

**Methane Action
Remineralize the Earth
Climate Protection and Restoration Initiative**

April 15, 2021

President Joseph R. Biden, Jr.
1600 Pennsylvania Avenue, N.W.
Washington, DC 20500

In Re: An Executive Order Expediting Research and Development
Of Active Removal of Greenhouse Gases from the Atmosphere.

Dear Mr. President,

Thank you for your commitment and determination to address the climate crisis and ensure a viable future. Your January 27th Executive Order on Tackling Climate Change and the fact sheet on your proposed infrastructure bill outline many of the key improvements in climate policy we need – though not all.

We are writing to ask you to consider an executive order that builds on your Order of January 27, 2021. Informed by the advice of our legal and scientific colleagues, including some who have served in the federal government, this proposed new order would draw on presidential powers to expedite a research agenda for developing and deploying ways to remove excess greenhouse gases (GHGs) from the atmosphere, including legacy carbon dioxide (CO₂) and short-lived climate pollutants (SLCPs), particularly methane.¹ A draft of this proposed order developed by some of the signatory groups is enclosed.

We also urge you to work with Congress to incorporate negative emissions strategies into the pending infrastructure package – for example specifying carbon-neutral or carbon-negative concrete² rather than using infrastructure funding to effectively subsidize GHG-intensive concrete.

As both the IPCC and the NAS have affirmed, in order to avoid catastrophic climate change and restore the climate we need to rapidly phase-out GHG emissions and actively remove a substantial share of the legacy emissions. We therefore strongly endorse the 2019 recommendation by the National Academy of Sciences that the nation “launch a *substantial* research initiative to advance negative emissions technologies (NETs) as soon as practicable.”³ (Emphasis added.)

¹ IPCC, 2014: Climate Change 2014: Synthesis Report Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Core Writing Team, R K Pachauri and L A Meyer (eds)] IPCC, Geneva, Switzerland, 151 pp , at 87 We specifically include methane here in light of its sharp growth in recent years, its high climate forcing potential and some very safe, effective and efficient methods of removing it that are now being proven out in laboratory tests in Europe

² <https://www.blueplanet-ltd.com/>

³ Negative Emissions Technologies And Reliable Sequestration: A Research Agenda, <https://www.nap.edu/read/25259/chapter/2#20> See also, Department of Energy's Advanced Research Projects Agency (ARPA-E), Request for Information on methods of reversing the rate of accumulation of methane in the atmosphere (2020) (seeking to (a) prevent

Different negative emissions technologies have different costs and benefits. Some may present environmental, human health, or social risks that should be further evaluated. Others offer significant potential for removing SLCPs from the atmosphere by enhancing existing natural processes. Some show great promise for securing Paris Agreement targets if pursued in concert with, and not instead of, parallel efforts to rapidly phase out emissions.

Because you soon will convene global leaders for the upcoming Leaders Summit on Climate, this is now the proper moment for you to mount a robust program for assessing NETs, while working to develop international governance for their deployment.

Towards that end, some of the organizations represented by our co-signers will provide you and your team with additional information on relevant approaches, legal and scientific. We would also be happy to provide one or more live briefings for you and/or your climate team, at your convenience, on the scientific, legal, and economic dimensions of this proposal.

Sincerely,



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methane emissions from anthropogenic activities; (b) abate methane emissions at the source (stack, vents, leaks, etc.); and (c) remove methane from the air) The NAS Report recommended: "A substantial investment would (1) improve existing NETs (i.e., coastal blue carbon, afforestation/reforestation, changes in forest management, uptake and storage by agricultural soils, and bioenergy with carbon capture and sequestration) to increase the capacity and to reduce their negative impacts and costs; (2) make rapid progress on direct air capture and carbon mineralization technologies, which are underexplored but would have essentially unlimited capacity if the high costs and many unknowns could be overcome; and (3) advance NET-enabling research on biofuels and carbon sequestration that should be undertaken anyway as part of an emissions mitigation research portfolio [and noted] The exclusive focus of this report on terrestrial and near-shore coastal NETs reflects the Statement of Task. The committee recognizes that oceanic options for CO₂ removal and sequestration (e.g., iron fertilization and ocean alkalization), which fall outside the scope of its task, could sequester an enormous amount of CO₂ and that the United States needs a research strategy to address them "

Copies to:

Honorable John Kerry, U.S. Special Presidential Envoy for Climate

Honorable Gina McCarthy, White House National Climate Advisor

Dana Remus, White House General Counsel

Ron Klain, White House Chief of Staff