VOLUME I | ISSUE 5

TRIBAL CARBON SOLUTIONS

A PUBLICATION OF BUILDING TRIBAL LEADERSHIP IN CARBON REMOVAL/GLOBAL OCEAN HEALTH

Carbon Entrepreneurship Is Ready to Boom

By Mark Fogarty

A trifecta of legislation is creating an atmosphere where carbon removal startups may be able to increase dramatically.

Jason Grillo, director of partnerships and operations of AirMiners, noted that the passage of the infrastructure, inflation reduction and CHIPS legislation in the past year has created “a much more favorable policy environment than we’ve ever seen.”

And entrepreneurship “is a crucial part of what we want to provide the carbon removal industry,” he said at a recent online AirMiners event.

> “Any method of carbon removal is likely going to benefit from the particulars of the new policies that have just been enacted.”

"Any method of carbon removal is likely going to benefit from the particulars of the new policies that have just been enacted.”

The event, structured as a question-and-answer session, featured Mac Kennedy, chief executive and co-founder of Mote; Carolyn Mormile and Danny Broberg, both senior policy analysts at the Bipartisan Policy Center; and Jaron Goddard, energy attorney at Wilson Sonsini.

“This is a really exciting time to be in carbon removal,” said Kennedy.

The question of how the IRA is going to influence carbon removal startups had Broberg reflecting “The Inflation Reduction Act was a monumental bill,” but he also wanted to note the benefits of other legislation passed in the last two years.

He said that the passage of the IRA through the reconciliation method is inherently nonpartisan. “But what’s important about the IRA is that it’s full of bipartisan priorities, and that’s worthy of keeping in mind.”

But there is other important legislation as well, including the Energy Act of 2020, the Infrastructure law, and the CHIPS and Science Act. “All of these have a tremendous number of opportunities for carbon management and removal.”

An important part of IRA is the 45Q tax credit, “which has been around for over a decade, and previously applied to point source carbon capture, and it’s a dollar per ton of carbon captured, and in that way it’s a production tax credit for capturing CO2.”

Before the IRA, he said, there were challenges to monetizing the credit, especially for direct air capture.

“What the IRA has done it’s extended the tax credit to 2033, but it’s increased the value of the credit to $180 per ton for direct air capture, which is a game changer.”

But he noted “There actually are some nuances as to how you get the $180 tax credit payout.”

"...the passage of the infrastructure, inflation reduction and CHIPS legislation in the past year has created "a much more favorable policy environment than we've ever seen." And entrepreneurship "is a crucial part of what we want to provide the carbon removal industry."

Other notable changes where direct air capture is concerned are that it decreases the minimum plant size from 100,000 tons to one ton. Since the biggest current DAC plant is 4,000 tons, that made it unrealistic for DAC to capture the credit. With 1,000 tons per year, pilot programs may well be able to monetize the credit by next year, he said.

An important new thing is a direct pay provision, which obviates the need to pay taxes on the credit, in effect making it a grant, Broberg said. But that is only for the first five years.

"But then for the seven years after the first five years, you can still have transferability, which is super important for monetizing the credit."

"The big thing about 45Q," said Goddard, "is it will allow you to claim the base and bonus structure."

She pointed out that the reconciliation process used to pass the IRA means that every single element in the bill has to have a budgetary impact, which accounts for the base and bonus structure.

"Prevailing wage applies during construction and the twelve years thereafter. Apprenticeship applies only during construction," she said.

The reason they are in the law is to provide high-paying jobs and to increase the skilled workforce that will be necessary.

There will be a waiver if qualified apprentices aren't found, she said. And she warned that penalties may be severe for non-compliance.

Transferability is an exciting component but will have to wait on Treasury guidance before it can be fully understood, she said.

How broadly is direct air capture defined in 45Q was a question that came in from the audience.

"There are a lot of practices that are compatible with funding through existing loan and grant programs," said Normile. Broberg said DAC is pretty well defined in the new law. "But a lot of it still needs to be figured out."