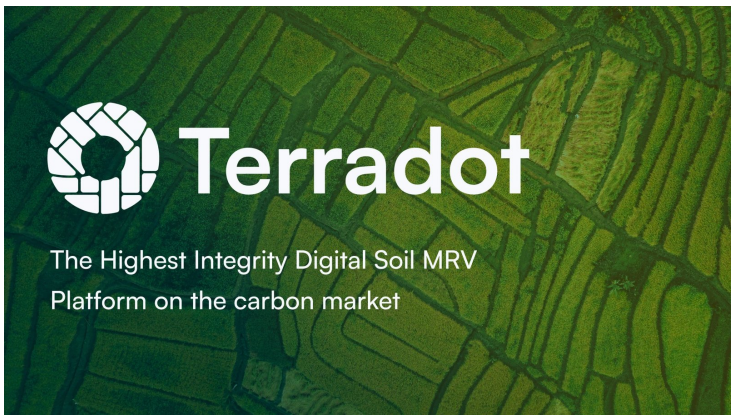
AgroSpectrum ASIA
Envisaging Future | Updating Present

Google makes its largest carbon removal purchase through Terradot deal

21 September 2026 | News

The Brazil project targets 1 million tonnes of carbon removal by 2040



Terradot and Google have launched a megaton-scale climate project across more than 200,000 hectares of rice farmland in Rio Grande do Sul, Brazil, in what the companies describe as the world's largest enhanced rock weathering (ERW) project to date. The initiative combines two approaches to reducing agriculture's climate impact: enhanced rock weathering to remove carbon dioxide from the atmosphere and alternate wetting and drying (AWD) in rice cultivation to reduce methane emissions and water use.

Under the agreement, Google will purchase 1 million tonnes of methane impact by 2030, measured in carbon dioxide equivalent, and 1 million tonnes of carbon removal by 2040. The carbon-removal commitment is Google's largest purchase of its kind to date, according to the companies. Enhanced rock weathering involves applying crushed volcanic rock to agricultural soils. As the rock weathers naturally, it reacts with carbon dioxide and can store the carbon in stable forms over long periods.

The scale of the initiative is significant for Brazil's rice sector. Rio Grande do Sul is one of the country's major rice-producing regions, while Brazil has around 1.5 million hectares under rice cultivation. Globally, rice cultivation is estimated to account for a significant share of agricultural methane emissions. "For years, climate action has been framed as a choice, either move fast on the warming happening now or remove carbon permanently. Our project with Google eliminates that trade-off," said James Kanoff, CEO, Terradot.

The project will also introduce alternate wetting and drying, under which rice fields are periodically drained rather than kept continuously flooded. The practice can reduce methane formation while lowering water consumption and potentially reducing production costs. Google's methane-impact purchase will support the deployment of the practice across participating farms, while the enhanced rock weathering component is intended to deliver longer-duration carbon removal.

"While most climate solutions are focused on either short- or long-term horizons, our partnership with Terradot will tackle both timelines simultaneously," said Randy Spock, Head of Carbon Removal, Google. The companies said the programme will also

include research and development activities involving Terradot and Stanford's Doerr School of Sustainability, aimed at advancing the science, measurement and deployment of enhanced rock weathering.

The project reflects a growing effort to link agricultural productivity with climate mitigation, particularly in farming systems where methane emissions and carbon-removal opportunities can be addressed simultaneously. "With this new model, every tonne of removal meets the same rigorous standard, and delivers climate impact faster than ever," Kanoff said.