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COMMODITIES 2026: Indian biochar credits to flow mainly to forward market amid rising supply

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Supply signals improve as biochar projects commence operations

Forward contracts offer stability amid capital constraints

Operational challenges persist despite growth prospects

India's biochar carbon credit supply is expected to improve in 2026 as multiple projects begin operations, though the majority of issuances will likely flow into forward delivery markets rather than immediate spot sales, according to industry sources.

The development reflects India's emergence as a cost-competitive global biochar production hub, leveraging abundant agricultural residue alongside affordable logistics and labor costs.

Platts Biochar India Year 01 price assessment, which reflects credits for one-year forward delivery, stood at a $15/mtCo2e discount to the current year price Dec. 18, indicating a downward pressure on prices going forward.

“Biochar will likely remain the hero use case for India,” said Siddhanth Jayaram, founder at Equilibrium, a leading biochar developer. “The combination of land availability and strong industrial capacity gives it [biochar] a natural head start.”

Production of biochar, which is obtained from processing dry agricultural feedstock in a pyrolysis machine, and subsequent application of the product aids in the generation of high-quality carbon dioxide removal credits.

Forward delivery in focus

The forward market preference signals developers' need for capital certainty during the capital-intensive early phases of project development.

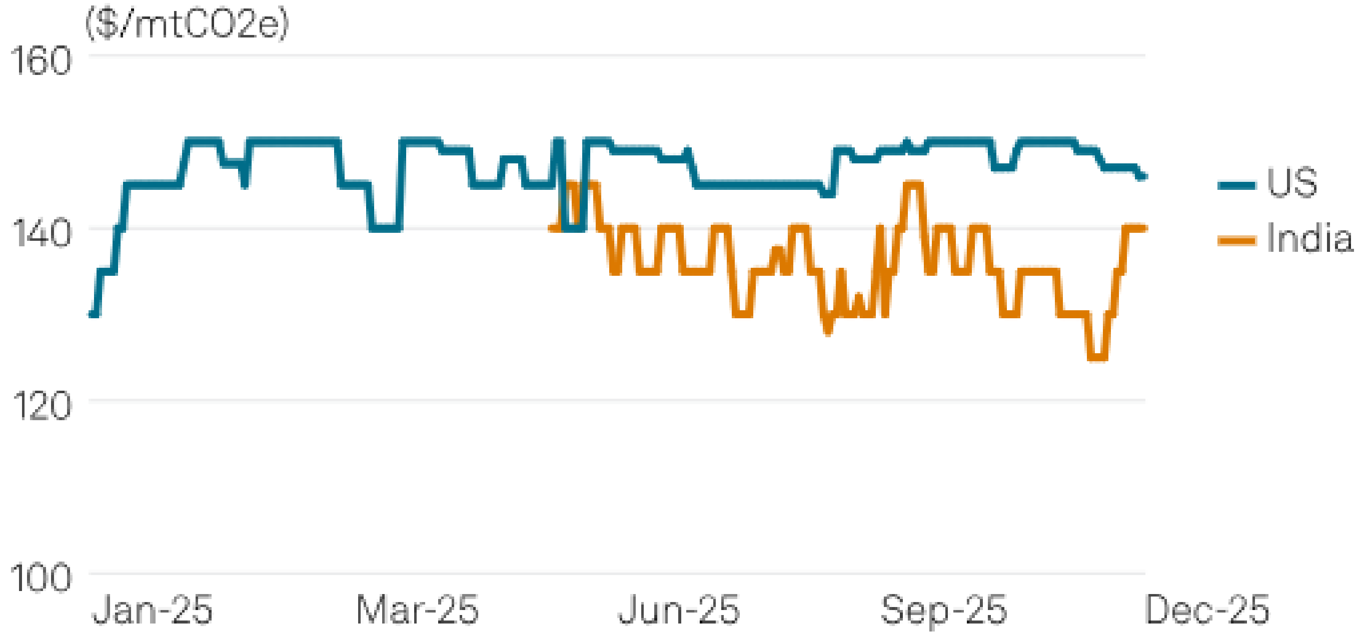
“They [forward agreements] offer price stability, upfront capital, and bankability, all of which are crucial in the early scaling phase,” said Anwita Mukherjee, co-founder at LongStraw Carbon.

Rachit Verma, senior vice president at Hexa Climate’s Carbon Solution Group, echoed a similar sentiment, while adding they expected a few developers to set aside around 10%-20% of total issuances for spot delivery to cater to any “market spurts”.

“We do expect some supply to be available for spot sales, once the market matures by mid-2026,” Verma said.

Platts-assessed Biochar India price declined nearly 7.1% from its June launch through Dec. 18, trading at an average of nearly 8% discount to Platts Biochar US prices during the same period.

Platts US and India Biochar current year assessment, 2025



Source: S&P Global Energy

Despite India's competitive positioning, operational challenges in feedstock sourcing and technology deployment are expected to persist through 2026.

“Indian developers must show that we can source feedstock reliably and move biochar through robust distribution networks. And of course, meet these volumes without disruption,” Jayaram said, adding that global buyers were “increasingly prioritising” scale.

Pyrolysis machines require continuous feeds of large volumes of dry biomass to generate the scale necessary for credit generation, but inadequate segregation of dry and wet agricultural waste by authorities in India complicates reliable feedstock procurement.

Farmer reluctance to sell agricultural residue, which they traditionally retain for cattle feed, presents additional sourcing challenges, market participants said.

In addition to ensuring a steady supply of biomass feedstock, sources told Platts that deploying technology that aided in building confidence among buyers for home-grown credits was also a challenge they constantly faced.

“One of the fundamental challenges is the lack of awareness of CDR projects and the viability of carbon financing, especially given the higher price tag they attract,” Rhea Dabriwala, CEO and Co-founder at Ground Up said.

Hopes for biochar inclusion in Article 6

Indian developers anticipate inclusion of biochar and other CDR pathways in future revisions to the Article 6 agreement between India and Japan, which could provide additional climate capital access. The current agreement does not recognize biochar as an eligible activity.

“The agreement has definitely sparked momentum,” Jayaram said, further adding, “its [biochar and other CDR pathways] growing relevance in carbon removal gives us reason to expect inclusion in future iterations of the JCM as the mechanism matures.”

India has traditionally been a major supplier of avoidance credits in the global voluntary market, but now developers are focusing to supply more removal credits.

“This inclusion [of biochar and other CDR pathways] and transactions will be instrumental for India to realise its true potential as a global CDR player,” Co-Founder and CEO at Carbon Removal India Alliance, Asitava Sen said.

Domestic demand to remain sluggish

Domestic demand for CDR credits is expected to remain limited in 2026, though industry players seek clearer policy guidance for biochar end-use applications and inclusion in domestic compliance mechanisms.

Besides agriculture, market participants said there is scope for the application of biochar in industrial facilities and processes as well, which may provide an additional avenue for using biochar.

“We expect early adopters from hard-to-abate sectors, and use of industrial embedding and insetting frameworks to generate local demand,” Sen said.

Verma said that the government's initiative to standardize the application of biochar and bio-oil as inputs in agriculture and the production of biofuel would simultaneously aid in scaling up projects in the country.

“We hope to see lucid policy frameworks for industrial CDR in India. We are counting on biochar to be recognized not just as a climate tool but as a soil amendment that will bolster Indian agriculture,” Jayaram said.