





May 11, 2016

Mary D. Nichols, Chair California Air Resources Board 1001 I Street Sacramento, CA 95814

Re: Comment for 2030 Target Scoping Plan Kickoff Workshop

Dear Chair Nichols,

The Center for Carbon Removal applauds California for its ambitious approach to utilizing natural and working lands to help California meet its climate goals in 2030 and beyond. Strategies to enhance terrestrial carbon sinks can help CA lead the global conversation on carbon removal (i.e. negative emissions) strategies that remove legacy carbon emissions from the atmosphere. In particular, California can help ensure that rigorous lifecycle carbon accounting protocols and measurement tools are developed and implemented to demonstrate the ability for biological carbon removal methods to support economic development, adaptation, and other environmental goals — in turn helping to build a more resilient, sustainable California.

The 2030 Scoping Plan Update provides a unique opportunity for California to further its leadership in the global climate conversation by laying the groundwork for a carbon-negative future. For the world to meet its climate goals and keep the average rise in temperatures to well below 2°C, climate scientists are unequivocal: the development of carbon removal solutions, in addition to swift emissions reductions, is needed. Yet, carbon removal solutions face significant challenges today, and require further development and policy support to reach the scale, costs, and reliability needed to aid in fighting climate change. Thus, the carbon sequestration strategies on both natural and working lands being pursued by the Air Resources Board can help answer key scientific questions and set an example for their implementation for other jurisdictions around the world. Additionally, effective inclusion of carbon removal strategies in CARB's Scoping Plan can help elevate carbon removal in the climate discussion today to ensure that solutions around the world develop in a way consistent with other social, economic, and environmental goals.

To have the greatest positive impact in the carbon removal discussion, we recommend that CARB focus their work in the short-term in the following areas:

1. Identify the scientific uncertainties around the reliability and permanence of carbon sequestration, and techno-economic challenges constraining commercialization of biological carbon removal solutions. To do so, CARB can work with the academic community in

California and beyond to identify research, development, and demonstration priorities for the range of carbon removal solutions that show potential to help California meet its climate goals.

- 2. Develop Lifecycle Carbon Accounting (LCA) and measurement and verification (M&V) standards and protocols for promising carbon removal solutions in collaboration with stakeholders. Where existing LCA analyses and M&V standards exist, identify and promote the "best practices" so projects can provide real and reliable sequestration. Together, these actions will help California to understand the true potential of each land category to sequester carbon dioxide and will help focus future mitigation efforts.
- 3. Export lessons learned to partners and collaborators around the world through convening key stakeholders and communicating lessons learned through domestic and international forums such as the Under 2 MOU.

Developing and deploying the solutions that sequester carbon dioxide on natural and working lands is an urgent priority that California will benefit from addressing in a meaningful way today. While there are challenges to implementing these solutions in a way that also maximize our auxiliary goals, these challenges highlight areas in which California can have an immeasurable impact on the development of carbon removal solutions around the world. The 2030 Target Scoping Plan Update offers a prime opportunity for California to become a leader in the carbon removal field, generating benefits for the state's people, economy, and environment.

Respectfully Submitted,

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About the Center for Carbon Removal:

www.centerforcarbonremoval.org

The Center for Carbon Removal is an initiative of the UC Berkeley Energy and Climate Institute dedicated to curtailing climate change. Our focus and mission is to accelerate the development of scalable, sustainable, economically-viable carbon removal solutions. To accomplish this mission, we lead industry and policy collaborations to unlock the potential of carbon removal solutions by conducting research and analysis, convening events, and curating an online hub for information and discussion about carbon removal. Our website is available at: www.centerforcarbonremoval.org and you can engage with us on Twitter (@CarbonRemoval) and Facebook (The Center for Carbon Removal).