



September 8, 2023

McKenzie Smith
Climate Action Reserve
600 Wilshire Blvd, Suite 202
Los Angeles, CA 90017

Submitted electronically via msmith@climateactionreserve.org

RE: CarbiCrete's Public Comments on U.S. Low-Carbon Cement Protocol v1.0

Dear McKenzie Smith,

CarbiCrete appreciates the opportunity to provide public comments on v1.0 of the Climate Action Reserve's U.S. Low-Carbon Cement Protocol. We look forward to further discussion on any of the recommendations outlined below.

Mineralization

While the proposed protocol applies to the displacement of OPC, we would recommend that CAR also allow for the generation of credits through CO2 capture and utilization, the protocol options for which are limited. Verra's VM0043, for instance only covers ready-mix concrete, so it would be great to have additional options for projects associated with the production of other concrete products such as masonry and precast.

CO2 mineralization into cement and concrete constitutes a permanent removal, but deployment, implementation and scaling of mineralization technologies can be costly and would greatly benefit from a flow of funds from the Voluntary Carbon Market. CCU credits can often have a higher value in the market and big players, including Microsoft, Stripe, and Shopify have indicated interest in credits of this type. We feel that not including CO2 capture and utilization in this protocol would represent a missed opportunity.

It is our view that the changes required to include mineralization into the protocol would not be extensive, especially if we consider CO2 as another SCM. The bulk of the work would be around measuring CO2 uptake/mineralization, but there are other established precedents, such as VM0043, already exist.

Canadian-Based Projects

Currently, the proposed CAR methodology only applies to projects in the US. We recommend expanding the applicability of the protocol to Canada where there is significant activity in the low carbon cement and concrete space. This would allow for wider market uptake.


Steel Slag as an Eligible ACM

We recommend the explicit inclusion of all steel slag types, including BOF, EAF, stainless steel slag and ladle slag as eligible ACMs. Whereas iron slag (GBFS) has been used as an SCM for decades due to its hydraulic properties, steel slag has limited hydraulic properties, it reacts with CO₂ in the presence of water and can be used as an ACM to replace OPC in a process where concrete is cured through carbonation and in which CO₂ is mineralized.

Thanks once again for the opportunity to submit comments on this proposed protocol. We look forward to further participation in the process.

Sincerely,

Yuri Mytko

A handwritten signature in black ink, appearing to read "Yuri Mytko", is positioned above the printed name.

Chief Marketing Officer