FICCI

Industry Recommendations for

Operationalizing Article 6 Mechanisms under the Paris Agreement



1. Executive Summary

The Paris Agreement's Article 6 provides the framework for global carbon markets, enabling countries to cooperate to achieve their Nationally Determined Contributions (NDCs) while laying the foundation for net-zero emissions in the future. While developing and least-developed countries are expected to make their best efforts to meet their NDC targets, the journey beyond NDCs, toward net-zero emissions, will be significantly assisted by Article 6 mechanisms through which developed countries will meet their NDCs or increased ambition.

However, the operationalization of Article 6 is moving too slowly, delaying the necessary action for countries to go beyond their NDCs. Not utilizing Article 6 and the associated offsets is contrary to the spirit of the Paris Agreement, where cooperative approaches should be the right step to increase climate ambition.

To date, the market mechanisms under Article 6 have failed to achieve their potential. This is effecting trust in the global climate action process, similar to what occurred with the Kyoto Protocol post-2012. Immediate and coordinated action is needed to accelerate the operationalization of Article 6 mechanisms, particularly as COP29 approaches.

India has already made significant progress by announcing 13 measures eligible for Article 6 ITMOs (Internationally Transferred Mitigation Outcomes) generation two years ago, and 14th was announced recently. Businesses in India, anticipating operationalization of article 6 , mechanism and international carbon market has committed /announced t more than $100 billion in investments into these measures, involving energy storage, green hydrogen/ ammonia/ methanol/SAF; carbon capture utilisation and storage, off-shore wind, solar thermal, compressed bio-gas etc. These investments are critical to India's goal of achieving net-zero emissions by 2070 and ensuring energy independence by 2047. The Government of India must act swiftly to operationalize Article 6 projects and lead negotiations at COP29 to restore trust in article 6 carbon markets.

List of Activities in India under Article 6.4 Mechanism	
I.	**GHG Mitigation Activities:**
1	Renewable energy with storage (only stored component)
2	Solar thermal power
3	Off- shore wind
4	Green Hydrogen
5	Compressed bio-gas
6	Emerging mobility solutions like fuel cells
7	High end technology for energy efficiency
8	Sustainable Aviation Fuel
9	Best available technologies for process improvement in hard to abate sectors
10	Tidal energy, Ocean Thermal Energy, Ocean Salt Gradient Energy, Ocean Wave Energy and Ocean Current Energy
11	High Voltage Direct Current Transmission in conjunction with the renewal energy projects
12	Clean Cooking using renewable energy at scale (Government or Public provate Partnership project only)
II.	**Alternate Materials:**
13	Green Ammonia
III.	**Removal Activities:**
14	Carbon Capture Utilization and Storage

2. Introduction

India's updated NDCs, submitted in 2022, reaffirm the country's commitment to reduce emissions intensity by 45% by 2030 compared to 2005 levels, and to achieve 50% non-fossil fuel-based power capacity by 2030. While India is on track to meet these goals, further investments will be needed to move beyond the NDC targets and reach net-zero emissions by 2070 or earlier.

The Article 6 mechanisms of the Paris Agreement provide a vital framework for international cooperation in achieving NDCs, allowing countries to trade carbon credits generated by projects that reduce or remove emissions. This cooperation is equally important for developed countries seeking to meet or exceed their NDC targets, as they can use Internationally Transferred Mitigation Outcomes (ITMOs) from developing countries to offset their emissions and for developing and least developed countries to mitigate GHGs beyond NDCs to generate revenues through ITMOs and initiate action on critical technologies and infrastructure of net zero future

3. Article 6: A Critical Tool for Net-Zero Ambitions

The Paris Agreement embodies the principle that all parties should make their best efforts toward net-zero emissions, with NDCs as intermediate milestones. Article 6 mechanisms were designed to facilitate this process by enabling cooperation between countries. However, the slow operationalization of these mechanisms is impairing the global effort to move beyond NDCs.

Many countries, especially developing and least-developed countries (LDCs), will require support to go beyond their NDCs. These nations need to build the infrastructure today for a low-carbon future, which will be critical to their eventual transition to net-zero. Article 6 projects are essential in this regard, as they provide the building blocks for these countries' long-term decarbonization.

However, the lack of momentum in Article 6 implementation threatens this potential. Delays in operationalizing Article 6 and creating robust market mechanisms could significantly impair global climate ambition. If developed countries do not use Article 6 and its offsets, they will be missing a key opportunity to support developing nations and to increase their own ambition, which is against the spirit of the Paris Agreement.

Article 6 credits can be used for purposes beyond NDCs, such as supporting voluntary climate actions by companies, contributing to corporate net-zero commitments, and driving investments in sustainability projects that foster broader global decarbonization efforts

4. India's Leadership in Operationalizing Article 6

India has taken significant steps to operationalize Article 6 mechanisms. In February 2023, the Indian government announced 13 measures that are eligible for generating ITMOs under Article 6. These measures include critical projects in renewable energy, carbon capture, and other low-carbon technologies. Together, these projects are expected to attract over $100 billion in investments well before 2030, which are crucial for India's journey toward net-zero by 2070. All these investments presuppose that the viability gap will be bridged by the carbon price of Article 6 international carbon markets.

India is also developing a domestic carbon market built around a cap-and-trade system. The Carbon Credit Trading Scheme (CCTS), architected in 2023, aims to help India meet its NDC targets by setting emission caps for industries and enabling domestic carbon trading. This market is designed to align with international mechanisms under Article 6, allowing the trade of excess credits in international markets of article 6.

5. The Global Context: Delayed Action on Article 6

Since the adoption of the Paris Agreement in 2015 and the conclusion of COP26 in 2021, significant action and investment in Article 6 projects have been anticipated. However, progress has been slow, and the global market for ITMOs has yet to reach its full potential. To date, announced ITMO trades and contracts have amounted to less than $1 billion, a figure far below expectations.

This lack of progress has damaged trust in the global climate action process, reminiscent of the post-2012 Kyoto Protocol period when inactivity in carbon markets led to missed opportunities for investment and action. To restore trust, at CoP 26, a decision to allow /reward CERs generated from projects registered during 2013-20 was allowed to be used to meet NDCs. Immediate and decisive action is required at COP29 to restore this trust in Article 6 operationalization and international carbon markets to ensure that private investments in decarbonization can move forward.

If Article 6 is not operationalized soon, the journey beyond NDCs for many countries will be seriously delayed. Developing and LDCs will face difficulties in securing the necessary finance and technology to build the infrastructure for their net-zero future. Developed countries, in turn, will miss out on the opportunity to use ITMOs to meet their climate commitments or increase their ambition.

6. Challenges for offsets and opportunities for ITMOs in the Net-Zero Journey

Article 6 credits address the key challenges of traditional offsets by ensuring transparency, environmental integrity, and alignment with national climate goals, making them a more reliable tool in the journey to net-zero.

Double Counting: Offsets can be claimed by both the buyer and the host country, leading to inflated claims of emissions reductions.

Lack of Additionality: Some projects may not deliver additional emissions reductions beyond what would have occurred without offset funding.

Temporary Reductions: Nature-based solutions (e.g., reforestation) may not guarantee long-term emissions reductions, as forests can be destroyed.

Greenwashing: Offsets can be misused by companies or countries to appear climate-responsible while avoiding direct decarbonization efforts.

Low-Quality Projects: Some offsets come from projects that lack rigorous oversight or don't meet high environmental standards.

Delays in Decarbonization: Offsets can be seen as an easier alternative, delaying real efforts to decarbonize industries or economies.

Trust Issues: Lack of transparency and clear regulations erode trust in carbon markets, making stakeholders hesitant to invest or participate.

How Article 6 Credits Overcome These Challenges

Prevents Double Counting: Article 6 ensures corresponding adjustments are made so emissions reductions are only counted once, by either the buyer or host country.

Ensures Additionality: ITMOs and Article 6.4 credits are subject to strict additionality criteria, meaning projects must prove they wouldn't happen without carbon finance.

Guarantees Permanence: Article 6 includes mechanisms for long-term reductions, ensuring the sustainability of emissions reductions through robust project oversight.

Reduces Greenwashing: The international governance structure of Article 6 ensures transparency and accountability, reducing the risk of offsets being used for greenwashing.

High Environmental Standards: Projects under Article 6 are subject to rigorous verification to ensure high-quality, real, and measurable emissions reductions.

Promotes Decarbonization: ITMOs are aligned with countries' NDCs, ensuring that they complement, rather than substitute, direct decarbonization efforts.

Builds Trust: Article 6's internationally overseen mechanisms ensure clear reporting and transparency, fostering trust in the global carbon market.

The challenges in **CORSIA (Carbon Offsetting and Reduction Scheme for International Aviation)** accepting **ITMOs (Internationally Transferred Mitigation Outcomes)** as credible offsets under Article 6 stem from the following key issues:

Double Counting Risk

- **Challenge:** ITMOs are tied to countries' NDCs, and if not properly managed, both the host country and the airline using the offset could claim the same emissions reduction.
- **CORSIA Concern:** CORSIA requires that offsets be used without compromising the integrity of countries' NDCs. Ensuring that corresponding adjustments are made to prevent double counting is essential but may not always be guaranteed under current Article 6 mechanisms.

Environmental Integrity

- **Challenge:** ITMOs must meet stringent environmental integrity criteria, such as additionality (i.e., ensuring the emissions reductions wouldn't occur without the offset project).
- **CORSIA Concern:** CORSIA demands that offsets deliver real, measurable, and permanent reductions. ITMOs, particularly from countries with weaker regulatory frameworks, may not consistently meet these high standards, raising concerns about their reliability.

Lack of Unified Rules Across Jurisdictions

- **Challenge:** ITMOs are generated under a variety of national contexts, with potentially differing regulatory standards and methodologies.
- **CORSIA Concern:** CORSIA seeks a standardized global approach to offset credits, but ITMOs vary depending on the host country's rules and methodologies, making it challenging to ensure a consistent and credible baseline for all credits.

Uncertainty Around Corresponding Adjustments

- **Challenge**: The requirement for corresponding adjustments under Article 6 (to avoid double counting) has yet to be universally applied, and not all countries have the necessary systems in place.
- **CORSIA Concern:** Without consistent application of corresponding adjustments, ITMOs might be less reliable, leading to concerns about transparency and credibility when used in CORSIA's voluntary offsetting program.

Market Fragmentation

- **Challenge:** The evolving nature of international carbon markets under Article 6 could lead to market fragmentation, with different systems and rules for trading and recognizing ITMOs.
- **CORSIA Concern**: This fragmentation could complicate the acceptance of ITMOs, as CORSIA needs a harmonized, transparent market for sourcing offsets, ensuring their integrity across multiple jurisdictions.

Timeframe Alignment

- **Challenge:** ITMOs are tied to countries' NDC timelines, which may differ from the timelines set by CORSIA for its offsetting goals (2021-2035).
- **CORSIA Concern**: Ensuring that the timing of emissions reductions from ITMOs aligns with CORSIA's own reporting and compliance cycles can be problematic, particularly if credits are generated outside the timeframes relevant to CORSIA's targets.

Lack of Clear Guidelines for Specific Sectors

- **Challenge:** ITMOs generated from sectors unrelated to aviation may not align well with CORSIA's sector-specific goals.
- **CORSIA Concern:** ITMOs from unrelated sectors (e.g., forestry or waste management) might not deliver the co-benefits or emissions reductions that are directly relevant to the aviation industry, reducing their perceived value in the CORSIA framework.

Political and Regulatory Uncertainty

- **Challenge:** The governance structure for Article 6 is still evolving, and many countries are in the process of establishing their ITMO frameworks.
- **CORSIA Concern:** The uncertainty around the finalization of Article 6 rules, and the variability in implementation across countries, creates challenges for CORSIA in terms of ensuring long-term reliability and regulatory certainty for ITMOs as offsets.

6. The Role of ITMOs in Achieving Net-Zero

ITMOs are a key mechanism under Article 6 that allow countries to transfer mitigation outcomes between each other, enabling developed countries to meet their NDCs while supporting developing nations. ITMOs can provide vital finance for transformative projects in developing countries that face viability gaps, such as large-scale renewable energy infrastructure or carbon capture and storage (CCS) technologies.

For India, the ability to generate and trade ITMOs is critical to securing the investments needed for its 13 eligible Article 6 measures which are building blocks of its net zero future. These investments are not only essential for meeting India's NDCs but also for laying the foundation for net-zero emissions by 2070. The projects enabled by these ITMOs will also contribute to India's energy independence by 2047.

The government must act swiftly to ensure that Article 6 project authorizations are operationalized and bilateral agreements are signed. India should also take a leading role in global negotiations at COP29 to push for accelerated action on Article 6 mechanisms and to counter declarations from some quarters that are against the use of Article 6 offsets.

7. Recommendations for the Government of India

India is well-positioned to lead by example in operationalizing Article 6 mechanisms, both domestically and on the international stage. To ensure that the country capitalizes on this opportunity, FICCI recommends the following actions for the Government of India:

1. **Operationalize Article 6 Project Authorizations:** The government should expedite the approval of Article 6 projects to unlock global investment. This includes setting clear processes for authorizing ITMO-generating projects and signing bilateral agreements with other countries.

2. **Engage at COP29 for Accelerated Article 6 Implementation:** India should lead global negotiations at COP29, advocating for the rapid operationalization of Article 6 mechanisms. The government should also push back against declarations from some countries or regions that are unwilling to use Article 6 offsets. Not using these mechanisms undermines the spirit of the Paris Agreement and delays progress toward net-zero emissions.

3. **Engage with CORSIA/IMO and SBTi /Climate Pledge/UNFCCC Net Zero Roadmap** to consider A6 Mitigation Outcomes as highly credible offsets to meet voluntary commitments.

4. **Expand Domestic Carbon Markets:** India's domestic carbon market must be further developed to align with international Article 6 mechanisms. This will allow for the smooth trading of ITMOs between domestic and international markets, ensuring that India's carbon credits are competitive globally.

5. **Push for Market-Based Solutions in Developing Countries:** India should use its leadership position in international forums to advocate for more Article 6 projects in developing and LDCs. These projects are critical for building the low-carbon infrastructure needed to meet future net-zero goals, and they require financial support from developed nations.

6. **Ensure Transparency and Trust:** To restore trust in the global carbon market, India should advocate for transparent reporting, verification, and tracking of ITMOs. This will prevent the same market failures that were seen post-2012 with the Kyoto Protocol and will ensure that all parties are accountable for their emissions reductions.

7. **Inclusion of Nature Based Solutions:** Include in the categories eligible under Article 6.2 &4, Nature Based Solutions(other than forestry) such as Mangroves, Soil Carbon and other Blue Carbon initiatives. Such an inclusion may not impact the achievement of India's NDC on forestry.

8. Conclusion

The slow operationalization of Article 6 threatens to derail the progress made under the Paris Agreement. Delays in setting up market mechanisms and finalizing bilateral agreements are preventing developing countries from accessing the finance and technology they need to build a low-carbon future. For India, immediate action is required to secure the $100 billion in investments needed for its 14 eligible Article 6 measures, which are critical to achieving its net-zero and energy independence goals.

The Government of India must push for the rapid operationalization of Article 6 at COP29 and beyond, advocating for the use of ITMOs as a tool for both developed and developing nations to increase their climate ambition. Only through coordinated global action can the full potential of Article 6 be realized, restoring trust in the carbon market and driving forward the global transition to net-zero emissions.



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