



# Advancing Credits for DAC

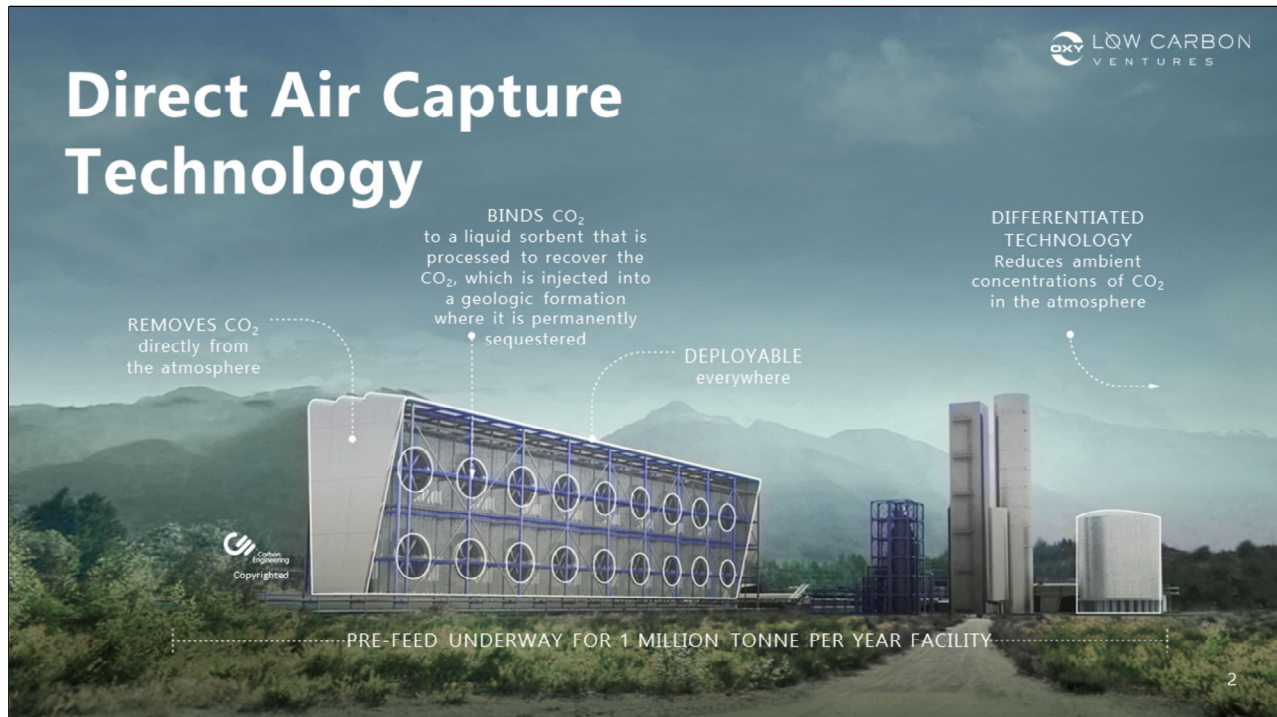
## CARB LCFS Workshop



<https://www.oxy-lowcarbon.com/>  
<https://www.1pointfive.com/>

10.15.2020

- Oxy is a world leader in the handling and sequestration of CO<sub>2</sub>.
- Oxy Low Carbon Ventures uses its expertise to provide global solutions which contribute both separately and synergistically to making a positive impact on climate change.



- DAC is differentiated from other carbon capture technologies that focus on avoided emissions, DAC reduces the amount of CO<sub>2</sub> that is already in our atmosphere.
- This technology can be deployed everywhere because the primary feedstock is air and the CO<sub>2</sub> concentration in air is relatively constant although increasing around the globe.
- The “deployed everywhere” statement can be qualified to reflect that maximum benefit is achieved when renewable or low carbon electricity is used to provide power needs to the DAC plant.
- Oxy Low Carbon Ventures has announced the design of a facility that will remove 1 million metric tons of CO<sub>2</sub> from the atmosphere each year.

## Benefits / Challenges

### KEY BENEFITS

- DAC will help CA achieve its climate goals
- Will generate high quality LCFS credits for the CA market
- Proven technology that can be deployed at scale

### FINANCIAL CHALLENGES

- Timing: Significant capital and a four-year design/construction period before becoming operational
- Contracts: CO<sub>2</sub> sequestration agreements must be executed four years in advance of operation
- Revenue: LCFS credit price forecast becomes more uncertain further into the future

- There are many benefits to rapidly deploy DAC technology.
- Financial challenges are the primary reason we have not seen these proven technologies deployed at scale.
- Financers need a level of certainty and assurance that the investment risks are minimized and that the project will compete favorably with alternate investment opportunities.

## Potential Timeline for Credits



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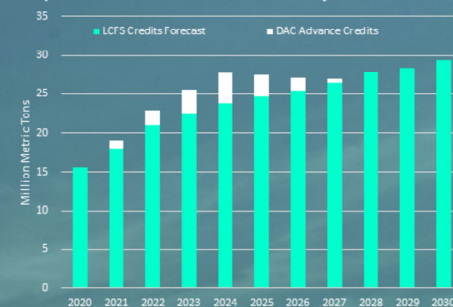
- Credits can be generated after approval of the DAC project.
- Yearly generation of credits equal to the design capacity of the facility will occur for up to four years to incentivize investment during the design, construction and commissioning phases.
- Restoration of the credits begins when the facility becomes operational.

# Generation of Capacity Credits

## Title 17 CCR Section 95490

- Will result in early deployment of impactful technologies
- Qualifying projects will generate capacity credits during construction
- Credits will be restored during the first 20 years of operation
- Capacity credits to be a small factor in the total credit market
- Expected to provide healthy benefits to the LCFS market

Sample Credit Market with 4 million MT of Projects



- Advancing LCFS credits to the design and construction phase enables the technology deployment in the near term and contributes to California’s climate goals and overcomes the investment challenges.
- Each project must be qualified by CARB before credit generation begins.
- This includes a demonstration that the financial responsibility of the project developers meets or exceeds the LCFS Protocol standards of the LCFS Protocol.
- Distinct from similar incentives to deploy technologies, the credits will be restored starting immediately after the project is operational.
- A typical sized DAC starting engineering design in 2022 would represent only 4% of the expected LCFS credit market
- This program can bring on other projects that remove CO2 from the air. We have examined the market impact of up to 1 million Mtpa of credits being generated each year from 2022 through 2024. The advance credits are temporary in nature, represent a small part of the total credit market, and are expected to be generated at a time that strengthens the California LCFS market.

# Questions