



DOE Outlines Billions of Dollars to Be Used for Carbon Management

By Mark Fogarty

It's not enough to remove carbon from the atmosphere or capture it at point of emission to prevent it from reaching the atmosphere, according to one of the key federal carbon management directors. And recent laws have targeted billions of dollars towards managing that effort.

"You still have to manage the CO₂ once you capture it," Jennifer Wilcox, Principal Deputy Assistant Secretary in the Office of Fossil Energy and Carbon Management at the U.S. Department of Energy, told the American Security Project's third webinar in its "Innovating Out of the Climate Crisis" series.

"Whether it's from the atmosphere or from a point source you have to do something with it in a way that's permanent and durable so it doesn't re-enter the atmosphere so you can have a positive impact on climate," said Wilcox.

Geologic storage is often the solution, she said, with capacity and durability so carbon "is stored in a timeframe that's

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relevant, up to thousands of years."

Wilcox continued, "But there's also utilization pathways. CO₂ can be used as a chemical feedstock," though she said sometimes this can cause carbon to be re-emitted into the atmosphere.



Jennifer Wilcox at her home in Philadelphia. Credit: Michelle Gustafson, The New York Times.



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The Carbon Storage Program (Lawrence Berkeley National Laboratory), uses theory along with lab, field, and simulation approaches to investigate processes needed to inform and guide the safe and effective implementation of geologic carbon sequestration. Barry Freifeld (left) with Carbon Storage Program Manager Sandeep Sharma, preparing equipment for a geological carbon sequestration project. Credit: Lawrence Berkeley National Laboratory

“In some cases, it can be converted to building materials,” she told the webinar. “So that’s a whole different suite of technologies.”

But between these strategies, “That’s really the broad portfolio of carbon management.”

Wilcox noted that with the recently passed Bipartisan Infrastructure Law (BIL), roughly \$12 billion has been designated for carbon management. Of that, “roughly \$2.5 billion is associated with the geologic storage piece, building out the capacity to store CO2 in the subsurface in a dedicated way. Then there’s \$3.5 billion associated with the building of Direct Air Capture hubs.”

Each of the four DAC hubs planned will scale up to about one million tons of carbon removal a year, Wilcox told the meeting.

“The remainder of the funding is associated with point source carbon capture,” she said. About \$1 billion is going towards pilot programs, and there are several billions of dollars earmarked towards at least six projects “where we’re looking at point source capture, avoiding emissions from entering the atmosphere, two associated with industrial sectors like cement, pulp paper or steel, and then four associated with the power sector.”

She noted “There’s a lot of funding with the Bipartisan Infrastructure

Law.” Another law, the Inflation Reduction Act, is “a critical element” because the public programs she listed are not going to be enough, “and we really need the private sector to get us the rest of the way there.”

The American Security Project’s “Innovating Out of the Climate Crisis” webinar series, also included Antonia Gawel, Head of Climate Change and Deputy Head of the Centre for Nature & Climate at the World Economic Forum; and Jack Andreasen, a Manager at Breakthrough Energy for Carbon Management and U.S. Policy & Advocacy. ASP Senior Adjunct Fellow Lindsey Iversen moderated the discussion.