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# Rewinding time with Direct Air Capture – Scaling novel technology towards 1 MT of Carbon Removal

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# Creating Insight...



Introduction to STRATOS



Taking the Leap: changing how we work



Innovating to bring novel technology to market at scale

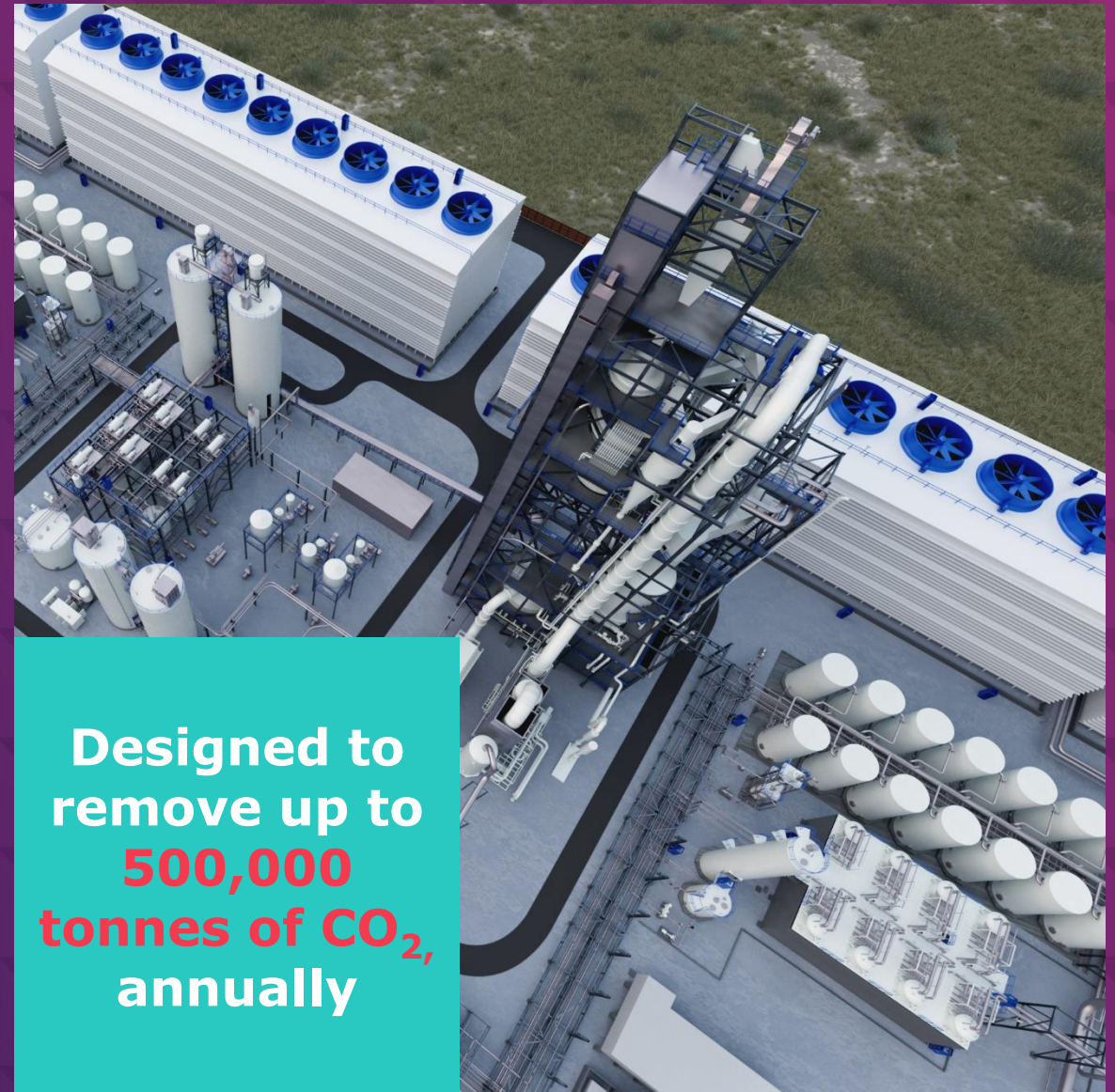
# STRATOS

Worley is currently providing EPC services for 1PointFive's STRATOS project, the largest Direct Air Capture (DAC) facility in the world.

1PointFive, an Oxy Low Carbon Ventures (OLCV) subsidiary, awarded Worley the STRATOS FEED services contract in 2021, with transition into EPC in 2022.

STRATOS is a first-of-a-kind facility being built at commercial scale, in Ector County, Texas.

STRATOS is expected to be operational mid-2025 and is designed to remove up to 500,000 tonnes of atmospheric CO<sub>2</sub>, annually.



# Where it all started...Taking the Leap

Oxy Low Carbon Ventures (OLCV) started 1PointFive to jumpstart the DAC industry around the world.

By implementing Carbon Engineering's DAC technology at scale, together with 1Pointfive, we intend to showcase the critical role this technology will play in reducing the global carbon footprint.

**The leap** involves disrupting our traditional norms, introducing new ways of working and innovation, into a program that will make one of the most meaningful contributions in history to save our planet...

**limiting global warming to**

**1.5°C**

*...by Delivering DAC facilities*



Achieving  
**1.5°C**

# The Dream Team to Cool the Planet



## Shared Success

We succeed together in an integrated, collaborative manner.

## Focus on Cost

We are relentlessly focused on reducing the cost of CO<sub>2</sub> capture using DAC technology to establish the commercial viability and competitiveness of DAC facilities.

## Innovation and Optimisation

Innovation, optimization and collaboration are key factors for success, including, and across, the DAC supply chain.

## Diversity Equity & Inclusion

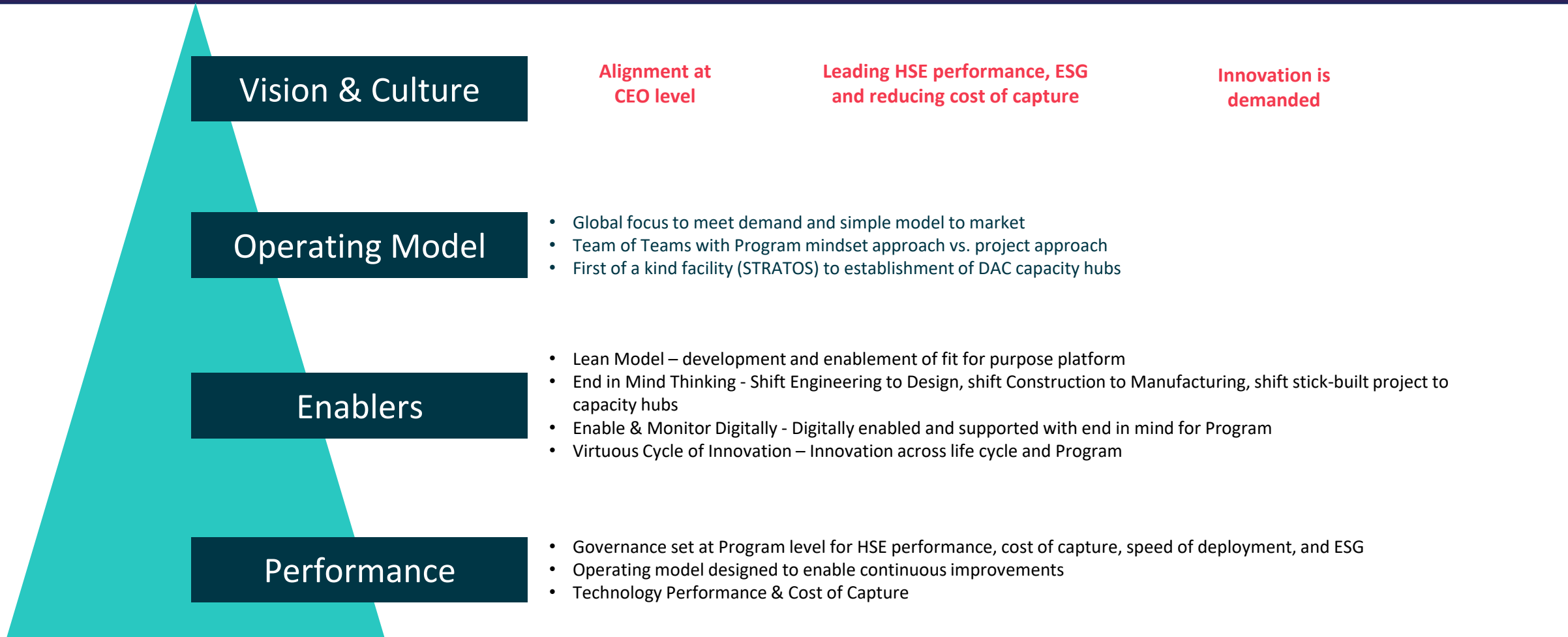
Our success relies on embracing diversity, and inclusivity, fresh ideas, and open communication in every aspect of the relationship.

## Flexibility

Maintaining flexibility is a must to enable success.

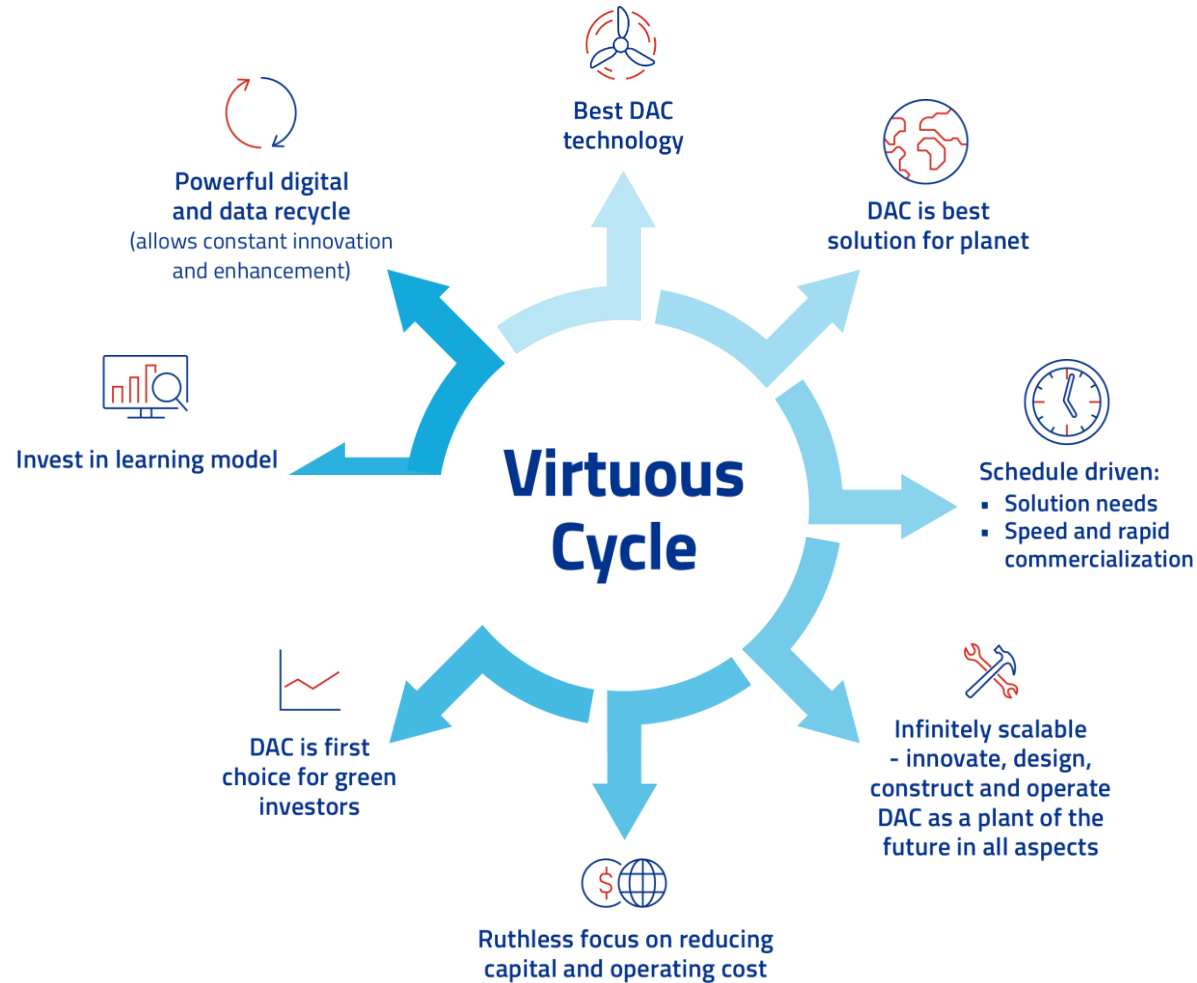


# From Ambition to Reality



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# Virtuous Cycle of Innovation



- Foundational to our focus and how we deliver innovative solutions and breakthrough results
- Each activity connects and builds on one another
- The virtuous cycle ensures we focus on the right elements continuously

**We used this program early in development to align to cost of capture impact**

# Challenging the Status Quo

## The Assumption Destruction™ Approach

### What is Assumption Destruction™ ?

A challenge framework and approach to various engineering & design outputs produced in the initial design. The approach, dubbed “Assumption Destruction™” took a non-traditional approach to achieve the following:

1. Align the project team on challenges around key disciplines and design areas that would dramatically impact the Cost of Capture and efficiency if achieved
2. Bring challengers into the project for a short period of time to help us think differently and identify alternative ways of execution
3. Challenge teams to move past incremental improvements to develop breakthrough ideas that materially impact the project in a positive way

20

20 sessions  
conducted to  
date

2,000

Over 2,000  
ideas generated

64

64 internal  
studies & many  
other related to  
vendors

122

122 ideas  
implemented

“Assumption Destruction™ used with permission of Oxy Low Carbon Ventures, LLC.”

# Tiger Teams in Action Across the DAC Program

## What is a Tiger Team?

A diverse team of different SMEs and roles that work in a non-hierarchical way anchored by a specific topic or issue.

## Why are they important to the DAC program and how do we use them?

On the DAC program, we use the tiger team concept to:

1. Rapidly accelerate the development of new approaches, processes and frameworks
2. Bring teams together from Worley, Oxy and Carbon Engineering to solve key program topics collaboratively
3. Use non-traditional approaches to design things in innovative ways

## Where have we used Tiger Teams?



# Community and Workforce Engagement

A New Era of Skilled labour



# What a “Dream Team” can do... and has done

Together with Oxy, we have disciplined teams using effective innovation methods get results that are better than current global norms.



## FOCUS

We identify the right innovation opportunities, challenges and define the innovation we intend to create before we begin experimentation



## DISRUPTION

We give people the space to be creative, disruptive and challenge... and now those concepts have become the norm and an expectation



## DIVERSITY

We use examples of analogies, trailblazers and put different people together with a wide set of ideas, backgrounds and skillsets to create new breakthrough approaches... and it is working



## IMPACT

Everything we do is brought back to the impact on cost of capture – this was something that has united the teams and is used to make sure everything we do brings value



## PURPOSE

Our teams have a greater connection to what we are doing beyond just project execution... it's about saving the world.



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DELIVERING SUSTAINABLE CHANGE



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