CarbonPool

May 15, 2024

U.S. Department of Energy
Office of Fossil Energy and Carbon Management
1000 Independence Ave., SW
Washington, DC 20585

Re: Comment in response to Notice of Intent, "Notice of Intent Regarding Launching a Voluntary Carbon Dioxide Removal Purchasing Challenge; DOE Carbon Dioxide Removal Purchasing (CO2RP) Challenge" (Document number 2024-05269)

To Whom it May Concern:

CarbonPool Holding AG ("CarbonPool") is submitting this comment in response to the U.S. Department of Energy Office of Fossil Energy and Carbon Management's ("FECM") call for feedback on its Voluntary Carbon Dioxide Removal ("CDR") Purchasing Challenge ("Challenge"). CarbonPool thanks the FECM for the opportunity to provide its view on how the Challenge may be structured to ensure that it benefits both CDR buyers and the carbon market overall.

CarbonPool is a carbon credit insurance company that pays clients' insurance claims in CDR credits instead of cash if they experience an under-delivery of credits ("shortfall insurance") or a reversal of retired credits ("reversal insurance"). We were founded by a group of ex-Allianz/AXA senior executives with several decades of experience in the insurance industry, and our team is comprised of economists, forestry experts, climate scientists, and weather modellers.

The FECM has specifically requested feedback concerning what is stopping organizations from purchasing CDR today, and what resources would enable organizations to procure CDR with "ease and confidence." We firmly believe that in-kind carbon insurance is a crucial de-risking mechanism that will allow buyers to invest in the carbon credit market with ease and confidence – and to guarantee that the world stays on track to net zero by ensuring that failed or reversed CDR credits are immediately replaced with another CDR credit. Insurance gives carbon credit developers confidence that they can deliver on their contracts, gives buyers assurance that they will receive their expected credits and that they will remain permanent, and is a common risk mitigation and transfer mechanism that exists in every mature market today.

In our experience speaking with CDR buyers, from new entrants to the most prominent participants in the voluntary carbon market ("VCM"), their chief concerns include: (1) CDR credit **impermanence** and (2) the lack of a **single, objective understanding of project risk and quality**, creating uncertainty in their investments. In-kind carbon insurance addresses both concerns:

- **Permanence**. When an issued carbon credit experiences a reversal—e.g., part of a restored forest burns down, releasing the sequestered CO2e on which a carbon credit from that project is based—CarbonPool's in-kind reversal insurance will replace that invalidated credit with a new carbon removal credit of CO2e removed from the atmosphere. In doing so, in-kind removal insurance ensures that credit's permanence by swapping the invalidated credit with a new, replacement credit from the insurance pool. It also allows the world to maintain its net zero trajectory and eliminates the need to assign largely

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arbitrary permanence durations to different types of technology- or nature-based credits. Institutions from the EU to the UN, and market participants like the American Carbon Registry ("ACR") and Climate Action Reserve ("CAR"), have all recognized that market actors can achieve credit permanence through in-kind carbon insurance.

- **Understanding of project risk and quality**. At present, there exists no single source that can provide an objective, quantitative understanding of a project's risk or quality. While some buyers do conduct extensive due diligence for their CDR procurements, those processes rarely (if ever) involve a probabilistic analysis of whether that project will actually deliver the carbon sequestration it has promised, or a view as to how likely a reversal may be in the future. Buyers are, in essence, forced to make informed guesses about investments' risk exposure whose value may reach into the tens of millions of dollars. Insurance fills that gap. During the underwriting process, projects are subject to an extensive scientific and probabilistic analysis, utilizing quantitative and qualitative data, including extensive weather data and climate risk assessments, that produces an objective, easy-to-understand assessment of how likely a project is to deliver its advertised climate benefits. This also serves as a signal of quality, in that a project with a high probability of delivering on its promised climate benefit could be viewed as a "high-quality" credit. Buyers with insurance will be able to make better informed choices about their procurements because they will have a precise view of their projects' shortfall and reversal risks, increasing confidence in their investments.

As the FECM sets purchase contract norms for CDR procurement, per its mandate, CarbonPool urges the FECM to include the use of in-kind carbon insurance in any future guidance or requirements. Like monitoring, reporting, and verification ("MRV") mechanisms, insurance should be viewed as a necessary, standard-practice component of CDR purchase agreements to ensure the purchased credit's **permanence**, and to ensure buyers understand their **credit's risk profile**. Indeed, mandatory liability insurance has historically been the **solution of regulators and governments for all insurable third-party liability problems** that involve externality costs to others and society, from motor liability insurance to marine pollution liability insurance. Carbon is no different.

We thank the FECM for the opportunity to comment on this matter. We would be happy to provide more detailed input in the future.

Best regards,

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