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**BRIEF**


# **KEY COP29 OUTCOMES FOR CARBON MANAGEMENT AND INSIGHTS FOR INCLUSIVE AND SUSTAINABLE DEVELOPMENT**

**NOORA AL AMER**

Senior International Climate Change Policy Lead

**DECEMBER 2024**





COP29 held in Baku, Azerbaijan, marked a pivotal moment in advancing carbon management, carbon markets, and climate finance as key components of the global response to climate change. While significant progress was made, challenges remain around inclusivity, financial accessibility, enhancement of mitigation ambition, and the importance of socio-economic considerations.

COP29 also saw increased global collaboration, with various stakeholders working together through ministerial discussions and other platforms to enhance collective action. The strong participation of industry through side-events also brought in insights from real life emission reduction initiatives as well as considerations of policy and market conditions that are needed to scale up deployment of these solutions.

Some of these developments, described below, underscore the growing recognition that achieving global climate goals requires not only scaling carbon management technologies but also ensuring that the benefits of these solutions are accessible and inclusive, considering the sustainable development of all countries.

## 1. DECISION ON GLOBAL CARBON MARKET RULES UNLOCKS NEW POTENTIAL FOR CARBON MANAGEMENT DEPLOYMENT

Substantial progress was made at COP29 on the rules governing carbon trading under Article 6 of the Paris Agreement, with the endorsement of the Article 6.4 guidelines on the first day. These guidelines lay the groundwork for the operationalisation of a global carbon market, marking a key milestone after almost a decade of negotiations. The two core mechanisms now in place are the bilateral trading of Internationally Transferred Mitigation Outcomes (ITMOs) under Article 6.2 and the establishment of the Paris Agreement Crediting Mechanism (PACM) under Article 6.4.

ITMOs allow for bilateral trade of mitigation outcomes that count toward Nationally Determined Contributions (NDCs), which incentivises investment in emissions reduction and removal technologies, particularly in regions with limited access to financing. The PACM supports the international sale of carbon credits generated by projects, helping to offset the deployment costs associated with carbon management technologies. This system integrates carbon capture and removal efforts into global climate accounting frameworks, ensuring transparency as well as boosting the financial viability of these technologies.

The *Requirements for the Development and Assessment of Methodologies and the Requirements for Activities Involving Removals* were also approved and play a crucial role in the operationalisation of the Article 6.4 mechanism, particularly for carbon dioxide removal (CDR) and carbon capture and storage (CCS) activities. The standards establish important safeguards, such as the creation of a “buffer pool” of credits to address the risks of reversal associated with removals. This provision applies not only to nature-based solutions like reforestation but also to carbon management. The Supervisory Body is exploring additional mechanisms, such as insurance or other financial guarantees, to provide further assurance.

The Supervisory Body will continue to refine these measures as it looks ahead to implementing further processes under the Article 6.4 mechanism, including developing monitoring and reporting standards for such activities, as well as the sustainability tool. These are vital to maintaining the integrity of carbon credits generated by carbon management technologies.

## 2. NCQG FRAMEWORK OFFERS FLEXIBILITY FOR CARBON MANAGEMENT FUNDING, BUT FACES KEY CHALLENGES

The final *NCQG text* retains flexibility in terms of the eligibility for carbon management technologies. While earlier drafts considered a more explicit technology-neutral approach, the final version does not limit support to specific technologies, provided they align with overarching climate objectives and national priorities. The NCQG framework does not explicitly prioritise or guarantee funding, nor does it provide detailed mechanisms for balancing public and private finance in these projects. Debates around concessional versus non-concessional funding remain unresolved, which could limit accessibility for emerging economies that are most in need of support to deploy carbon management technologies. In this context, while NCQG is a step forward in broadening financial access, targeted policies and innovative mechanisms are still required to de-risk investments and ensure support for deployment globally.

## 3. MIXED PROGRESS IN THE MITIGATION WORK PROGRAMME WITH FUTURE COLLABORATION OPPORTUNITIES

Progress on the *Mitigation Ambition and Implementation Work Programme (MWP) text* was marked by mixed outcomes, where no consensus was reached on incorporating the *first Global Stocktake outcome*, which includes a call on Parties to accelerate carbon capture and utilisation and storage (CCUS), particularly in hard-to-abate sectors in paragraph 28(e). Opportunities however remain for continued discussion on carbon management in future global dialogues and investment-focused events, as well as through the potential creation of a digital platform that enhances collaboration between governments, financiers and other stakeholders on developing investable mitigation projects.



## 4. WORK PLAN INCLUDES ADDRESSING SOCIO-ECONOMIC IMPACTS OF CLIMATE POLICIES AND TRADE-RELATED CLIMATE MEASURES

Response measures are focused on managing socio-economic impacts as a result of policies and actions that countries undertake in response to climate change. At COP29, countries agreed to establish the upcoming [four-year work plan \(2026-2030\)](#) on response measures, which includes a dedicated focus on the “cross-border impacts” of climate change mitigation actions. This development can bring trade-related climate measures, such as the EU’s carbon border adjustment mechanism (CBAM), (which can encourage global industries to adopt low-carbon production and trade with Europe through carbon management), on a formal platform for discussion and impact assessment in future UNFCCC negotiations. This represents a significant step in integrating trade and climate policies into the broader global climate dialogue.

Geopolitical tensions and green trade issues significantly influenced the conference agenda at the start of COP29, with response measures emerging as a key point of discussion. On 6 November, following Donald Trump’s US election victory, China, representing the BASIC group (Brazil, South Africa, India, and China), proposed adding “climate-change-related unilateral restrictive trade measures” to the agenda. Although this proposal was ultimately withdrawn after intense debate, the exchange highlighted the growing importance of trade-related response measures in the climate negotiation process.

The response measures workplan also includes a number of exchanges, workshops, technical papers and a high-level ministerial roundtable, focused on socio-economic issues. These developments signal the increasing importance of just transition strategies in climate mitigation policies and technologies, including carbon management.

## 5. CMC MINISTERIAL MEETING FOCUSES ON ADVANCING CARBON MANAGEMENT AND EXPANDING GLOBAL COLLABORATION

The [Carbon Management Challenge \(CMC\)](#) held its second Ministerial Meeting at COP29 following the first [high-level event at COP28](#). The meeting was well attended with active government participation and new country interest in carbon management, as well as observers and media in the room. The event focused on achieving concrete outcomes for the CMC’s ambition to advance a pipeline of carbon management projects by 2030 that, when fully operational, will collectively manage 1 gigatonne (Gt) of CO<sub>2</sub> or more annually.

The roundtable supported ambition through (i) coordinating carbon management efforts from major governments across all key regions that meet the needs of the Paris Agreement; (ii) assessing global progress towards the Gt goal; and (iii) developing the CMC’s three key workstreams in implementing and delivering the Gt goal. This builds on the ministerial event “Gt by 2030 – Accelerating Carbon Management” launching [the Gigatonne by 2030 Campaign](#) at the Clean Energy Ministerial (CEM) and Mission Innovation (MI) in Foz do Iguaçu, Brazil on 3 October 2024. At the time of writing, the CMC includes 22 countries plus the European Commission, with new members in 2024 including Mauritania, Senegal, Nigeria, Kenya, and Bahrain. It has established three workstreams:

- Finance for developing countries (led by Indonesia, Kenya, and the United States)
- Project deployment and tracking (led by Brazil)
- Communication and engagement (led by Saudi Arabia and the United Kingdom)

Key discussions included innovative financing mechanisms, emphasising the need for international collaboration and inclusivity in scaling projects globally. The event highlighted regional efforts in the Caribbean, supported by the Green Climate Fund, and fostered dialogues on the integration of carbon management into international carbon markets under Article 6.

[Read more.](#)

## INSIGHTS: KEY CHALLENGES AND PATHWAYS FOR INCLUSIVE AND SUSTAINABLE DEPLOYMENT

The outcomes of COP29 provide a strong foundation for scaling carbon management technologies, with a growing recognition of their importance to mitigate climate change. While challenges in finance and global integration remain, the emphasis on collaboration and region-specific approaches shows a commitment to overcoming barriers, particularly for developing countries. Voices from the developing world have also emphasised the importance of capacity-building to enable the scaling of carbon management solutions. This underscores the importance of efforts that address both the need for financial resources as well the development of the expertise necessary for responsible implementation.

As more countries and stakeholders engage in global climate action, the sustainable implementation of carbon management technologies becomes increasingly critical. Their increased deployment may bring opportunities and challenges related to social, environmental, and economic impacts which must be carefully managed. Carbon management technologies need to be deployed in ways that contribute well to both climate goals and broader sustainable development objectives in a way that ensures that they do not lead to unintended consequences. This approach ensures that the deployment of such technologies not only mitigates climate change but also addresses the needs of diverse communities worldwide.



Global CCS Institute  
Level 23, Tower 5,  
727 Collins Street  
Docklands VIC 3008 Australia

[globalccsinstitute.com](https://globalccsinstitute.com)

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