

Senator Sheldon Whitehouse (D-RI) Applauds the FUTURE Act Bipartisan Law (2/13/18)
Zooming Adoption of Direct Air Capture of Carbon - following Global Thermostat DAC
Presentation in Rhode Island January 10th, 2018



Whitehouse Applauds Passage Of Bipartisan Carbon Capture Technology Bill

February 9th, 2018

RI companies poised to leverage expanded tax credits for technologies that reduce carbon emissions

Washington, D.C. – U.S. Senator Sheldon Whitehouse (D-RI) today announced that the FUTURE Act, his bipartisan bill to encourage technological innovation in carbon capture utilization and storage while reducing carbon pollution, passed both the Senate and House of Representatives as part of the bipartisan budget deal and was signed into law. The bill was also sponsored by U.S. Senators Heidi Heitkamp (DND), Shelley Moore Capito (R-WV), and John Barrasso (R-WY). “This is a big win for our climate and the promising new carbon capture and utilization technologies looking to gain a foothold in the market,” said Whitehouse. “This bipartisan bill will help to clear a path for businesses in Rhode Island and around the country that turn carbon pollution into something useful. And it takes a key step forward in combatting climate change by putting a dollar value on reducing carbon pollution. I’m proud to have joined Senators Heitkamp, Barrasso, and Capito to find common ground.” The bipartisan legislation aims to drive further development of carbon capture, utilization and storage technologies and processes – while also spurring adoption of low-carbon technologies

to transform carbon pollution into useable products. A broad cross-section of utilities, coal companies, environmental groups, and labor organizations support the bill. “We know that converting waste streams into products with value is a smart business model. Industries have grown around turning waste frying oil into biofuels and recycled bottles into furniture. Now, there are new opportunities to productively use excess carbon dioxide in agriculture and other industries. Senator Whitehouse’s bill will jumpstart this growing industry and create new jobs, while reducing carbon emissions,” said Lawrence Dressler, President of Rhode Island's Agcore Technologies, LLC, which has patented methods of eliminating carbon dioxide from waste gases that can be

FUTURE Act
Furthering carbon capture, Utilization, Technology, Underground storage, and Reduced Emissions

Heitkamp, Capito, Whitehouse, Barrasso, Graham, Kaine

infused in water for the production of their high protein algae for both human and animal nutrition. The FUTURE Act extends and expands a tax credit for projects that capture and then utilize or store carbon dioxide. In addition, the bill would help encourage the development of new technologies to remove carbon pollution directly from the atmosphere. Whitehouse continues to reach across the aisle to find bipartisan energy solutions on climate change. Whitehouse helped secure infrastructure upgrades to Rhode Island ports to support the deployment of America’s first offshore wind farm off Block Island, RI. He has introduced legislation to put a fee on carbon, establishing a market incentive to reduce emissions while generating substantial revenue to be returned to the American people.

Section 45Q was enacted as part of the Energy Improvement and Extension Act of 2008 and amended by the American Recovery and Reinvestment Act of 2009. 45Q provides a credit for CO₂ storage and is available to taxpayers that capture qualified CO₂ at a qualified facility and dispose of the CO₂ in secure geological storage. The credit is equal to: (1) \$20 per metric ton for qualified CO₂ that is captured and disposed of in secure geological storage or (2) \$10 per metric ton for qualified CO₂ that is captured, used as a tertiary injectant and stored in a qualified enhanced oil recovery (EOR) project. To currently qualify a facility must capture and store a minimum of 500,000 tons of qualified CO₂ during the taxable year. The program is capped and expires when 75 million tons have been claimed. Under the current credit framework Carbon Capture Utilization and Storage (CCUS) projects have not been deployed successfully and the credit does not include industrial sources and utilization technologies beyond EOR. This issue is that CCUS projects remains very expensive to build and the \$10 per ton credit for EOR and \$20 per ton credit for other geologic storage continue to be

insufficient to stimulate any real financing of CO2 capture or utilization projects. The IRS last indicated in 2014 that at least 35 million of the authorized 75 million tons have already been claimed by existing industrial CO2 capture projects, but since then, it is not clear how many more credits have been claimed. In addition, the financial uncertainty created by a cap – whether or not there will be any credits remaining when the facility captures CO2 – does not provide access to commercial capital necessary to finance CCUS projects.

FUTURE Act

The Furthering carbon capture, Utilization, Technology, Underground storage, and Reduced Emissions (FUTURE) Act would reform, enhance, and expand upon the current 45Q tax credit provision. The Act would more fully incorporate utilization – beyond just EOR – and direct air capture as critical components of developing carbon capture projects and technologies that will contribute to greatly reducing CO2 and CO emissions and creating products of usable value – both in the U.S. and globally. The Act would provide greater certainty for project developers and potential financiers, create more flexibility in credit qualified entities, encourage innovation and development of new projects, and incorporate the Department of Energy's planned large-scale pilot demonstration projects, by:

- Putting in place language for new facilities or equipment to qualify for the credit if they have “commenced construction” within 7-years from the date of enactment;
- Allowing those who qualify to claim the credit for 12-years;
- Increasing the current credit values so that the EOR credit rises to \$35 per metric ton and the credit for other geologic storage rises to \$50 per metric ton;
- Opening up the \$35 per metric ton credit to current and future utilization and direct air capture projects beyond EOR;
- Creating three separate capture threshold tiers for electric generation units(EGUs),non-EGUs, and pilot or early development projects;
- Maintaining the 75 million metric ton cap – and \$20/\$10 per metric ton credit amounts – for projects that are already using the credit or qualify and utilize the credit prior to enactment of this Act; and
- Authorizing transferability of the credit to the entity sequestering the CO2 or using it in EOR (the credit initially goes to the entity that owns the capture equipment and captures the CO2 from the facility).

CCUS is a vital component to addressing global climate change through increased carbon reduction – as stated by the EIA, IEA, IPCC, and world leaders from North America to Asia. It is imperative that we invest and continue to enhance existing – and develop new – technologies while also encouraging innovation and utilization if we are to provide a viable path forward for CCUS on a national and global scale.

Here is the wording of the entire new law FYI:

[Click here to download the FUTURE Act](#)