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WORKING PAPER · SCRF-WP-2026-11-001

# Article 6 Implementation: Lessons for Emerging Markets

*Authorisation, sequencing and integrity in Ghana, India and Indonesia, with evidence to November 2026*

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**November 2026**
Revised and updated edition · New Delhi

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## Abstract

In 2026 Article 6 of the Paris Agreement entered its operational phase. The Paris Agreement Crediting Mechanism approved its first issuance, five methodologies were adopted and bilateral cooperation grew to 113 arrangements involving 68 Parties. Verified transfers remain small, and the first two rounds of technical expert review identified 543 inconsistencies in Party reporting. This paper assesses how emerging markets can participate in cooperative approaches under Article 6.2 and in the centralised mechanism under Article 6.4 without compromising their Nationally Determined Contributions or long-term industrial strategy.

The paper develops a four-pillar framework covering institutional architecture, authorisation discipline, benefit sharing and reporting integrity, operationalises it through an explicit scoring rubric, and applies it to Ghana, India and Indonesia using primary sources current to 13 November 2026. Ghana scores highest on readiness, having completed two issuances and capped authorisations through a quantified Article 6 budget. India has built the most consequential new compliance market among emerging economies and secured its recognition under the United Kingdom's border adjustment regime, while keeping international authorisation deliberately narrow. Indonesia has rebuilt its legal and registry architecture and signed a 12 million tonne agreement with Norway, but has contracted export volume ahead of the reporting capacity that will determine its credibility.

The paper finds that readiness to transact and quality of strategy are distinct, and that the appropriate sequence depends on economic scale, exposure to border carbon measures and regulatory stability. The principal risk for emerging markets is authorisation that runs ahead of accounting capacity. Eight recommendations are differentiated by country profile.


**Keywords:** Article 6, Paris Agreement, ITMOs, Paris Agreement Crediting Mechanism, corresponding adjustment, carbon markets, CBAM, emerging markets, Ghana, India, Indonesia.

**JEL classification:** F53, O13, Q54, Q56, Q58.

## Key findings

- **Article 6 is operational, but delivery lags commitment.** About 151,600 tonnes of ITMOs had been transferred through bilateral cooperation by mid-2026, against 113 arrangements and authorisations running to tens of millions of tonnes.
- **Reporting is now the binding constraint.** Two review cycles identified 543 inconsistencies. Neither India nor Indonesia had submitted an Article 6.2 initial report at the cut-off date.
- **Ghana leads on readiness (9/12).** A statutory framework, a 24 Mt Article 6 budget and two completed issuances; more than half of the budget is already authorised.
- **India and Indonesia score 4/12 for opposite reasons.** India has deliberately deferred export while building a 490-entity compliance market; Indonesia has contracted up to 12 Mt with Norway ahead of its reporting capacity.
- **Sequence should follow economic profile.** Small open economies can export early within a budget; large industrial economies should price carbon domestically first; economies with a history of regulatory reversal should stabilise rules before scaling volume.

# Contents

1. Introduction ..... 4
2. Data and Method ..... 4
2.1 Case selection ..... 4
2.2 Sources and evidence standard ..... 5
2.3 Scoring ..... 5
2.4 Limitations ..... 5
3. The Architecture of Article 6 ..... 5
3.1 Article 6.2: cooperative approaches ..... 5
3.2 Article 6.4: the Paris Agreement Crediting Mechanism ..... 6
3.3 Article 6.8: non-market approaches ..... 7
4. The State of Implementation, November 2026 ..... 7
4.1 Cooperative approaches ..... 7
4.2 The Paris Agreement Crediting Mechanism ..... 8
4.3 Demand ..... 8
4.4 From Belém to Antalya ..... 9
5. Analytical Framework: Four Pillars of Participation ..... 9
6. Case Study I: Ghana ..... 10
6.1 Institutional architecture ..... 10
6.2 Authorisation and transfers ..... 11
6.3 Integrity under scrutiny ..... 12
6.4 Assessment ..... 12
7. Case Study II: India ..... 12
7.1 The Carbon Credit Trading Scheme ..... 13
7.2 Article 6 participation ..... 13
7.3 Border carbon measures ..... 14
7.4 Assessment ..... 14
8. Case Study III: Indonesia ..... 15
8.1 IDX Carbon and early market activity ..... 15
8.2 Presidential Regulation No. 110 of 2025 ..... 15
8.3 Article 6 transactions ..... 16
8.4 Assessment ..... 16
9. Cross-Case Analysis ..... 17
9.1 Readiness and strategy are distinct ..... 17
9.2 Sequencing depends on economic profile ..... 17
9.3 Volume and integrity ..... 18
9.4 Buyer concentration and domestic coalitions ..... 18
10. Policy Recommendations ..... 19
11. Conclusion ..... 20
References ..... 20
About the Author ..... 22
About SCRF ..... 22

**Suggested citation:** Ritwik, S. (2026). Article 6 Implementation: Lessons for Emerging Markets. SCRF Working Paper No. SCRF-WP-2026-11-001. New Delhi: Sustainable Capital Research Foundation.

**Edition and data:** Revised and updated edition, 15 November 2026. Supersedes SCRF-WP-2025-11-001. Data current to 13 November 2026; outcomes of COP31 adopted after that date are not reflected.

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# 1. Introduction

Article 6 of the Paris Agreement was negotiated as a single provision in December 2015 and took nine further years to render operational.[1] The Glasgow decisions of 2021 established the core guidance for cooperative approaches and the rules for a centralised crediting mechanism. Sharm el-Sheikh added reporting and review procedures in 2022. Dubai produced no Article 6 decision in 2023. Baku completed the rulebook in 2024, and Belém in 2025 responded to the first round of technical reviews and financed the wind-down of the Clean Development Mechanism (CDM). In February 2026 the Paris Agreement Crediting Mechanism (PACM) approved its first issuance of credits. The thirty-first Conference of the Parties, meeting in Antalya from 9 to 20 November 2026, therefore convenes with the rules largely settled and attention shifted to delivery.

For emerging markets, this transition has a structural opportunity and a structural risk. The opportunity lies in the concentration of low-cost mitigation in developing economies, whether in clean cooking, renewable electrification, methane abatement or forest conservation, and in a framework through which those reductions can be monetised. The risk lies in the accounting. Every internationally transferred mitigation outcome (ITMO) that a host authorises triggers a corresponding adjustment that debits the host's own emissions balance. A country that sells its cheapest abatement before securing its domestic trajectory may later meet its Nationally Determined Contribution (NDC) only through costlier measures. The overselling problem identified in the CDM literature returns under Paris in a sharper form, because the host now carries a quantified target.[2]

Until recently, analysis of these questions rested largely on design documents. That is no longer necessary. By November 2026 the record includes completed ITMO transfers, the first PACM issuances, sixteen published technical expert review reports and a secretariat synthesis of the inconsistencies they identified. This paper uses that record.

The paper makes three contributions. First, it operationalises a four-pillar framework for host-country participation through an explicit scoring rubric, so that assessments are reproducible. Second, it applies the framework to Ghana, India and Indonesia using primary sources current to 13 November 2026. Third, it resolves a tension common in the policy literature, between praise for early exporters and advice to build domestic markets first, by showing that the appropriate sequence depends on economic profile. Readiness to transact and quality of strategy are measured separately throughout.

Section 2 sets out data and method. Section 3 describes the architecture of Article 6, and Section 4 the state of implementation in November 2026. Section 5 presents the analytical framework. Sections 6, 7 and 8 apply it to Ghana, India and Indonesia. Section 9 synthesises the cross-case evidence, Section 10 offers recommendations and Section 11 concludes.

[1] UNFCCC, *Paris Agreement* (2015), Article 6; Decision 1/CP.21.

[2] L. Schneider and S. La Hoz Theuer, 'Environmental integrity of international carbon market mechanisms under the Paris Agreement', *Climate Policy* 19, no. 3 (2019): 386–400.

# 2. Data and Method

## 2.1 Case selection

The three cases were selected purposively to maximise variation in design choice and economic profile. Ghana, a lower-middle-income economy with a modest emissions base, chose early institutional investment and bilateral export. India, a lower-middle-income economy and the world's third-largest emitter, chose to build a domestic compliance market first and to calibrate international authorisation to industrial strategy. Indonesia, an upper-middle-income economy with globally significant forest and peatland sinks, has iterated repeatedly on its carbon pricing framework.[3] The cases illustrate pathways; they are not a representative sample of host countries.

## 2.2 Sources and evidence standard

The analysis applies a strict hierarchy of evidence. Primary sources are used wherever available: decisions of the Conference of the Parties serving as the meeting of the Parties to the Paris Agreement (CMA), reports of the Article 6.4 Supervisory Body, secretariat compilations, the Centralized Accounting and Reporting Platform (CARP), national legislation and gazettes, official press releases and exchange trading reports. Secondary sources, including specialist trade press and law-firm briefings, are used only where a primary document was not publicly accessible, and are identified as such in the notes. The data cut-off is 13 November 2026. Outcomes of COP31 adopted after that date are not reflected.

## 2.3 Scoring

Each country is scored from 0 to 3 on each of four pillars against the criteria in Table 1, for a maximum of 12. Scores record operational readiness to participate in Article 6 at the cut-off date. They do not grade the merit of a country's strategy: a country may score low on reporting because it has deliberately not yet transferred units. The evidence behind every score is set out in Table 3. Scores are ordinal and are intended to support comparison, not to imply precision.

## 2.4 Limitations

Three limitations apply. Bilateral deal terms, including prices, are frequently confidential under the Article 6.2 guidance, which restricts analysis of value. Implementation is moving quickly, so some findings will date within months. Finally, the review record is incomplete: neither India nor Indonesia had submitted an Article 6.2 initial report at the cut-off, so their reporting capacity is assessed on institutional evidence alone.

# 3. The Architecture of Article 6

Article 6 establishes three instruments. Article 6.2 permits bilateral or plurilateral cooperative approaches involving the transfer of ITMOs. Article 6.4 creates a centralised crediting mechanism under a Supervisory Body. Article 6.8 provides a framework for non-market approaches. The

[3] World Bank, country income classifications for fiscal year 2026 (July 2025).

instruments are complementary in design and compete in practice, because host countries must allocate scarce institutional capacity and a finite stock of low-cost mitigation among them.

## 3.1 Article 6.2: cooperative approaches

Article 6.2 is decentralised. Participating Parties define a cooperative approach, specify eligible activities and authorise ITMOs for use towards another Party's NDC or for other international mitigation purposes such as aviation. On first transfer, the host applies a corresponding adjustment so that the same reduction is not counted twice.[4] Sharm el-Sheikh adopted the reporting tables and the guidelines for the Article 6 technical expert review.[5]

The Baku decision on cooperative approaches, Decision 4/CMA.6, completed the rulebook. It specified the content and timing of authorisations, set out the architecture of the international registry and Party registries, and established a process for identifying, notifying and correcting inconsistencies. Where a significant or persistent inconsistency affects a Party's emissions balance, the Party must take corrective action, and the CMA is notified through the secretariat's annual compilation.[6] The decision does not prohibit the transfer or use of affected units. At Belém, a draft provision that would have barred transfers of units with unresolved inconsistencies was not retained.[7]

Decision 19/CMA.7 acknowledged the inconsistencies found in the first review cycle, urged Parties to correct them, expressed concern at the status of the Article 6.2 infrastructure, and recorded a funding shortfall of USD 8.0 million for 2024 to 2025 against an estimated need of USD 14.1 million for 2026 to 2027.[8] The practical consequence for hosts is direct. Oversight under Article 6.2 identifies and publicises problems but does not stop trades, so the integrity of a host's ITMOs depends primarily on its own institutions and on the due diligence of its buyers.

## 3.2 Article 6.4: the Paris Agreement Crediting Mechanism

Article 6.4 is centralised. A twelve-member Supervisory Body, drawn from the five United Nations regional groups with dedicated seats for least developed countries and small island developing States, approves methodologies, accredits auditors and registers activities. The mechanism issues Article 6.4 emission reductions (A6.4ERs). Units authorised by the host can be used towards NDCs or other international mitigation purposes and require a corresponding adjustment. Units not authorised, known as mitigation contribution units, carry no adjustment and cannot be counted towards any NDC.

Two levies distinguish the mechanism from Article 6.2. A share of proceeds of 5 per cent of issued A6.4ERs accrues to the Adaptation Fund, alongside a monetary levy, and at least 2 per cent of

[4]UNFCCC, Decision 2/CMA.3, 'Guidance on cooperative approaches referred to in Article 6, paragraph 2, of the Paris Agreement' (Glasgow, 2021).

[5]UNFCCC, Decision 6/CMA.4, 'Matters relating to cooperative approaches referred to in Article 6, paragraph 2, of the Paris Agreement' (Sharm el-Sheikh, 2022), including the guidelines for the Article 6 technical expert review in its annex II.

[6]UNFCCC, Decision 4/CMA.6, 'Matters relating to cooperative approaches referred to in Article 6, paragraph 2, of the Paris Agreement' (Baku, 2024), chapter VII (paragraphs 39–44) on identifying, notifying and correcting inconsistencies.

[7]Clifford Chance, 'What happened at COP30', briefing (December 2025). A draft provision barring the transfer of units with unresolved inconsistencies was not retained in the adopted text.

[8]UNFCCC, Decision 19/CMA.7, 'Implementation of the guidance on cooperative approaches referred to in Article 6, paragraph 2, of the Paris Agreement', FCCC/PA/CMA/2025/19/Add.3 (Belém, 2025).

issued units are cancelled to deliver an overall mitigation in global emissions (OMGE).[9] These obligations were set in the Glasgow rules; the Baku decisions provided further guidance on standards, registry connections and authorisation.[10]

Operationalisation accelerated through 2025 and 2026. Carbon Check (India) became the first accredited designated operational entity in February 2025.[11] The first mechanism methodology, A6.4-AMM-001 for flaring or use of landfill gas, entered into force on 30 October 2025. It applies a downward adjustment to baselines over time and requires an investment analysis to demonstrate additionality.[12] By October 2026 five methodologies had been adopted, covering landfill gas, nitric acid $N_2O$ abatement, grid-connected renewable electricity, cooking energy transitions and household cooking efficiency. Together they cover 77 per cent of activities transitioning from the CDM. Eighteen operational entities had been accredited, and 130 Parties had designated national authorities.[13] The two cooking methodologies adopted at the Supervisory Body's twenty-third meeting differ in their treatment of downward adjustment, which will produce different issuance profiles.[14]

Decision 20/CMA.7 welcomed the transfer of USD 26.8 million from the CDM Trust Fund to the Article 6.4 trust fund, requested the Supervisory Body to raise capacity-building allocations to up to USD 5 million, and extended to 30 June 2026 the deadline for host approval of transitioning CDM activities.[15] The mechanism registry is now expected to be completed by the end of the first quarter of 2027. Until then, no A6.4ERs have been forwarded to the Adaptation Fund or cancelled for OMGE.[16]

## 3.3 Article 6.8: non-market approaches

Article 6.8 supports cooperation on mitigation, adaptation, finance, technology and capacity building without the creation of tradable units. Because no corresponding adjustment arises, it allows cooperation without any debit to the host's NDC accounts. Its financial scale remains modest, and it has received less negotiating attention than the market instruments. For hosts with tight NDC trajectories, it is nonetheless the only Article 6 channel that carries no accounting cost.

[9] UNFCCC, Decision 3/CMA.3, 'Rules, modalities and procedures for the mechanism established by Article 6, paragraph 4, of the Paris Agreement' (Glasgow, 2021). The 5 per cent share of proceeds for adaptation and the minimum 2 per cent cancellation for overall mitigation in global emissions are established in this decision.

[10] UNFCCC, Decision 5/CMA.6, 'Guidance on the mechanism established by Article 6, paragraph 4, of the Paris Agreement', and Decision 6/CMA.6, 'Further guidance on the mechanism established by Article 6, paragraph 4, of the Paris Agreement' (Baku, 2024).

[11] Ministry of the Environment, Japan, 'Result of 15th Meeting of the Article 6.4 Supervisory Body' (20 February 2025). SBM 015 was held in Thimphu, 11–14 February 2025.

[12] Article 6.4 Supervisory Body, 'A6.4-AMM-001: Mechanism methodology: Flaring or use of landfill gas', version 01.0, adopted at SBM 019 (29–30 October 2025), in force 30 October 2025; UNFCCC press release, 'UN Body agrees first methodology under Paris Agreement carbon market' (30 October 2025).

[13] Article 6.4 Supervisory Body, 'Annual report of the Supervisory Body for the mechanism established by Article 6, paragraph 4, of the Paris Agreement', FCCC/PA/CMA/2026/8 (22 October 2026).

[14] Article 6.4 Supervisory Body, meeting report of SBM 023 (Bonn, 5–9 October 2026), adopting A6.4-AMM-004 (cooking energy transitions) and A6.4-AMM-005 (energy efficiency measures in household cooking).

[15] UNFCCC, Decision 20/CMA.7, 'Further guidance for the mechanism established by Article 6, paragraph 4, of the Paris Agreement', FCCC/PA/CMA/2025/19/Add.3 (Belém, 2025). The transfer of USD 26.8 million from the CDM Trust Fund was authorised by Decision 4/CMP.20.

[16] FCCC/PA/CMA/2026/8, op. cit.

# 4. The State of Implementation, November 2026

## 4.1 Cooperative approaches

Bilateral cooperation continues to expand. The 2026 Article 6 Implementation Status Report recorded 113 arrangements by July 2026, up from 99 a year earlier: 61 memoranda of understanding, 44 bilateral agreements and other instruments. The arrangements involve 68 Parties, of which 58 are hosts and 10 are acquirers. Thirty-six Parties had authorisation arrangements in place, compared with 22 in 2025, and a further 56 were developing them.[17,18] Demand remains concentrated: almost all bilateral agreements involve six buyer countries.[19]

Reporting has begun to test the system. By 13 November 2026, 26 Parties had submitted Article 6.2 initial reports to the CARP.[20] The secretariat's synthesis of the first two review cycles, covering 38 cooperative approaches, recorded 16 published review reports and 543 inconsistencies: 86 in the first cycle and 457 in the second.[21] The rise reflects a growing number of reports under review rather than deteriorating quality alone, but it confirms that consistent reporting is the binding constraint on credible participation. Physical transfers remain small. Around 151,600 tonnes of ITMOs had been transferred through bilateral cooperation by mid-2026,[22] most of it from the Bangkok E-Bus Programme, which had delivered 108,960 ITMOs to Switzerland.[23]

## 4.2 The Paris Agreement Crediting Mechanism

On 26 February 2026 the Supervisory Body approved the first issuance of A6.4ERs, from a cookstove programme of activities in Myanmar that had transitioned from the CDM. Credited reductions were about 40 per cent lower than earlier rules would have produced, reflecting updated default values and more conservative calculation.[24] Four issuance requests had been approved by October 2026, and host Parties had approved the transition of 418 CDM projects and programmes by 30 June 2026.[25]

## 4.3 Demand

Three developments in 2026 changed the demand outlook. First, the European Union's amended Climate Law, in force since 7 April 2026, allows high-quality international credits to contribute up

[17]Paris Agreement Article 6 Implementation Partnership (coordinated by IGES), *Article 6 Implementation Status Report: 2026 Edition*, data to July 2026, as summarised by Carbon Pulse, 'Article 6 implementation accelerates as bilateral deals expand, but capacity gaps persist' (2026) and CarbonCredits.com (2026).

[18]IGES, *The Paris Agreement Article 6 Implementation Status Report: 2025 Edition* (2025).

[19]Sylvera, 'From commitments to delivery: What to look out for at COP31' (November 2026).

[20]UNFCCC, Centralized Accounting and Reporting Platform, 'Article 6.2 reports', accessed 13 November 2026. Twenty-six Parties had submitted initial reports; neither India nor Indonesia appeared among them.

[21]UNFCCC secretariat, 'Results of the Article 6 technical expert review of the reports submitted by Parties participating in cooperative approaches referred to in Article 6, paragraph 2, of the Paris Agreement: compilation and synthesis report', advance unedited version (19 October 2026), covering activities to 31 August 2026; see also FCCC/PA/CMA/2026/INF.1.

[22]A6IP, *Article 6 Implementation Status Report: 2026 Edition*, op. cit.

[23]KliK Foundation, 'Mitigation activity of electric mobility': 1,916 ITMOs credited on 15 December 2023; KliK Foundation, 'New ITMO issuances for NDC use from Bangkok E-Bus Programme' (April 2026): 49,717 ITMOs for 2023–24; Energy Absolute disclosure of 57,327 ITMOs for 2025 operations, bringing the cumulative total to 108,960.

[24]UNFCCC announcement of 26 February 2026, as reported by S&P Global Commodity Insights, 'UN greenlights first credits under Article 6.4 from Myanmar cookstove project' (26 February 2026), including the Supervisory Body Chair's statement that credited reductions were about 40 per cent lower than earlier rules would have produced.

[25]FCCC/PA/CMA/2026/8, op. cit.

to 5 per cent of 1990 net emissions towards the 2040 target from 2036, with a pilot period from 2031 to 2035.[26] One estimate places the potential at up to 232 $MtCO_2e$ in 2040.[27] Second, Norway plans to raise its resources for Article 6 purchases to NOK 26.1 billion in its 2027 budget.[28] Third, sovereign procurement of PACM units has begun: Germany's environment agency opened a tender for up to 1.1 million PACM-aligned credits in October 2026.[29] Singapore's International Carbon Credit framework, which allows taxable facilities to offset up to 5 per cent of emissions with eligible credits, remains the principal Asian compliance channel.[30]

## 4.4 From Belém to Antalya

COP31 is not expected to reopen the Article 6 rules. Its Article 6 agenda centres on implementation, including the informal dialogue on recurring inconsistency themes mandated by Decision 19/CMA.7 for November 2026.[31] Table 2 summarises the state of play at the cut-off date.

### Table 2. Article 6 implementation indicators, November 2026

| Indicator | Value | Source |
|---|---|---|
| **Article 6.2 bilateral arrangements (July 2026)** | 113 | A6IP (2026) |
| **Parties in bilateral cooperation (hosts / acquirers)** | 68 (58 / 10) | A6IP (2026) |
| **Parties with authorisation arrangements in place** | 36 (22 in 2025) | A6IP (2026) |
| **Parties with Article 6.2 initial reports submitted** | 26 | UNFCCC CARP |
| **Inconsistencies identified, review cycles 1 and 2** | 543 (86 + 457) | UNFCCC (Oct 2026) |
| **ITMOs transferred through bilateral cooperation** | c. 151,600 t | A6IP (2026) |
| **PACM methodologies adopted** | 5 | FCCC/PA/CMA/2026/8 |
| **PACM accredited operational entities** | 18 | FCCC/PA/CMA/2026/8 |
| **CDM activities approved by hosts for transition** | 418 | FCCC/PA/CMA/2026/8 |
| **PACM registry completion** | Q1 2027 (expected) | FCCC/PA/CMA/2026/8 |

# 5. Analytical Framework: Four Pillars of Participation

Effective participation by a host country rests on four interdependent pillars. Weakness in any one exposes the others. Table 1 defines each pillar and the scoring criteria applied in Sections 6 to 9.

[26] Regulation (EU) 2026/667 amending the European Climate Law, in force 7 April 2026, new Article 4(3) and Article 4(5)(a); A&O Shearman, 'The EU's 2040 climate target: the next phase of European climate governance' (2026).

[27] Climate & Company, 'International (Article 6) credits under the EU 2040 climate target' (updated 5 February 2026), estimating up to 232 MtCO2e in 2040.

[28] Argus Media, 'Cop: Norway, Indonesia sign Paris Article 6.2 deal' (11 November 2026), reporting the Norwegian government's plan to raise Article 6 purchasing resources to NOK 26.1 billion in its 2027 budget.

[29] Argus Media, 'Germany opens tender for 1.1mn Article 6 carbon credits' (9 October 2026), reporting average prices of EUR 13.50 per tonne in the 2025 tender and EUR 25.84 per tonne in 2024.

[30] Ministry of Trade and Industry, Singapore, 'Singapore signs first Implementation Agreement with Papua New Guinea' (7 December 2023): 2 per cent cancellation at first issuance and a contribution equivalent to a 5 per cent share of proceeds for adaptation.

[31] Decision 19/CMA.7, op. cit.

### *Pillar I: National institutional architecture*

The machinery to authorise, track, verify and adjust mitigation outcomes: a designated authority, a legal basis for ownership and transfer of mitigation outcomes, a national registry able to connect with the international registry, and published procedures for authorisation.

### *Pillar II: Strategic authorisation discipline*

The political choice of which mitigation to export. Every authorisation subtracts from the host's own trajectory, so the question is which activities are surplus to domestic need. The strongest practice combines a published list of eligible activities with a quantified ceiling linked to the NDC. Ghana's Article 6 budget, discussed in Section 6, is the leading example. Rules that are reversed frequently undermine discipline as much as rules that are absent.

### *Pillar III: Benefit sharing and local legitimacy*

The distribution of revenue within the host country. Without credible benefit sharing, projects face local opposition that threatens both delivery and the credibility of the host's authorisations. Kenya provides the clearest statutory benchmark: its Climate Change (Amendment) Act, 2023 requires annual social contributions of at least 40 per cent of the previous year's aggregate earnings for land-based projects and 25 per cent for other projects, applied under the 2024 regulations net of the cost of doing business.[32]

### *Pillar IV: Transparency and reporting integrity*

The capacity to report in the agreed formats and to pass technical expert review. Inconsistencies are published and notified to the CMA. Although they do not block transfers, they reduce buyer confidence and the price a host can command.[33] Reporting capacity is therefore an economic asset as well as a compliance obligation.

### Table 1. Scoring rubric for the four pillars

| Pillar | 0 | 1 | 2 | 3 |
|---|---|---|---|---|
| **I. Institutional architecture** | No designated authority | Legal basis and designated authority in place | Plus operational national registry and published eligibility rules | Plus a completed international transfer with corresponding adjustment |
| **II. Authorisation discipline** | No eligibility rules | Rules absent, unpublished or materially reversed within 36 months | Published positive or negative list of eligible activities | Published list plus a quantified ceiling linked to the NDC, applied to authorisations |
| **III. Benefit sharing** | No provision identified | Stated policy expectation without a binding rule | Binding rule in statute or regulation | Binding rule with published disbursement data |

[32]Government of Kenya, Climate Change (Amendment) Act, 2023 (assented 1 September 2023, in force 15 September 2023): annual social contribution of at least 40 per cent (land-based) and 25 per cent (non-land-based) of the aggregate earnings of the previous year; Climate Change (Carbon Markets) Regulations, 2024 (gazetted 17 May 2024), applying the contribution net of the cost of doing business.

[33]Carbon Market Watch, 'What the first Article 6.2 review tells us about transparency and accountability' (April 2026).

| Pillar | 0 | 1 | 2 | 3 |
|---|---|---|---|---|
| **IV. Reporting integrity** | No Article 6.2 initial report submitted | Initial report submitted, review pending | Initial report reviewed; inconsistencies identified, none classed significant | Reviewed with no outstanding significant inconsistencies, and annual information submitted |

# 6. Case Study I: Ghana

Ghana is the most institutionally advanced Article 6 host in Africa and among the most advanced worldwide. Its approach combines early political commitment, statutory infrastructure and a quantified limit on what it will export.

## 6.1 Institutional architecture

Ghana's Framework on International Carbon Markets and Non-Market Approaches, published in December 2022, created the Carbon Market Office within the Environmental Protection Agency and linked authorisable activities to the conditional component of the NDC.[34] The Environmental Protection Act, 2025 (Act 1124), enacted on 6 January 2025, placed this architecture on a statutory footing. Part Five designates the new Environmental Protection Authority as the national authority for carbon markets and establishes the Ghana Carbon Registry and a multi-stakeholder Carbon Market Committee.[35] Carbon market regulations under the Act were under legal review in September 2026.[36]

## 6.2 Authorisation and transfers

Ghana signed its first bilateral agreement under Article 6 with Switzerland in November 2020. The two governments authorised the Transformative Cookstove Activity in Rural Ghana at the end of January 2024.[37] On 7 July 2025, 11,733 ITMOs, less the OMGE contribution levied by Switzerland, were issued to the KliK Foundation's account in the Swiss Emissions Trading Registry for use under the Swiss $CO_2$ Act and towards the Swiss NDC. These were Africa's first ITMOs for NDC use.[38] A second issuance of 22,972 ITMOs followed on 14 October 2026.[39] Ghana's Implementation Agreement with Singapore, signed on 27 May 2024, adds a contribution equivalent to a 5 per cent

[34]Environmental Protection Agency, Ghana, Carbon Market Office, *Ghana's Framework on International Carbon Markets and Non-Market Approaches* (Accra, December 2022).

[35]Republic of Ghana, Environmental Protection Act, 2025 (Act 1124), enacted 6 January 2025, Part Five, establishing the Ghana Carbon Registry and the Carbon Market Committee.

[36]Government of Ghana and UNDP, *Making the Carbon Market Work for All: Ghana's 2025–2026 Progress*, annual progress report (10 September 2026).

[37]KliK Foundation, 'Ghana: the Article 6 pioneer', *KliK Journal*: bilateral agreement signed November 2020; cookstove activity approved by both governments at the end of January 2024.

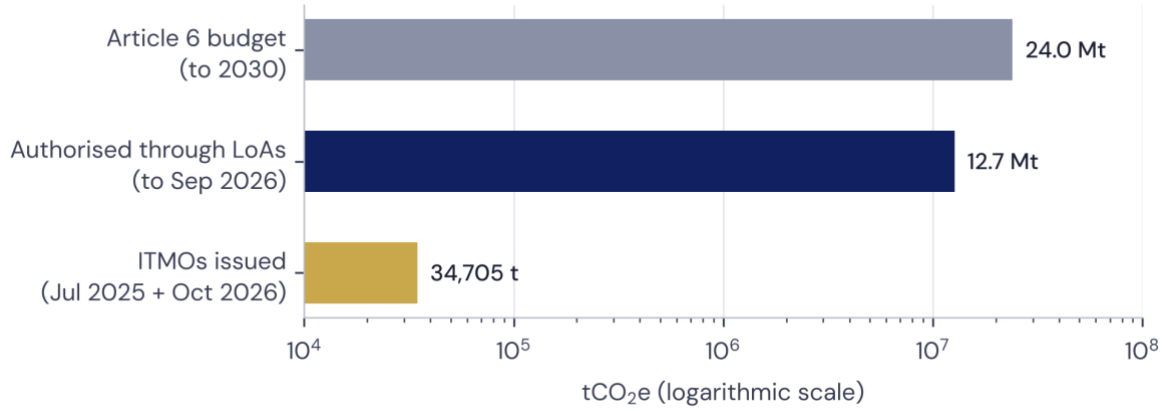
[38]KliK Foundation, 'First ITMO transfer: Switzerland–Ghana' (July 2025): 11,733 ITMOs, less the OMGE contribution levied by Switzerland, issued to KliK's account in the Swiss Emissions Trading Registry on 7 July 2025.

[39]Carbon Pulse, 'Ghana issues 23k ITMOs from cookstove project' (16 October 2026): 22,972 ITMOs issued on 14 October 2026.

share of proceeds for adaptation in Ghana, voluntarily replicating the Article 6.4 levy within a cooperative approach.[40]

The distinctive feature of Ghana's model is its Article 6 budget of 24 $MtCO_2e$. Letters of authorisation issued by March 2026 represented 47 per cent of that budget.[41] By September 2026 Ghana had authorised 12.7 $MtCO_2e$ through 2030, more than half of the budget, and was cooperating with five partner countries.[42,43] Ghana submitted its Article 6.2 initial report on 14 September 2023; the review is complete and identified inconsistencies, none classed as significant.[44,45] The first transfer will be reported in Ghana's second Biennial Transparency Report, due by 31 December 2026.[46]

**Figure 1. Ghana: Article 6 budget, authorised volume and ITMOs issued**




*Sources: UNFCCC FMCP Ghana Q&A (2026); Carbon Pulse (2 September 2026), citing Government of Ghana data; KliK Foundation (July 2025); Carbon Pulse (16 October 2026). Logarithmic scale.*

## 6.3 Integrity under scrutiny

The cookstove activity also shows the cost of integrity. After the fraction of non-renewable biomass used in the activity's calculations was disclosed and recalculated, the projected emission reductions were revised from 3.2 to 1.3 $MtCO_2e$.[47] The revision reduced expected volume by roughly three-fifths. It also strengthened the credibility of the units that were issued, and it illustrates a pattern that recurs across Article 6: conservative parameters reduce supply at the outset and raise the value of what remains.

[40] Ministry of Sustainability and the Environment, Singapore, 'Singapore signs Implementation Agreement with Ghana to collaborate on carbon credits under Article 6 of the Paris Agreement' (27 May 2024).

[41] UNFCCC, Facilitative, Multilateral Consideration of Progress, 'A compilation of questions to, and answers by, Ghana', SB 64 (exported 27 May 2026).

[42] Carbon Pulse, 'Ghana authorises over 50% of Article 6 credit volume through 2030, as project pipeline surges' (2 September 2026), citing a Government of Ghana report: 12.7 MtCO2e authorised through 2030.

[43] Government of Ghana and UNDP, *Making the Carbon Market Work for All: Ghana's 2025–2026 Progress*, annual progress report (10 September 2026).

[44] UNFCCC, Report on the technical expert review under Article 6, paragraph 2, of the initial report of Ghana, FCCC/A6/IRTERR.1/2024/GHA and Add.1; initial report submitted 14 September 2023.

[45] UNFCCC, CARP, op. cit.

[46] UNFCCC, FMCP Ghana Q&A, op. cit.

[47] MyJoyOnline, 'The Swiss-financed carbon credit project in Ghana partners don't want to talk about' (2025), reporting disclosures obtained under Swiss freedom-of-information law: projected savings revised from 3.2 to 1.3 MtCO2e after the non-renewable biomass fraction was recalculated.

### 6.4 Assessment

Ghana scores 3 on institutional architecture, having completed transfers with corresponding adjustments, and 3 on authorisation discipline, having applied a quantified budget to its authorisations. It scores 1 on benefit sharing: the framework sets expectations, but binding rules await the pending regulations and disbursement data are not published. It scores 2 on reporting, with a reviewed initial report and no significant inconsistencies. Its total of 9 is the highest of the three cases.

Two risks follow. The first is headroom. With more than half of a budget that runs to 2030 already committed by 2026, the remaining capacity to authorise is limited, and any shortfall in delivery of the domestic NDC would narrow it further. The second is scale. Issued volumes, at 34,705 ITMOs, are a small fraction of authorised volumes, and demand has come from a narrow group of buyers. Ghana has demonstrated that disciplined export is achievable; it has yet to demonstrate that the model delivers at the volume its authorisations imply.

## 7. Case Study II: India

India has made a different strategic choice. It has prioritised a domestic compliance market as its principal carbon pricing instrument and has kept international authorisation narrow, calibrating it to industrial competitiveness and to the border carbon measures of its trading partners. In doing so it has built the most consequential new compliance market among emerging economies.

### 7.1 The Carbon Credit Trading Scheme

The Energy Conservation (Amendment) Act, 2022 provides the legal basis for the Carbon Credit Trading Scheme (CCTS), notified on 28 June 2023 and amended in December 2023.[48] The scheme has a compliance mechanism for obligated entities and an offset mechanism for voluntary participants. Governance rests with the National Steering Committee for the Indian Carbon Market, chaired by the Secretary of the Ministry of Power and co-chaired by the Secretary of the Ministry of Environment, Forest and Climate Change. The Bureau of Energy Efficiency (BEE) administers the scheme, Grid Controller of India operates the registry and the Central Electricity Regulatory Commission (CERC) regulates trading.

The CCTS is an intensity-based baseline-and-credit system. Obligated entities receive greenhouse gas emission intensity targets per unit of output. Those that outperform receive Carbon Credit Certificates (CCCs); those that fall short must buy and surrender them, and non-compliance carries environmental compensation equal to twice the average CCC price. The design permits industrial growth while pricing emissions intensity. Targets for 282 entities in aluminium, cement, chlor-alkali, and pulp and paper were notified on 8 October 2025. Amendment rules notified on 13 January 2026 added 208 entities in petroleum refining, petrochemicals, textiles and secondary aluminium, bringing coverage to 490 entities with binding targets for 2025–26 and 2026–27 against a 2023–24 baseline.[49] Draft targets for iron and steel followed in mid-2026.

[48] Government of India, Energy Conservation (Amendment) Act, 2022 (Act No. 19 of 2022); Ministry of Power, Carbon Credit Trading Scheme, 2023, Gazette Notification (28 June 2023), as amended December 2023.

[49] MoEFCC, Greenhouse Gases Emission Intensity Target Rules, 2025 (notified 8 October 2025: 282 entities in aluminium, cement, chlor-alkali, and pulp and paper) and Greenhouse Gases Emission Intensity Target (Amendment) Rules, 2025 (notified 13 January

The market infrastructure is now largely in place. The Indian Carbon Market Portal was launched on 21 March 2026.[50] CERC notified its trading regulations on 27 February 2026, under which CCCs trade on the three power exchanges within a floor and forbearance price band.[51] The first compliance filings for 2025–26 were due on 31 July 2026. In October 2026 BEE published a draft procedure for CCC transactions, and first issuance awaited the completion of verification.[52] Under the offset mechanism, BEE issued its detailed procedure and the Ministry of Power approved eight methodologies on 27 March 2025; offset CCCs could not yet be used for compliance as of April 2026.[53]

## 7.2 Article 6 participation

India's Article 6 architecture is in place but deliberately narrow. The National Designated Authority for the Implementation of the Paris Agreement (NDAIAPA) was notified on 30 May 2022, and a first list of activities eligible for Article 6.2 followed on 17 February 2023, oriented to emerging technologies such as green hydrogen, storage and carbon capture.[54] A revision in July 2025 narrowed eligibility to 13 activity types and removed clean cooking.[55] India signed a memorandum of cooperation with Japan on the Joint Crediting Mechanism on 7 August 2025, its first bilateral Article 6.2 partnership; the Joint Committee adopted the Rule of Implementation on 8 June 2026.[56] A second memorandum, with the Republic of Korea, was signed on 20 April 2026.[57] Rules for letters of authorisation and corresponding adjustments, and the planned Article 6 modules of the market portal, remain to be completed, and India had not submitted an Article 6.2 initial report at the cut-off date.[58]

## 7.3 Border carbon measures

The strategic rationale for India's sequence lies in trade. The European Union's Carbon Border Adjustment Mechanism (CBAM) entered its definitive period on 1 January 2026. Importers may deduct a carbon price effectively paid in the country of origin, net of rebates and compensation and subject to independent verification. A draft implementing act on the calculation of that

2026, published 16 January 2026: 208 entities in petroleum refining, petrochemicals, textiles and secondary aluminium); ICAP, 'India notifies emission intensity targets for nine sectors under Carbon Credit Trading Scheme' (2026).

[50] ICAP, 'Indian Carbon Credit Trading Scheme' (2026), recording the launch of the Indian Carbon Market Portal by the Minister of Power at Prakriti 2026, New Delhi, on 21 March 2026.

[51] Central Electricity Regulatory Commission, (Terms and Conditions for Purchase and Sale of Carbon Credit Certificates) Regulations, 2026 (notified 27 February 2026); Columbia University Center on Global Energy Policy, 'India' fact sheet, *Regulatory Frameworks for Project-Based Carbon Credit Markets* (17 June 2026).

[52] Bureau of Energy Efficiency, 'Draft Detailed Procedure for Transaction of Carbon Credit Certificates under the Compliance Mechanism', notice inviting public comment (19 October 2026); S&P Global Commodity Insights, 'Indian carbon market advances verification as first credit issuance nears' (21 October 2026).

[53] Bureau of Energy Efficiency, *Detailed Procedure for the Offset Mechanism*, version 1.0 (27 March 2025); eight crediting methodologies approved by the Ministry of Power on the same date; Columbia CGEP (2026), op. cit.

[54] MoEFCC, Gazette Notification constituting the National Designated Authority for the Implementation of the Paris Agreement (30 May 2022); Press Information Bureau, 'Activities finalised to be considered for trading of carbon credits under Article 6.2 mechanism' (17 February 2023).

[55] IETA, 'Recommendations on strengthening India's Article 6 framework' (May 2026), noting the 2025 revision of the eligible activity list to 13 activity types, excluding clean cooking; see also the MoEFCC memorandum of 14 July 2025.

[56] Ministry of the Environment, Japan, 'Signing of the Memorandum of Cooperation on the JCM between Japan and the Republic of India' (29 August 2025; signed in New Delhi on 7 August 2025) and 'Adoption of the Rule of Implementation of the JCM between Japan and the Republic of India' (25 June 2026; adopted by the Joint Committee on 8 June 2026).

[57] S&P Global Commodity Insights, 'India inks Article 6.2 deal with South Korea to foster climate finance, tech transfer' (21 April 2026); memorandum signed on 20 April 2026.

[58] UNFCCC, CARP, op. cit.

deduction was published on 13 May 2026, with retrospective effect from 1 January 2026.[59] In September 2026 HM Treasury recognised the CCTS as a qualifying scheme for carbon price relief under the United Kingdom's CBAM, which applies from 1 January 2027. This is the first such recognition of India's scheme by a major trading partner.[60] Relief is limited to the effective carbon price actually borne by the goods. The value of the CCTS to exporters therefore depends on target stringency and the resulting price, and analysts have noted that several benchmark performers received targets equal to their baselines.[61]

### 7.4 Assessment

India scores 2 on institutional architecture: a designated authority, an operational domestic registry and published eligibility rules are in place, but no international transfer has occurred. It scores 2 on authorisation discipline, reflecting a narrow and recently tightened list without a published quantified ceiling. It scores 0 on benefit sharing, since no binding revenue-sharing rule was identified for offset projects, a gap that matters because the offset mechanism covers land-based activities. It scores 0 on reporting, having submitted no initial report. Its total of 4 reflects a deliberate choice: India has not yet sought to transact.

The low readiness score should not be read as a weak position. India has created domestic demand, verified emissions data for 490 industrial facilities and a price signal that now carries value at the border. Exporting low-cost abatement through Article 6 before the CCTS matures would work against that strategy, because each unit sold abroad would be a reduction unavailable to lower the domestic compliance burden. The next steps are to finalise authorisation rules, build the portal's Article 6 modules and tighten targets enough to produce a price that border regimes will reward.

## 8. Case Study III: Indonesia

Indonesia combines exceptional mitigation potential with a history of regulatory iteration. Its formal framework began with Presidential Regulation No. 98 of 2021 and was replaced by Presidential Regulation No. 110 of 2025. In 2026 it moved rapidly from rule-making to registry operation and to its first large Article 6.2 agreement.

### 8.1 IDX Carbon and early market activity

The Indonesia Carbon Exchange (IDX Carbon) opened on 26 September 2023 under the supervision of the Financial Services Authority (OJK) and opened to international buyers in January 2025. Activity has been modest. Cumulative transactions reached about IDR 78 billion (USD 4.9 million) by September 2025.[62] Calendar 2025 volume was 903,915 $tCO_2e$ worth IDR 36.4 billion, an

[59] ICAP, 'EU CBAM enters compliance phase and outlines path ahead' (January 2026); European Commission, draft implementing regulation on carbon prices paid in third countries, published for consultation on 13 May 2026, applicable retrospectively from 1 January 2026.

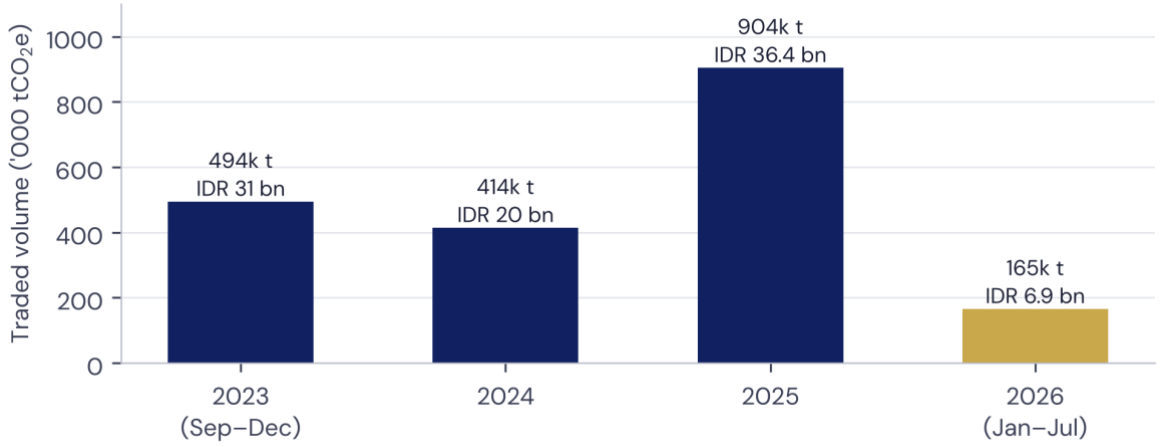
[60] Khaitan & Co, 'UK recognition to CCTS', ERGO update (18 September 2026), on HM Treasury's recognition of the Carbon Credit Trading Scheme under the Carbon Border Adjustment Mechanism (Calculation of CBAM Rate and Determination of Carbon Price Relief) Regulations 2026; the UK CBAM applies from 1 January 2027.

[61] Down To Earth, 'India notifies GHG emission intensity targets for four sectors: delay derails ambition further' (October 2025), noting that several benchmark performers received targets equal to their baselines.

[62] IEEFA, 'Two years after launch, Indonesia's carbon market struggles to find momentum' (15 October 2025): cumulative transactions of IDR 78 billion (about USD 4.9 million); average price in September 2025 of IDR 67,047 per tonne.

implied average of about IDR 40,200 per tonne. In the first half of 2026 volume fell to 164,219 $tCO_2e$ worth IDR 6.8 billion, even as listed units available for sale stood at 3.1 $MtCO_2e$.[63] The exchange has supply; it lacks sustained demand.

**Figure 2. IDX Carbon traded volume and value, 2023 to 2026**




*Sources: IEEFA (2025) for 2023 and 2024; IDXCarbon monthly reports for 2025 and 2026. 2023 covers September to December; 2026 covers January to July.*

## 8.2 Presidential Regulation No. 110 of 2025

Presidential Regulation No. 110 of 2025, signed on 10 October 2025, revoked the 2021 framework. It introduces carbon allocations to guide NDC baselines and targets, confirms that carbon trading may proceed before NDC targets are achieved, distinguishes transactions requiring corresponding adjustment from those that do not, recognises units issued under international standards, and provides a one-year alignment period for existing plans and agreements.[64,65] A Steering Committee on Carbon Economic Value sits under the Coordinating Minister for Food Affairs.[66]

Implementing rules followed through 2026. The Ministry of Forestry issued its forestry carbon trading regulation on 13 April 2026.[67] OJK revised its exchange regulation on 6 July 2026, and the Ministry of Environment launched the Carbon Unit Registry System (SRUK) on 9 July 2026, making it mandatory to record every traded unit in SRUK.[68] Mutual recognition agreements were concluded

[63] IDXCarbon, monthly reports (December 2025 to July 2026). Calendar 2025: 903,915 tCO2e and IDR 36.37 billion (about USD 2.3 million, as reported by *The Jakarta Post*, 11 May 2026). January to June 2026: 164,219 tCO2e and IDR 6.81 billion, with 155 participants; available listed units of 3.14 MtCO2e in July 2026.

[64] Government of the Republic of Indonesia, Presidential Regulation No. 110 of 2025 on the Implementation of Carbon Economic Value Instruments and National Greenhouse Gas Emission Control (10 October 2025), revoking Presidential Regulation No. 98 of 2021; SSEK Law Firm, legal update (4 February 2026), noting Article 58(1).

[65] Ashurst, 'Major overhaul of Indonesia's carbon regulatory framework' (December 2025).

[66] Ministry of Forestry, Regulation No. 6 of 2026 (13 April 2026), establishing procedures for forestry-sector carbon trading under PR 110/2025 and confirming a Steering Committee on Carbon Economic Value under the Coordinating Minister for Food Affairs.

[67] Ministry of Forestry, Regulation No. 6 of 2026 (13 April 2026), establishing procedures for forestry-sector carbon trading under PR 110/2025 and confirming a Steering Committee on Carbon Economic Value under the Coordinating Minister for Food Affairs.

[68] Ministry of Environment, Regulation No. 10 of 2026 on the Carbon Unit Registry System; ANTARA, 'Indonesia launches carbon registry to accelerate carbon trading' (9 July 2026); OJK Regulation No. 10 of 2026 (6 July 2026), requiring every traded unit to be recorded in SRUK.

with Gold Standard in May 2025, the Global Carbon Council and Plan Vivo in September 2025, and Verra in October 2025.[69]

## 8.3 Article 6 transactions

Indonesia's first major Article 6.2 transaction is with Norway. Following a framework agreed in 2025, the state electricity company PLN and the Global Green Growth Institute, acting for Norway, signed a framework at COP30 covering around 12 $MtCO_2e$ from renewable energy projects.[70] On 11 November 2026, at COP31, the two governments signed a bilateral Article 6.2 agreement under which Norway will purchase up to 12 Mt of emission reductions over ten years to support a shift from coal-fired to solar generation.[71] Indonesia had not submitted an Article 6.2 initial report at the cut-off date.[72]

## 8.4 Assessment

Indonesia scores 2 on institutional architecture: a legal basis, an operational registry and published rules now exist, but no ITMO has been transferred and the connection between SRUK, the exchange and the international registry remains to be tested. It scores 1 on authorisation discipline, because the export regime was restricted and then reopened within the past 36 months. It scores 1 on benefit sharing, reflecting stated commitments to social and customary forest beneficiaries without a quantified rule identified. It scores 0 on reporting. Its total is 4.

The equal totals of India and Indonesia conceal opposite positions. India scores low because it has chosen not to export. Indonesia has now contracted a large export volume ahead of the reporting capacity that will determine how buyers value it. Regulatory stability is an input to market credibility at least as important as regulatory content, and Indonesia's 2025 reforms will be judged by whether they survive intact through the first transfers to Norway.

# 9. Cross-Case Analysis

### Table 3. Comparative scorecard, November 2026

| Pillar | Ghana | India | Indonesia |
|---|---|---|---|
| **I. Institutional architecture** | 3. Act 1124; registry; transfers completed with corresponding adjustment | 2. NDAIAPA; domestic registry live; eligibility list published; no transfer | 2. PR 110/2025; SRUK live since July 2026; no transfer |
| **II. Authorisation discipline** | 3. 24 Mt budget; 12.7 Mt authorised through 2030 | 2. 13 activity types; clean cooking removed in 2025 | 1. Export regime restricted, then reopened in 2025 |
| **III. Benefit sharing** | 1. Framework expectation; regulations pending | 0. No binding rule identified for offsets | 1. Stated commitments; no quantified rule identified |
| **IV. Reporting integrity** | 2. Initial report reviewed; no significant inconsistencies | 0. No initial report | 0. No initial report |

[69] ANTARA (8 May 2025) on the Gold Standard agreement; Ministry of Environment press release SR.227/HUMAS/KLH-BPLH/9/2025 (16 September 2025) on the Global Carbon Council and Plan Vivo agreements; S&P Global Commodity Insights (3 October 2025) on the Verra agreement.

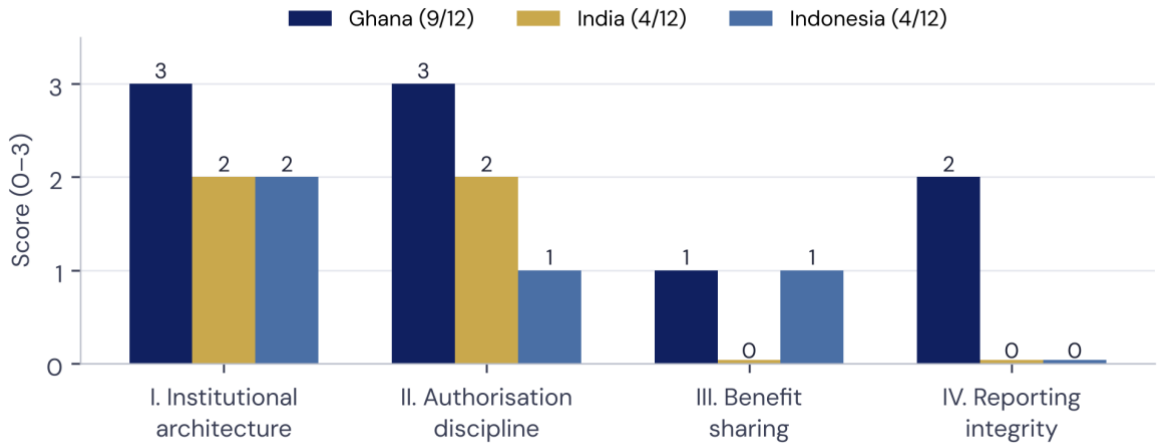
[70] Ministry of Environment, Indonesia, press release SR.299/HUMAS/KLH-BPLH/11/2025 (13 November 2025); ANTARA, 'COP30: Indonesia, Norway seal 12.5 million tons carbon trade deal' (November 2025).

[71] Argus Media (11 November 2026), op. cit.

[72] UNFCCC, CARP, op. cit.

| Pillar | Ghana | India | Indonesia |
|---|---|---|---|
| **Total (of 12)** | **9** | **4** | **4** |

### Figure 3. Pillar scores by country




*Source: SCRF assessment against the rubric in Table 1, data to 13 November 2026.*

## 9.1 Readiness and strategy are distinct

The scorecard measures readiness to transact. It does not rank strategies. Ghana scores highest because it has chosen to transact and has built the institutions to do so. India scores low because it has chosen to defer. Indonesia scores low while having committed to transact. The relevant policy question is whether a country's readiness matches its commitments. On that test, Ghana and India are internally consistent, and Indonesia faces the largest gap.

## 9.2 Sequencing depends on economic profile

The evidence suggests that no single sequence is optimal. Three profiles emerge, summarised in Table 4. Small open economies with modest abatement portfolios and limited domestic demand gain most from early export, provided authorisations are capped by a quantified budget, as in Ghana. Large industrial economies exposed to border carbon measures gain most from building domestic compliance first, because a credible domestic price earns relief at the border and conserves low-cost abatement for domestic use, as in India. Economies with large land-use sinks and nascent markets gain most from stabilising rules and reporting before scaling volume, because their credibility discount is driven by regulatory history, as in Indonesia.

### Table 4. Sequencing by economic profile

| Profile | Recommended sequence | Principal risk | Case |
|---|---|---|---|
| **Small open economy, modest abatement portfolio** | Export early within a quantified Article 6 budget | Budget exhaustion; buyer concentration | Ghana |
| **Large industrial economy exposed to border carbon measures** | Domestic compliance first; narrow technology-led authorisation | Low domestic price limits border relief | India |

| Profile | Recommended sequence | Principal risk | Case |
|---|---|---|---|
| **Large land-use sink, nascent market** | Stabilise rules and reporting, then scale volume | Contracted volume outruns reporting capacity | Indonesia |

## 9.3 Volume and integrity

All three cases confront a trade-off between volume and integrity, and the evidence of 2025 and 2026 shows integrity costing volume at the outset. The first PACM issuance was about 40 per cent below what earlier rules would have produced.[73] Ghana's cookstove activity saw its projected reductions revised from 3.2 to 1.3 $MtCO_2e$.[74] A 2025 change to the CDM tool for non-renewable biomass roughly halved the credits that a leading clean-cooking developer could generate.[75] Prices reflect the difference in quality. Germany paid an average of EUR 13.50 per tonne for correspondingly adjusted credits in its 2025 tender, while Indonesia's exchange cleared at an implied average of about IDR 40,200 (roughly USD 2.50) per tonne in 2025.[76,77] The comparison is indicative, since the products differ, but the direction is consistent. Buyers pay for verified, adjusted and conservatively quantified units, and the binding constraint in each case is high-integrity supply that satisfies due diligence, not physical mitigation potential.[78]

## 9.4 Buyer concentration and domestic coalitions

Demand is concentrated in a small group of sovereign buyers, including Japan, Switzerland, Singapore, Norway and the Republic of Korea, and transactions remain small relative to authorisations. The European Union's entry from 2031 will diversify demand, and its quality criteria are likely to shape the market. Domestically, each case shows that carbon markets require coalitions across ministries. India's scheme is co-chaired by the power and environment ministries. Indonesia's steering committee sits under a coordinating minister for food. Ghana has placed authority in a statutory environmental regulator with a multi-stakeholder committee. Carbon markets are financial and industrial instruments with distributional consequences, and they require ownership beyond environment ministries.

# 10. Policy Recommendations

The recommendations below are ordered by priority. Each indicates the country profile to which it applies most directly.

[73] S&P Global Commodity Insights (26 February 2026), op. cit.

[74] MyJoyOnline (2025), op. cit.

[75] Argus Media (9 October 2026), op. cit., reporting that a 2025 change to the CDM tool for the fraction of non-renewable biomass roughly halved the credits one leading clean-cooking developer could generate.

[76] Argus Media (9 October 2026), op. cit.

[77] IDXCarbon monthly reports, op. cit.

[78] A. Michaelowa, L. Hermwille, W. Obergassel and S. Butzengeiger, 'Additionality revisited: guarding the integrity of market mechanisms under the Paris Agreement', *Climate Policy* 19, no. 10 (2019): 1211–1224.

1. **Fix and publish an Article 6 budget before issuing letters of authorisation.** Quantify the volume of mitigation that is surplus to the NDC, link it to conditional measures, and publish its utilisation annually. Ghana's budget is the model; its rapid utilisation shows why the ceiling should be reviewed against NDC delivery each year. *Applies to all hosts.*

2. **Match the sequence to economic profile.** Small economies with modest abatement portfolios may export early within a budget. Large industrial economies should establish domestic compliance and a credible price first. Economies with a history of regulatory reversal should stabilise rules before scaling volume (Table 4). *Applies to all hosts.*

3. **Submit an initial report and complete review before the first transfer.** With 543 inconsistencies identified in two review cycles, reporting quality now differentiates sellers. Hosts should build reporting systems to pass review without iteration and publish the results. *Priority for India and Indonesia.*

4. **Codify benefit sharing in binding instruments.** Voluntary commitments lose credibility under fiscal or political stress. Statutory rules, defined on a clear revenue base as in Kenya, provide local legitimacy and buyer comfort. Enforceability matters more than the precise percentage. *Priority for land-based activities in all three cases.*

5. **Use the PACM where adopted methodologies exist.** Five methodologies now cover 77 per cent of transitioning CDM activities. Engagement through these is lower risk than early entry in sectors where methodologies remain in development, despite higher fixed costs. *Applies to hosts with CDM legacy portfolios.*

6. **Document the effective carbon price for border-adjustment relief.** Relief under the EU and UK regimes is limited to the price actually borne and verified. Domestic schemes should be designed, and their data assured, with that test in mind. India's UK recognition is a precedent that other partners can be asked to follow. *Priority for exporters to the EU and UK.*

7. **Diversify buyers and prepare for EU demand.** Demand is concentrated in six buyers. Hosts should align eligibility, methodology and reporting with the quality criteria the European Union will set for its 2031 to 2035 pilot. *Applies to all hosts.*

8. **Fund durable institutional capacity.** The Article 6.2 infrastructure faces an estimated funding need of USD 14.1 million for 2026 to 2027, and the PACM has allocated USD 4.7 million to capacity building.[79,80] Support should build permanent staff and systems in authorities and registries, not one-off technical assistance. *Applies to donors and least developed country hosts.*

[79] Decision 19/CMA.7, op. cit.

[80] FCCC/PA/CMA/2026/8, op. cit.

# 11. Conclusion

Article 6 is now operational in substance. The rulebook is complete, the PACM has issued its first credits, bilateral cooperation spans 113 arrangements and the review system is generating public evidence on the quality of national reporting. Transfers remain small, and the gap between authorised and delivered volumes is wide, but the system functions.

For emerging markets, the evidence from Ghana, India and Indonesia supports a differentiated conclusion. Ghana shows that disciplined early export is possible for a well-governed economy with a modest abatement portfolio, provided authorisations are capped. India shows that a large industrial economy can create more value by building a domestic price first, and that the price can earn recognition at the border. Indonesia shows that regulatory reform can move quickly once begun, and that the critical test comes when contracted exports meet reporting obligations.

The central risk for emerging markets is authorisation that runs ahead of accounting capacity. A country that authorises its cheapest mitigation before it can report consistently, verify conservatively and price correctly will find the central promise of Article 6, that finance flows to the most efficient abatement, operating at its own expense. The discipline of the coming period is to budget authorisations, report before transferring, share benefits by rule, and treat Article 6 as an instrument of industrial and climate strategy.

SCRF will continue to track Article 6 implementation in its working paper series. Forthcoming papers will address the interaction of Article 6 with border carbon adjustment, the evolution of benefit-sharing law and the fiscal treatment of carbon market revenues in host jurisdictions.

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