

United States Senate

WASHINGTON, DC 20510

April 4, 2019

The Honorable Lamar Alexander
Chairman
Subcommittee on Energy and Water
Development
U.S. Senate Committee on Appropriations
Dirksen Senate Office Building, Room 140
Washington, DC 20510

The Honorable Dianne Feinstein
Ranking Member
Subcommittee on Energy and Water
Development
U.S. Senate Committee on Appropriations
Dirksen Senate Office Building, Room 188
Washington, DC 20510

Dear Chairman Alexander and Ranking Member Feinstein,

As the Committee develops the Fiscal Year (FY) 2020 Energy and Water Appropriations Bill, we urge you to support programs at the Department of Energy (DOE) to develop and deploy carbon capture, utilization, and storage (CCUS) technologies in partnership with the private sector. We appreciate your past support for CCUS programs at DOE. We ask that you fund CCUS programs at the highest possible levels in FY 2020 and adopt report language supporting an aggressive timeline for developing new and advanced carbon storage and utilization technologies.

As the world transitions towards a carbon constrained economy, investment in CCUS technology will spur economic development and ensure energy security while protecting the environment from carbon dioxide emissions and maintaining global leadership role in research and development. According to the International Energy Agency and United Nation's Intergovernmental Panel on Climate Change, CCUS is a critical component of the portfolio of energy technologies needed to reduce carbon dioxide emissions worldwide. Innovators across the United States are already developing a wide range of CCUS technologies that can improve the efficiency of electricity generation and utilize carbon dioxide emitted by power plants and other sources for more efficient resource development and valuable products, such as algae-derived chemicals, plastics, and fuels. As the U.S. develops CCUS technologies, we will benefit not only from cleaner power here at home, but from new markets for U.S. technologies abroad, including innovations towards direct air capture. Investment in carbon utilization technologies will transform carbon dioxide into an economic resource, lower the cost of reducing emissions, create jobs, save consumers money, and safeguard our environment.

Last year, Congress made a critical first step in catalyzing a CCUS industry in the U.S. through the enactment of the FUTURE Act to extend and expand the Section 45Q carbon sequestration tax credits. These credits will incentivize the implementation of CCUS in all industries and encourage the creation of new CO₂ utilization markets. However, today's technology is still relatively expensive to implement in some industries, like the power sector, and improved carbon capture technologies will be needed to reduce costs. Like the wind and solar industries, a combination of federal incentives such as tax credits and federal funding for research, development, and demonstration, will be needed to improve the technology so that it can be cost-competitive with other forms of low CO₂ emitting technologies.

The U.S., through the DOE, has a world leading CCUS RD&D portfolio and is in a position to be a global leader in CCUS. The DOE program has enabled the advancement of technology to a commercial demonstration in one project, PetraNova. Other newer CCUS technologies are readying for pilot scale testing and commercial demonstration, and others in the R&D pipeline hold promise for achieving significantly improved cost and environmental performance over the state of the art in the long term. However, significantly more CCS/CCUS pilot and demonstration projects are needed in order to improve the performance, reliability, and efficiency of both new and existing fossil fuel fired power plants. We request robust funding to develop technologies that will address CO₂ emissions from coal, natural gas, and industrial facilities. Continuation of funding for both research and development and pilot scale field testing is necessary to advance critical CCUS technologies to the next stage including development of direct air capture technologies, and we urge Congress to support funding for technology development at all scales of development and testing that is required to achieve successful technology commercialization.

Specific funding within CCS and Power Systems should include maximum funding for the carbon capture and carbon storage programs. We see no reason to combine these programs, nor have seen a clear programmatic blueprint or strategy for how a combined program would work – we therefore ask that these programs continue to operate separately but collaboratively under the Office of Fossil Energy. Additionally, the focus of the carbon storage program should be expanded to include utilization.

We request the following report language to encourage DOE to support the development of innovative carbon storage and utilization technologies:

The Committee encourages the Office of Fossil Energy to use its existing authority within the CCS and Power Systems area to fund activities that promote the reuse of captured carbon dioxide from coal, natural gas, industrial facilities, direct air capture, and other sources for the production of fuels and other valuable products. The Committee directs the Department to establish a comprehensive carbon sequestration and utilization effort to combine research and development capacity and expertise to solve the carbon sequestration and utilization challenge within ten years, with the goals of improving the economics associated with domestic energy production, achieving optionality in carbon management, and further reducing carbon emissions.

Thank you for your consideration of these requests.

Sincerely,



Senator Joe Manchin III



Senator Michael F. Bennet



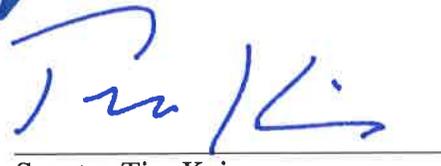
Senator Tammy Duckworth



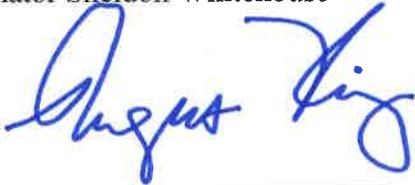
Senator Jon Tester



Senator Sheldon Whitehouse



Senator Tim Kaine



Senator Angus S. King Jr.



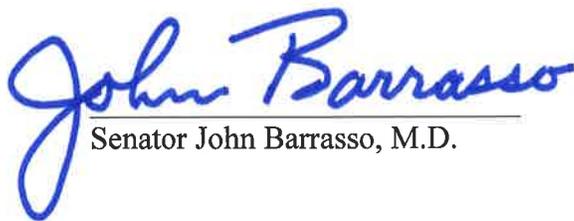
Senator Kevin Cramer



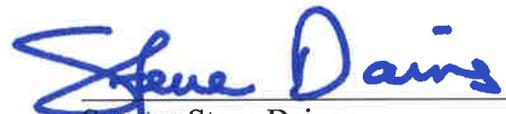
Senator Christopher A. Coons



Senator Cory Gardner



Senator John Barrasso, M.D.



Senator Steve Daines