

August 30, 2023

The European Commission Re: EC Call for Evidence on Industrial Carbon Management Submitted via https://ec.europa.eu/

Dear Madams and Sirs:

The <u>Carbon Business Council</u> (CO2BC) is a nonprofit trade association of more than 100 innovative carbon management companies with over \$16.5 billion in combined assets working across six continents, and we appreciate this opportunity to offer the following comments in response to to the European Commission's <u>Call for Evidence on Industrial Carbon Management</u>:

- The science is clear that carbon dioxide removal (CDR) alongside a strong prioritization on greenhouse gas emissions reduction – is "unavoidable," and will be required at gigatonne (Gt) global scale by 2050 to reach net zero and have a chance to limit warming to 1.5 or even 2°C.¹ (After mid-century, the global community will need to continue to scale CDR to remove the tremendous excess of anthropogenic carbon dioxide [CO₂] in the atmosphere and restore our climate to a safer and healthier state.) As such, the CO2BC urges the European Commission (EC) to place strong emphasis on scaling high-quality CDR as part of a dedicated Industrial Carbon Management Strategy (ICMS).
- 2. As the EC considers this ICMS, it is critical to differentiate between CDR and carbon capture and storage (CCS). The IPCC defines CDR as "anthropogenic activities removing CO₂ from the atmosphere and durably storing it in geological, terrestrial, or ocean reservoirs, or in products."² CCS is the capture and storage of CO₂ from an industrial emissions source. When the emissions source is of fossil or geologic origin (e.g. a cement kiln or natural gas power plant), CCS is a form of emissions reduction; when the emissions source is biogenic (e.g. a bioenergy or pulp-and-paper plant) CCS can be a form of CDR.³ These technologies have distinct characteristics and serve distinct objectives, which differences should be reflected in specific policy formulation within the ICMS.
- 3. In order to maximize clarity and focus on achieving the levels of both deep greenhouse gas emissions reduction and high-quality CDR needed to meet Europe's climate goals, the CO2BC recommends that the ICMS establish parallel ("<u>twin</u>") targets for emission reductions and CDR at the EU and member nation levels, so that both can scale up in tandem over the critical coming decades.⁴ Specifically, the CDR target should be set via a rigorous determination of member nations' residual emissions, i.e. those emissions that cannot be abated in a climate relevant timeframe and therefore must be neutralized by

¹<u>IPCC AR6 Synthesis Report</u> p 50

² IPCC AR6 WGIII Report p1,796

³<u>The Difference Between CDR, CCU, and CCS – and Why It Matters</u>, Carbon Gap, 2022.

⁴ Rubin, "<u>Should We Reduce or Remove Greenhouse Gas Emissions? Why Not Both?</u>" Fast Company, June 2023.



high-quality CDR in order to reach net zero in 2050.⁵ The ICMS should additionally include binding interim targets to ensure that mitigation efforts commence now and scale over time to meet a 2050 net-zero goal. Finally, both emissions reduction and CDR targets should be subdivided into biospheric and geospheric components. While biospheric removals (such as soil, forest, and "blue" carbon sinks) can serve to neutralize residual biogenic emissions from land use change and agriculture and deliver meaningful ecosystem and agronomic co-benefits, only long-duration geospheric CDR can neutralize effectively permanent fossil carbon emissions.⁶

- 4. Given the massive level of CDR that will be required, it is essential that the EC take concrete steps to start scaling and funding the deployment of high-quality CDR today. Given the substantial incentives and other funding for CDR enacted in the United States in recent years, Europe is at risk of falling behind in terms of jobs-creation and other economic benefits that a vibrant CDR sector can confer. There exist a range of policy mechanisms that can accelerate and scale CDR deployment from investment tax credits, to contract-for-difference, to public procurement and a successful ICMS should include significant funding for high-quality CDR.
- 5. The CO2BC strongly recommends a method-neutral, criteria-based treatment of CDR in the ICMS as outlined in our recently published issue brief "Defining CDR."⁷ It is important to highlight that CDR encompasses a range of pathways, from land-based soil and forest carbon sinks; biomass-based carbon removal and storage (BiCRS); to marine carbon dioxide removal (mCDR); to mineralization-based approaches; to direct air capture (DAC) as well as emergent and potentially as yet undiscovered methods. A method-neutral criteria-based definition of CDR in the ICMS (that recognizes the distinct roles of biospheric and geospheric CDR in achieving durable net zero⁸ as outlined in Section 3 above) will best incentivize continued development and scaling of the portfolio of CDR methods needed to meet our climate goals.

We would be pleased to discuss these points further with relevant parties at the EC, and very much appreciate the opportunity to submit this input for your consideration.

Sincerely,

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⁵ Buck et. al. "<u>Why Residual Emissions Matter Right Now</u>," Nature Climate Change, March 2023.

⁶ Fankhauser et. al. "<u>The Meaning of Net Zero and How to Get It Right</u>," Nature Climate Change, December 2021.

⁷ "Defining Carbon Removal," Carbon Business Council, May 2023.

⁸ Carbon Removal and the 2040 Targets: The Key to Getting Them Right, Carbon Gap, June 2023.