



August 16, 2021

Rajinder Sahota, Deputy Executive Officer  
California Air Resources Board  
1001 I Street  
Sacramento, CA 95814

***RE: Bloom Energy Comments on the 2022 Scoping Plan Update –  
Engineered Carbon Removal Technical Workshop***

Dear Ms. Sahota,

Bloom Energy (Bloom) is pleased to provide comments on the 2022 Scoping Plan Engineered Carbon Removal Technical Workshop. Bloom has been at the forefront of the energy sector since its inception and continues to offer clean, resilient alternatives to centralized energy generation. As a mission-driven company, Bloom continues to develop innovative solutions to respond to challenging problems. To this end, Bloom has committed to strategic expansion across our growth pillars of product innovation spanning zero-carbon, renewable and carbon-negative power, and transportation solutions. They include hydrogen solid oxide fuel cells, hydrogen solid oxide electrolyzer cells, carbon capture utilization and storage, biogas, and marine applications.

As California and the world moves towards decarbonization, Bloom is ready to collaborate with the state towards a transformed energy sector. Renewables alone are not enough to reach decarbonization goals. Researchers and entrepreneurs have long sought ways to isolate CO<sub>2</sub> from combusted fossil fuels in the hopes of capturing and storing the isolated carbon, but this has shown to be prohibitively expensive and inefficient. Bloom's solid oxide fuel cells generate electricity via an electrochemical reaction rather than combustion, which avoids emitting harmful air pollutants that come with burning fuel.

Bloom's platform captures and recycles hydrogen and water from the fuel cell exhaust and then separates emitted water vapor and CO<sub>2</sub>. Once the water vapor is removed via condensation, a pure stream of CO<sub>2</sub> remains. This CO<sub>2</sub> can be easily captured and permanently sequestered in the ground or utilized in new applications. This technology solution paves the way to meet our carbon neutral targets, or exceed them when utilizing carbon capture technology with biogas.

Carbon capture and utilization can help support growth of the circular economy while aiding California to meet our climate goals by creating opportunities for new supply chains and business models to form around the transformation of a pollutant into a useful product. We appreciate the ARB's leadership on the climate change Scoping Plan and look forward to working with you to fully realize the potential of fuel cells and carbon capture technology to help meet our mutual climate and clean air goals.

Thank you for your consideration,

Amy Mmagu  
Senior Policy Manager