



THE FUTURE OF CLIMATE CHANGE: INSIGHTS FROM COP29 AND ARTICLE 6.4 OF THE PARIS AGREEMENT

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The 29th Conference of the Parties (COP29), held in 2024, has marked another significant milestone in global efforts to combat climate change. With world leaders, climate experts, activists, and businesses converging in the bustling city of Belém, Brazil, the conference focused on enhancing global climate action, with a particular emphasis on operationalizing Article 6 of the Paris Agreement. Among its provisions, Article 6.4—dealing with a new market mechanism—garnered significant attention as nations strategized how to align their economic goals with environmental imperatives.

Article 6.4: A Market Mechanism for Climate Action

Article 6 of the Paris Agreement provides a framework for international cooperation in reducing greenhouse gas emissions. Within this framework, Article 6.4 establishes a mechanism to allow countries to achieve their nationally determined contributions (NDCs) by buying and selling carbon credits, effectively creating a global carbon market. This mechanism aims to encourage public and private sector entities to

engage in climate-positive projects that generate verified emission reductions.

Unlike the older Clean Development Mechanism (CDM) under the Kyoto Protocol, Article 6.4 introduces stricter guidelines to ensure the environmental integrity of carbon credits. It incorporates measures to prevent double counting of emissions reductions and ensures that a share of the proceeds supports adaptation efforts in developing countries. These features address longstanding criticisms of earlier market mechanisms and enhance the credibility of carbon trading as a tool for climate action.

COP29 and the Operationalization of Article 6.4

At COP29, discussions around Article 6.4 revolved around its practical implementation. Delegates deliberated on setting baselines for projects, ensuring transparency, and establishing mechanisms for independent verification of emission reductions. A key breakthrough was the agreement to integrate indigenous and local community perspectives into carbon market projects.

This decision underscored the recognition that climate action must be inclusive, respecting the rights and knowledge of those most affected by environmental changes.

The conference also addressed concerns regarding the potential misuse of Article 6.4 to delay domestic climate action. To mitigate this risk, negotiators emphasized the principle of "supplementarity," which requires countries to prioritize domestic emission reductions and use carbon credits as a secondary measure. This ensures that the mechanism complements, rather than undermines, ambitious national climate policies.

Financing Climate Action: A Balanced Approach

One of the highlights of COP29 was the focus on mobilizing climate finance to support developing nations in achieving their NDCs. Article 6.4 is expected to play a critical role in this by channeling investments into renewable energy, reforestation, sustainable agriculture, and other low-carbon projects. At the same time, the conference called for an equitable distribution of resources to avoid perpetuating existing inequalities between developed and developing nations.

Brazil, the host country, set an example by announcing a series of projects under the Article 6.4 mechanism, ranging from preserving the Amazon rainforest to promoting agroforestry practices. These initiatives not only contribute to global emission reduction goals but also support local communities through sustainable development.

Future of Climate Action in the Context of Article 6.4

As the effects of climate change intensify, the operationalization of Article 6.4 offers both opportunities and challenges. On the one hand, a well-functioning global carbon market can unlock billions of dollars in climate finance, accelerate the transition to clean energy, and incentivize innovation. On the other hand, the success of this mechanism depends on robust governance, transparency, and the active involvement of all stakeholders.

Moving forward, the role of Article 6.4 in driving transformative change will depend on several factors:

1. **Strengthening Institutional Frameworks:** Countries must establish strong governance structures to oversee carbon market transactions, ensuring accountability and environmental integrity.
2. **Capacity Building for Developing Nations:** To fully participate in the carbon market, developing countries require technical and financial support to design and implement eligible projects.
3. **Private Sector Engagement:** The private sector's involvement is critical for scaling up climate-positive projects. Policies must incentivize businesses to invest in sustainable practices while holding them accountable for their climate impacts.
4. **Adapting to Evolving Climate Realities:** As climate change accelerates, the priorities and parameters of carbon markets may need to be reassessed. This includes incorporating emerging technologies and addressing non-carbon benefits like biodiversity conservation and community resilience.

The Broader Picture: COP29's Legacy

COP29 has reaffirmed the global commitment to the Paris Agreement's goal of limiting global warming to 1.5°C above pre-industrial levels. Beyond Article 6.4, the conference also highlighted the need for systemic changes in energy, agriculture, and transportation to achieve this target. Significant attention was given to phasing out fossil fuels, enhancing adaptation strategies, and safeguarding vulnerable ecosystems.

The conference also underscored the urgency of collective action. Climate change is a shared challenge that transcends national boundaries, demanding collaboration across governments, businesses, and civil society. As COP29 concluded, it became clear that while Article 6.4 represents a powerful tool, it is not a silver bullet. Achieving a sustainable and equitable future requires a holistic approach that

combines market-based mechanisms with policy reforms, innovation, and grassroots engagement.

A Hopeful Yet Cautious Outlook

As the global community moves forward from COP29, the decisions made in Belém will shape the trajectory of climate action for years to come. Article 6.4 holds immense promise, but its success hinges on careful implementation and unwavering commitment to environmental and social integrity. The future of climate change mitigation and adaptation depends on our ability to harness the opportunities presented by such mechanisms while addressing their limitations.

The path ahead is fraught with challenges, but COP29 has provided a roadmap for navigating them. With concerted efforts, the vision of a climate-resilient, low-carbon future remains within reach. As 2024 draws to a close, the world stands at a critical juncture—a moment that demands bold action, shared responsibility, and an unwavering dedication to preserving the planet for future generations.

Host country transfers Article 6.2 units (ITMOs) to buyer country through a bilateral agreement



Article 6.2 (market)

Host country generates units through a UNFCCC centralized mechanism and transfers them to buyer country



Article 6.4 (market and non-market)

UNFCCC web platform could be voluntarily used to facilitate matching projects with financial and technical support available in several focus areas



Article 6.8 (non-market)

Source: The Nature Conservancy (May 2023)