the risk of technology dependency on developed countries or commercial providers, thereby safeguarding their technology sovereignty. The Hub further focuses on reducing the environmental footprint of digital technologies while democratizing access to climate data, empowering all nations to leverage green digital solutions equitably.

Secondly, the AI Climate Institute (AICI), launched at the opening day, addresses the critical gap of unequal access to AI for climate action in developing countries. Building digital capacity initiatives from COP28 and COP29, AICI empowers policymakers and practitioners in the Global South through training and resource-efficient AI models for real-time, locally relevant climate decision-making. AICI supports inclusive climate resilience by democratising AI tools and fostering sustainable innovation aligned with local needs, marking a major step toward equitable climate technology governance.

Another major launch on the first day is the Nature's Intelligence Studio, aimed to drive climate innovation with bio-inspired technological development. The initiative emphasises benefit-sharing with Indigenous and local communities, addressing longstanding demands for forest sovereignty and environmental justice highlighted at COP29. Placed at the Amazon, one of the world's most biodiverse and climate-critical regions, the Studio is led by the University of Oxford, Brazil's National Institute for Amazonian Research (INPA), and the Development Bank of Latin America (CAF). It aims to foster sustainable economic development while respecting ecological integrity and empowering local stewards, turning the Amazon into an innovation hotspot driving nature-inspired solutions globally. These technological initiatives are expected to accelerate climate solutions, ensuring that progress is not only in the right direction but also at the necessary speed to meet planetary limits and turn commitments into impactful scalable action.

Bridging Ambition and Implementation: Insights from the 2025 NDC Synthesis Report

On October 28, 2025, ahead of the COP30, the UNFCC Secretariat released the 2025 Nationally Determined Contributions (NDC) Synthesis Report, providing assessments of countries' climate commitments, tracking their alignment with the Paris Agreement's goals. The report analyses 64 new or updated NDCs submitted between January 2024 and September 2025, that amounts approximately to one-third of global greenhouse gas emissions.

The report's methodology involves synthesising economy-wide emissions targets, sectoral actions, adaptation plans, and data-driven assessments aligned with the recent Global Stocktake and Article 6 cooperative mechanisms. According to the report, the emissions are projected to be 12 per cent below 2019 levels when including land use, land-use change, and forestry (LULUCF), if all new and revised NDCs communicated by 113 Parties are fully implemented, contrasting sharply with an estimated 20 to 48 per cent increase under scenarios without Paris Agreement policies. Approximately 89 per cent of parties included economy-wide targets linked to net-zero goals between 2040 and 2060. Developing countries have significantly elevated adaptation components in their updated NDCs, with 73 per cent of all parties incorporating adaptation plans. Many of these parties have linked adaptation efforts within their national development strategies, disaster risk reduction and food security.

The report also revealed a positive trend in technological integration, with parties showing increasing reliance on AI and digital tools and clean technologies to meet their climate goals.

The most critical challenge is the profound gaps in adaptation finance. Developing countries require USD 310 to 365 billion annually for adaptation by 2035, while the current international public adaptation finance is allocated at only USD 26 billion annually. For developing countries specifically, the NDC Synthesis Report indicates that meeting their collective climate finance needs requires up to USD 600 billion annually, while the New Collective Quantified Goal (NCQG) commits only USD 300 billion by 2035. More than 90 per cent of developing countries' NDCs indicate that implementation of ambitious targets depends on access to international finance and technology transfer.

India's updated NDC commits to increasing non-fossil energy capacity to 50 per cent by 2030, a target it has already substantially advanced. The country has already achieved a 47 per cent reduction in emissions intensity of GDP between 2005 and 2023, surpassing the previous NDC target of 33 to 35 per cent reduction by 2030. In the 2025 NDC update, India has also committed to expanding its carbon sink to 2.5 billion tonnes of CO_2 equivalent through enhanced forest cover and sustainable land-use practices, contributing to net carbon sequestration. With this updated commitment, at COP30, India is set to champion equitable climate finance access, advocating for the principle of common but differentiated responsibilities (CBDR).

Climate Finance at COP30

Climate finance conversations at the COP summits have evolved through a series of milestones, including the establishment of funds like the Adaptation Fund at COP7 and the promises by developed countries at COP16 in Cancun to mobilise USD 100 billion annually by 2020 to support climate action in developing countries. Despite significant progress, critiques regarding the adequacy and accessibility of climate finance persist.

At COP29 in Baku, negotiations advanced the New Collective Quantified Goal (NCQG), setting a new finance target of USD 300 billion annually by 2035, up from the previous USD 100 billion goal. COP30 develops on this need and legacy by advancing the 'Baku to Belém Roadmap,' which aims to scale climate finance from USD 300 billion annually at COP29 in Baku to USD 1.3 trillion by 2035. It outlines five key action fronts, namely, *replenishing, rebalancing, rechanneling, revamping*, and *reshaping.* The first action front, *replenishing*,' focuses on increasing grants, concessional finance, and low-cost capital from multilateral climate funds such as the Green Climate Fund and the Adaptation Fund, as well as support from multilateral development banks. The second front, rebalancing,' addresses the disproportionate borrowing costs and debt challenges faced by developing countries, proposing mechanisms such as debt-for-climate swaps.

'Rechanneling' aims to mobilise private capital through blended finance and innovative financial instruments while ensuring alignment with countries' NDCs and national adaptation plans (NAPs). 'Revamping' the fourth front involves strengthening readiness, project preparation, capacity building, and developing country-led investment platforms to and scale climate action. The final action, 'reshaping' targets reform of the global financial architecture to enhance transparency, accountability, and equity. This includes reforms in credit rating and fostering better collaboration across funds and institutions.

The first two days of COP30 saw negotiators stressing the urgency of closing the existing finance gap, particularly for adaptation and loss and damage. The Green Climate Fund, marking its 10th anniversary at COP30, reported record commitments USD 3.26 billion, accelerated by increased private sector involvement. The discussions stress the critical necessity for grant-based finance to avoid exacerbating debt burdens in vulnerable and developing economies, alongside calls for simplified access procedures that enhance the flow of funds to frontline communities. Further, the recently operationalised Fund for Responding to Loss and Damage (FRLD) announced its first call for proposals, offering USD 250 million to frontline countries. However, despite early funding pledges, challenges remain regarding sustained and adequate financing over the longer term.

Looking ahead to the remaining days of COP30, discussions are anticipated regarding the funding modalities for the FRLD, advancing the delivery mechanisms of the Baku to Belém Roadmap that ensures equitable access to climate finance.

DPI-based Climate Action

Furthering the agenda of innovation-driven climate action, the COP30 Presidency in Belém officially partnered with the *DPI for People and Planet Innovation Challenge (DPI4PP),* which awarded USD 1,00,000 grant funding to five innovators for transformative DPI-based solutions addressing climate and social resilience.

The DPI4PP initiative was launched in June 2025 by a multi-stakeholder coalition including the Japan International Cooperation Agency (JICA), Co-Develop, the Gates Foundation, the Centre for Digital Public Infrastructure (CDPI), and Boston Consulting Group (BCG), the challenge sought scalable, inclusive, and impactful digital innovations that leverage DPI components such as digital identity, interoperable payments, open data platforms, and data exchange systems.

Kazam, an India-based startup, was one among the awardees of the grant challenge. The company applies DPI-linked mobility and energy data to optimise electric vehicle (EV) charging networks, enabling cleaner transport ecosystems while integrating real-time energy demand management. In October 2025, Kazam partnered with Hindustan Petroleum Corporation Ltd (HPCL) to integrate HPCL chargers into its platform, thus enhancing interoperability of EV infrastructure. This sort of DPI-based solution is a new model of digital climate action, where open, interoperable infrastructure replaces fragmented solutions.

The DPI4PP initiative promises to accelerate climate innovation at a global level. Firstly, it validates DPI as a core enabler of next-generation climate action, providing the architecture for transparent finance delivery. Further, it enables inclusion by ensuring that digital tools used for climate purposes are accessible and interoperable, particularly across developing nations. Through verifiable data and open protocols, these solutions are likely to create a foundation for measurable outcomes across national and subnational levels.

However, these solutions are not devoid of implementation challenges. Digital divide where uneven access to internet services among the populations is a significant barrier in operationalising DPI-based solutions, as was seen in other service delivery mechanisms. Without equitable digital access, DPI-driven climate tools are likely to exacerbate the socio-economic inequalities.

Besides, the lack of universally accepted interoperability standards for DPI impedes seamless integration of digital tools across regions. While DPI frameworks like India's *India Stack* and Europe's *eIDAS* have operated within their own national contexts, their architectures are not directly compatible, thereby hindering transnational climate solutions that are data-bound.

COP30, now officially endorsing DPI-based solutions, should then head critical dialogues that seek to address the existing challenges that DPI frameworks face. It is within these days of deliberations, one gets to know and decide how to put technological solutions into just and scalable use.

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