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Abstract for CRADA between NETL and Carbon To Stone, Inc.

(AGMT-1506)

The National Energy Technology Laboratory (NETL) and Carbon To Stone (CTS), Inc. (Participant) will collaborate on a techno-economic assessment (TEA) and life cycle assessment (LCA) of CTS's carbon dioxide removal (CDR) technology under an awarded project from the Department of Energy's Direct Air Capture Pre-Commercialization Technology Prize. CTS has developed a technological platform that captures carbon dioxide (CO₂) from air and mineralizes it into durable carbonates using alkaline industrial residues such as steel slag and mine tailings. In addition, CTS's technology uses electrochemistry to recover value-added energy critical metals (ECMs) from these residues. NETL has expertise in CDR TEA and LCA development. The collaboration between CTS and NETL aims to quantify the performance, cost and lifecycle impacts of CTS's technology and produce LCA and TEA models that can accelerate development and deployment of this technology.