

28Cearth

Profitably Removing CO2 at Scale

Agenda - *15 slides in 10 Minutes*



28Qearth

1. We are a Palo Alto based technology company.
2. We started working on our technology in 2018 inside Google X.
3. We build solid sorbent Direct Air Capture machines that remove CO2 from the atmosphere.
4. We designed our DAC systems to be land and energy efficient and water positive.
5. We plan to BOO with partners - C6 well owners, waste heat and CO2 utilization partners.
6. We have a growing development stage, project pipeline in the US.
7. We plan to make money by selling products, services and carbon credits in the global VCM.
8. We are laser focused on driving down the LCOC - both CapEx and OpEx.
9. We have an experienced team, world class investors and we are exiting the VOD
10. We have raised ~\$100M todate and **we are about to start ourSeries C.**

.....We usually don't give presentations in 10 minutes.



**Materials
Scientists**

**Mechanical
Engineers**

**Product
Designers**

**Geologists
& Environmental
Scientists**

**Advanced
Software
Engineers**

**FOAK Project
Finance
Specialists**



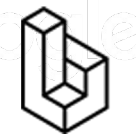
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 The
Moonshot
Factory

Google

Gideon
Yu

Large
Family
Office

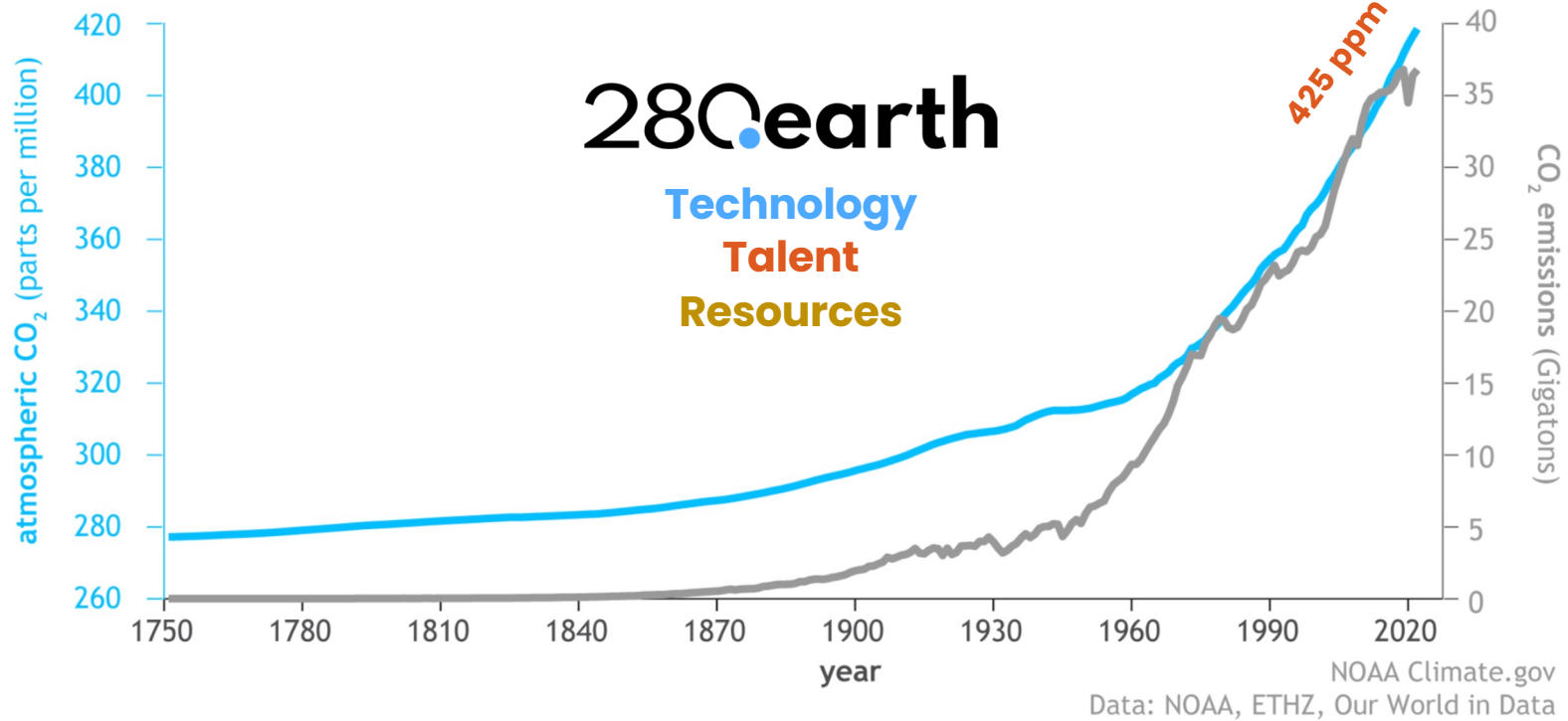


builders | vc

◆◆ Frontier

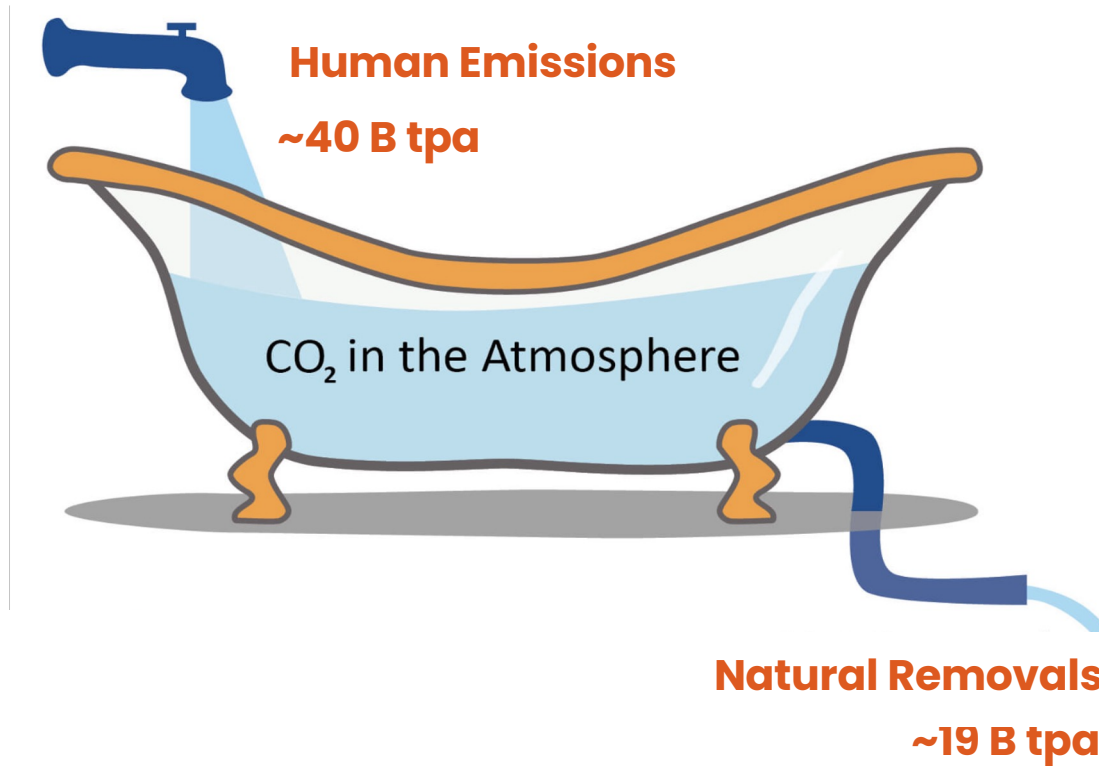
The Problem - *Climate is an existential threat*

Global atmospheric carbon dioxide compared to annual emissions (1751-2022)



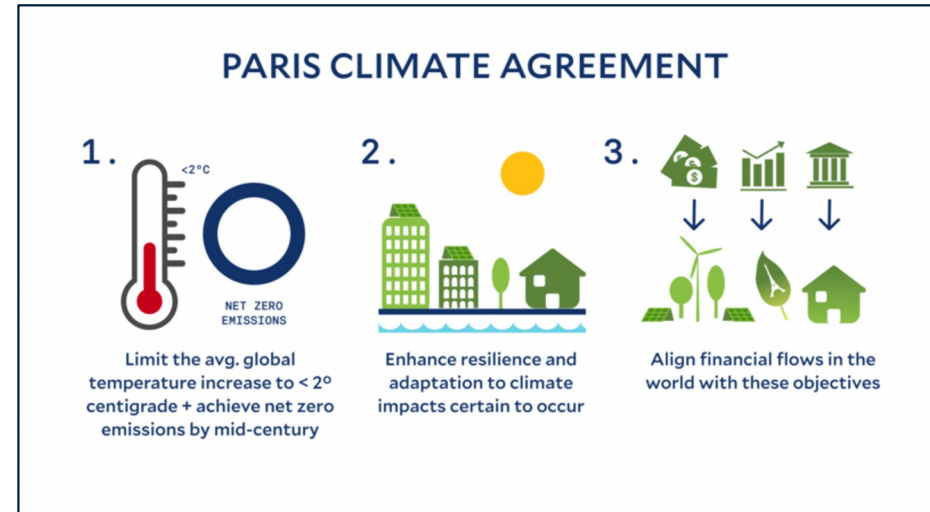
Technical and financial innovation is required to solve the problem

Reduction or Engineered Removal? - *Why not both?*



Sources: IEUA, National Geographic, OurWorldInData.org,
University of Oxford/Carbon Brief

Paris Climate Agreement - *Set the limit at 2°C - 1.5°C*

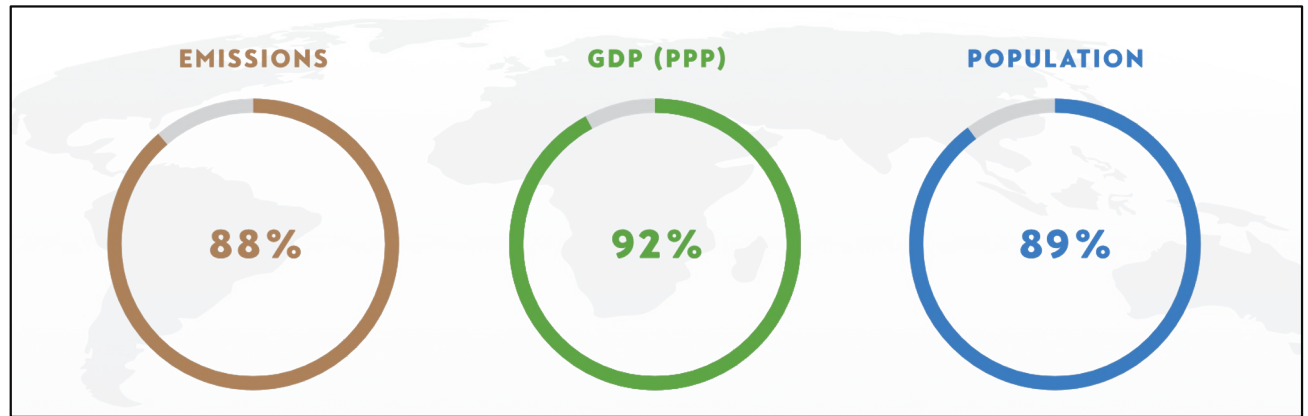
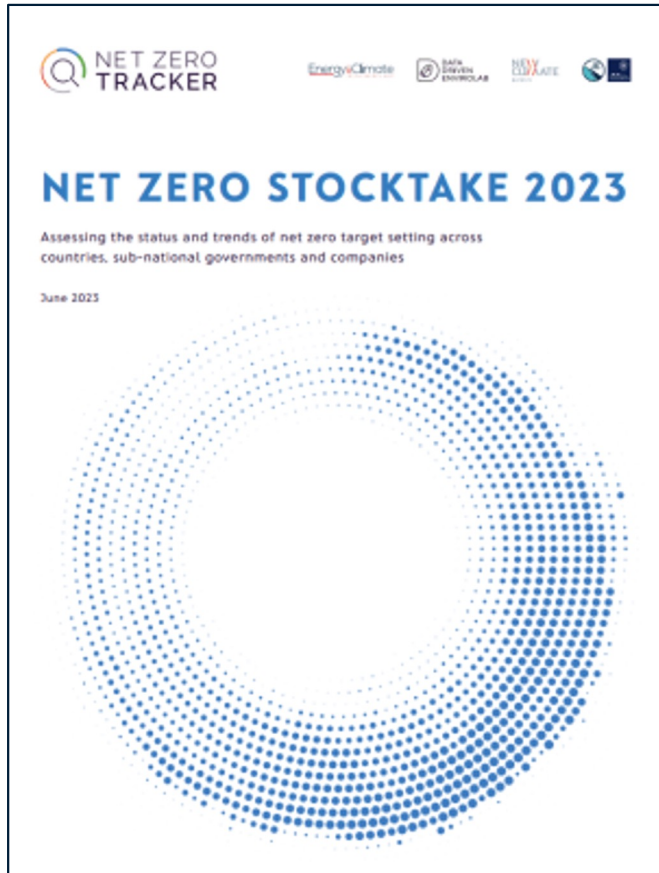


“The 1.5C threshold was the stretch target established in the Paris Agreement in 2015, a treaty in which 195 nations pledged to tackle climate change. The agreement aims to limit global warming to “well below” 2C by the end of the century, and “pursue efforts” to keep warming within the safer limit of 1.5C.”

Source [BBC](#), Yale Sustainability Report

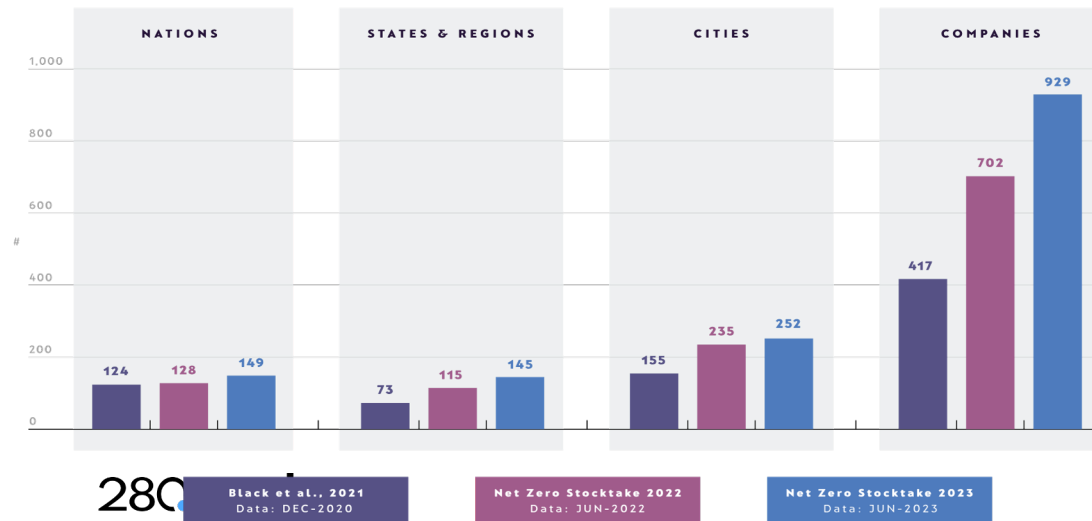


Post Paris - How are we doing on the road to net-zero?

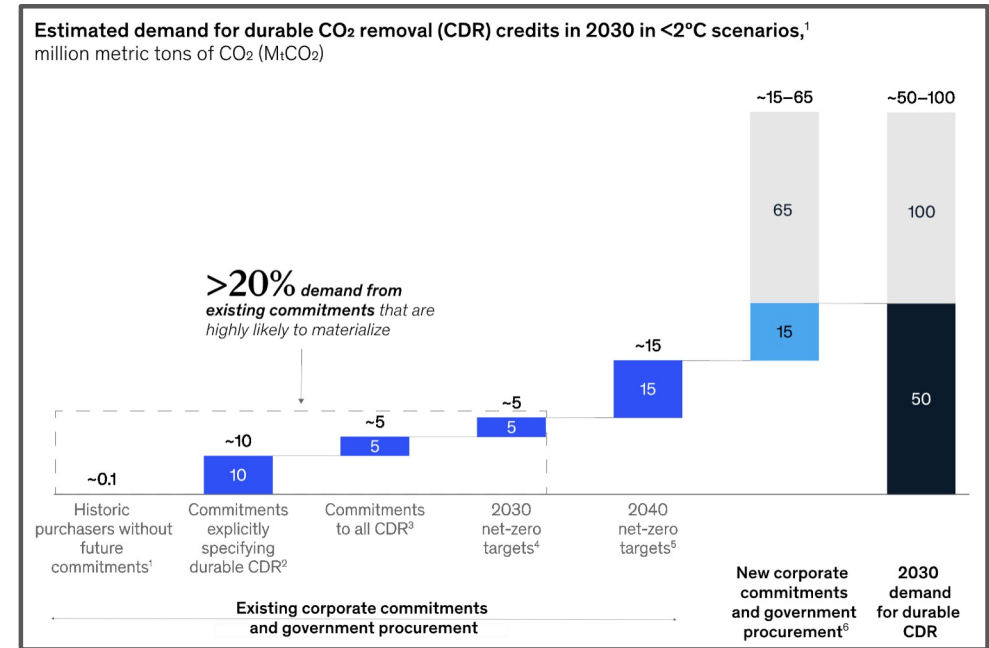
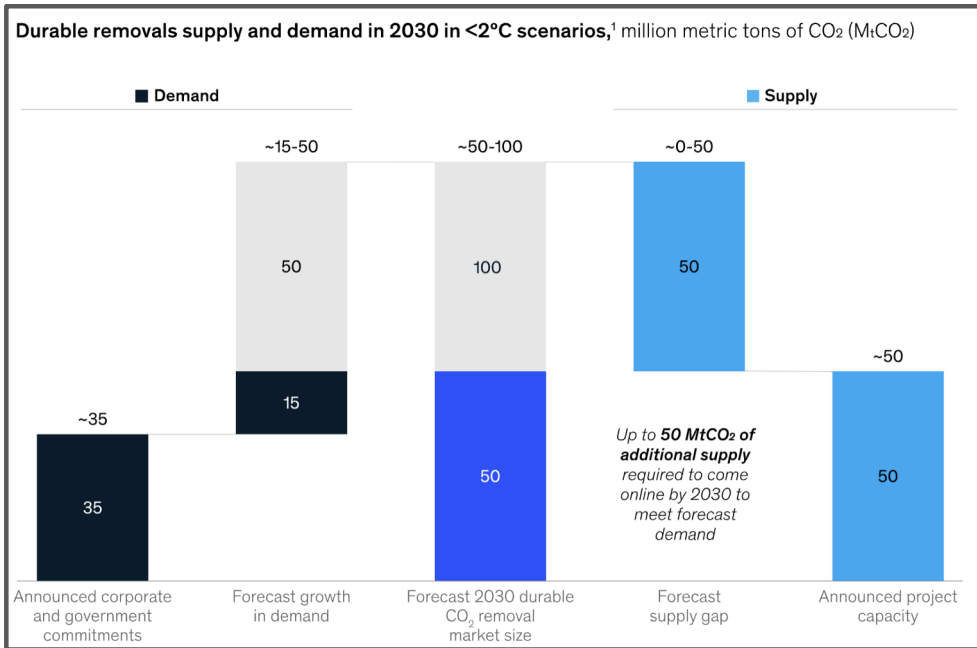


NET ZERO TARGET SETTING

Comparing net zero target numbers over the last two and a half years.

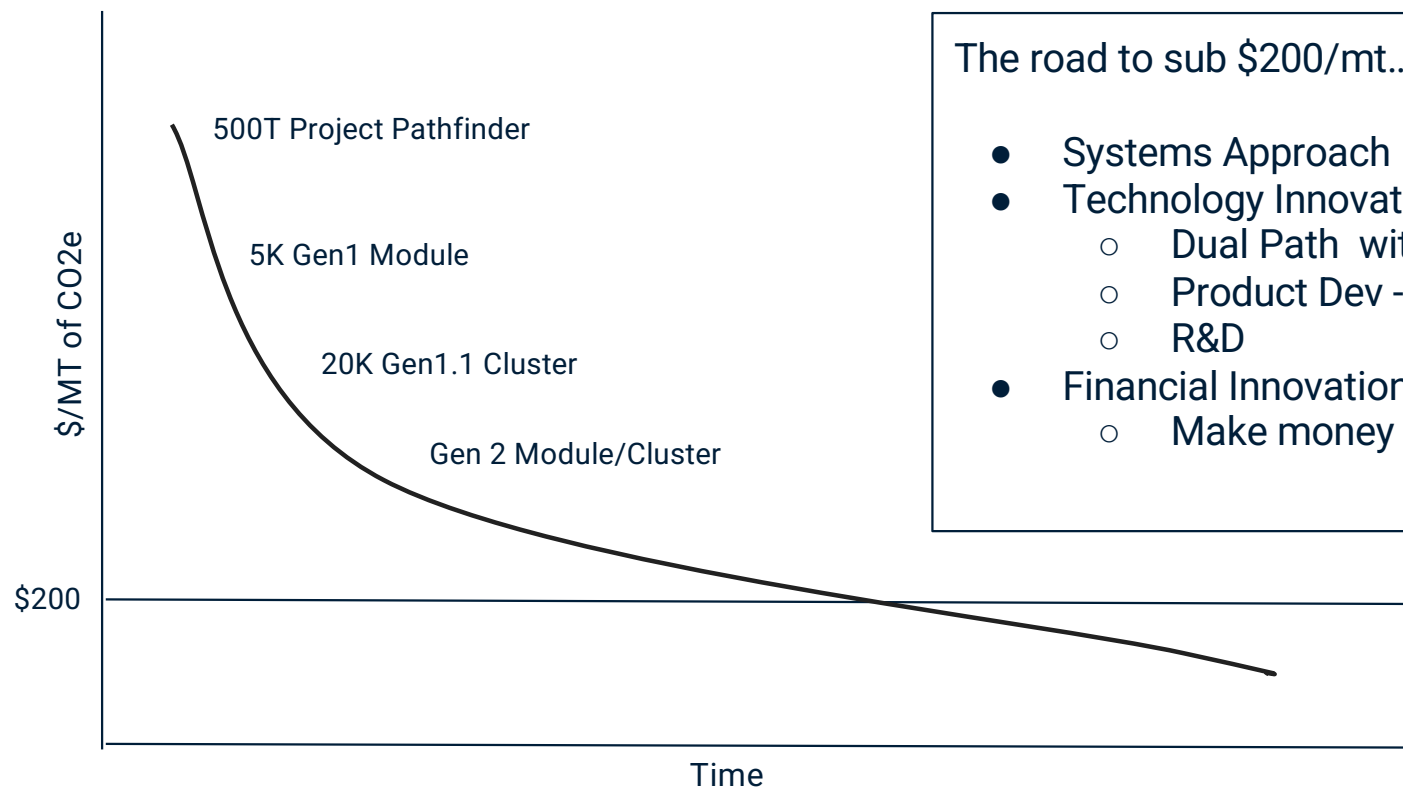


The Demand for durable CDR is greater than Supply



Sources: [McKinsey Sustainability Report](#)

Levelized Cost of Capture Curvedriving toward sub \$200/mt

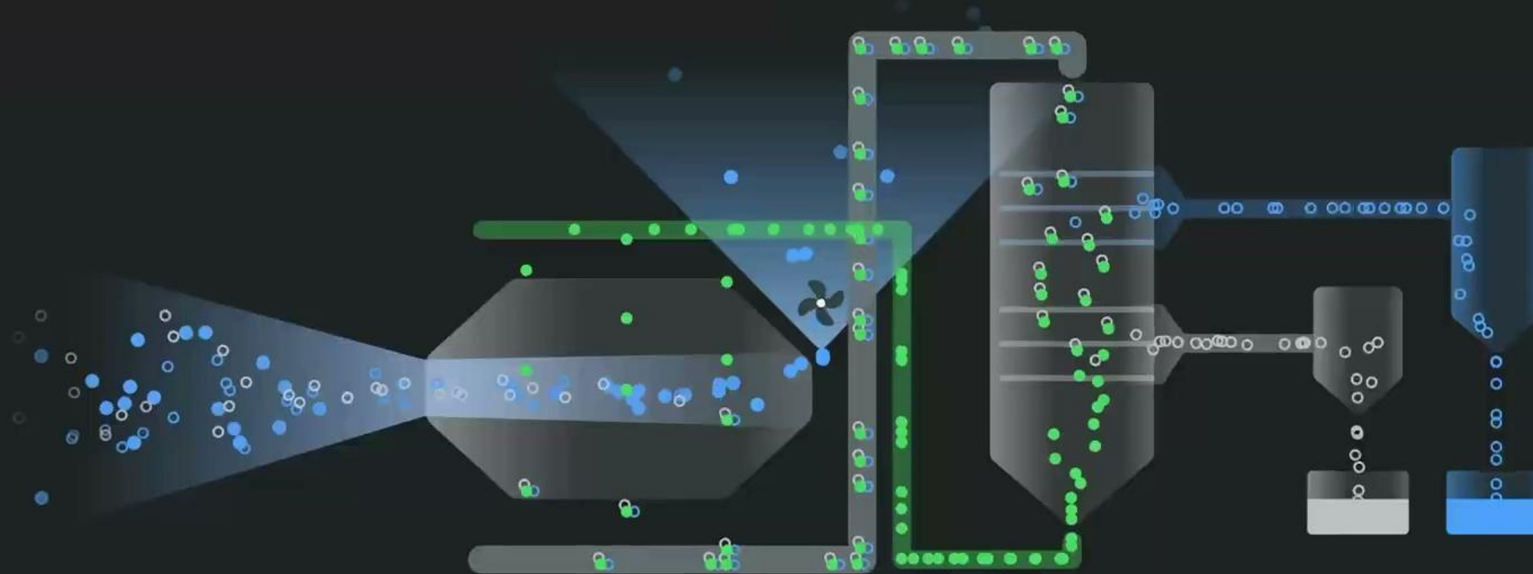


The road to sub \$200/mt....

- Systems Approach
- Technology Innovation
 - Dual Path with Feedback Loop
 - Product Dev - Modules & Clusters
 - R&D
- Financial Innovation
 - Make money along the way.

How It Works

- Air
- CO₂
- Water
- Sorbent



STEP 1

Air Intake

Using large fans, air is pulled into the DAC system.

STEP 2

Adsorption

CO₂ in the air attaches to our sorbent, a solid compound that has been designed for the process.

STEP 3

Desorption

The sorbent is moved into a separate vacuum chamber and heated, separating the CO₂ from the sorbent.

STEP 4

Storage & Usage

CO₂ is removed, and may be used in products or permanently stored underground.

Project Pathfinder – Will scale to 20K–40K TPA



28Qearth

Experienced Team

Scalable Technology / LCOC

Growing Underserved TAM

World Class Investors

Starting Series C



280earth

For more information:

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Greg@280.earth

Thank You



A large industrial building under construction, featuring a prominent steel frame structure. A yellow crane is positioned on the left side, and a blue lift truck is visible inside the structure. The scene is set against a clear blue sky with scattered clouds. The ground is dirt, and there is some vegetation on the right side.

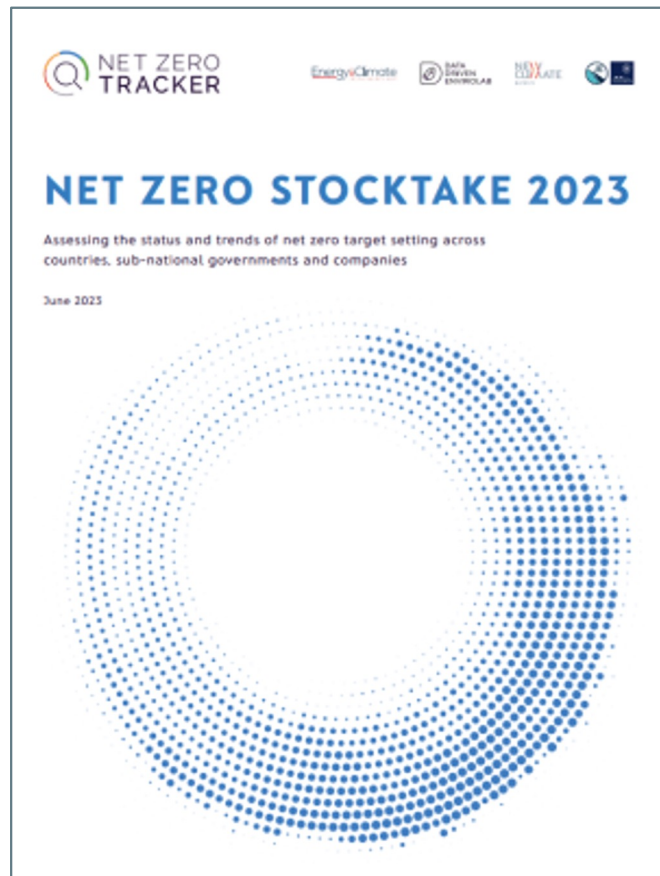
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Appendix

September 2024



Post Paris - *How are we doing on the road to net-zero?*



Of the 4,000+ entities we currently track, at least 1,475 have a net zero target, up from 769 in December 2020, and up from 1,180 twelve months ago:

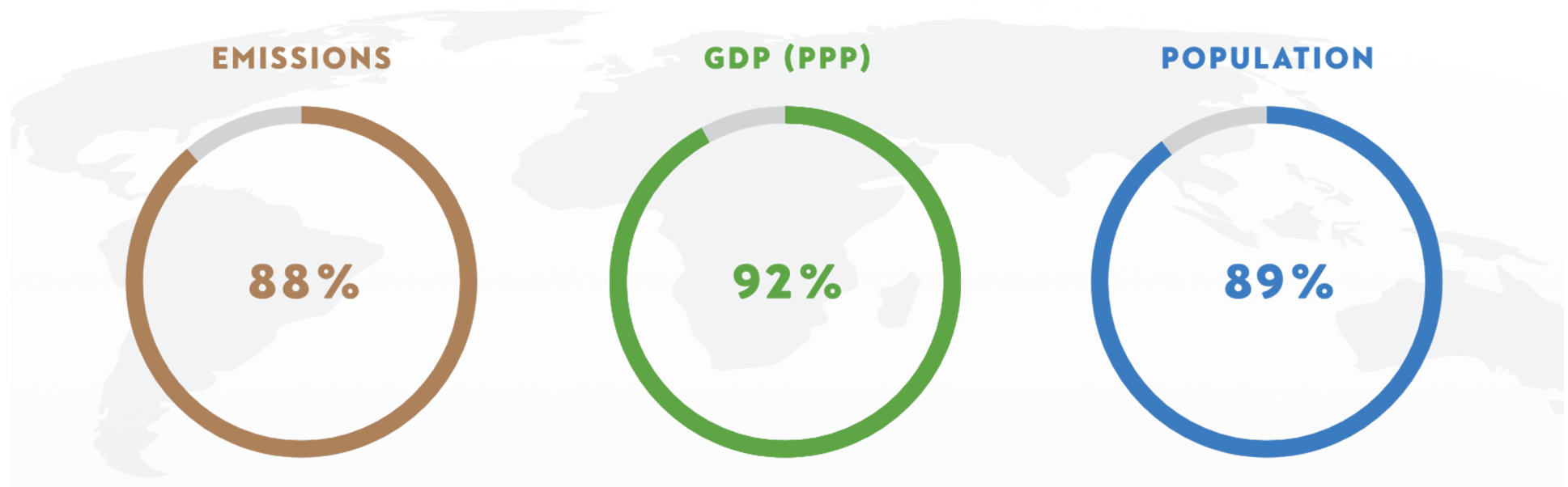
- 149 countries including the EU and Taiwan, up from 124 in December 2020
- 145 states & regions, up from 73
- 252 cities, up from 115
- 929 publicly-listed companies from the Forbes Global 2000, up from 417

Most large economies and emitters have some variation of a net zero target, including 19 members of the G20. Country-level targets (including the European Union and Taiwan) now represent:

- 92% of global GDP (PPP), up from 68% in December 2020
- 88% of global GHG emissions, up from 61%
- 89% of the global population, up from 52%

Sources - [Net Zero Tracker - 2023 Stocktake Report](#)

Post Paris - *How are we doing on the road to net-zero?*

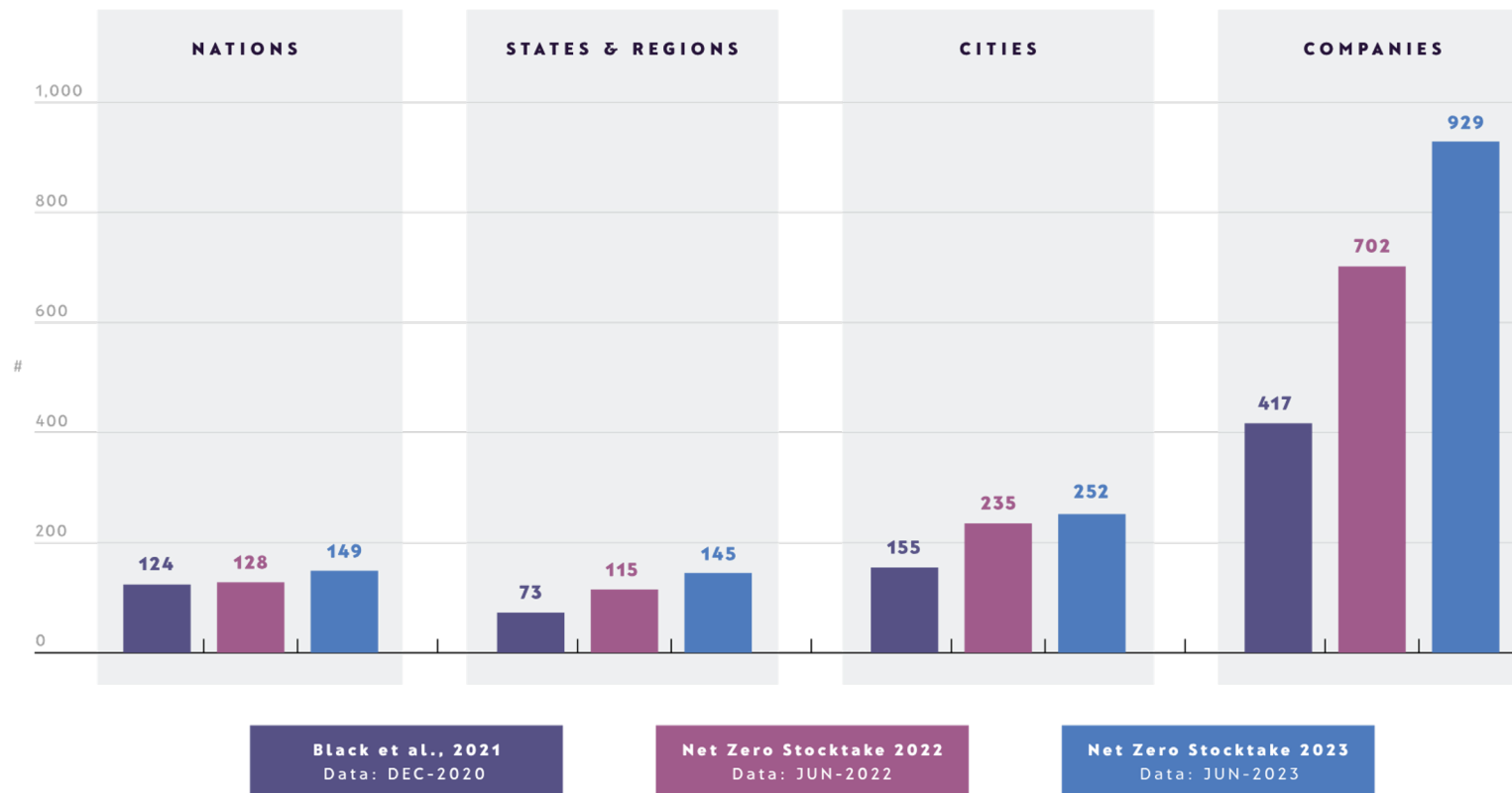


Sources - [Net Zero Tracker - 2023 Stocktake Report](#)

Post Paris - *How are we doing on the road to net-zero?*

NET ZERO TARGET SETTING

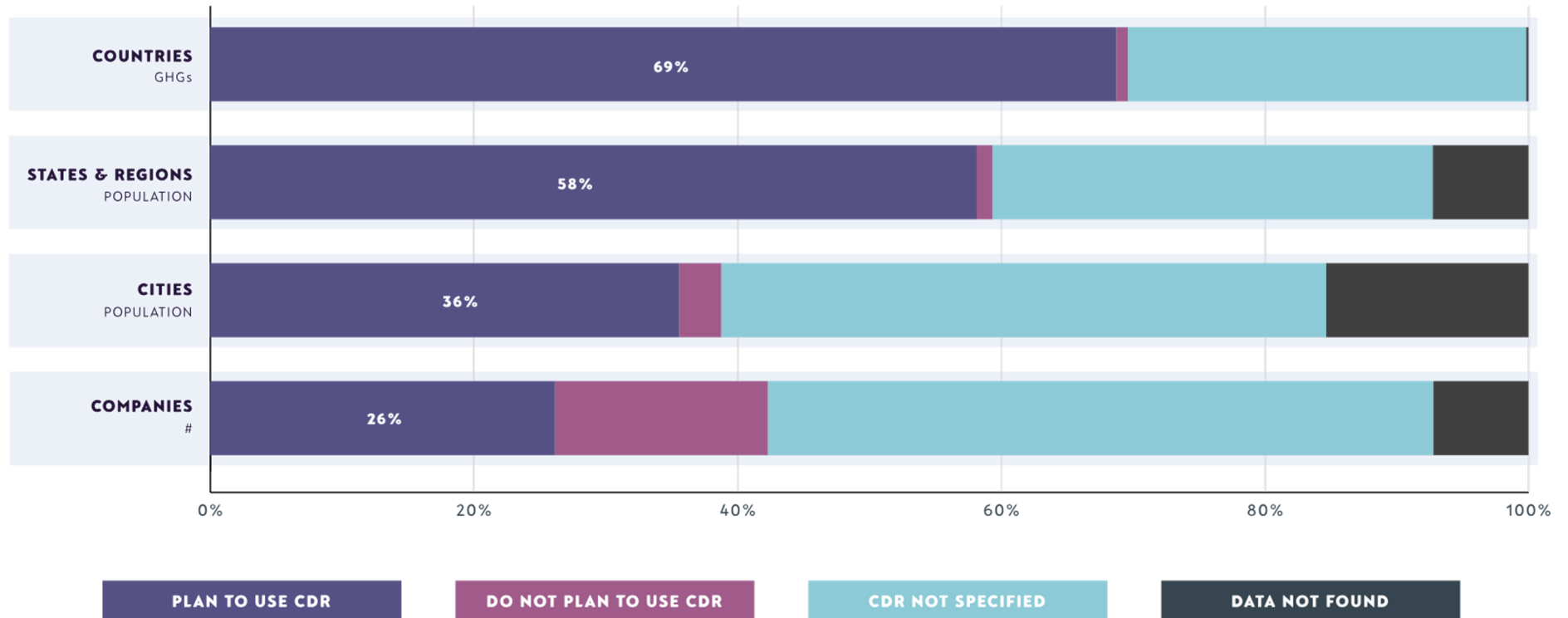
Comparing net zero target numbers over the last two and a half years.



Post Paris - How are we doing on the road to net-zero?

PLANNED USE OF CARBON DIOXIDE REMOVAL (CDR)

Comparing the intended use of CDR across countries, states and regions, cities, and companies.

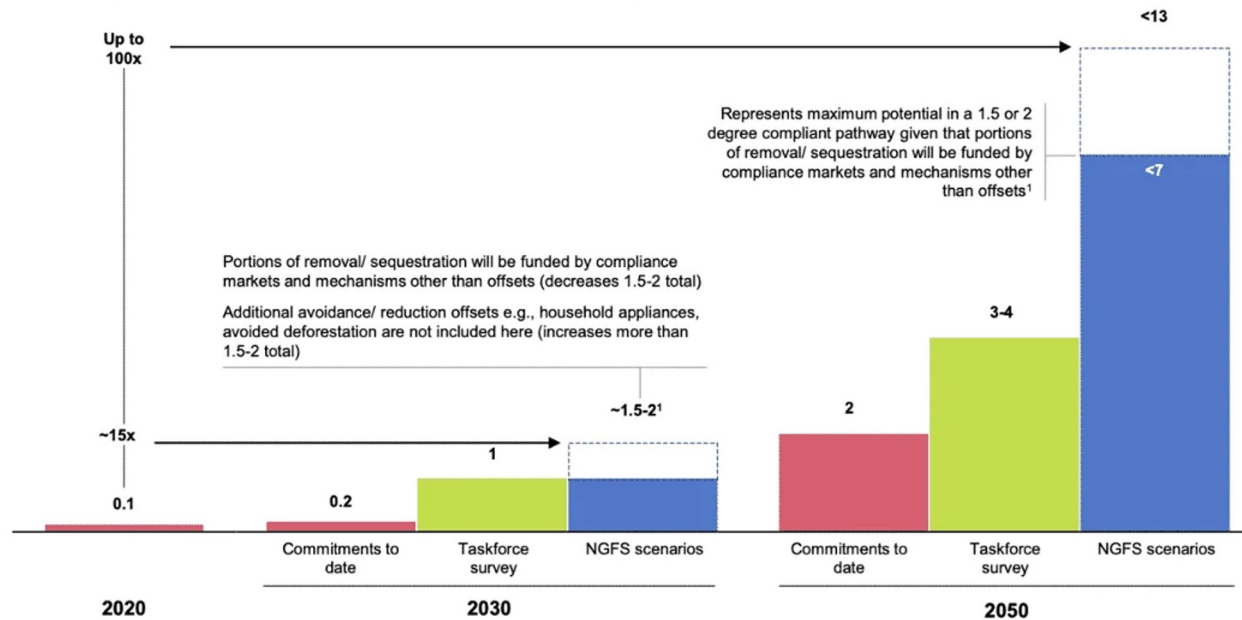


To meaningfully support a 1.5C pathway, voluntary carbon markets need to grow by >15x by 2030

Taskforce survey projects 1 Gt in 2030 and 3-4 Gt in 2050

□ Represents NGFS Immediate action 1.5C pathway with CDR

Voluntary demand scenarios in 2030 and 2050, GtCO₂ per year



1. We note that compliance markets will likely grow over time as regulatory requirements (national and sectoral) increase

Source: McKinsey, Network for Greening the Financial System (NGFS)

Commitments to date:

Demand that has been established by climate commitments of more than 700 large companies. This is a lower bound as it does not account for likely growth in commitments

Taskforce survey:

Projected offset demand envisioned by subject matter experts within the Taskforce on Scaling Voluntary Carbon markets (i.e., sits between upper and lower bound)

NGFS scenarios:

Removal/ sequestration required in 1.5-degree and 2-degree NGFS climate scenarios in 2030 and 2050.

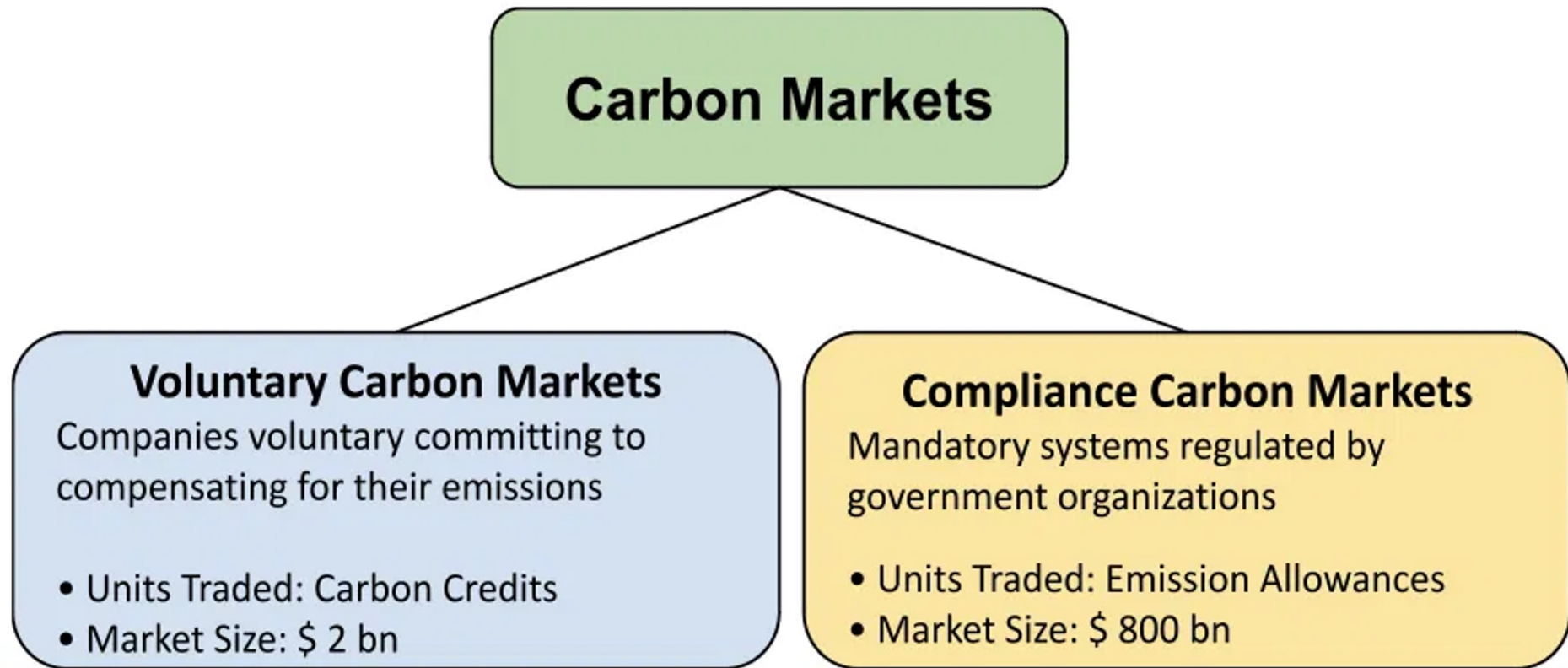
This is an upper bound in 2050 as it assumes that all removal/ sequestration is supported by voluntary offsets whereas in reality it will be made up by a mix of voluntary and compliance markets as well as mechanisms other than offsets

Note:

This analysis (i) does not take into account the split of credits that will be traded in compliance vs. voluntary markets;

(ii) is built on a starting assumption that the world is compliant with a 1.5 or 2 degree pathway

Post Paris - *How are we doing on the road to net-zero?*



Source - [Illuminem](#)

Carbon Markets:

Compliance Carbon Markets

Mandatory systems regulated by government organizations to cap emissions for specific industries.



Compliance
\$899B

Market size
2021

Voluntary Carbon Markets

Where carbon credits can be purchased by those that voluntarily want to compensate for their emissions.



Voluntary
\$2B

Source: Global
Emissions Markets

As demand to cut emissions intensifies, voluntary carbon market volume has grown five-fold in three years.

