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# From pipeline to policy: designing India's Article 6 approval framework for climate finance and domestic decarbonisation

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# Glossary

## Article 6 and its mechanisms

**Article 6.** The part of the Paris Agreement that lets countries cooperate through carbon markets to meet their climate pledges (Nationally Determined Contributions [NDCs]). The Article runs through three channels: the market approaches of 6.2 and 6.4, and the non-market approach of 6.8.

**Article 6.4/Paris Agreement Crediting Mechanism (PACM).** The centralised, UN-supervised crediting mechanism that succeeds the Clean Development Mechanism. The newer mechanism covers almost all of India's project pipeline.

**Authorisation.** A host government's formal approval of a carbon credit for international sale. This turns a pipeline entry into a sellable credit under Article 6 and is a prerequisite for the corresponding adjustment.

**Clean Development Mechanism (CDM).** The Kyoto Protocol-era UN crediting mechanism (covering projects registered during roughly 2003–12) that the Paris Agreement Crediting Mechanism replaces. India's projects under this earlier mechanism can apply to transition to Article 6.4.

**Corresponding adjustment.** The core procedure to prevent double counting of emissions reductions: in making this adjustment, India adds a given quantity of CO<sub>2</sub> equivalent back onto its own emissions account, to prevent the same reduction or removal from being counted by both buyer and seller. In effect, every carbon credit India sells adds one tonne of CO<sub>2</sub> equivalent to its account.

**Designated National Authority (DNA).** The national body that approves Article 6 activities. India's DNA is the Ministry of Environment, Forest and Climate Change (MoEFCC).

**Internationally Transferred Mitigation Outcome (ITMO).** The credit transferred directly by parties but not necessarily between them (through, for example, the Carbon Offsetting and Reduction Scheme for International Aviation [CORSIA]) under the bilateral Article 6.2 channel.

**Positive list/Host Party Participation Requirements (HPPR).** The list of types of activity that a government will authorise for international transfer. India's list includes just 13 types of activities in high-cost sectors (narrowly defined). This is the most restrictive list of any large nation and, accordingly, covers only a small share of its pipeline.

**Prior Consideration Notification (PCN).** The formal notice a developer files to bring a new project into Article 6.4, as distinct from a project transitioning into the Article from the CDM.

## India's targets and emissions accounting

**Absolute emissions.** Total emissions in tonnes (without reference to GDP). India's net zero goal is an absolute measure, whereas its Nationally Determined Contribution (NDC) is based on carbon intensity. Accordingly, the sale of a carbon credit can sit safely within the NDC yet still add to the absolute gap India must close to achieve net zero.

**Current Policy Scenario (CPS).** India's projected emissions under current policies, which rise by about 3.14% per year from the 2020 baseline, reaching roughly 4,031 million tonnes of CO<sub>2</sub> equivalent (MtCO<sub>2</sub>e) by 2030 and 4,705 MtCO<sub>2</sub>e by 2035. The CPS indicates where emissions are heading, providing a measure of progress towards emissions reduction targets.

**Emissions intensity.** Emissions per unit of economic output (CO<sub>2</sub>e per unit of GDP). Because India's Nationally Determined Contribution is designed around this, the growth of the economy allows for a higher level of emissions.

**Nationally Determined Contribution (NDC).** A country's voluntary pledge to reduce emissions under the Paris Agreement. India's is based on its level of emissions relative to GDP, targeting reductions in emissions intensity of 45% by 2030 and 47% by 2035 relative to 2005 levels.

**NDC ceiling.** The absolute level that India's emissions intensity target allows for in a given year (the intensity target relative to projected GDP): about 4,688 million tonnes of CO<sub>2</sub> equivalent (MtCO<sub>2</sub>e) by 2030 and 6,335 MtCO<sub>2</sub>e by 2035.

**NDC (accounting) headroom.** The gap between the absolute level that India's emissions intensity target allows for in a given year (NDC ceiling) and projected Current Policy Scenario emissions: about 657 MtCO<sub>2</sub>e by 2030 and 1,630 MtCO<sub>2</sub>e by 2035. This headroom increases as the economy grows over time, while each authorised export reduces it on a one-for-one basis.

## The approval framework

**Net zero pathway.** The absolute emissions trajectory that is consistent with India reaching net zero by 2070. This is modelled as roughly flat at about 4,200 MtCO<sub>2</sub>e, in contrast to the rising CPS line (NITI Aayog, 2026).

**Net zero safeguard.** Screen 2 of the framework, and the report's binding constraint. India is already about 505 MtCO<sub>2</sub>e above its pathway for achieving net zero by 2035 even before exports of carbon credits. Each credit India sells is added to its emissions account on a one-for-one basis.

**Screen.** One of three sequential tests each authorisation option must pass in the report's framework. Screen 1 (NDC accounting): would the sale of a carbon credit push emissions above the NDC ceiling? Screen 2 (net zero safeguard): how much would this add to the net zero gap? Screen 3 (price): is selling at scale still beneficial once India's own supply has lowered the price of carbon credits? An option must pass all three screens to be a strong candidate for early authorisation.

# Summary

India holds the largest position of any country in the international carbon market underpinned by Article 6 of the 2015 Paris Agreement. While India can use this market to help finance its own decarbonisation, it needs to establish the right framework for approving sales of its Article 6 projects. Without this, there is a risk that the country will undermine efforts to hit its near-term climate targets and achieve its 2070 net zero goal. We propose a framework for analysing India's entire project pipeline to determine how it can strike a balance between mobilising finance through carbon markets and reaching its own net zero targets. The key considerations are whether a sale would breach India's emissions target, how much it would add to the structural gap India must close to reach net zero, and how much India's sales would depress the price it receives.

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A carbon market puts a price on greenhouse gas emissions and facilitates the purchase and sale of mitigation outcomes, so that money flows to wherever reductions are cheapest and the world can maximise the level of climate change mitigation for a given cost. For two decades, these markets were fragmented across competing standards and drew criticism for their weak transparency and uneven quality. Article 6 of the 2015 Paris Agreement was the response: it created a system for voluntary cooperation between countries in implementing their Nationally Determined Contributions (NDCs), allowing mitigation outcomes and other forms of cooperation to support higher ambition, sustainable development and environmental integrity under the common rules of the United Nations Framework Convention on Climate Change (UNFCCC). The market mechanisms under Article 6 are designed to channel finance from countries willing to pay for emissions reductions to those that can deliver them.

India's position in this market is the largest globally by both number of projects and the volume of emissions they represent: it has received 593 requests to move legacy Clean Development Mechanism projects into Article 6 and has made 649 notifications of new projects. This amounts to about 476 million tonnes of CO<sub>2</sub> equivalent (MtCO<sub>2</sub>e) of requested mitigation outcomes per year. But the sale of a carbon credit comes at a cost for the seller. Under the Paris rules, every credit India authorises for export must be matched by a corresponding adjustment. The country adds that tonne to its own emissions account and must abate it domestically at a later stage. Therefore, each sale involves a trade-off between finance today and mitigation tomorrow. This is why India has so far approved only a restrictive list of 13 types of activity for these sales. That positive list covers about 2.7% of its CDM projects initiated under the Kyoto Protocol-era UN crediting mechanism and 10.9% of newer ones.

**Selling carbon credits does not break India's own 2030 or 2035 climate pledges, even if the entire pipeline is approved.** However, selling a large volume of credits can pay off but delivers less than the headline price may suggest, because India is a big enough seller to push the price of carbon credits down against itself. The headline recommendation for policymakers, therefore, concerns the need for selective, staged authorisation: sell the qualifying, low-burden volumes early at a defended price floor, hold back the largest releases and taper sales as India nears net zero.

Three main factors have direct implications for authorisation decisions:

- **First, India's NDC climate target is not a binding constraint.** Because the NDC specifies emissions per unit of GDP rather than an absolute cap, its emissions are allowed to rise as its economy grows. No scenario that we modelled breaches the 2030 or 2035 targets. The implication for policymakers is that selling credits does not threaten India's headline pledge, so authorisation decisions can be treated as a question of long-term strategy rather than near-term compliance.

- **Second, the 2070 net zero goal is already proving to be a binding constraint.** India is projected to exceed its 2035 target on the pathway to net zero by 505 MtCO<sub>2</sub>e before any exports of carbon credits. This implies that authorisation should be judged using a net zero test rather than an NDC test: what matters is how much each sale increases the urgency with which India must engage in mitigation.
- **Third, selling at scale pays less than a fixed price implies because India is the single largest supplier to a finite market.** Accordingly, releasing more credits lowers the price India receives from about US\$20 per tonne to US\$15–16 per tonne as its approvals increase. Revenue rises with volume only up to a point, but even India's most ambitious approval scenario never reaches that point. India would therefore capture more value by selling selectively at a defended price than by selling everything in the pipeline.

These findings translate into an approval framework that grades each sale option according to its net zero burden rather than approving or rejecting the entire pipeline. Authorising only the volumes that already qualify would widen the gap between India's current trajectory and its 2035 net zero-aligned pathway by about 5% – and, at the reference price, could mobilise around US\$5.4 billion cumulatively between 2025 and 2036. A calibrated sector-by-sector widening of approvals would add about 48% to the 2035 net zero gap and could mobilise US\$64 billion; authorising the entire pipeline would increase the gap by more than 100%.

The message for policymakers is one of proportion and timing: as India needs to generate around US\$10 trillion in climate investment by 2047 (according to think tank NITI Aayog), Article 6 is best understood as an early accelerant of such investment. Sales in carbon markets are most valuable when their proceeds are quickly invested in projects for which private capital is hardest to raise, and when they are calibrated so as not to frustrate efforts to hit the 2070 target.

## Recommendations

Our approvals framework produces six recommendations to refine the strategy India is already following. India's short positive list, and its choice not to transition its legacy Clean Development Mechanism pipeline, both point towards the government reserving cheap abatement for its own targets. In this context, policymakers should consider:

1. **Promptly authorising the volumes that already qualify.** The 71 Prior Consideration Notifications (PCNs) sit in the low-burden band, at about 5% of the 2035 net zero gap. Yet they account for most of the potential near-term finance, over half of which can be realised before 2031. This volume is too small to affect either the climate target or the market price. It is the one part of the decision with no real trade-off. A delay would simply mean foregoing financing. The 16 qualifying legacy CDM activities would have contributed a little more, but India's window to authorise them closed on 30 June 2026.
2. **Expanding the positive list in ranked steps at the 2028 review.** This list excludes the high-volume, low-cost categories that India wants to keep for its own compliance, such as standard wind and solar, and cleaner cooking (cookstoves and fuels that cut emissions and household air pollution relative to traditional, open-fire biomass cooking). A moderate expansion would add the three largest excluded PCN sectors. Project-level approvals in cleaner cooking, mixed renewables and solar, the three largest sectors by PCN submissions, could be made with respect to the net zero burden cap, and would be easy to revisit at the next review.
3. **Establishing a price floor and a domestic-spending condition for medium-burden sales.** These sales are only worth making if the price is at least US\$15–16 per tonne (the level to which India's own supply has already pushed the realised price) and the proceeds of sales are ring-fenced for domestic decarbonisation. The aim is not only to spend the proceeds at home but to ensure that they fund the abatement the sale defers.
4. **Avoiding bulk sales.** This involves maintaining total authorisation below the point where India's supply starts to reduce the credit price. A prudential ceiling keeps the realised price at about three-quarters of the reference price, which works out at roughly 440 MtCO<sub>2</sub>e in 2030 and 525

MtCO<sub>2</sub>e in 2035. High-burden volumes should be reserved for India's use or sold only at a compliance premium.

5. **Using programmes of activities and bilateral Article 6.2 deals to raise both the qualifying volume and the price.** Bundled programmes currently qualify about twice as often as individual projects, and internationally transferred units, including Article 6.2 ITMOs and authorised Article 6.4 emission reductions, can command a premium because of host country authorisation and corresponding adjustments to unauthorised or voluntary market credits. Yet India is party to only two Article 6.2 agreements and has registered no transfers. Both levers could provide additional financing without requiring changes to the positive list.
6. **Giving the retained pipeline a route into the voluntary market.** With the positive list excluding most of the pipeline by design, a voluntary market sale carries no corresponding adjustment and, therefore, adds nothing to India's net zero burden. Signalling that projects not on the list could be sold in the voluntary market would help sustain them without affecting India's accounts.

# 1. Introduction

Article 6 of the Paris Agreement offers India an opportunity to receive payments from other countries for mitigation outcomes at home, and to channel that revenue towards the vast investment that the low-carbon transition requires. This report examines how and to what extent India should take that opportunity. The country's transition demands a shift from qualitative policy discussion to a data driven, end-to-end analysis of its Article 6 pipeline that captures its share of the emerging global carbon market and its efforts to mobilise climate finance without impeding its domestic energy transition. Below, we set out what a carbon market is, how Article 6 works and why India has a unique position in these markets.

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## What a carbon market is, and why it matters

**A carbon credit is a unit of climate action that has been verified under a recognised crediting programme.** It is tradable and represents one tonne of carbon dioxide equivalent that has been reduced, avoided or removed against an approved baseline. Carbon credits (also referred to as carbon offsets) are distinct from emissions allowances: in an emissions trading system (ETS), such as the EU ETS, regulated entities mainly surrender allowances issued under a cap, while offset credits can be used for compliance only where the scheme explicitly permits this. Credits are, therefore, traded in both compliance and voluntary markets, but these markets have differing roles: compliance markets use them only under scheme-specific rules, while voluntary markets allow companies and individuals to buy and retire credits as they work towards self-imposed climate goals.

Carbon credits and emissions allowances both exist to put a price on carbon, which gives emitters a financial incentive to cut emissions. As the cost of emissions reductions varies in different places, the creation of a market also channels these cuts to wherever they are cheapest – which is a valuable benefit of the system rather than its main purpose. This is important to the global goal of limiting warming to less than two degrees above pre-industrial levels, as much of the lowest-cost mitigation lies in developing countries that cannot finance it alone (World Bank, 2024). Article 6 of the Paris Agreement is the high-integrity, UN-regulated framework designed to organise that flow.

## From Kyoto to Paris

**International carbon market cooperation began under the 1997 Kyoto Protocol, and its weaknesses shaped what came next.** The Kyoto Protocol created the Clean Development Mechanism (CDM), the first cross-border, project-based crediting system (its credits are formally known as Certified Emission Reductions, or CERs). This allowed industrialised countries to finance mitigation outcomes in developing ones and count the resulting credits towards their own targets. Once the Protocol entered into force, India became the second-largest host (seller of credits) after China. Crucially, the Kyoto Protocol placed binding emission caps only on developed (Annex I) countries, leaving developing countries such as India without targets. Kyoto's commitment period ran to 2020, after which it was replaced by the Paris Agreement, which was adopted in 2015 and came into force in 2016. The Paris Agreement brought every country under a single framework of self-defined pledges, while a voluntary market with no treaty obligation grew alongside it. Both the Kyoto Protocol and the Paris Agreement drew sustained criticism for crediting mitigation outcomes that did not always materialise, particularly in forestry, and that thereby weighed on prices and trust (LSE Business Review, 2024; BCG, 2025).

**The Paris Agreement reset the system around a single, UN-supervised market.** It replaced legally binding caps with Nationally Determined Contributions (NDCs), emissions pledges that every country set for itself, and detailed the framework for cooperating to meet them under Article 6. The Paris rulebook, adopted at the COP 26 summit in Glasgow in 2021 and finalised at COP 29 in Baku in 2024, centres on the four core principles of credit quality, additionality, permanence and accurate

measurement, as backed by the authorisation of the host country and a UN supervisory body (United Nations Framework Convention on Climate Change [UNFCCC], 2022). Its defining safeguard is the corresponding adjustment: when a host country authorises a carbon credit for sale abroad, it adds that tonne back onto its own NDC ledger, so the same mitigation outcome cannot be counted twice. That rule ensures that the UN-governed market has greater integrity than the voluntary one, and turns every authorisation into a trade between financing now and mitigating later.

### Box 1.1. The three parts of Article 6

**Article 6.2** allows countries to enter bilateral or multilateral cooperative arrangements on internationally transferred mitigation outcomes (ITMOs) rather than credits issued through a centralised mechanism. These transfers require authorisation by participating countries and corresponding adjustments to prevent double counting. Because buyers value government authorisation and the accounting safeguard attached to such transfers, Article 6.2 units may command a premium over unauthorised or voluntary-market credits.

**Article 6.4** covers the Paris Agreement Crediting Mechanism, the centralised mechanism under UN supervision that succeeded the CDM. Legacy projects transition to it, while new projects enter through a Prior Consideration Notification (PCN). Most projects in India's pipeline fall into the latter category.

**Article 6.8** covers non-market cooperation, such as finance, capacity-building and technology transfers with no credits exchanged. Because it generates nothing to authorise or sell, it falls outside the scope of this report.

## India's global position, and why it sells so few credits

**India holds the largest single share of the Article 6.4 pipeline in the world, with its restrictive domestic approval criteria.** The country accounts for 593 of the roughly 2,460 requests to move legacy CDM projects into Article 6, and 649 of the 1,112 notifications for entirely new projects. Each one needs approval from India's Ministry of Environment, Forest and Climate Change (MoEFCC), which must then make the corresponding adjustment. Under an Office Memorandum issued in 2025, the Ministry approved just 13 sectors as eligible for Article 6, a list that applies to both the bilateral and the centralised routes and is reviewed roughly every three years (MoEFCC, 2025). The list only covers high-cost emerging technologies, among them renewable energy paired with storage; green hydrogen and ammonia; compressed biogas; offshore wind; and carbon capture. Applied to the existing pipeline, the list covers just 2.7% of India's legacy requests and 10.9% of its new submissions.

**India's caution in expanding the list reflects two aims linked to concerns about overshooting domestic emission targets and falling back on external financing opportunities from the sale of carbon credits.** The first is to avoid overselling: a country that transfers too many mitigation outcomes can find that it has too few left to meet its own domestic emissions reductions target, a risk well-documented in the Article 6 literature (La Hoz Theuer et al., 2019). The second is to keep low-cost domestic mitigation, such as standard wind and solar, for India's own transition, reserving Article 6 for the expensive technologies it cannot finance alone at scale. That approach is sound in principle. However, correct calibration of the approach turns on how much each approval choice reduces India's room for manoeuvre in pursuit of its climate targets, and how much external financing each raises.

## The fate of the unauthorised pipeline

**For a country with a large pipeline of projects, Article 6 is a particularly valuable market mechanism.** It provides a way to help overcome the high cost of capital in emerging markets for projects that would otherwise struggle to attract financing (Sandler and Macquarie, 2023). Article 6 also comes with a fallback position. Under the transition rules, credits from CDM projects registered since 2013 can count towards a country's first NDC. As India's first NDC runs until 2030, it can use its unauthorised credits

domestically or sell them on the voluntary market, which involves no corresponding adjustment. Nonetheless, these credits would not have the price premium that Article 6 authorisation commands. Project developers had to file their transition requests by the end of 2023, while India needed to decide which to authorise by 30 June 2026 (a deadline that was extended from 2025 and that India eventually missed).

## Why the decision matters now

**There have been two main sources of pressure on India to decide which projects to authorise.** The first is the EU's Carbon Border Adjustment Mechanism, which from 2026 places a charge on the carbon embodied in imported steel, aluminium, cement, fertilisers, electricity and hydrogen. India is a major exporter of several of these products. The link to Article 6 has also become stronger: the European Commission's May 2026 draft rules on recognising carbon prices paid in third countries would, if finalised, allow limited deductions for eligible international Article 6 credits, making an operational Article 6 channel relevant to trade competitiveness (European Commission, 2026; Latham & Watkins, 2026). The second source of pressure was the 30 June 2026 deadline for host countries to authorise CDM legacy projects, after which unapproved legacy credits could no longer earn the Article 6 premium. As the value of these projects may peak at the same time as India's development and decarbonisation spending, the defining question concerns not whether India will hit its climate target but how much financing it will forgo if its positive list remains too restrictive.

### Box 1.2. Scope of Article 6 and Article 9 of the Paris Agreement

Article 6 allows countries to cooperate through carbon markets so that a buyer can pay for a mitigation outcome and, through a corresponding adjustment, count it towards its own NDC or another authorised purpose.

Article 9 establishes a distinct obligation rather than a market. Under it, developed countries "shall provide financial resources to assist developing country Parties with respect to both mitigation and adaptation", continuing their existing commitments under Articles 4.3 and 4.4 of the 1992 UNFCCC (UNFCCC, n.d.). The Article involves no corresponding adjustment or sale of a transferable unit and is the principal channel for financing the conditional elements of developing countries' NDCs. Its history runs from developing countries' 2009 Copenhagen pledge to provide US\$100 billion in climate finance per year by 2020, which was first met in 2022 at about US\$115.9 billion; to roughly US\$132.8 billion in 2023 and US\$136.7 billion in 2024 (OECD, 2026); to the New Collective Quantified Goal (NCQG) agreed at COP 29 in Baku. Under this last agreement, developed countries are to take the lead in mobilising at least US\$300 billion per year by 2035, replacing the US\$100 billion goal, and all actors are to work towards reaching at least US\$1.3 trillion per year by 2035 (UNFCCC, 2024).

Unlike Article 6, Article 9 is operationalised not through a market mechanism but through these successive collective finance goals. The current US\$1.3 trillion goal is being taken forward through the Baku to Belem Roadmap, commissioned at COP 29 and launched at COP 30 in Belem (UNFCCC, 2025b); it entered an implementation phase during 2026, with a first progress report expected later in the year (UNFCCC, 2025b).

The two channels interact, creating a risk of displacement between them. Because Article 6 revenue can resemble climate finance, a buyer that counted its Article 6 purchases towards the NCQG, or a host that treated Article 6 receipts as a substitute for Article 9 finance, would erode the finance Article 9 is meant to deliver. This is why both the Oxford Principles for Responsible Engagement with Article 6 (2025) and the Oxford Roadmap to Net Zero Aligned Carbon Market Regulation (2025) warn that carbon market flows should be additional to, and not counted towards, the Paris Agreement's climate finance goals.

## This report's place in the literature

This report fills a specific gap in the literature: while existing works examine the architecture and integrity of Article 6, none of them quantifies the external finance India could raise by authorising its pipeline, which is a central contribution of our analysis. To analyse India's authorisation decisions, we take the mitigation outcomes recorded in the UNFCCC pipeline at face value and do not independently verify the quality or additionality of individual projects, or model how many credits buyers will ultimately purchase. It is also worth noting that many registered projects were never implemented or issued credits. While credit integrity and buyer demand are consequential issues, we note where they have a bearing on our conclusions but separate them from the accounting and pricing logic examined here.

**The role of Article 6 in facilitating India's transition to net zero has emerged as a central pillar of global climate governance.** The current body of literature is dominated by broad architectural analyses that examine the global mechanics of cooperative approaches, such as piloting landscape reviews (Greiner et al., 2020), legal inquiries into 'market making' (Minas, 2022; 2023) and foundational explainers (World Bank Group, 2022; Asian Development Bank, 2020). Other works with broad coverage include a theoretical framework of 'climate clubs' (Stua et al., 2022) or an analysis of international transfer limits (La Hoz Theuer et al., 2018). Another strand of the literature addresses the accounting mechanics of these systems, particularly how corresponding adjustments should be applied to transfers involving sectors and activities that fall outside NDC targets (Müller and Michaelowa, 2019).

**Despite this global breadth, few works have a dedicated focus on India's specific Article 6 pathway; early exceptions primarily address additionality in the CDM (Michaelowa and Purohit, 2007).** This scarcity is even more pronounced in scholarship published after COP 29. The finalisation of the Article 6 rulebook at COP 29 provided the regulatory certainty that countries and investors required to develop their cooperative approaches in practice.

**Accordingly, there is a need for an evidence-based, quantitative analysis of India's Article 6 pathway to help policymakers make authorisation decisions.** One of the few comprehensive works published following the finalisation of the rulebook is a review of the technical operationalisation of Articles 6.2 and 6.4 that highlights persistent challenges in environmental integrity and double counting (Deswal, 2025). Similarly, one report provides a vital post-COP 29 synthesis of policy dialogues, focusing on India's strategic use of bilateral partnerships, such as the India–Japan Joint Crediting Mechanism (JCM), which was formalised on 7 August 2025 (Council on Energy, Environment and Water [CEEW] and International Emissions Trading Association [IETA], 2025). These works have a predominantly qualitative methodological orientation. One synthesises the work of opinion leaders and critical policy analysis to evaluate implementation hurdles (Deswal, 2025). Another relies on high-level stakeholder dialogues to identify themes such as technology transfer and market integrity (CEEW and IETA, 2025). Other academic contributions employ qualitative harmonisation assessments of sustainable development methods (Oh, 2023) or interpret the relevant mechanisms through the lens of transnational legal theory (Minas, 2022; 2023).

**To our knowledge, our contribution is to provide the first quantitative, end-to-end analysis of a host country's entire pipeline and the approval decisions it faces.** In doing so, we seek to answer two main questions. First, how large a share of its India's Article 6 pipeline can it authorise for international transfer to mobilise finance for domestic decarbonisation without eroding its NDC accounting or altering its 2070 net zero trajectory? Second, what approval framework is required to achieve that balance? These primary questions lead to the following six sub-questions that frame the scope and focus of our study:

- **What is in the global Article 6 pipeline, and how dominant is India within it?** India has the largest share of CDM transition and PCN projects globally, but their composition, emissions footprint and standing relative to other top hosts are poorly characterised. We map the full Article 6.2 and 6.4 pipelines across 101 countries and benchmark India against other top hosts on project counts, sectoral mix and submissions for conversion through sales authorisation.

- **How much does India's 13-sector positive list, the Host Party Participation Requirement (HPPR), exclude, and on what basis?** As discussed, this list only includes high-cost emerging technologies that are largely absent from the legacy CDM pipeline. We quantify excluded projects by sector and emissions volume, and benchmark India's qualification rate against its closest peers by pipeline scale: Brazil, Kenya, Chile and Pakistan. As each of these countries has notified an open or broad HPPR under which close to 100% of submissions qualify, they are natural comparators in identifying the effects of India's shorter list (rather than its pipeline size) and, accordingly, its current policy and calibrated additions to the list.
- **Do international transfers threaten India's NDC?** Large volumes of transfers could, in principle, compromise the country's efforts to fulfil its NDC. To test the severity of that risk, we explore four PCN approval scenarios in relation to India's NDC accounting headroom: the gap between its intensity-based NDC ceilings (for 2030 and 2035) and its projected emissions pathway under current policy. This is important in identifying the appropriate approval framework.
- **Will international transfers cost India its net zero future?** India's NDC and its 2070 net zero goal are distinct yardsticks: a transfer can sit comfortably within NDC headroom but still widen the structural gap India must eventually close to reach net zero, because each exported tonne of carbon is one India must abate elsewhere later. We measure the incremental changes in the net zero burden in each scenario to identify how they affect India's trajectory towards the 2070 goal.
- **Does it pay to authorise projects in the Article 6 pipeline at scale?** The flow of India's carbon finance revenue does not simply equate to the volume of carbon credits it authorises for sale at a fixed price. Because India is the single largest prospective supplier to a finite Article 6 market, the price can move when it releases a large volume of credits, with the market settling at a lower clearing price. So, the price India earns per credit falls as the volume it releases rises. This is the price elasticity of demand. Revenue also builds up over time, because each credit provides earnings across its crediting window of about 10–15 years rather than in a single upfront payment. We measure how the carbon finance return changes in each scenario with the inclusion of the price effect. This provides insights into how India can mobilise finance with its Article 6 pipeline and how, beyond a certain point, the authorisation of more volume brings in a decreasing amount of extra revenue per carbon credit.
- **What, concretely, should India do?** Synthesising the analytical screens above, we identify the volumes that the country should authorise outright, which projects it should conditionally authorise and which are better retained domestically. This sets out the approval framework that is appropriate to the 30 June 2026 authorisation deadline and beyond, since India still has room to decide which PCN activities to authorise. Indeed, India can still add to its positive list, which is set for an initial three years and which the Designated National Authority can revise thereafter.

**We find that, because India's NDC is intensity-based, no approval scenario will automatically breach its 2030 or 2035 target.** The binding considerations are the long-term net zero mitigation burden each transfer imposes and the price effect of authorising projects at scale, which our approval framework manages through low-, medium- and high-burden bands.

**The report proceeds in three steps.** Section 2 maps the global pipeline and benchmarks India against the other leading hosts. Section 3 runs India's options through the three screens above and builds an approval framework from the results. Section 4 sets out the implications of our analysis for India's policy choices.

## 2. The global Article 6 pipeline and India's place in it

Article 6 allows countries to cooperate to cut emissions in three distinct ways. The only one India currently uses at scale is the centralised UN-crediting mechanism (6.4), the focus of our analysis. The other two are intergovernmental transfers and government-backed authorised units used by airlines under the Carbon Offsetting and Reduction Scheme for International Aviation (6.2) and a non-market track for cooperation that includes capacity-building (6.8). This section sets out the size of each channel and India's position relative to that of other large host countries. We explain why India has the largest single share of the global Article 6 pipeline and why only a small share of its projects currently qualify for sale.

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### The three channels of Article 6

The intergovernmental transfers covered by Article 6.2 include multilateral arrangements as well as bilateral deals in which one country buys mitigation outcomes from another and both adjust their emissions accounts to avoid double counting. Article 6.4, as the successor to the CDM, is open to project developers and governments alike. Article 6.8 is a non-market track for cooperation without trading, such as through capacity-building, technology transfer and policy support. The three channels differ in both their maturity and, as discussed, the extent of India's involvement in them.

**The bilateral 6.2 market is small and highly concentrated, and India is barely present in it.** As of early 2026, the market comprised 108 signed agreements across 64 countries, with the first transfer (Switzerland buying from Thailand) completed in January 2024 (Institute for Global Environmental Strategies [IGES], 2025). Demand and activity in the market are concentrated in a handful of buyers: Japan, Singapore and Switzerland, with Japan's Joint Crediting Mechanism supporting most pilot projects. India participates in only two of these agreements, signed in 2025 with Japan and Singapore respectively, and has not registered any 6.2 projects or transfers. Because 6.2 attaches a price premium to authorised credits, bilateral partnerships present another kind of opportunity for India to increase its revenue.

#### Box 2.1. Why our analysis excludes Article 6.8

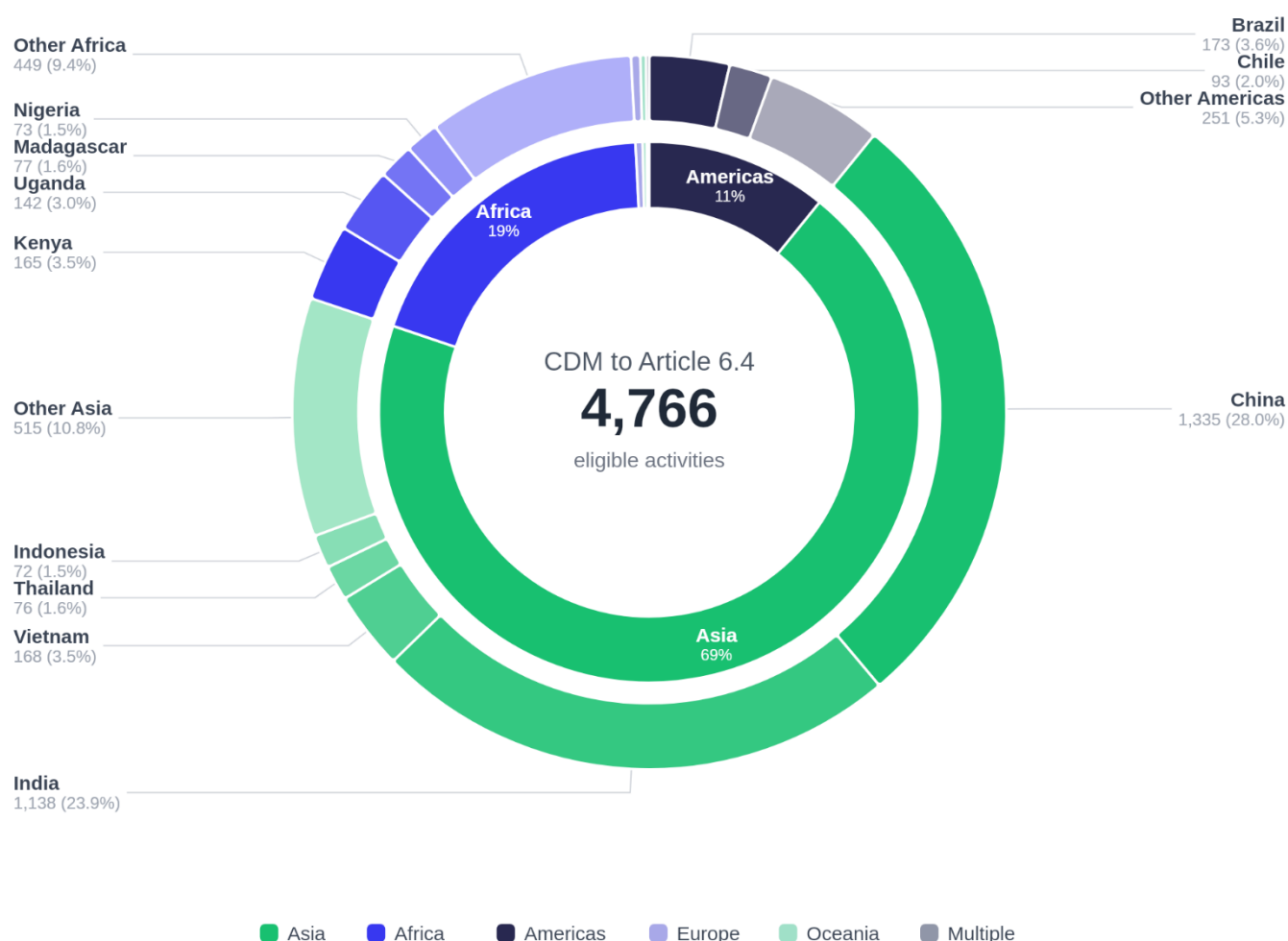
Article 6.8 is the non-market track of the Paris Agreement: it coordinates capacity-building, technology transfer and policy support rather than issuing tradable credits. The main initiatives under Article 6.8 include the Article 6 Implementation Partnership (76 partner countries) and the World Bank's carbon asset facilities; India takes part indirectly through the GIZ Global Carbon Market project but hosts no programmes of its own. Because Article 6.8 generates no transferable units, we treat it as a complementary support channel rather than a source of carbon finance.

**As discussed, India's project pipeline is concentrated in 6.4.** Unlike 6.2, this mechanism does not require a government counterparty for each project and UNFCCC mandates cover its registry and methodologies. India provides two ready-made streams of projects to the mechanism: 593 legacy CDM projects seeking to transition, and 649 new project notifications.

## Global benchmarks: how India compares to other countries

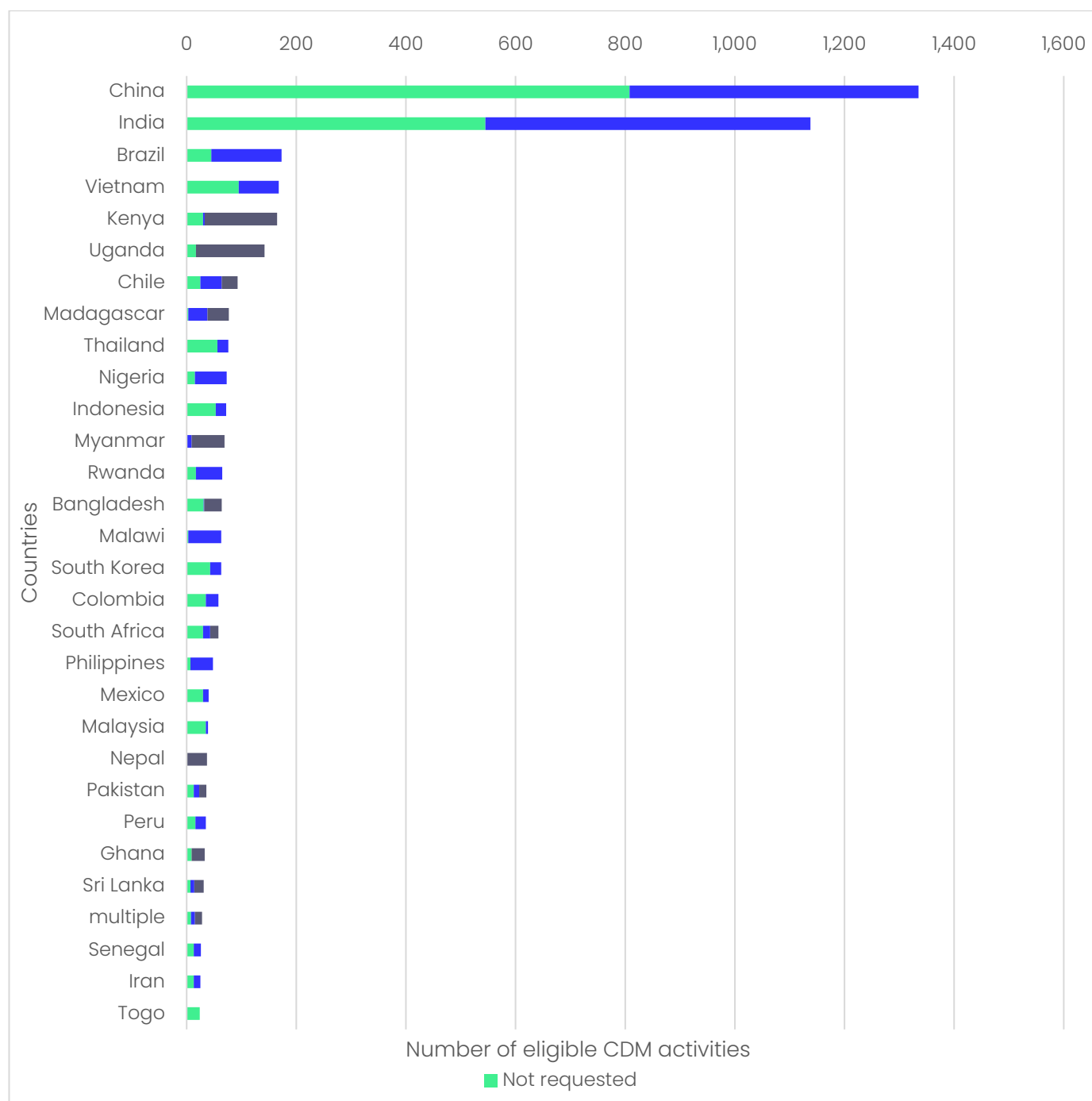
Seen against the full field of host countries, India's position is distinctive in three ways: it leads in the number of projects seeking to transition to Article 6 and in new project notifications; and it qualifies the smallest share of what it submits against its list of approved activities for Article 6 participation. Figures 2.1 and 2.2 show the concentration of countries' Article 6.4 activities. Combined with our analysis of the sectors with the highest emissions and of India's qualifying activities, they help explain why the country's authorisation choices matter globally, and why its short positive list, rather than any shortage of projects, holds its qualifying share down. We use three levels of classification: sector is the broad grouping (energy, buildings, transport, waste, agriculture, industry); activity type is the specific technology within a sector (solar, wind, biogas, cleaner cooking); and India's approved categories reflect its positive list for judging qualification. The global view is shown by sector, the country detail by activity type, and India's qualifying volume by its approved categories.

**Figure 2.1. Global CDM to Article 6.4 transition activities by host country**



Source: Author's analysis based on UNFCCC Article 6 pipeline data for 101 host countries (as of 17 February 2026). Note: The inner ring represents eligible CDM activities by region and the outer ring represents host countries. Eligible CDM activities include project activities, the programme of activities and component project activities. Multiple denotes an activity hosted in more than one country (and, correspondingly, spanning more than one region).

**Figure 2.2. CDM transition activities in the top 30 host countries**



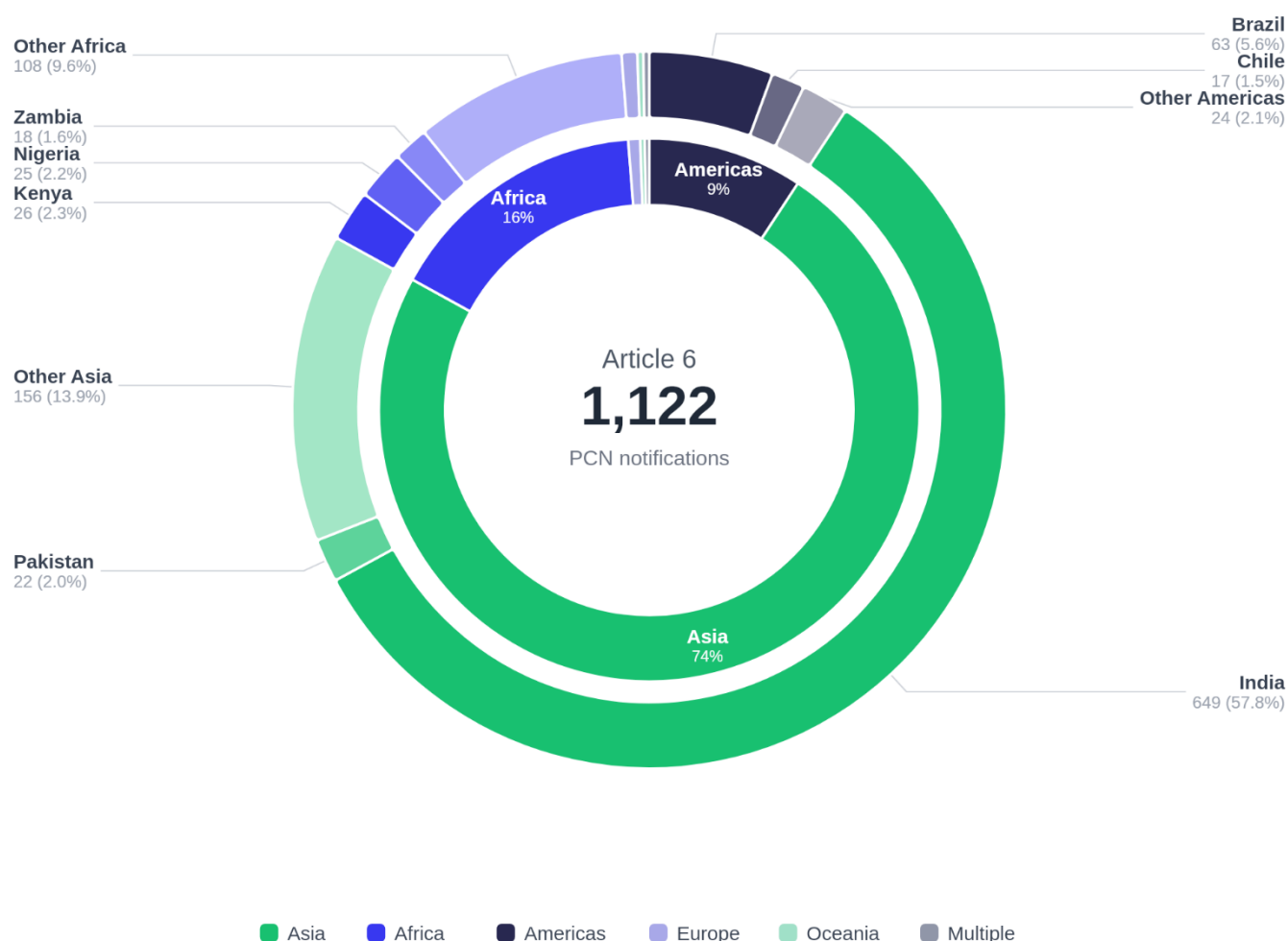
Source: Author's analysis of the UNFCCC CDM activity database.

As the figures above show, a handful of countries account for most of the legacy pipeline, with China and India the largest contributors by far. Therefore, the decisions of a few governments determine how much of the CDM stock reaches the market.

**Demand for Article 6 credits is expected to grow significantly over time.** One study shows that demand for internationally transferred mitigation outcomes (ITMOs) under Article 6 will rise to 665 million credits by 2030 and 1,438 million credits by 2040 (NewClimate Institute, 2026). This increase will be predominantly driven by the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA), the JCM and the EU. During CORSIA's mandatory second phase in 2027–35, airlines will face a massive increase in their compliance obligations (ICAO, 2016). From 2036, the Council of the European

Union will allow high-quality international carbon credits to contribute to emissions reductions equivalent to as much as 5% of the EU's 1990 net emissions (Council of the European Union, 2025). This provision, which follows the Council's adoption of a 90% emissions reduction target for 2040, is incorporated into Regulation (EU) 2026/667, adopted in April 2026 (EU, 2026). Global demand is expected to reach 7.2 billion credits annually by 2050 (BloombergNEF, 2025). Meeting that additional demand will require a corresponding increase in supply; India, with the world's largest Article 6 pipeline, is among the countries that are best placed to provide it (Carbon Pulse, 2026).

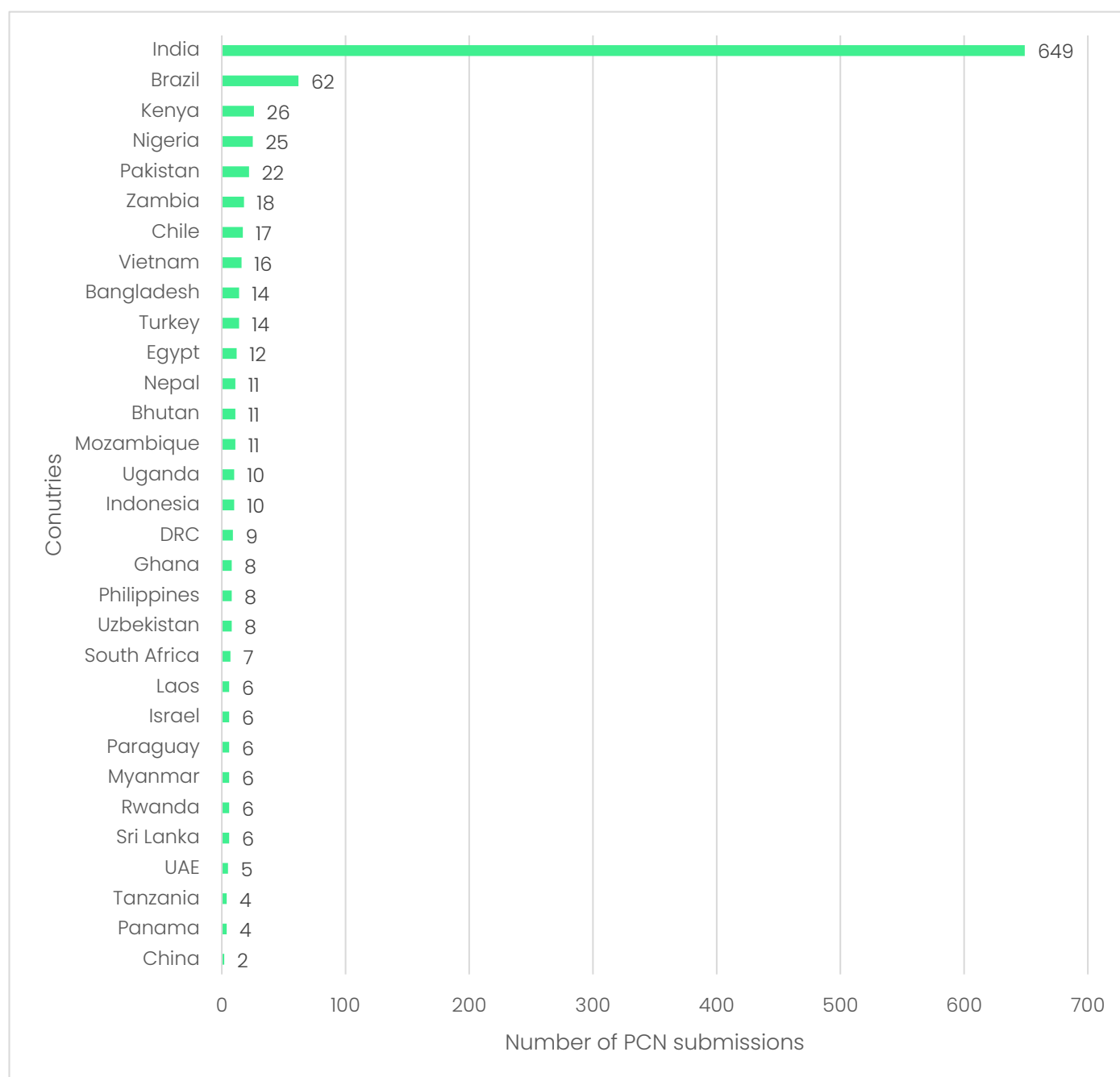
**Figure 2.3. Global Article 6 Prior Consideration Notifications by host country**



Source: Author's analysis based on UNFCCC Article 6 pipeline data for 94 host countries (as of 17 February 2026).

The type and quantity of credits each country can sell depend on its positive list and Host Party Participation Requirements (HPPR), which differ far more than the pipelines themselves. An HPPR is the list of activity types a government will authorise for international transfer. Brazil, Kenya, Chile and Pakistan operate open or long lists, so almost everything they submit can qualify; Nigeria has not yet produced a list, so nothing qualifies; and, as discussed, India has the most restrictive list of any large host country, covering just 13 narrowly defined sectors (MoEFCC, 2025). Several of these large countries dominate in credits requested for transition: China accounts for about 69 MtCO<sub>2</sub>e per year and India about 62 MtCO<sub>2</sub>e per year, with Brazil in third place at roughly 35 MtCO<sub>2</sub>e per year. India submits the most transition requests of any country (593), as shown in Figure 2.2, while China leads on volume. However, because of its HPPR, India converts the smallest proportion of its requests into sellable credits. This is the result of a policy choice rather than a structural limit.

**Figure 2.4. Article 6.4 Prior Consideration Notification submissions by host country**



Source: Author's analysis of the UNFCCC Article 6.4 PCN database (1,112 submissions across 94 countries). Note: The 15 largest host countries are shown, with China added for comparison.

As Figure 2.4 shows, India's PCN submissions dwarf those of every other country. China, which once led the legacy CDM pipeline, has filed only two new notifications. The country's deliberate strategy has evolved to build up its own domestic carbon market rather than export credits. Therefore, India is effectively filling the space left by the largest Kyoto-era host country.

In 2025, China expanded its national emissions trading system to cover steel, cement and aluminium, and began to issue domestic offsets once again – partly to align its industry with Carbon Border Adjustment Mechanisms such as the EU's. One analysis projects that China could become a net importer of Article 6 credits as early as 2030 (S&P Global, 2024). For India, this may provide a useful example of how a large economy can shift from selling credits abroad to pricing carbon at home as its exposure to border adjustments grows.

## India's approach to the Article 6.4 pipeline

### The CDM transition pipeline

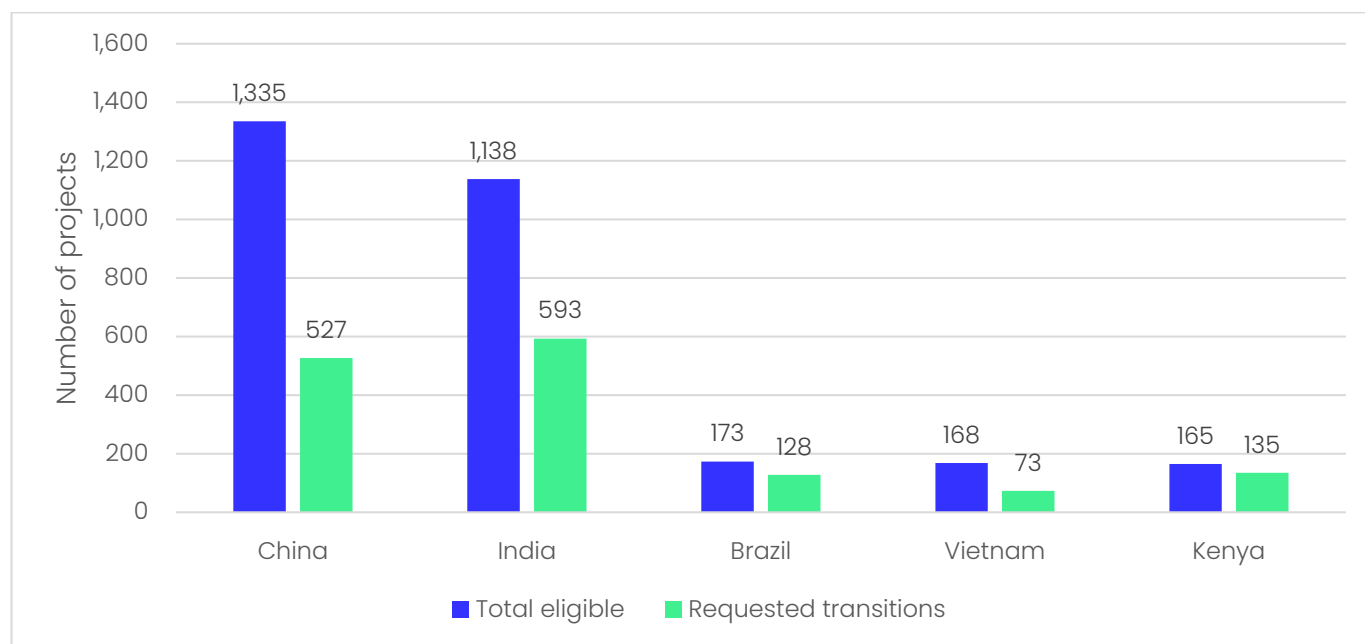
India's handling of the legacy CDM pipeline is the clearest illustration of the opportunity that our analysis explores and of how easily India could miss it. As discussed, the country held the single largest stock of CDM projects seeking to move into the new mechanism. According to the latest available data, 2,462 of 4,766 eligible CDM activities worldwide have requested to transition to Article 6 (UNEP Copenhagen Climate Centre, 2025). India (593), China (527), Kenya (135), Brazil (128) and Vietnam (73) account for more than 60% of all requests. Figure 2.5 shows the leading hosts and the gap between their activities that are eligible to transition and the requests they have made. India has 1,138 eligible activities, 545 of which (accounting for about 48 MtCO<sub>2</sub>e per year) did not request to transition.

**The largest CDM hosts are developing countries rather than the EU or US because the mechanism was built for that purpose.** The CDM was designed under the Kyoto Protocol to encourage industrialised (Annex I) countries to finance mitigation outcomes in developing nations and count the results towards their own climate targets. The EU and US were, therefore, buyers and financiers, so the project pipeline accumulated in countries such as India, China and Brazil.

**Given that the submission deadline for transitioning CDM projects has now passed, India's decision not to authorise any of these projects is better read as a deliberate choice than as a failure to act.**

Developers had to file transition requests by the end of 2023 (a deadline extended to December 2025 for some project types) and host governments had to approve them by 30 June 2026. Like China, India authorised none of its requests. India did not check its legacy projects against its positive list, and the transition window simply closed without any authorisation decisions. Meanwhile, the other major host of legacy projects, Brazil, approved almost all its requests. India's abstention is consistent with a broader reluctance to transfer Kyoto-era credits – widely judged to be weakly additional – to the new mechanism, and with its stated policy of reserving low-cost domestic abatement for its own targets. Under UNFCCC rules, the certified emissions reductions of CDMs that have not been approved to transition to Article 6.4 credits can still count towards India's first NDC. As such, India no longer has the option to sell this batch internationally at the Article 6 premium, for now. It does, however, retain full control over its new project (PCN) pipeline and can expand its positive list at the next review, applying the framework that we set out in our analysis.

**Figure 2.5. Eligible versus requested CDM to Article 6.4 transitions in top host countries**



Source: Author's analysis of the UNFCCC CDM activity database. Note: Requested activities are those filed for transition by the submission deadline.

As Figure 2.5 shows, India is not a marginal player but the single largest holder of legacy projects that have requested to transition to Article 6.4. Therefore, India's decision not to approve any of these credits will have an important influence on the whole market, as could the way in which this decision will shape its approach to PCN approvals.

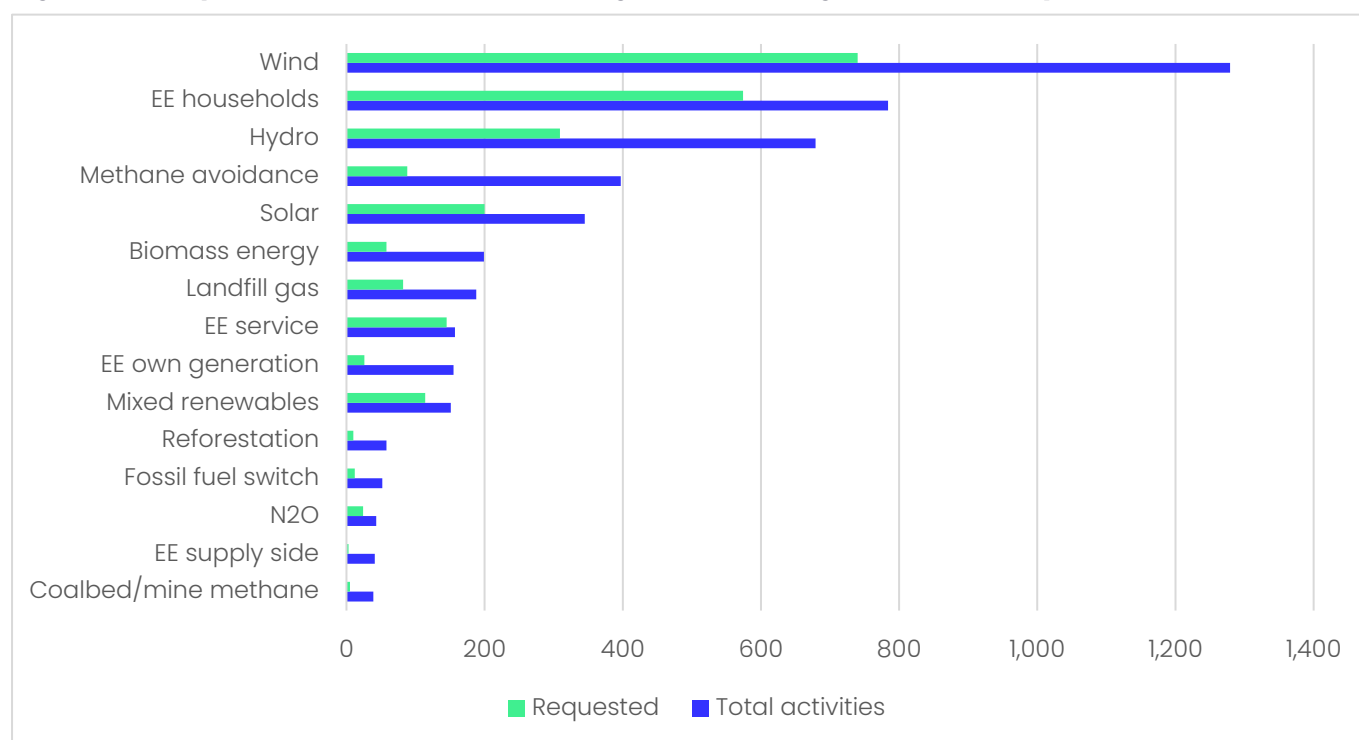
### India's CDM qualification gap

**Only 16 (2.7%) of India's 593 requests qualified for sale on its positive list.** India's list of 13 approved sectors (MoEFCC, 2025) admits only a narrow set of high-tech activities, such as renewable energy with storage, solar thermal, green hydrogen and compressed biogas. The MoEFCC has stated explicitly that Article 6 supports India's NDC target of reducing its emissions intensity by 45% by 2030, as set out in its updated NDC prior to its latest submission, which is for 2031–35.

India's positive list is also the natural yardstick for the legacy CDM pipeline, even if it never formally applied the list to that pipeline. An activity in the pipeline could earn the Article 6 premium only by transitioning to Article 6.4 – and any such transition would have needed India's authorisation. The country initially proposed to authorise those transitions using the same positive list that applies to its PCN projects under Article 6.4. So, the filter that determines which new projects qualify could also have determined which legacy requests qualified. Therefore, we use the same sectoral screen for CDM projects in our estimates below to gauge how many of them India's current rules would have covered and, accordingly, to measure the opportunity that has now been lost.

The green bars in Figure 2.6 show the credits India has already developed but currently cannot sell, a grouping that a longer positive list could have unlocked without the need to build new projects. Project developers submit the intent to transition to Article 6.4 to the UNFCCC Secretariat, which then notifies the respective country's Designated National Authority (DNA), such as India's MoEFCC, to approve this. Accordingly, the green bars represent total submissions activity. We cross-checked total submissions with the MoEFCC's list of 13 activities that might be approved for Article 6 to help identify which of these activities might have qualified. For example, energy projects such as solar and wind are not included, but higher-tech activities such as offshore wind and solar with battery storage (only for the battery storage part) and offshore wind are a part of the positive list.

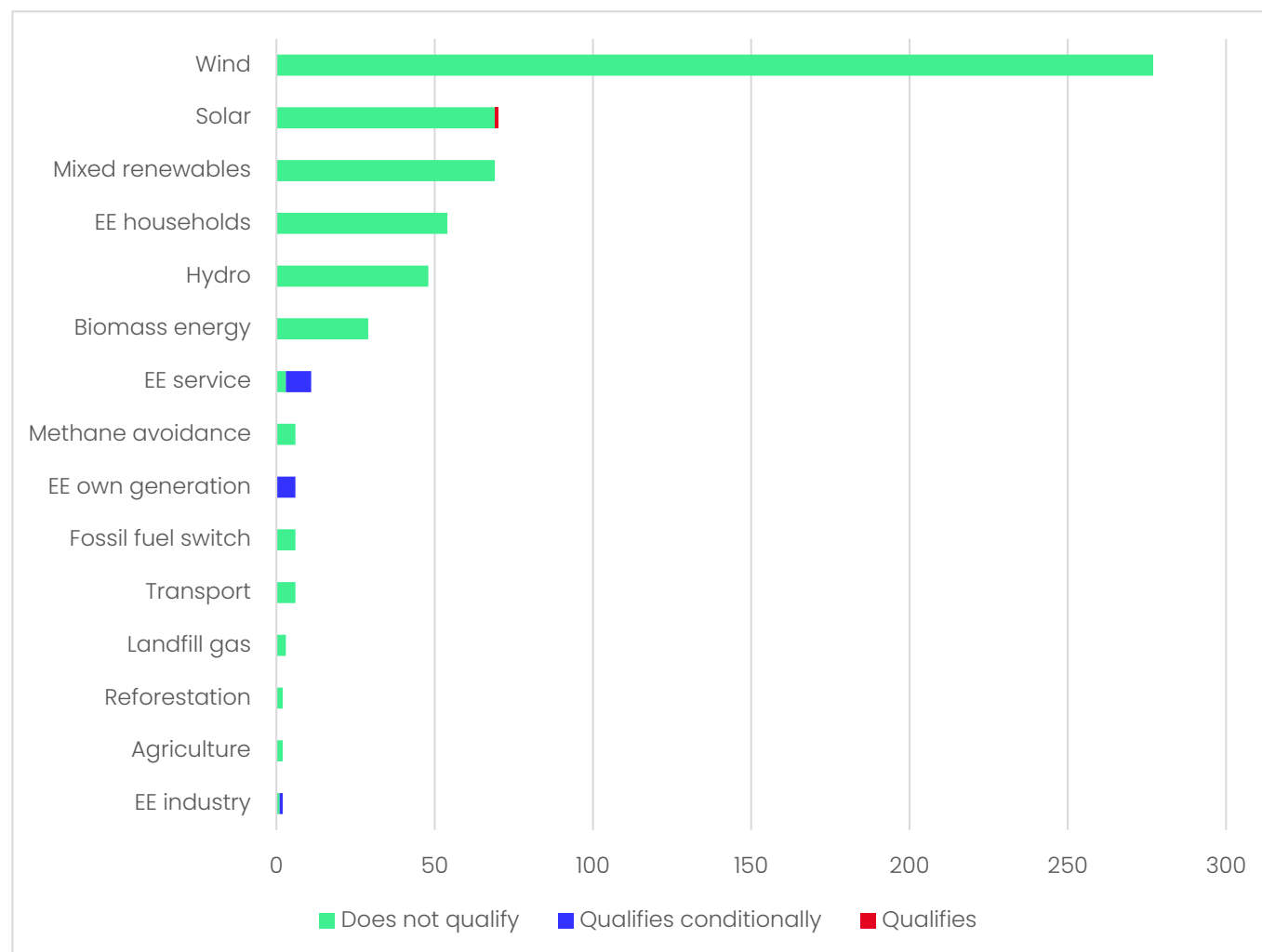
**Figure 2.6. Requested versus total available global CDM-eligible activities by sector**



Source: Author's analysis of the UNFCCC CDM activity database. Note: EE is energy efficiency; fossil fuel switch refers to replacing a more carbon-intensive fuel with a less carbon-intensive one.

The reason so few projects qualified is that there was a mismatch between activity types, not demanding criteria that had to be applied case by case. Only one of the 593 requests was a clean match for activity types on the list: a solar thermal plant, under list item #2. Another 15 might have qualified, but only conditionally. All 15 of these were energy-efficiency projects that mapped to two threshold-based buckets: #9, best-available technology for hard-to-abate sectors such as cement and steel; and #7, high-end efficiency in HVAC and lighting. These projects could have qualified only if each fit 'best available' or 'high-end' criteria, but the pipeline records are unclear on whether they did so. The remaining 577 were simply not the kinds of activity that featured on the list. Figure 2.7 shows why the gap is so wide: the pipeline is dominated by standard wind (277 activities), solar photovoltaic, small hydro, household efficiency and biomass.

**Figure 2.7. India's qualifying versus not qualifying CDM transition requests by activity type**



Source: Author's analysis of India's CDM portfolio applied to the MoEFCC list of 13 approved sectors (Host Party Participation Requirements). Note: EE is energy efficiency; fossil fuel switch refers to replacing a more carbon-intensive fuel with a less carbon-intensive one.

Taken together, the qualification gap and India's stated position point to a deliberate strategy, not an overly restrictive list applied by accident. The clearest strand of this strategy is visible in the data above. The activities India keeps off the list are its cheapest and most abundant: standard wind, solar and hydro. India reserves those low-cost reductions for its own NDC and offers only the surplus for sale. The way the list is built also indicates two further aims. By admitting emerging, high-cost technologies, the list steers Article 6 finance towards the sectors India cannot yet fund alone at scale. By favouring activities that depend on advanced technology, India uses buyer country demand as a route to gain the know-how it still needs to import. These two aims appear to make up India's rationale for the design of the list, but the evidence here is consistent with them rather than proof of them.

**Table 2.1. Conversion ratio: India's CDM transition requests versus activities permitted for Article 6.4**

| Status of India's CDM transition requests | Number of requests | Share of total requests |
|-------------------------------------------|--------------------|-------------------------|
| Clearly qualifies                         | 1                  | 0.2%                    |
| Conditionally qualifies                   | 15                 | 2.5%                    |
| Does not qualify                          | 577                | 97.3%                   |
| Maximum possible (including conditional)  | 16                 | 2.7%                    |

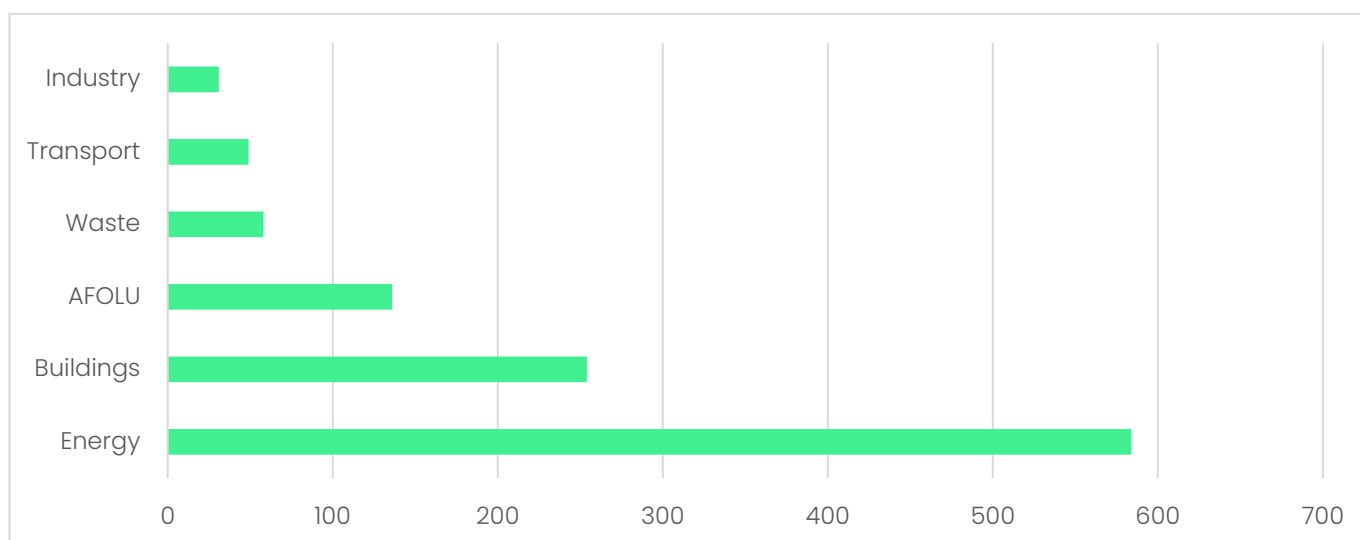
Source: Author's analysis of India's CDM portfolio applied to the MoEFCC list of 13 approved sectors (Host Party Participation Requirements). Note: EE is energy efficiency; fossil fuel switch refers to replacing a more carbon-intensive fuel with a less carbon-intensive one.

The mismatch between the list and the project pipeline is structural: the list is forward-looking in its inclusion of emerging technologies, whereas the pipeline includes projects that were registered a decade ago. India's CDM activities were registered between 2003 and 2012, when onshore wind and small hydro were the leading commercially deployed technologies of this kind globally, as shown in Figure 2.6. In contrast, India's positive list covers activities that were barely deployed then, as shown in Figure 2.7. So, even a smoothly functioning transition converts only about 2.7% of India's CDM requests. That conversion gap, 62 MtCO<sub>2</sub>e per year of requested credits and 0.66 MtCO<sub>2</sub>e per year of those that qualify, is the single largest source of the headroom we analyse in Section 3.

## The PCN pipeline

Alongside the legacy CDM stream, India is the leading provider of entirely new projects by an even wider margin. Since the new project notification (PCN) process began in 2023, 1,112 notifications have been filed across 94 countries, concentrated in energy (about 53%) and buildings (about 23%). Figure 2.8 shows the global picture by sector. India accounts for 649 (about 58%) of these notifications, or more than those of China, Brazil, Kenya and Pakistan combined.

**Figure 2.8. Global PCN submissions by sector, 2023–26**



Source: Author's analysis of the UNFCCC Article 6.4 PCN database. Note: Sector tags are harmonised with the supervisory body's categories; AFOLU stands for Agriculture, Forestry and Other Land Use.

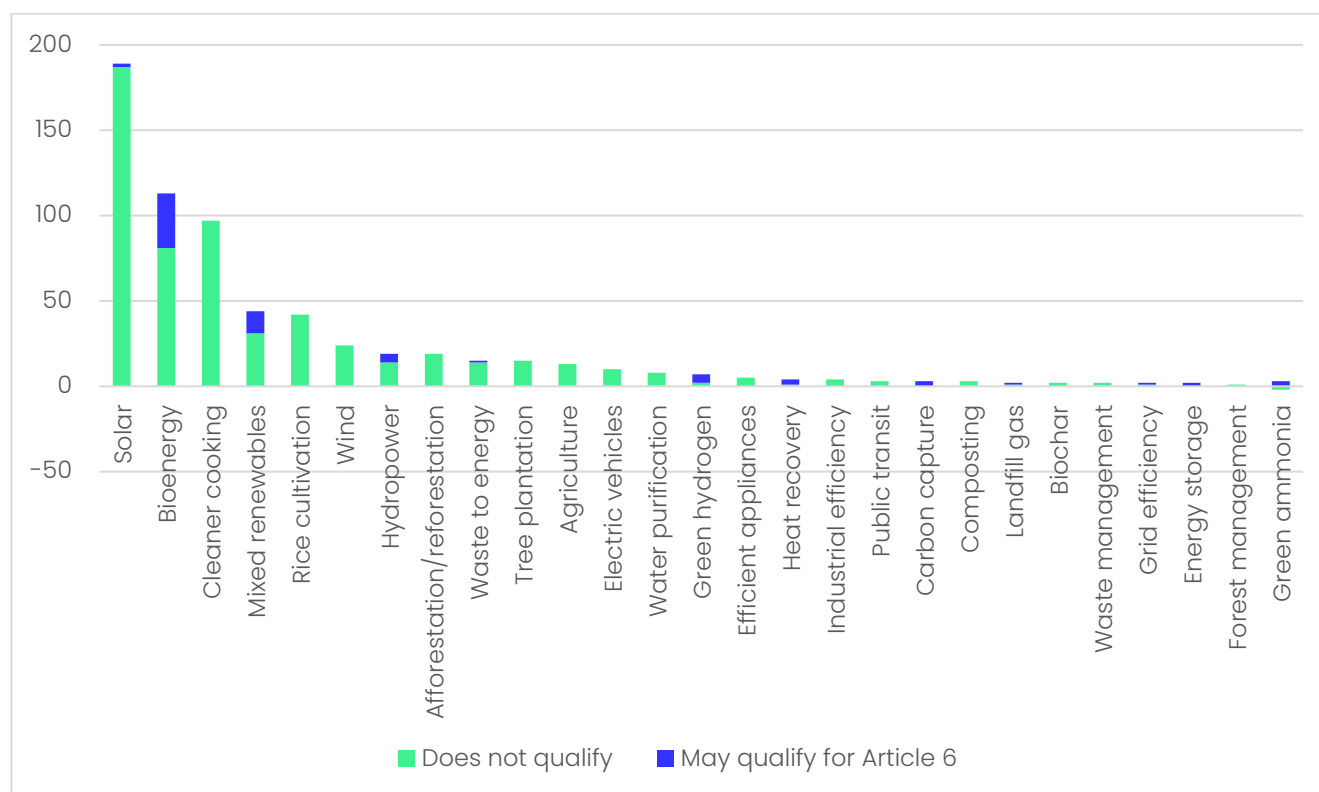
India files so many notifications because it has the deepest pool of carbon market capacity from the Kyoto era. Developers, auditors and regulators built up a familiarity with the notification process during India's large-scale CDM programme, allowing it to generate and submit notifications faster than countries still building that capacity (IGES, 2025). Other factors seem to be India's size and the reality that, unlike China, it sees the potential of carbon credit exports. The result is a vast submission volume but, as with CDM projects, most of it does not qualify on the current positive list.

As Figure 2.8 shows, the global Article 6 pipeline is dominated by India and is overwhelmingly made up of energy and buildings projects, the types of lower-cost activities that India's positive list mostly excludes. This is why the main question for India concerns not whether projects exist but which ones it chooses to approve for international sale.

### India's PCN qualification gap

Only 71 of India's 649 notifications qualify (10.9%), with bundled programmes qualifying roughly twice as often as individual projects. This low rate of qualification is explained by the largest activity types: solar photovoltaic (189 notifications; 2 qualifying), bioenergy (113; 32 qualifying as compressed biogas), cleaner cooking (97; none qualifying) and mixed renewables (44; 13 qualifying).

**Figure 2.9. India's total PCN submissions versus those that qualify for Article 6 by activity type**



Source: Author's analysis of the UNFCCC Article 6.4 PCN database mapped to India's positive list.

Compressed biogas alone accounts for about half of the 71 that qualify, and renewable energy paired with storage accounts for most of the rest, so the list effectively favours a narrow band of technologies. Programmes of activities have a qualification rate of about 18%, compared to about 10% for individual projects, because developers can describe a bundle in language that matches the positive list more closely. Figure 2.9 shows the split by activity type.

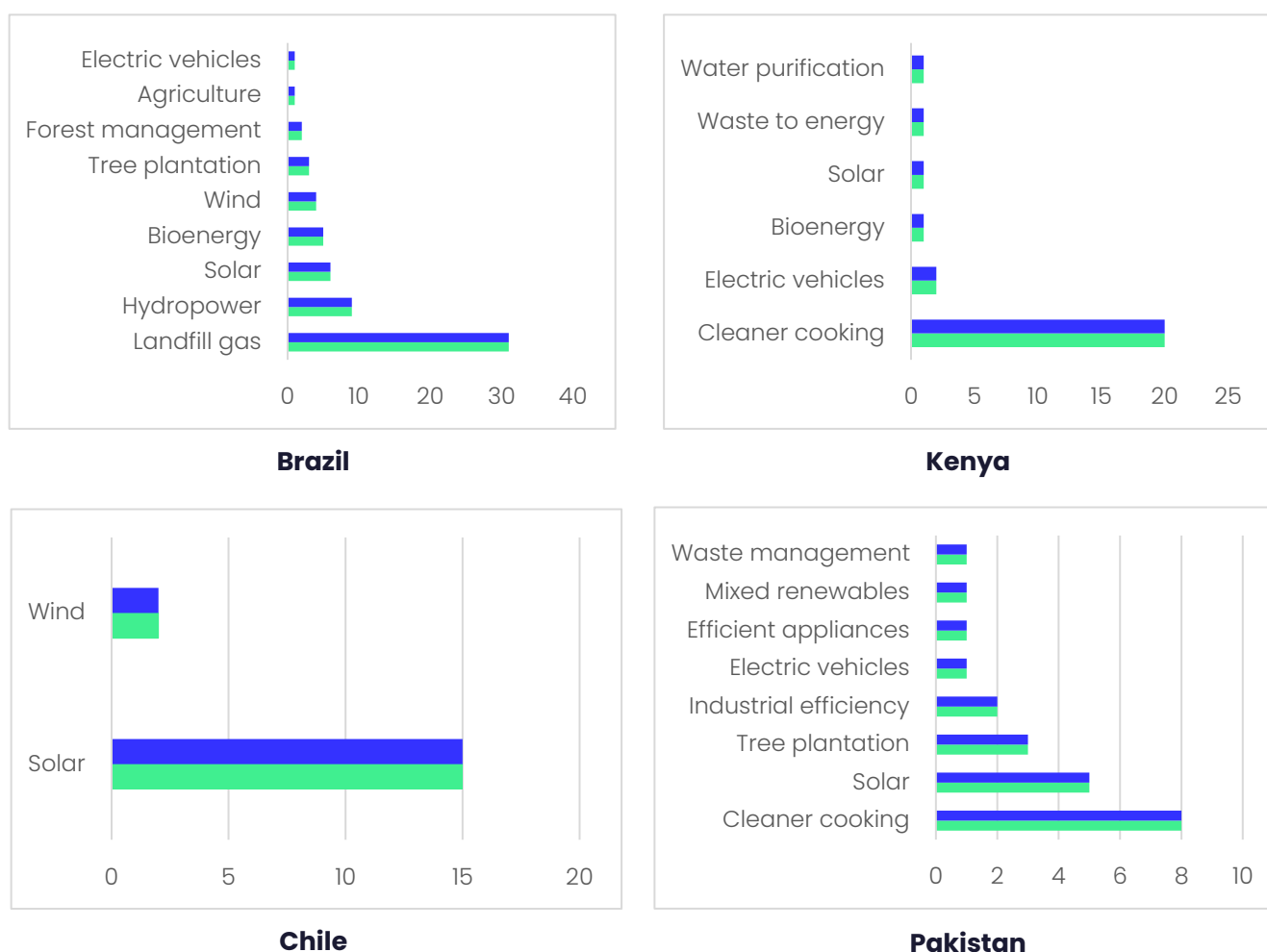
The green bars in Figure 2.9 represent India's PCN submissions that are unlikely to qualify for Article 6 participation based on its list of approved activities. The blue bars represent those that might qualify.

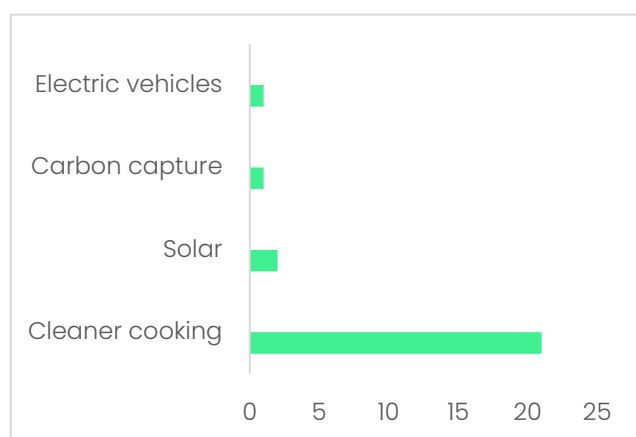
**Table 2.2. Conversion ratio: PCN submissions versus those that qualify for Article 6**

| Category                       | Qualifying              | Total submissions | Conversion rate                   |
|--------------------------------|-------------------------|-------------------|-----------------------------------|
| All PCN Submissions            | 71 [578 non-qualifying] | 649               | 10.9% [89.1% non-conversion rate] |
| Project Activities (PA)        | 53                      | 548               | 9.7%                              |
| Programmes of Activities (PoA) | 18                      | 101               | 17.8%                             |

Table 2.2 shows that when set side by side, data on the benchmark countries highlight the contrast between most of them, which approve the majority of their submissions, and India, which approves almost none. (The exception to this, Nigeria, has not yet notified an HPPR list.) Figure 2.10 shows how many of four of the five benchmark countries' PCN submissions qualify in comparison to those that do not. The blue bars represent activities that qualify on that country's list of activities approved for Article 6 participation, and the green bars represent the total number of submissions. The qualifying share is high for the benchmark countries because they have open lists, which throws India's restrictive list into sharp relief.

**Figure 2.10. Benchmark countries' qualifying and non-qualifying PCN submissions by activity type**





### Nigeria

Source: Author's analysis of the UNFCCC Article 6.4 PCN database mapped to each country's positive list. Note: there are no qualifying bars for Nigeria because it is yet to release its HPPR.

## Cross-country benchmarks and emissions footprints

As discussed, India's low qualification rate is an outlier among large host countries, reflecting the restrictive nature of its list rather than the size of its pipeline. The next-largest PCN hosts – Brazil, Kenya, Chile and Pakistan – each qualify close to 100% of their submissions on open positive lists; Nigeria qualifies none, but only because it has not yet notified a list. India is alone in pairing a very large pipeline with a very restrictive list. Table 2.3 and Table 2.4 set out the differences between them. The former shows that India's submitted PCN volume, about 415 MtCO<sub>2</sub>e per year, is by far the largest in absolute terms.

Table 2.3. Cross-country PCN submissions and qualification rates

| Country  | PCNs submitted | Qualifying rate | Positive list (HPPR)     | Submitted PCNs (MtCO <sub>2</sub> e/yr) | Submitted PCNs as a share of national GHG | Qualifying (MtCO <sub>2</sub> e/yr) |
|----------|----------------|-----------------|--------------------------|-----------------------------------------|-------------------------------------------|-------------------------------------|
| India    | 649            | 10.9%           | Restrictive (13 sectors) | 414.50                                  | 16.99%                                    | 24.72                               |
| Brazil   | 62             | ~100%           | Open                     | 16.44                                   | 0.64%                                     | 16.44                               |
| Kenya    | 26             | ~100%           | Broad/sectoral           | 21.24                                   | 20.29%                                    | 21.24                               |
| Chile    | 17             | ~100%           | Open (case by case)      | 1.71                                    | 1.37%                                     | 1.71                                |
| Pakistan | 22             | ~100%           | Open                     | 10.75                                   | 2.23%                                     | 10.75                               |
| Nigeria  | 25             | No data         | Not yet notified         | 19.39                                   | 4.87%                                     | 0.00                                |

Source: Author's analysis of the UNFCCC Article 6.4 PCN database mapped to each country's positive list. Note: GHG stands for greenhouse gas emissions.

Table 2.4. Cross-country CDM submissions and qualification rates

| Country  | Eligible CDM activities | Not requested | Requested pending host country approval | Approved | Share requested for transition | Eligible CDM emissions (tCO <sub>2</sub> e/yr) | Eligible as a share of national GHG |
|----------|-------------------------|---------------|-----------------------------------------|----------|--------------------------------|------------------------------------------------|-------------------------------------|
| China    | 1335                    | 808           | 527                                     | 0        | 39.5%                          | 185,747,081                                    | 1.48%                               |
| India    | 1138                    | 545           | 593                                     | 0        | 52.1%                          | 109,997,818                                    | 4.51%                               |
| Brazil   | 173                     | 45            | 128                                     | 0        | 74.0%                          | 43,115,718                                     | 1.68%                               |
| Vietnam  | 168                     | 95            | 73                                      | 0        | 43.5%                          | 12,028,115                                     | 2.07%                               |
| Kenya    | 165                     | 30            | 3                                       | 132      | 81.8%                          | 11,804,863                                     | 11.28%                              |
| Chile    | 93                      | 25            | 39                                      | 29       | 73.1%                          | 8,058,012                                      | 6.47%                               |
| Nigeria  | 73                      | 15            | 58                                      | 0        | 79.5%                          | 5,733,979                                      | 1.44%                               |
| Pakistan | 36                      | 13            | 10                                      | 13       | 63.9%                          | 4,456,058                                      | 0.92%                               |

Sources: Host countries' DNA notifications; UNFCCC PCN database. Note: GHG stands for greenhouse gas emissions.

Although the full pipeline of India's emissions-reduction projects is large in terms of its absolute volume, the share of it that qualifies for sale is small relative to the country's NDC headroom (the gap between its climate targets and its projected emissions). Therefore, authorising sales of these projects will not put India's NDC compliance at risk. Table 2.5 shows the country's net emissions in 2020, which were about 2,440 MtCO<sub>2</sub>e (MoEFCC, 2024), and the volume of each part of the pipeline relative to that total (a comparison that indicates their scale, not a contribution to emissions). The pipeline is large by that measure, roughly equivalent to 17% of India's annual emissions or the entire annual emissions of a country such as the UK. Taken together, India's CDM projects are equivalent to about 2.5% of its annual emissions.

It would be costly to export reductions equivalent to 17% of annual emissions. As discussed, India would then need to make a corresponding adjustment to its own emissions balance, impacting its efforts to achieve net zero by 2070. However, the volume India could authorise for sale is far smaller than this, because most of the pipeline is not covered by its positive list: its qualifying PCN projects are equivalent to about 1.0% of annual emissions and its qualifying CDM projects to about 0.03%. It is this qualifying volume, not the full pipeline, that is small relative to India's NDC headroom, which is why authorising it would not threaten near-term NDC compliance. However, that 17% figure matters as a measure of the potential mitigation in play; India's decisions about whether to sell that potential or keep it for its own targets are important to its net zero pathway (see Section 3).

Table 2.5. India's Article 6 pipeline relative to its national emissions baseline

| Stream                                    | Annual volume (MtCO <sub>2</sub> e/yr) | Annual volume as a share of 2020 national GHG |
|-------------------------------------------|----------------------------------------|-----------------------------------------------|
| National GHG 2020 (net, including LULUCF) | 2,440                                  | 100%                                          |
| CDM transitions requested (593)           | 62.1                                   | 2.5%                                          |
| Qualifying CDM activities (16)            | 0.66                                   | 0.03%                                         |
| Submitted PCN activities (649)            | 414.5                                  | 17%                                           |
| Qualifying PCN activities (71)            | 24.7                                   | 1.0%                                          |

Sources: Author's analysis of the UNFCCC Article 6 databases; India's Fourth Biennial Update Report (2020 reference year). Note: LULUCF stands for Land Use, Land-Use Change and Forestry; GHG stands for greenhouse gas emissions. All figures are annual: each stream's volume is the annual emissions reduction its activities represent, shown as a percentage of 2020 national emissions rather than as a share of the emissions stock.

### 3. Scenarios for India: how much to authorise, and at what price

This section asks how much of the Article 6 pipeline India can afford to sell abroad, and on what terms. The binding questions are not about volume. We run every realistic approval choice through three sequential screens that mirror the questions policymakers must answer when approving projects: does selling breach India's near-term climate target (the NDC accounting screen)? Does selling widen the gap India must still close to reach net zero (the net zero safeguard)? And does it pay to sell at scale, once India's own supply has reduced the market price (the price screen)? Those screens form an approval framework that sorts each option into authorise now, authorise only with conditions, or retain at home or sell only at a premium. The headline result is that India's intensity-based NDC is never the binding constraint; the real limits are the net zero burden and the price effect of selling in bulk. The 30 June 2026 deadline for host-party approval of CDM transition projects has passed without India authorising any of its 593 requests. So, the scenarios below quantify both what that inaction has put at risk and what remains to be decided for the new project (PCN) pipeline and the next review of the positive list.

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#### Assumptions, scenarios and methodology

Our analysis rests on a deliberately conservative emissions baseline drawn from India's official reporting. It adopts India's Fourth Biennial Update Report (BUR-4) 2020 baseline: 2,959 MtCO<sub>2</sub>e gross of land use and 2,440 MtCO<sub>2</sub>e net. We project a current policy trajectory using the 3.14% annual growth in emissions rate observed in EDGAR v8.0 (the Emissions Database for Global Atmospheric Research), the European Commission's global greenhouse gas dataset (Crippa et al., 2025), producing roughly 4,031 MtCO<sub>2</sub>e in 2030 and 4,705 MtCO<sub>2</sub>e in 2035. These projections sit slightly below the current policy range reported by the Climate Action Tracker. Therefore, they may understate future emissions.

India's climate targets are measured in relation to emissions per unit of GDP (emissions intensity), allowing the country's absolute emissions limit to rise as its economy expands. The Nationally Determined Contribution (NDC) commits India to cutting its emissions intensity by 45% by 2030 and by 47% by 2035 compared to 2005 levels. By applying those factors to the GDP projections in NITI Aayog (2026), the Government of India's public policy think-tank, we convert the intensity target into an absolute emissions ceiling of about 4,688 MtCO<sub>2</sub>e in 2030 and 6,335 MtCO<sub>2</sub>e in 2035. Both figures exceed projected emissions. That is, India's NDC ceilings (which are calculated using emission intensities based on GDP projections for the respective years, as per the country's pledges) are higher than projected emissions in the current policy scenario. The gap between the two, NDC accounting headroom, is roughly 657 MtCO<sub>2</sub>e in 2030 and 1,630 MtCO<sub>2</sub>e in 2035. Independent assessments take a similar view of the ambition of these targets: the Climate Action Tracker rates them, and India's related actions, as being 'highly insufficient'. The Tracker notes that as India can largely meet its targets under its current policies, such targets will do little to push its emissions trajectory downwards on their own (Climate Action Tracker, 2025).

We test four approval choices in the live PCN pipeline against that baseline, ordered from the status quo to full approval. SA is the qualifying set of 71 projects; SB adds cleaner cooking, the largest excluded PCN category by emissions; SC adds the top three excluded sectors (cleaner cooking, mixed renewables and solar); and SD is full approval of all 649 submissions. Each subsequent step retains everything in the step before it, so the choices are strictly nested and the results scale clearly as the positive list widens. We also modelled a parallel set of legacy CDM scenarios (S1–S4) but, as the

window to authorise those activities closed on 30 June 2026, they are no longer live choices. As such, we discuss them separately as a one-off financing opportunity that has been lost. To clarify our analysis, we show only the figures and tables needed to support our findings. Table 3.2 sets out each PCN scenario and its average annual credit volume, while Figure 3.1 and Figure 3.2 show the volumes each pathway puts on the market over time.

**Because new projects keep entering the pipeline, we model the PCN track using two growth rates.** We run each PCN scenario at 2% and 5% annual pipeline growth respectively, reflecting the roughly 40–70 new notifications filed each year. Each annual cohort credits over its own window, about 10 years for fixed crediting and 15 for renewable crediting, and expires independently. This is why the credit curves we discuss below rise and taper off in their later stages.

### Box 3.1. The 30 June 2026 deadline, legacy CDM projects and scenario design

The window for host governments to authorise the transition of legacy CDM activities to Article 6.4 closed on 30 June 2026 without India acting on its 593 transition requests. Therefore, we excluded the legacy CDM pipeline from our scenario exercise. The CDM track was modelled as a separate, parallel track so that its contribution could be isolated from that of the PCN track (see Table 3.2 and Figures 3.1 and 3.5). The figures for the CDM track measure the finance that the transition window could have delivered. As that one-off opportunity has been lost, we report these figures for context only.

We exclude the CDM pipeline on grounds of timing, not climate integrity. Had India approved all 593 requests to transition CDM projects to Article 6.4, it would still have been on track to achieve both its NDC and net zero targets. The export of these projects would have consumed only about one-eighth of the 2035 net zero gap and would have constituted a low burden. India would have comfortably preserved its NDC accounting headroom. What has been lost is finance. At the US\$20 Article 6 reference price, the full pipeline would have raised about US\$12.4 billion cumulatively by 2036; at the more realistic legacy credit price of about US\$9, it would have raised roughly US\$5.6 billion. (These figures assume every activity was built and delivered its projected reductions, which historically many were not.)

#### **An alternative scenario design**

The scenarios we discuss widen India's positive list by sector, adding the largest excluded sectors first. An alternative scenario design could rank activities by their marginal abatement cost and approve the most expensive to abate first. This would steer the Article 6 premium towards the emissions reductions that are hardest to finance at home, reinforcing the case for using Article 6 as an accelerant of investment in high-cost technologies. Given that such an approach would require a defensible abatement-cost estimate for each sector, which lies beyond the scope of this study, we did not include it here. As discussed, India would still have to make the corresponding adjustments for approved projects later, so sales of projects in high-cost areas would finance that abatement now rather than postponing it.

**In the scenarios below, we use three reference prices spanning the range of realistic sales and adjust for the fact that India's sales can move the market price.** The three tiers are a voluntary market floor of US\$9/tCO<sub>2</sub>e, an Article 6 reference price of US\$20 and a compliance premium of US\$70 (World Bank, 2024; Gold Standard, 2024). The last of these, which is also the EU ETS spot price, applies only to credits paired with a high-paying compliance buyer such as Switzerland, Singapore or South Korea. We then adjust these prices for demand. The key parameters are summarised in Table 3.1.

Table 3.1. Key parameters and assumptions in the scenario analysis

| Parameter                                       | Value                                                      | Source                                                                                                                                                                                                                                        |
|-------------------------------------------------|------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2020 emissions (gross, excluding LULUCF)        | 2,959 MtCO <sub>2</sub> e                                  | India BUR-4                                                                                                                                                                                                                                   |
| 2020 emissions (net, including LULUCF)          | 2,440 MtCO <sub>2</sub> e                                  | India BUR-4                                                                                                                                                                                                                                   |
| Current policy growth rate                      | 3.14% per year                                             | EDGAR v8.0                                                                                                                                                                                                                                    |
| Projected emissions, 2030/2035                  | 4,031/4,705 MtCO <sub>2</sub> e                            | India BUR-4, EDGAR                                                                                                                                                                                                                            |
| NDC intensity targets (relative to 2005 levels) | 45% (2030)/47% (2035)                                      | India's Updated NDC                                                                                                                                                                                                                           |
| NDC emissions ceiling, 2030/2035                | 4,688 MtCO <sub>2</sub> e/6,335 MtCO <sub>2</sub> e        | Author's calculations based on the literature                                                                                                                                                                                                 |
| NDC accounting headroom, 2030/2035              | 657 MtCO <sub>2</sub> e/1,630 MtCO <sub>2</sub> e          | Author's calculations based on the literature                                                                                                                                                                                                 |
| Net zero pathway, 2030/2035                     | 4,200 MtCO <sub>2</sub> e/4,200 MtCO <sub>2</sub> e        | NITI Aayog (2026)                                                                                                                                                                                                                             |
| Net zero gap before exports, 2030/2035          | Minus 169 MtCO <sub>2</sub> e/plus 505 MtCO <sub>2</sub> e | Author's calculations based on the literature                                                                                                                                                                                                 |
| Carbon price tiers                              | US\$9/US\$20/US\$70 per tCO <sub>2</sub> e                 | VCM/Article 6/EU ETS                                                                                                                                                                                                                          |
| PCN pipeline growth rates                       | 2% per year and 5% per year                                | Author's assumption: 2% assumes the pipeline stabilises as new projects replace expiring ones; 5% assumes credits grow modestly as the mechanism matures, below CDM early-phase growth of 20–40% but reflecting steady institutional progress |
| Global Article 6 market, 2030                   | ~3,500 MtCO <sub>2</sub> e per year                        | International Emissions Trading Association (2023)                                                                                                                                                                                            |
| Price elasticity of demand                      | 0.5 (range: 0.3–0.8)                                       | Author's calculations based on the literature                                                                                                                                                                                                 |

Note: LULUCF stands for Land Use, Land-Use Change and Forestry; VCM stands for voluntary carbon markets.

Box 3.2 below sets out the formulas we use in our calculations for this study. There is no accurately measured demand elasticity for carbon credits: the literature treats the carbon price elasticity as a parameter to be assumed rather than estimated; as a result, direct ex-post estimates are scarce and imprecise (Rafaty et al., 2025). So, rather than anchoring to a single point, we set -0.5 as a central value and ran the model as a sensitivity analysis across a -0.3 to -0.8 band.

The two ends of the band reflect the two kinds of Article 6 buyer. The inelastic end (-0.3) reflects compliance buyers such as airlines under the Carbon Offsetting and Reduction Scheme for International Aviation (CORSIA). The closest modelling study for Article 6 pricing finds that demand from these buyers is highly inelastic, and demand from NDC-compliance buyers is relatively inelastic at low prices (NewClimate Institute et al., 2021). This matches short-run carbon price demand responses in compliance settings, which sit well below 1 and rise over the longer term (European Commission, 2025). However, these are sectoral energy demand responses, not credit demand elasticities. The more elastic end of the band (-0.8) reflects buyers who can switch supplier, change credit type or defer purchases. In other words, for these buyers, demand becomes elastic when their confidence is weak (BloombergNEF, 2024) or cheaper substitutes are available (NewClimate). As India's market includes both types of buyer, we use a price elasticity of demand of -0.5.

### Box 3.2. Formulas used in our study

**Emissions under current policy:**  $E(t) = 2,959 \times 1.0314^{(t - 2020)}$

**NDC emissions ceiling:**  $C(t) = 30.4 \times (1 - r) \times GDP(t)$

Where 30.4 is the 2005 emissions intensity (MtCO<sub>2</sub>e per US\$ trillion) and r is NDC intensity-reduction target (45% by 2030 and 47% by 2035).

**NDC accounting headroom:**  $H(t) = C(t) - E(t)$

**Headroom after a transfer (corresponding adjustment):**  $H\_CA(t) = H(t) - X(t)$

**Net zero gap:**  $G(t) = E(t) - N(t)$  (before exports);  $G\_CA(t) = E(t) + X(t) - N(t)$  (after exports)

**Market-adjusted (realised) price:**  $P_{new} = P_{base} \times (1 + (\Delta Q / Q_{market}) \times (1 / PED)) = 20 \times (1 - \Delta Q / 1,750)$

**Adjusted revenue:**  $R = P_{new} \times \Delta Q$

**Revenue forgone to the price effect:**  $(P_{base} - P_{new}) \times \Delta Q = P_{base} \times \Delta Q^2 / (|PED| \times Q_{market})$

**Revenue-maximising volume:**  $\Delta Q^* = |PED| \times Q_{market} / 2 = 875 \text{ MtCO}_2\text{e}$

At which  $P_{new} = P_{base} / 2 = \text{US\$}10$  and  $R = P_{base} \times |PED| \times Q_{market} / 4 \approx \text{US\$}8.75 \text{ billion}$

*Note: t is calendar year; E(t) is emissions under current policy (MtCO<sub>2</sub>e); C(t) is the NDC emissions ceiling (MtCO<sub>2</sub>e); H(t) is NDC accounting headroom (MtCO<sub>2</sub>e); N(t) is net zero-aligned pathway emissions (MtCO<sub>2</sub>e); G(t) is the net zero gap (MtCO<sub>2</sub>e); X(t) is authorised exports/credits sold abroad (MtCO<sub>2</sub>e); GDP(t) is projected GDP (trillion); ΔQ is the volume India supplies to the market (MtCO<sub>2</sub>e); P<sub>base</sub> is the 2025 reference price (US\$/tCO<sub>2</sub>e); PED is -0.5 price elasticity of demand; Q<sub>market</sub> is 3,500 MtCO<sub>2</sub>e, the global market size in 2030. G<sub>\_CA</sub>(t) is the net zero gap after the corresponding adjustment; i.e. after authorised exports X(t) are added back to India's ledger, so that G<sub>\_CA</sub>(t) = E(t) + X(t) - N(t).*

The three sequential screens we use to produce a policy answer distinguish our analysis from previous studies. The first two screens share a common premise: every credit sold abroad is added back to India's ledger through a corresponding adjustment, so any export India cannot offset elsewhere counts against its own targets. Screen 1 (NDC accounting) asks whether a transfer would push projected emissions above the intensity-based NDC ceiling. Screen 2 (the net zero safeguard) asks how much each transfer adds to the structural gap between India's current trajectory and a pathway aligned with net zero, since the exported tonnes of carbon must be abated at home later. Screen 3 (price and market impact) asks whether it pays to sell at scale once India's supply has depressed the price. A scenario must clear all three screens to be a strong candidate for early authorisation. In contrast, earlier analysis weighed only the NDC and a single fixed price.

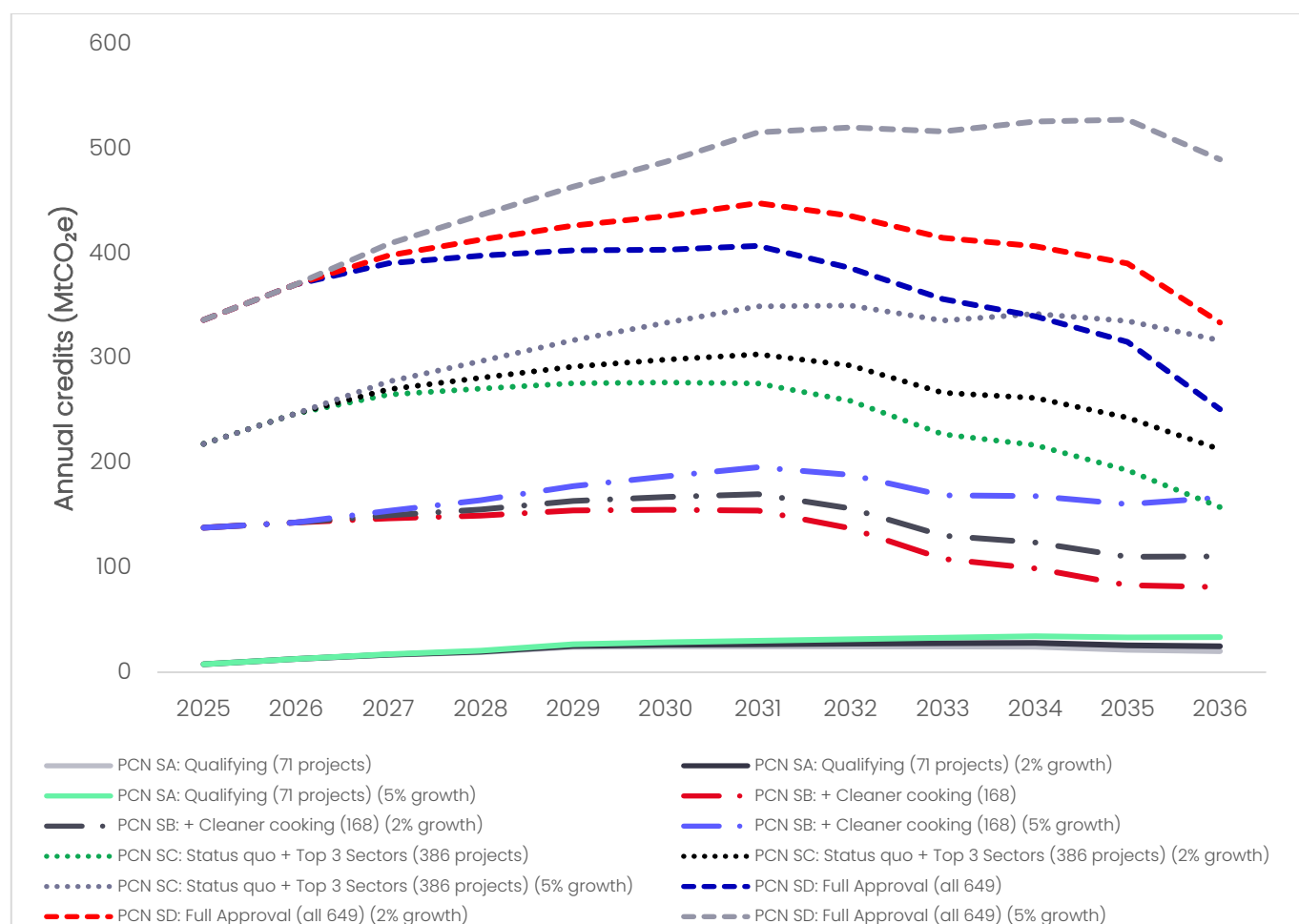
Table 3.2. The four PCN approval scenarios and their average annual credit volumes

| Track | Scenario (cumulative)                                                          | Projects | Avg. annual credits (MtCO <sub>2</sub> e/year) |
|-------|--------------------------------------------------------------------------------|----------|------------------------------------------------|
| PCN   | SA: Qualifying under the positive list                                         | 71       | 24.72                                          |
| PCN   | SB: plus cleaner cooking (largest excluded sector)                             | 168      | 155.21                                         |
| PCN   | SC: plus top three excluded sectors (cleaner cooking, mixed renewables, solar) | 386      | 277.55                                         |
| PCN   | SD: Full approval                                                              | 649      | 414.50                                         |

Source: Author's analysis of the UNFCCC Article 6.4 PCN database.

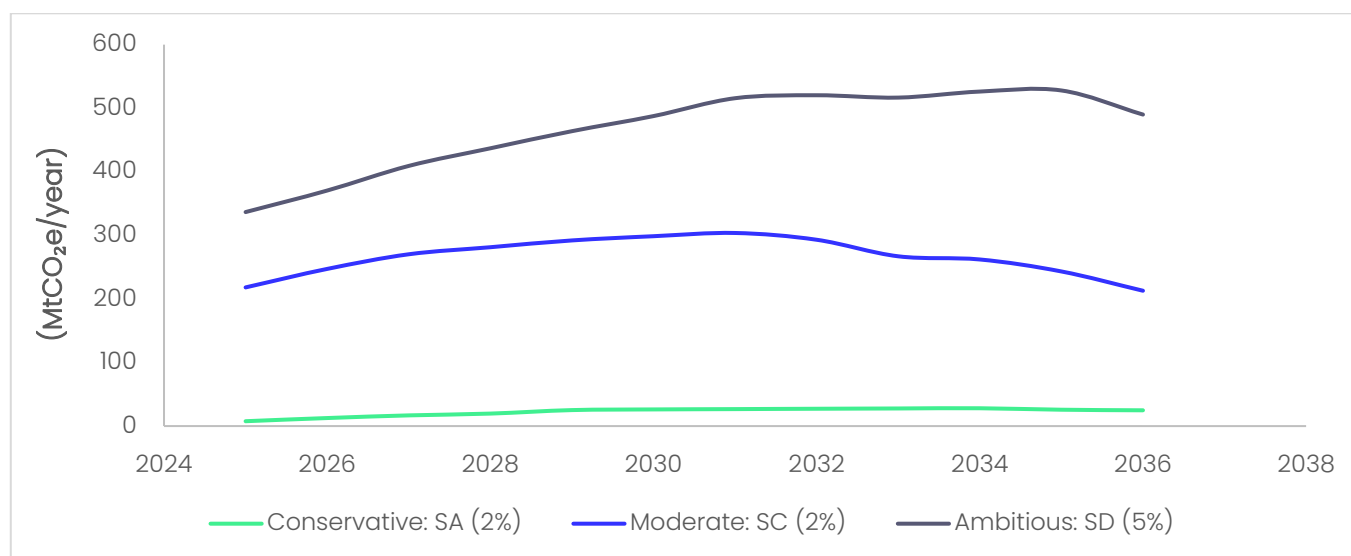
Our approach uses the four approval scenarios to project the annual volume of carbon credits India would put on the market, which is the single input that every screen below works from. As shown in Figures 3.1 and 3.2, there is a sharp divergence between the annual credit volumes each pathway would put on the market. This leads to the price and revenue differences we examine in the screens that follow.

Figure 3.1. Article 6 annual credit supply by scenario, 2025–36



Source: Author's calculations based on the UNFCCC Article 6 pipeline database.

**Figure 3.2. Article 6 credit supply by PCN scenario, 2025 to 2036**



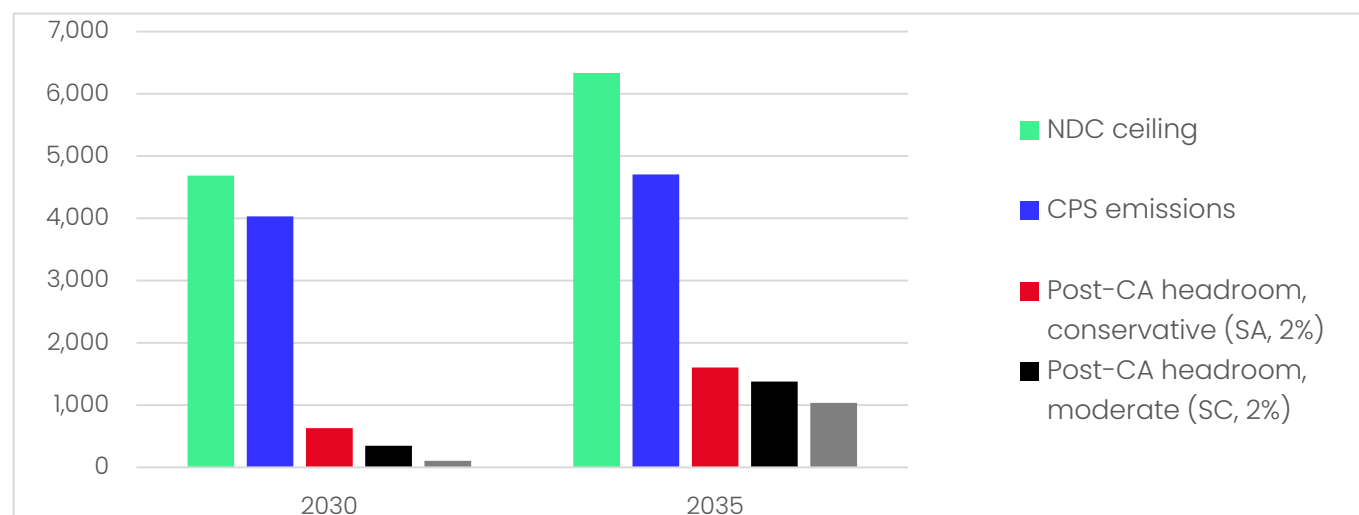
Source: Author's calculations based on the UNFCCC Article 6 pipeline database. Note: The y-axis shows annual active credit volumes.

## Screen 1: holding to the near-term climate target

On the first screen, which every scenario passes, there is no approval choice that pushes India past its 2030 or 2035 NDC ceiling. Because the NDC is intensity-based and its headroom grows with GDP, even the most aggressive PCN scenario, full PCN approval at 5% growth, takes up about 74% of 2030 headroom and only about 32% of 2035 headroom after the corresponding adjustment. The moderate scenario takes up roughly 46% and 15%, and the conservative scenario about 4% and 2%, respectively.

The reason transfers stay comfortably below the NDC ceiling lies in the corresponding adjustment rule and in how small the pipeline is compared to a rising ceiling. As discussed, when India sells a credit internationally, it must add the equivalent amount to its own reported emissions. In other words, in the corresponding adjustment, transfers of carbon credits eat into NDC headroom on a one-for-one basis. But even the full PCN pipeline at its peak, just over 400 MtCO<sub>2</sub>e per year, is equivalent to significantly less than the 657 MtCO<sub>2</sub>e of 2030 headroom. By 2035, the ceiling has risen so much that India's headroom more than doubles to 1,630 MtCO<sub>2</sub>e. The policy implication is that NDC compliance is not the constraint that should shape India's authorisation decisions.

**Figure 3.3. Credit transfers and NDC headroom after the corresponding adjustment, 2030 and 2035**



Source: Author's calculations.

As Figure 3.3 shows, each emissions bar sits below the NDC ceiling. This pushes the real decision onto the next screen.

## Screen 2: the constraints of the net zero safeguard

The second screen presents more significant constraints: on the pathway to net zero by 2070, India is already running a deficit by 2035 before it sells a single carbon credit. The net zero gap is the difference between India's current policy trajectory and its pathway to net zero, which sits at roughly 4,200 MtCO<sub>2</sub>e in both 2030 and 2035 (NITI Aayog, 2026). On that pathway, India is about 169 MtCO<sub>2</sub>e below the limit in 2030, leaving a little headroom, but about 505 MtCO<sub>2</sub>e above it in 2035: a structural deficit of roughly half a billion tonnes per year before any credits are exported.

This second screen does not treat a credit sold this decade as a breach of a target in 2070. India's net zero-aligned pathway sets an emissions level for every year between now and 2070, and each sale is judged against the near-term points on that pathway, the 2030 and 2035 levels, rather than a distant endpoint. A sale made now is linked to that 2030 or 2035 figure by the corresponding adjustment. The adjustment applies only within the NDC period of the transfer and does not formally apply to the 2070 net zero target, which is part of India's long-term strategy. Therefore, we model sales made after 2035 without a corresponding adjustment because India's NDC commitments currently run only to 2035 and the 2070 net zero target carries no corresponding-adjustment obligation. If India adopts a post-2035 NDC that covers these flows, we would need to revisit this assumption. We extend the same logic of avoiding double counting to the net zero pathway as a deliberately conservative benchmark. As such, a sale in this decade does not threaten India's efforts to achieve the 2070 goal. This is why Screen 2 grades each option according to its share of the 2035 net zero gap rather than any figure for 2070.

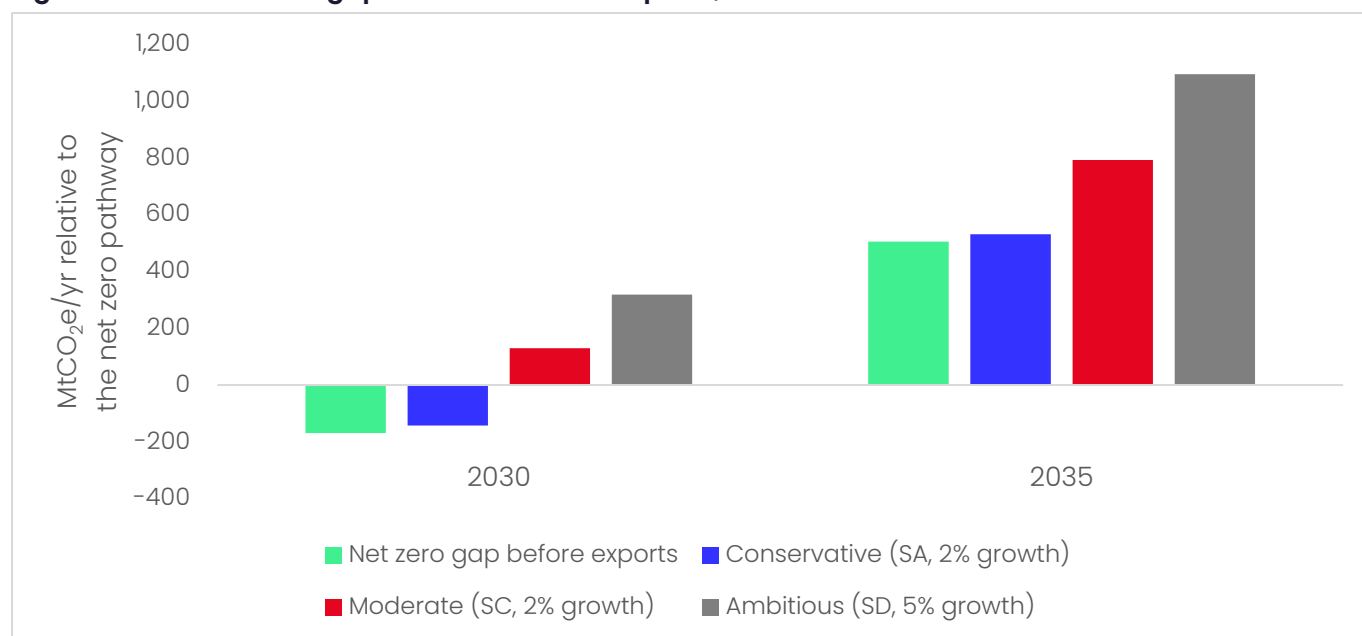
Unlike the NDC test, the net zero test does not provide more leeway over time, because the net zero pathway runs along a clearly defined line rather than varying according to carbon intensity. An approval scenario can, therefore, sail through the NDC screen (Screen 1) but quietly enlarge the mountain India must climb after 2035 (see Box 3.3). This long-term burden is at the heart of our analysis, separating it from studies that measure authorisation against NDC targets alone. Such an approach also aligns our analysis with wider modelling of India's pathway to net zero, which finds that the country can keep growing while pushing net emissions down towards 2070, a trajectory that selling too many credits would alter.

### Box 3.3. How the net zero safeguard is tested

The safeguard does not require India to achieve net zero emissions in any given year before 2070. It measures each option for approving the sale of carbon credits against India's trajectory towards that target. India could close the gap between the 2070 trajectory and its trajectory under current policy mainly by cutting emissions faster, not by relying on negative emissions (the active removal of carbon dioxide from the atmosphere through, for example, afforestation or carbon capture). Carbon removals only become the binding limit as net emissions approach zero in the last few years before 2070, which is why authorised sales should taper to close to zero by then. The corresponding adjustment applies to authorised Article 6 transfers. As voluntary market sales do not require such an adjustment, retained credits can be routed towards them without adding to the net zero burden.

Sorting approval scenarios according to this burden clearly separates the safe choices from the costly ones. Measured as part of a cumulative burden in 2025–36, the conservative PCN pathway adds about 268 MtCO<sub>2</sub>e, the moderate pathway about 3,190 MtCO<sub>2</sub>e, and the ambitious, near-full pathway about 5,602 MtCO<sub>2</sub>e. (As discussed, legacy CDM projects are excluded from these figures.) The policy implication is that India could authorise sales of smaller qualifying and near-qualifying volumes in the conservative scenario, and mainly between now and 2030, at almost no cost to its efforts to achieve net zero. Meanwhile, the largest releases would trade a one-off financial gain for a lasting addition to its own mitigation burden.

**Figure 3.4. The net zero gap before and after exports, 2030 and 2035**



Source: Author's calculations based on BUR-4, EDGAR v8.0 and the NITI Aayog (2026) net zero scenario. Negative values indicate that India sits below the net zero pathway; positive values indicate a structural deficit that it must address later.

As Figure 3.4 shows, Screen 2 creates certain constraints: bars above the zero line indicate that India is emitting more than its net zero pathway will allow for. In 2030, the gap is small or non-existent but, even in the conservative scenario, India is already in deficit before selling any carbon credit by 2035. Each subsequent scenario adds to this deficit, showing how much more India must abate later in exchange for selling credits today.

### Screen 3: does it pay to sell at scale?

India could generate significant financing from the sale of carbon credits at a fixed price, especially in the near term. However, it may be unrealistic to expect a fixed price in more ambitious scenarios. At the US\$20 Article 6 reference price, cumulative external finance for 2025–36 ranges from about US\$5.4 billion in the conservative scenario to about US\$64 billion in the moderate scenario and US\$112 billion in the ambitious one; at the US\$70 compliance premium, the moderate and ambitious figures rise to roughly US\$223 billion and US\$392 billion, respectively. India would receive around half of this value before 2031. The legacy CDM track would have made up a relatively small part of each total (and, as discussed, India has foregone this); for the larger PCN volumes, whose value is similarly front-loaded before 2031, further delay would erode value permanently rather than merely defer it.

**Incorporating market equilibrium pulls the realised price below US\$20; the more India sells, the further it falls.** A fixed price of US\$20 assumes India can sell any volume without affecting the price. However, the country will be the single largest supplier to a finite market of roughly 3,500 MtCO<sub>2</sub>e per year in 2030 (IETA, 2023). After applying the standard demand relationship shown in Box 3.2, the realised price stays close to US\$20 for small qualifying volumes (SA, around US\$19–20) but declines to about US\$17 in the moderate scenario and to roughly US\$15–16 in the ambitious scenario. Across the time window covered by this study, full PCN approval earns roughly 20–26% less per credit than it would at a fixed price, a reduction of roughly US\$20 billion to US\$30 billion, while small qualifying volumes are barely affected. The CDM sales, being relatively small, would have stay closed to US\$20. This price response is captured by the equation below:

$$P_{new} = P_{base} \times (1 + (\Delta Q / Q_{market}) \times (1 / PED))$$

Where  $P_{base}$  = US\$20, the baseline Article 6 price;  $\Delta Q$  is India's annual supply of credits;  $Q_{market}$  is the total global market, about 3,500 MtCO<sub>2</sub>e in 2030, growing by about 3.8% per year (IETA, 2023); and PED is the price elasticity of demand, set at -0.5.

**There is a point at which selling more credits lowers total revenue, but every scenario stays below it.** Using the formula shown in Box 3.2, revenue keeps rising with volume up to a revenue-maximising point of about 875 MtCO<sub>2</sub>e per year in 2030 (one-quarter of the market) at the central elasticity, by which stage the realised price has fallen by about half. With a lower price-discipline ceiling, the volume that keeps the realised price at or above three-quarters of the reference price sits at about 440 MtCO<sub>2</sub>e per year in 2030. Table 3.3 sets out both scenarios. They come from the same market-adjusted price calculation that we use in Box 3.2: the revenue-maximising ceiling is found by maximising revenue (price × volume) and identifying the point at which selling more stops adding to this total. The price-discipline ceiling is the volume that holds the realised price at or above three-quarters of the reference price (about US\$15), a chosen prudential floor rather than an optimal one. India's ambitious scenario peaks at about 14% of the market, well below the revenue-maximising point; only the ambitious scenario rises above the softer price-discipline ceiling. India is, therefore, a price influencer, not a price maker: one independent global model (IETA and University of Maryland, 2023) finds that the country's complete withdrawal from the market would change the carbon price by only about US\$1 per tonne.

| Table 3.3. Volume ceilings from the price analysis (annual flows) |                               |                               |                                                                                                                                                                       |
|-------------------------------------------------------------------|-------------------------------|-------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Volume ceiling                                                    | 2030 (MtCO <sub>2</sub> e/yr) | 2035 (MtCO <sub>2</sub> e/yr) | Implications                                                                                                                                                          |
| Revenue-maximising point (hard)                                   | ~875 (525–1,400)              | ~1,055 (630–1,690)            | Realised price halves to ~\$10; selling beyond this reduces total revenue. No scenario reaches it.                                                                    |
| Price-discipline ceiling (soft)                                   | ~440 (265–700)                | ~525 (315–845)                | Holds the realised price at around 75% of the reference price (~\$15). The conservative and moderate scenarios stay within it; the ambitious scenario rises above it. |

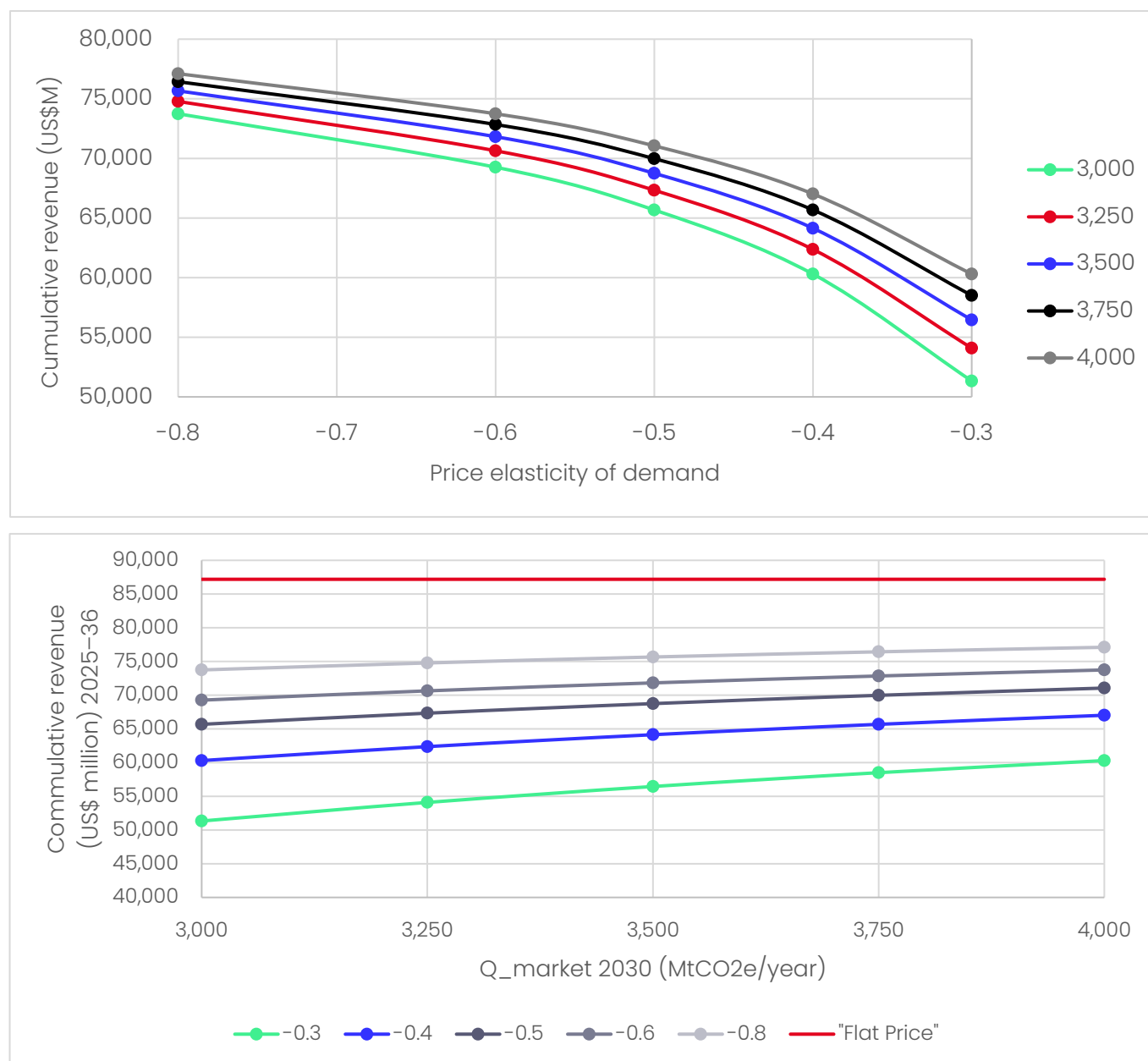
*Source: Author's calculations using a central demand elasticity of 0.5 and a market of about 3,500 MtCO<sub>2</sub>e per year. Note: The revenue-maximising point and price-discipline ceiling scale with assumptions about price elasticity and market size.*

**Two caveats apply to these revenue estimates.** First, the prices we set out assume that India's authorised credits trade at parity with the international reference market; if buyers treat them as lower-quality or non-comparable, realised revenues will be lower than these figures. It is useful to note that the EU ETS labelled new Indian projects as 'non-comparable' for EU compliance in its third trading phase, which began in 2013. This abruptly cut off Indian project developers from the world's largest compliance buyer base and drove down the value of Indian Certified Emission Reductions (CERs). More recently, carbon border regimes have created a different form of recognition. The UK has already listed India's Carbon Credit Trading Scheme as qualifying for CBAM relief. Meanwhile, the EU framework allows carbon prices effectively paid in third countries to be deducted from CBAM liabilities. India and the EU are discussing how this could apply in practice. This does not mean that Indian carbon credits and EU ETS allowances are fungible, but it does recognise India's domestic carbon price for the purpose of reducing the border charge.

**This concern about credit quality also runs through the wider literature: the Oxford Roadmap to Net Zero Aligned Carbon Market Regulation (2025) reaches a similar conclusion about the value of Indian CERs from the standpoint of alignment with net zero targets.** The Roadmap holds that a carbon credit's fungibility across markets depends on its alignment with the highest standards of integrity and that, as compliance systems such as the future EU ETS and UK ETS move towards durable removals and cross-system linkage, an overly broad and undifferentiated ITMO export industry risks crowding out the scarcer, higher-value units most likely to retain compliance-grade fungibility over time. The realised price falls as India approves more projects for sale. This shows that bulk PCN approval erodes the price India earns.

The second caveat is that the price effect is modelled as though only India adjusts its supply. In practice, other sellers respond, too. However, the one multi-country model that is available (IETA and University of Maryland, 2023) suggests this would not change our headline conclusion. As we have not directly observed the demand elasticity of carbon credits in any market, we use a central value of 0.5 and test a 0.3–0.8 range, which aligns with our finding that India is a price influencer (NewClimate Institute et al., 2021; Rafaty et al., 2025). This value determines how far the realised price falls. A more elastic response would deepen the discount and strengthen the case for selling selectively rather than in bulk. A less elastic response would leave a little more room to sell before the price gave way. In either case, the direction of our recommendations holds.

**Figure 3.5. Sensitivity of cumulative revenue to projected elasticity of demand**



Source: Author's calculations. Note: The y-axis shows cumulative revenue under full PCN approval across the 0.3 to 0.8 elasticity range and a range of assumptions about market size.

The binding limit on large sales is not the price but the net zero burden. That burden is an accounting factor: each authorised credit, once adjusted for, adds to India's net zero burden regardless of the price it fetches. In other words, the burden does not depend on price elasticity. Nor does it depend on whether these credits reach the market. Because the same projects could sell their reductions on the

voluntary market, authorising them does not change the supply of credits but their tier: authorisation moves a reduction into the Article 6 compliance segment, which earns the compliance premium and, at the same time, triggers the corresponding adjustment to the net zero burden. The price effect we model is, therefore, confined to that compliance segment and indicates the extent to which India's sales reduce the Article 6 premium. Meanwhile, the voluntary market is an outside option that remains available in any scenario. So, the revenue figures we discuss change with price elasticity (Figure 3.5) but the volume India should authorise does not. This is because the binding constraint, the net zero burden, is created by authorisation, not by the credits' existence.

## The approval framework

The three screens combine into a simple decision rule that grades each option rather than approving or rejecting the pipeline as a whole. Table 3.4 depicts this approval framework. An option must first clear the NDC accounting screen, which they all do. The option is then graded by how much its 2035 export volume adds to the roughly 505 MtCO<sub>2</sub>e net zero gap: less than 25% of that amount is a low burden (authorise early); 25–100% is a medium burden (authorise only with a price floor and a commitment to channel the proceeds into domestic decarbonisation); and more than 100% is a high burden (retain at home or sell only at a premium). Finally, the revenue check confirms that the volume is below the revenue-maximising point identified in Section 3.4 (875 MtCO<sub>2</sub>e per year in 2030, rising to about 1,055 MtCO<sub>2</sub>e in 2035).

Applied to the reference scenarios, the approval framework clearly points towards selective, staged authorisation rather than a simple 'yes' or 'no' on the whole pipeline. As the conservative scenario and the qualifying and near-qualifying scenarios fall into the low-burden band, India can authorise them now to get the Article 6 process moving. The moderate scenario, approval of the top three PCN sectors, creates a medium burden. Only the ambitious scenario, full approval at high growth, produces a high burden, in which the long-term cost of mitigation outweighs the discounted one-off gain. We report our results as ranges rather than single numbers to reflect the underlying uncertainty. The framework, not any single recommended volume, provides the guidance policymakers require for approval decisions.

**Table 3.4 Approval framework: Screens 1 to 3**

| Scenario                                             | Cumulative exports 2025–36 (Mt) | 2030 post-transfer NDC accounting headroom (Mt) | 2035 post-transfer NDC accounting headroom (Mt) | Screen 1 NDC accounting | Burden (2035 exports/ 2035 net zero gap) | Screen 2 net zero safeguard | Combined recommendation                                         |
|------------------------------------------------------|---------------------------------|-------------------------------------------------|-------------------------------------------------|-------------------------|------------------------------------------|-----------------------------|-----------------------------------------------------------------|
| PCN SA: Qualifying (71 projects)                     | 245                             | 632                                             | 1,608                                           | Pass                    | 0.04                                     | Low                         | Approve: early-pipeline candidate                               |
| PCN SB: plus cleaner cooking (168 projects)          | 1,552                           | 501                                             | 1,547                                           | Pass                    | 0.16                                     | Low                         | Approve: early-pipeline candidate                               |
| PCN SC: status quo plus top 3 sectors (386 projects) | 2,885                           | 380                                             | 1,437                                           | Pass                    | 0.38                                     | Medium                      | Approve selectively: price floor plus finance leverage required |

|                                                                  |       |     |       |      |      |        |                                                                 |
|------------------------------------------------------------------|-------|-----|-------|------|------|--------|-----------------------------------------------------------------|
| PCN SD: full approval (all 649 projects)                         | 4,359 | 253 | 1,314 | Pass | 0.62 | Medium | Approve selectively: price floor plus finance leverage required |
| PCN SA: qualifying (71 projects) (2% growth)                     | 268   | 630 | 1,604 | Pass | 0.05 | Low    | Approve: early-pipeline candidate                               |
| PCN SB: plus cleaner cooking (168 projects) (2% growth)          | 1,720 | 489 | 1,520 | Pass | 0.21 | Low    | Approve: early-pipeline candidate                               |
| PCN SC: status quo plus top 3 sectors (386 projects) (2% growth) | 3,190 | 358 | 1,387 | Pass | 0.48 | Medium | Approve selectively: price floor plus finance leverage required |
| PCN SD: full approval (all 649 projects) (2% growth)             | 4,812 | 221 | 1,239 | Pass | 0.77 | Medium | Approve selectively: price floor plus finance leverage required |
| PCN SA: qualifying (71 projects) (5% growth)                     | 309   | 628 | 1,597 | Pass | 0.06 | Low    | Approve: early-pipeline candidate                               |
| PCN SB: plus cleaner cooking (168 projects) (5% growth)          | 2,014 | 469 | 1,469 | Pass | 0.32 | Medium | Approve selectively: price floor plus finance leverage required |
| PCN SC: status quo plus top 3 sectors (386 projects) (5% growth) | 3,722 | 323 | 1,294 | Pass | 0.66 | Medium | Approve selectively: price floor plus finance leverage required |
| PCN SD: full approval (all 649 projects) (5% growth)             | 5,602 | 169 | 1,102 | Pass | 1.05 | High   | Retain domestically OR premium only                             |

|                                               |       |     |       |      |      |        |                                                                          |
|-----------------------------------------------|-------|-----|-------|------|------|--------|--------------------------------------------------------------------------|
| <b>Conservative:</b><br>PCN SA<br>(2% growth) | 268   | 630 | 1,604 | Pass | 0.05 | Low    | Approve:<br>early-pipeline<br>candidate                                  |
| <b>Moderate:</b><br>PCN SC<br>(2% growth)     | 3,190 | 358 | 1,342 | Pass | 0.6  | Medium | Approve<br>selectively: price<br>floor plus finance<br>leverage required |
| <b>Ambitious:</b><br>PCN SD<br>(5% growth)    | 5,602 | 169 | 1,040 | Pass | 1.17 | High   | Retain<br>domestically OR<br>premium only                                |

Table 3.4 runs each scenario through all three screens in turn, translating the NDC, net zero and price results into a single burden band and the recommendation it implies. Table 3.5 then applies that framework to the three reference scenarios – conservative, moderate and ambitious – to show which volumes should be authorised now, authorised with conditions or retained at home.

| Table 3.5. Approval framework applied to the three reference scenarios |                                           |        |               |                                                               |
|------------------------------------------------------------------------|-------------------------------------------|--------|---------------|---------------------------------------------------------------|
| Pathway                                                                | Net zero<br>burden (share<br>of 2035 gap) | Band   | NDC<br>screen | Recommendation                                                |
| Conservative (SA, 2%)                                                  | about 5%                                  | Low    | Pass          | Authorise now                                                 |
| Moderate (SC, 2%)                                                      | about 48%                                 | Medium | Pass          | Authorise with a price floor<br>and a financing<br>commitment |
| Ambitious (SD, 5%)                                                     | about 105%                                | High   | Pass          | Retain at home or sell only<br>at a premium                   |

Source: Author's calculations. Note: The net zero burden is the 2035 export volume as a share of the roughly 505 MtCO<sub>2</sub>e structural net zero gap. Indicative cumulative finance to 2036, ranging from the market-adjusted realised price (lower bound) to the flat US\$20 reference price (upper bound), is as follows: about US\$5.4 billion in the conservative scenario (volume too small to move the price, so the same on both bases); about US\$54 billion–US\$64 billion in the moderate scenario; and about US\$83 billion–US\$112 billion in the ambitious scenario.

## Alignment with Viksit Bharat 2047 and Net Zero 2070

**Read against India's 2026–47 climate investment need, Article 6 is a useful early accelerant rather than a primary source of financing.** This need stands at roughly US\$10 trillion (NITI Aayog, 2026). The US\$112 billion India would generate in the ambitious scenario at the flat reference price (assuming every approved activity was built and delivered its projected reductions), or US\$83 billion once the price effect of India's own supply was factored in, is equivalent to only around 1% of that need, rising to a few per cent at the compliance premium. As such, the value of the revenue from sales of carbon credits lies in its timing rather than its quantity. Concentrated in 2025–36, the influx of financing would come at a time when upfront capital for investment in renewables and electricity grids was scarcest and hardest to raise on commercial terms.

**Article 6 is, therefore, best understood as a bridge that has its largest effects in the next decade, diminishing influence in the 2040s, and close to zero impact by 2070.** The legacy CDM pipeline's fixed credits run out around 2036; by 2070, India's residual emissions will require removals through systems that Article 6 credits cannot substitute for, such as carbon capture mechanisms and nature-based sinks. A growth path of 2–5% of GDP would help reinforce that bridge through the critical decade without overcommitting to future mitigation. The net zero safeguard stops the bridge from becoming a liability: by capping authorisation at the point where the long-term burden remains manageable, India can benefit from the near-term financing Article 6 provides and still achieve net zero by 2070. This is the balance that our approval framework is designed to strike.

## 4. Conclusion and recommendations

India should decide whether to authorise sales of carbon credits under Article 6 based on calibrated questions about what to sell, when to sell it and at what price. Below, we make several recommendations on this decision-making process to the Government of India, principally the Ministry of Environment, Forest and Climate Change as the Designated National Authority that decides how much of the pipeline to authorise and on what terms. We present options that are derived from our findings and the approval framework we set out above. Broadly, India should authorise moderate sales, supported by a price floor, while ruling out full approval of the Article 6 pipeline and gradually reducing sales with a view to achieving net zero by 2070.

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**Rather than approving whole sections of the Article 6 pipeline, India could allow the following three findings to anchor its approval decisions.** First, India's intensity-based NDC target is never the binding constraint: even full approval of both the pipeline would consume, at most, about 74% of its 2030 headroom (the gap between the intensity-based NDC target and projected emissions under current policy) and 32% of its 2035 headroom. Second, India's 2070 net zero target is the main constraint. Even before selling any carbon credits abroad, India is already expected to be 505 MtCO<sub>2</sub>e above its 2035 trajectory towards net zero. And for every credit it exports, India will need to cut the equivalent amount of emissions at home. Third, selling at scale pays less than a fixed price would imply, because India's own supply can move the market at large volumes: the realised price falls from about US\$20 per credit to US\$15–16 as approval expands to cover the whole pipeline, and revenue rises with volume only up to a point – albeit one that even the ambitious scenario never reaches.

**We group India's authorisation choices into three scenarios and score each according to its net zero burden (see Table 3.5).** The net zero burden is the cumulative volume of credits to be authorised for export by 2035 in different scenarios, as a share of the roughly 505 MtCO<sub>2</sub>e gap India must close to maintain its trajectory towards net zero by 2070. In the conservative scenario, India authorises only what may already qualify based on its list of approved activities, which constitutes a net zero burden of about 5%. The moderate scenario adds the three largest excluded PCN sectors and constitutes about 48% of the 2035 net zero burden. In the ambitious scenario, India approves the entire PCN pipeline at about 105% of the 2035 net zero burden. We sort these burdens into three bands: low (less than 25%), medium (25–100%) and high (above 100%). India hits its near-term NDC target in every scenario; what separates them is the long-term net zero burden and the price effect of selling in bulk. Our recommendations follow from that framework.

**India will now face several important decisions.** As the window to authorise its 593 legacy CDM requests closed on 30 June 2026 without action, India can no longer sell those credits at the Article 6 premium, even if they can still count towards India's first NDC and remain open to the voluntary market (as per the UNFCCC guidelines). Therefore, the live decisions concern how much of the PCN pipeline to authorise, for which there is no equivalent authorisation window, and how to calibrate the positive list of activities India authorises for Article 6 participation at its next review, which is due around 2028.

**India should authorise qualifying low-burden volumes sooner rather than later, because delays cause value to be permanently lost rather than deferred.** The approval of India's 71 qualifying PCNs would constitute a low burden but would provide most of the financing available in the conservative scenario: about US\$5.4 billion cumulatively by 2036, more than half of which could be realised before 2031. (The 16 qualifying legacy (CDM) activities would have added only about US\$0.13 billion to this total.) Authorising the qualifying PCN volumes now would capitalise on this near-term financing opportunity and signal procedural readiness to the market that India leads.

**At the 2028 review, India should expand its list of approved activities under Article 6 in ranked steps rather than exclude whole categories.** The timing favours acting: in December 2025, the EU agreed to allow up to five percentage points of its 2040 target to be met with high-quality Article 6 credits from 2036 onwards (European Union, 2026). The EU's demand is projected to reach around 230 MtCO<sub>2</sub>e per year by 2040 (Climate & Company, 2026), many times more than India's qualifying projects could cover and comparable to a large share of its full pipeline. Because India's higher-integrity activities are well placed to supply this market, the binding constraint is India's positive list and net zero limits, not demand. Only 2.7% of the CDM requests and 10.9% of the PCN requests India submits could qualify for Article 6 participation based on its current list. This is because the list excludes high-volume categories in the pipeline such as wind (277 CDM activities), solar, cleaner cooking and mixed renewables. In contrast, the open lists of Brazil, Kenya, Chile and Pakistan cover close to 100% of such activities (MoEFCC, 2025). As our analysis shows, India would still achieve its NDC targets even in the ambitious scenario, which involves the approval of the full CDM and PCN pipeline. As discussed, the case for excluding these categories rests on the long-term net zero burden and not on short-term NDC compliance.

**Therefore, within our approval framework, India could widen the list of approved activities for Article 6 participation in steps ranked by revenue per unit of the 2035 net zero burden.** Our moderate scenario adds cleaner cooking, mixed renewables and solar to the PCN track as the top three PCN sectors that are currently excluded. In all, this would constitute about 48% of the 2035 net zero gap and unlock roughly US\$64 billion in financing (about US\$54 billion once the price effect is included). Given that approvals in the ambitious scenario would constitute 105% of the 2035 net zero gap, we recommend that India consider approving activities in the moderate scenario at the next review and halt project-level approvals within those areas where the cumulative burden approaches the high band. This approach would be far easier to revisit than the permanent exclusion of certain categories of activity, and would align with the Oxford Principles for Responsible Engagement with Article 6 (2025). These principles recommend that a host country regularly review and update its Article 6 positive list in response to technological progress, evolving market conditions and changes to its NDC and Long-Term Low-Emissions Development Strategy.

**India should set a minimum clearing price for each burden band using two rules.** For low- and medium-burden credits, the price floor should reflect the open market price that India can realistically achieve: low volumes should fetch close to the full Article 6 reference price because they are too small to affect supply. Meanwhile, medium volumes should have a lower floor of roughly three-quarters of this, because significant increases in Indian supply depress the realised price. India should avoid deals below that level and retain the relevant credits. Because carbon prices are widely expected to rise as the market matures, these floors are expressed as a share of the prevailing Article 6 reference price rather than fixed in nominal terms, and are revised as demand grows.

**For high-burden credits, the logic changes.** These credits have high domestic opportunity costs and are important to India's efforts to achieve net zero, so they should not be sold on the open market. They should be authorised only through bilateral Article 6.2 deals at a strong compliance premium, closer to the EU ETS level of about US\$70 per tonne, or otherwise kept for domestic use. In all cases, the test is the same: authorise exports only when the price exceeds the future cost of replacing that abatement at home. These floors turn the price analysis in Section 3.4 into a simple test the Ministry of Environment, Forest and Climate Change (MoEFCC) can apply at the point of authorisation.

**India should condition medium-burden authorisations on a price floor and a domestic decarbonisation commitment.** As approvals in the medium band trade a one-off financial gain for a lasting addition to India's own mitigation efforts, they are worthwhile only if the finance is both real (at a price high enough to cover the abatement the sale defers) and directed (with the proceeds committed to domestic decarbonisation rather than to the general budget). The cost of domestic abatement falls as India scales up its renewables and storage, so the price floor moves and should be revisited as abatement becomes cheaper. A commitment to channel the proceeds of carbon-credit sales into domestic decarbonisation matters because these sales are justified by the mitigation they bring forward: against an investment need of about US\$10 trillion by 2047 (NITI Aayog, 2026), Article 6 is a useful early accelerant of financing rather than a primary source. Therefore, its value lies in spending the proceeds where the cost of capital is highest and commercial finance is hardest to attract.

**India could attach two further conditions, drawn from the Oxford Principles for Responsible Engagement with Article 6 (2025), to all authorisations.** First, the underlying activity should meet robust integrity criteria: additionality, conservative baselines, permanence (where relevant), leakage control, and transparent monitoring, reporting and verification. Second, India should prioritise activities that provide significant sustainable development co-benefits, such as those related to adaptation, biodiversity, the just transition and benefits for local communities. These factors lie beyond the accounting and price tests we model here but have a direct bearing on whether an authorised transfer is genuinely high-integrity.

**India should hold total authorisations below the price-discipline ceiling.** Because the country is the largest supplier in global carbon markets, its bulk sales push down the revenue per credit it receives. Accordingly, revenue only rises up to a maximising point of about 875 MtCO<sub>2</sub>e per year in 2030 (and about 1,055 MtCO<sub>2</sub>e in 2035), the volume at which the realised price falls to about US\$10, half the reference price, and beyond which selling more lowers total revenue. A tighter, prudential price-discipline ceiling, which is the volume that keeps the realised price at three-quarters of the reference price (about US\$15), sits at about 440 MtCO<sub>2</sub>e per year in 2030 and 525 MtCO<sub>2</sub>e per year in 2035. The ambitious scenario peaks at about 490–590 MtCO<sub>2</sub>e per year: comfortably below the revenue-maximising point, but above the price-discipline ceiling. By keeping total authorisations below that ceiling and holding high-burden volumes back or selling them only at a premium, India would protect the market price of its carbon credits and make its long-term mitigation task more manageable.

**India should use programmes of activities and bilateral Article 6.2 partnerships to raise both the qualifying volume and the realised price of carbon credits.** The country can use two levers to maximise revenue without expanding the positive list. Around 18% of projects listed as programmes of activities qualify (compared to about 10% for individual projects). As these bundles of many similar small projects are registered and credited together as a single Article 6 activity, they can be described in a way that matches the positive list more closely. Because qualifying activities are already concentrated in compressed biogas and renewables with storage, supporting large programmes in these categories directly increases the qualifying volume. Meanwhile, India could gain greater benefits from the Article 6.2 premium by expanding its bilateral agreements with high-paying compliance buyers such as Switzerland, Singapore and South Korea (which often pay US\$70 per credit, significantly more than the US\$20 reference price) and by standing up authorisation infrastructure to convert credits into authorised transfers. Currently, India is party to only two such agreements, with Japan and Singapore.

**Retained projects in the Article 6 pipeline should have a clear route to the voluntary carbon market.** Even after a calibrated expansion of approvals, India will ensure that its positive list excludes most of the pipeline, or 577 CDM and roughly 578 PCN activities, because it is reserving those projects for its own NDC and efforts to achieve net zero. However, unless these projects have a route to the voluntary carbon market, developers will abandon them. To give developers certainty and keep the projects alive, India could signal that its retained activities are permitted to enter the voluntary carbon market, which would not require a corresponding adjustment to the country's net zero burden. This would also clarify the logic of India's approach to climate integrity: international transfers would be reserved for projects the country chooses to authorise, and everything else would either count towards its own climate targets or would be sold without a corresponding adjustment. Over the longer term, India should also strengthen the credibility, transparency and quality of its own carbon market and anticipate that, like China, it may move from being a net exporter to a net importer of credits as its domestic demand and CBAM exposure grow. The eligibility of projects in the Article 6 pipeline should, therefore, be kept under continual review rather than treated as a one-off expansion.

**Together, these policy choices would allow India to benefit from the financing Article 6 can provide in the near term while maintaining its trajectory towards net zero by 2070.** Our central recommendation is for India to adopt the Article 6 approval framework rather than to authorise a specific volume of sales. We deliberately avoid saying, for example, 'authorise the 71 qualifying PCNs' or 'authorise 490 MtCO<sub>2</sub>e'. The main purpose of the framework is to establish the decision rule: check whether each option takes up NDC headroom; sort each one that does not do so by its net zero burden; and decide which volumes to authorise outright based on this, which to attach conditions to, and which to hold back for India's own mitigation efforts. That rule is the solution to the challenge India faces because it remains valid even as the pipeline grows, whereas any specific volume would be a one-off snapshot

that quickly became outdated. The rule would also provide India's MoEFCC with a quantifiable basis for each inclusion decision at the next review of the positive list.

## Summary of recommendations

Our analysis points to six options for India, framed as considerations rather than directives:

- Authorise qualifying, low-burden PCN projects promptly (the 16 qualifying legacy CDM activities are now past their 30 June 2026 authorisation deadline). These projects are set to lose more than half their value before 2031.
- Calibrate the 2028 positive list to include activities in the moderate scenario above and use the 2035 net zero safeguard to cut off project-level approvals once a medium or high threshold is reached. Expanding approval in ranked steps at the next review is preferable to excluding categories wholesale.
- Hold total authorisation below the price-discipline ceiling and either retain high-burden volumes or sell them only at a premium.
- Condition medium-burden authorisations on a price floor and a commitment to spend the proceeds on domestic decarbonisation.
- Scale up programmes of activities and widen bilateral Article 6.2 partnerships to increase both the qualifying volume and the realised price.
- Provide the retained pipeline with a clear route to the voluntary carbon market.
- Set a minimum clearing price for each burden band, pegged to the prevailing Article 6 reference price: the full reference price for the low-burden band, about three-quarters of that price for the medium-burden band and a compliance premium for the high-burden band.

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