

The USEIT Act (Utilizing Significant Emissions through Innovative Technologies):

Creating Economic, Jobs and Environmental Benefits through Carbon Capture and Utilization

Background

The emerging "carbontech" sector is developing and deploying technologies that capture carbon emissions from industrial and power plant sources, as well as through direct air capture, and convert them into useful materials and products. By leveraging technological innovation and market forces, carbontech can play a significant role in the deployment of carbon capture and removal technologies and in decarbonization generally. However, federal support is required for the sector to reach its full commercial potential. That is where the USE IT Act comes in.

Building on recent landmark reform of the federal 45Q tax credit to incentivize deployment of carbon capture technology, the USE IT Act will foster continued development and deployment of carbon capture by authorizing the EPA Administrator to coordinate with the Secretary of Energy on furthering research, development and demonstration of carbon utilization and direct air capture technologies. The bill would also support collaboration between federal, state and non-governmental interests to facilitate planning and deployment of pipelines to transport CO₂ for ultimate storage or beneficial use.

If enacted, the USEIT Act would:

- Help advance next generation carbon capture and utilization technologies to transform CO₂ into a beneficial resource and economic opportunity while reducing emissions;
- Create a direct air capture technology demonstration prize, supported by a technology advisory board;
- Establish a federal CO₂ utilization research and development program; and
- Facilitate planning, siting and permitting of pipeline infrastructure to transport CO₂ captured from industrial and power generation facilities to where it can be stored or put to beneficial use.

The Opportunity

Today there are more than 300 carbon capture and storage operations globally; 53 of those operations – including some of the world's largest and most technologically innovative projects such as the Petra Nova project in Texas – are in the United States.

In addition to enhanced oil recovery (EOR), carbon dioxide is being used to create plastics, chemicals, strengthen cement and make jet fuel, with untold new beneficial

uses only waiting to be realized through additional federally supported research and development.

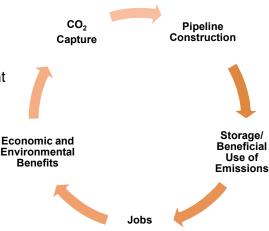
A recent report from the ClearPath Foundation and the Carbon Utilization Research Council (CURC) with support from the International Brotherhood of Boilermakers, Iron Ship Builders, Blacksmiths, Forgers & Helpers, the International Brotherhood of Electrical Workers and the United Mine Workers suggests that if the U.S. government continues to deploy the right policies, markets will drive the growth of carbon capture.

Entitled "Making Carbon a Commodity," the report estimates that accelerated research, development and deployment of carbon capture technology could add \$190 billion to U.S. annual GDP by 2040 and add 780,000 jobs over the same period.

The report also suggests that if carbon capture deployment is to work, states will have to build new or extend already existing pipelines to transport carbon dioxide from where it is captured to where it may be stored or used. The existing network of CO_2 pipelines – approximately 5,000 miles – is simply not enough. We need more pipelines to transport CO_2 to oil fields and to other locations for storage and utilization purposes. The report's most ambitious projections show the gains that can be achieved by deploying carbon capture on power plants with a capacity of 87 gigawatts. The economic incentive to do that would come from additional oil production of up to 900 million barrels per year via EOR, a process that involves injecting CO_2 into aging oil fields to increase recovery. Thousands of jobs can be created through pipeline construction alone. Pipeline projects will be anchors for manufacturing and job creation in a new low carbon economy.

The Carbontech Economy

Carbon capture, utilization and storage is one example of a circular economy. By adopting the right policies and leveraging market forces, the federal government can create economic, jobs and environmental benefits through the monetization of industrial emissions.



Next Steps

The USEIT Act (S. 383) was introduced in the Senate with bipartisan support in February and a House companion measure (H.R. 1166) followed shortly thereafter. We need your help in securing passage of this important legislation.