

Capture the **opportunity**

Gianni Spinelli
Head of Carbon Removals Origination



Enabling a zero carbon, lower cost energy future

We have a history of putting sustainability first, and our strategy ties commercial success to delivering three outcomes: climate positive, nature positive & people positive



Transforming Western Europe's largest coal-fired generator into its largest decarbonisation project



99% reduction in Scope 1 & 2 CO₂ intensity since 2012



On track to be a carbon negative company by 2030

Drax: A global leader in carbon removals

Tackling climate change while advancing sustainability is at the heart of our purpose.

Using bioenergy with carbon capture and storage – BECCS - we're creating opportunities for businesses to advance their environmental goals while delivering positive global change.

40+ years

of experience in power generation,
bioenergy pioneering and
decarbonisation partnerships

14Mt

of CO₂ removed every year by
2030 with our international
BECCS plants

12TWh

of power generated by our
BECCS plants in the US and the
UK by 2030





UK

- 8Mt per year of carbon removals at Drax Power Station by 2030
- Testing a number of carbon capture technologies since our first trial in 2018

North America

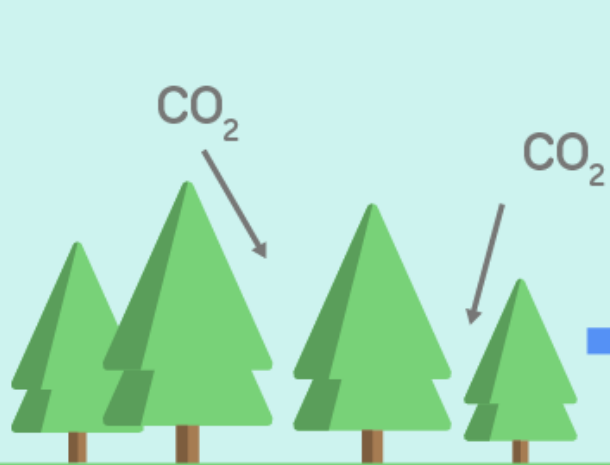
- Two Bioenergy Carbon Capture and Storage (BECCS) plants selected in US South, targeting Financial Investment Decision in 2026 and operational by 2030
- Will deliver 6Mt of Carbon Dioxide Removals (CDRs) in total every year by 2030
- An additional nine sites under evaluation
- Each site requires significant investment and creates 5,000+ permanent jobs

How BECCS removes carbon from the atmosphere



Step one

Working forests are thinned and managed to increase health and ensure maximum carbon absorption



Step two

Biomass pellets are produced from forest waste and residues.

Sawmill



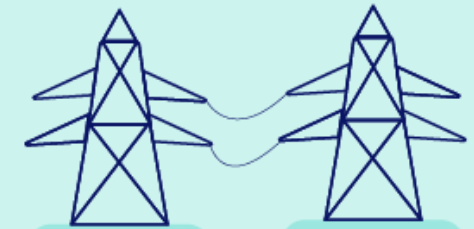
Step three

24/7 dispatchable renewable power is generated, and CO₂ from the trees separated from the flue gas.

BECCS



Dispatchable renewable power

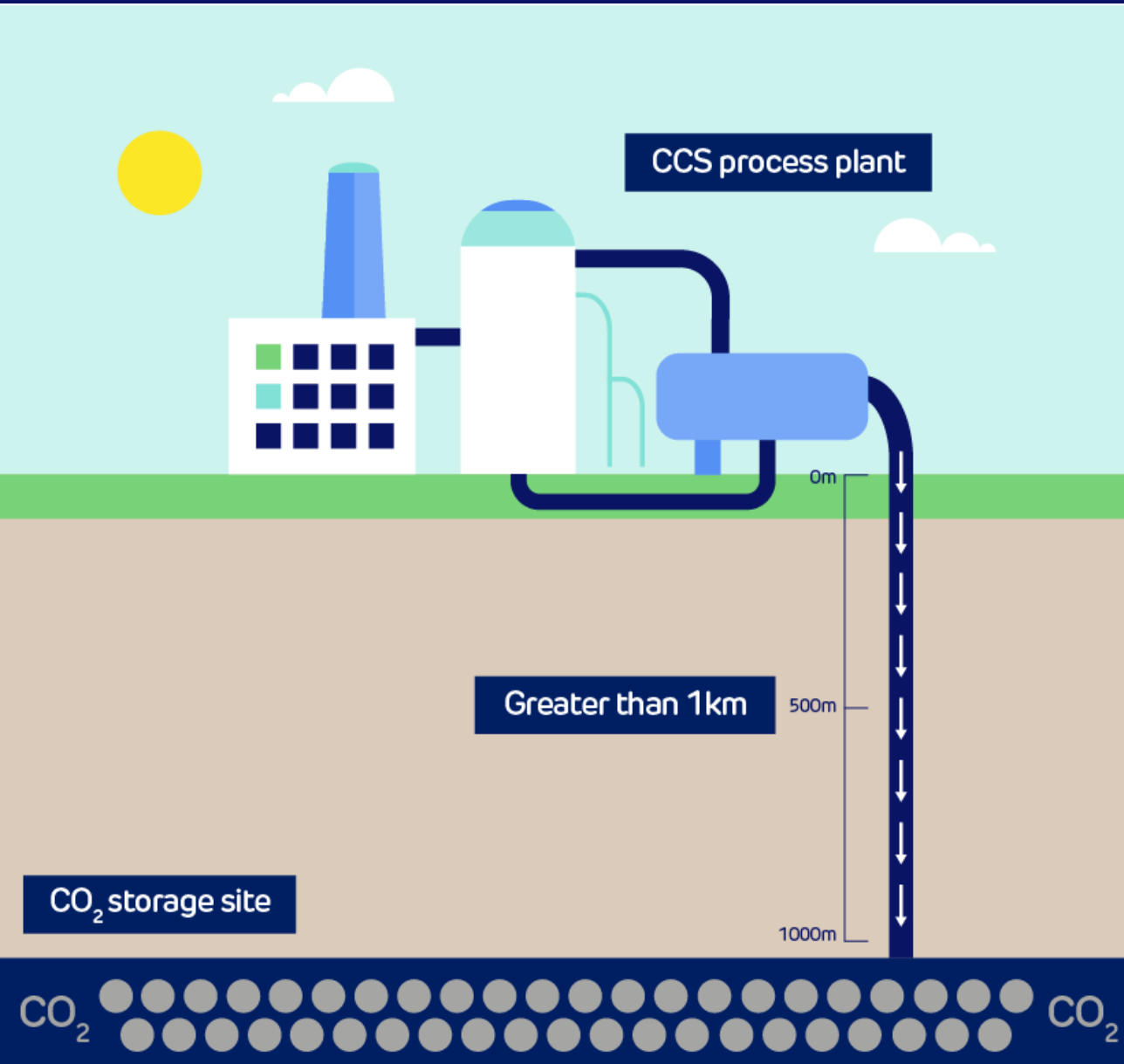


Step four

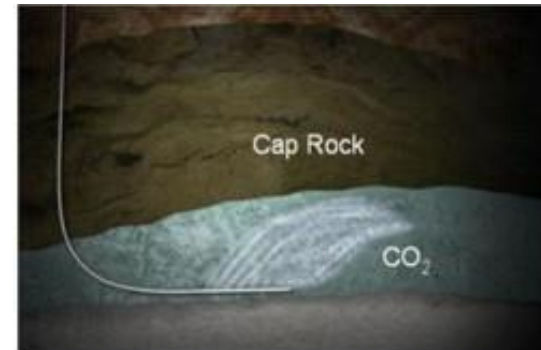
The BECCS technology captures and permanently stores CO₂ underground



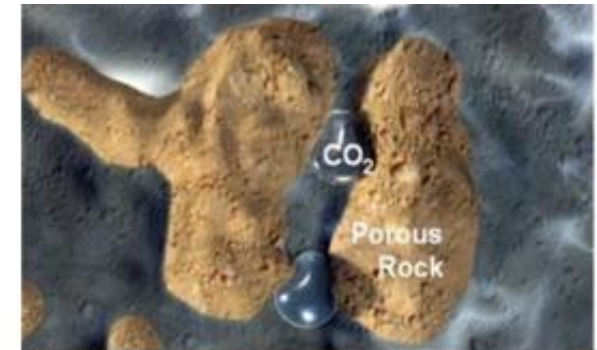
Storing CO₂ permanently and safely in geological formations



Trapping mechanisms



Structural/Stratigraphic



Residual



Solubility



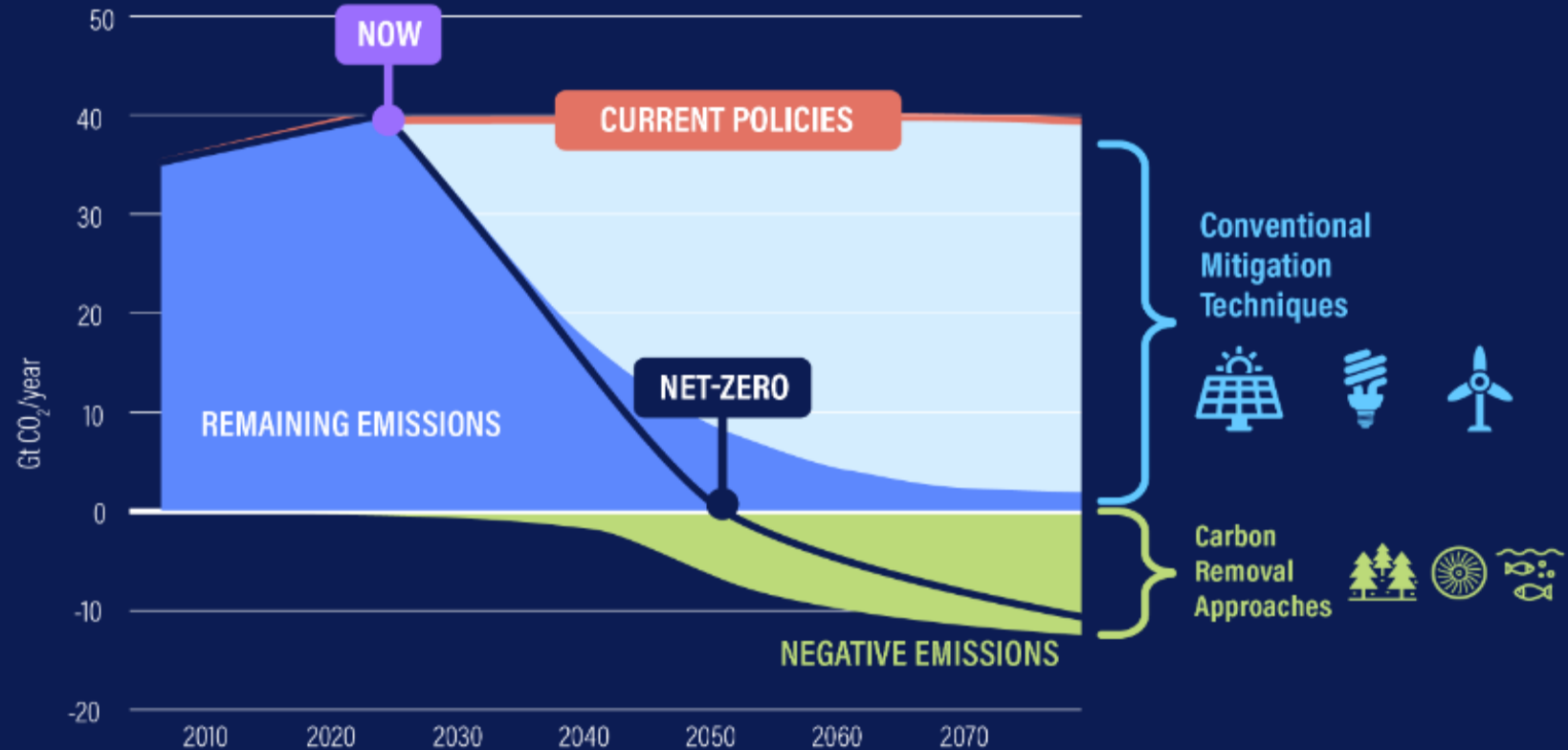
Mineral

Zhao et al., 2014

Carbon neutrality requires both emissions reductions and carbon removals



STAYING BELOW 1.5 DEGREES OF GLOBAL WARMING



Source: WRI.



It's critical that we all:

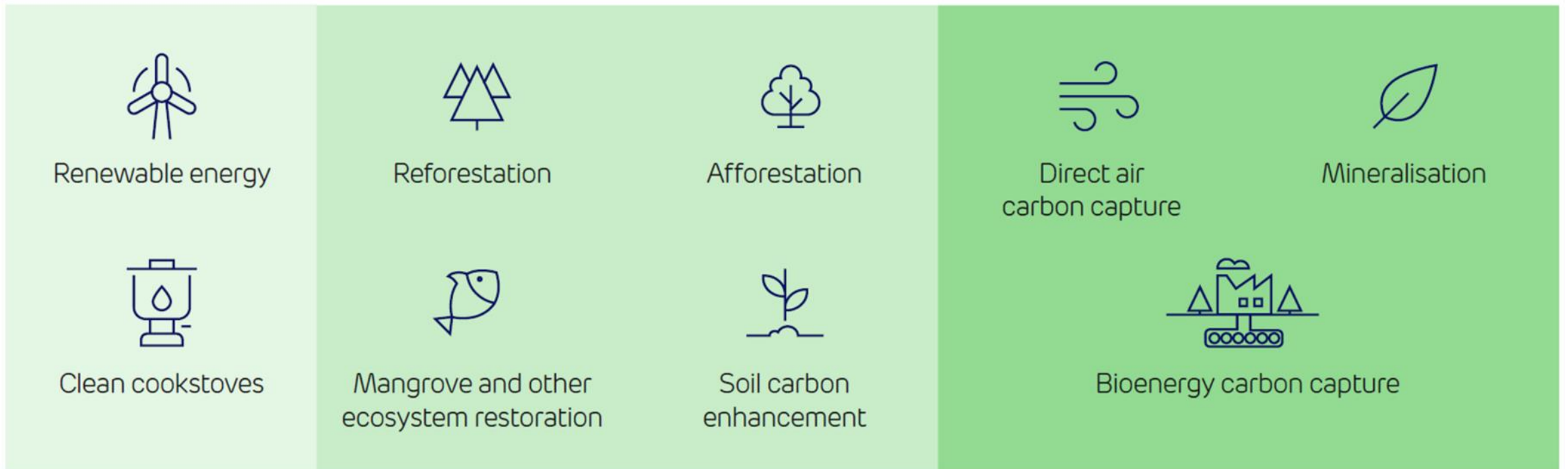
- A Reduce emissions as quickly as possible
- B Invest now in carbon removal projects.

Decarbonisation projects produce either reduction or removal credits



BECCS is a permanent carbon removal technology. It stores carbon securely underground in naturally occurring geological formations for 1,000+ years.

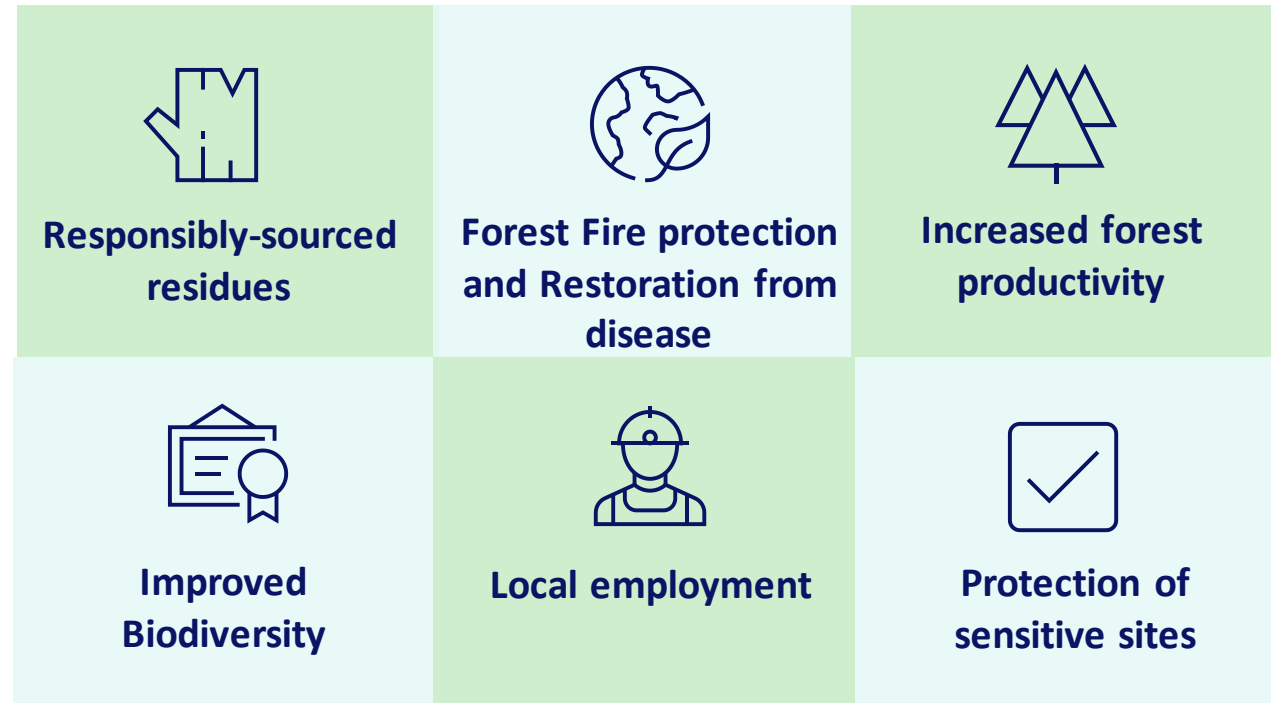
Reduction (avoidance) methods → Removal methods with mid and long-term storage → Removal methods with long-term and permanent storage





BECCS begins with photosynthesis, using well-managed working forests that capture carbon dioxide as they grow.

We source sustainable biomass from forests that are well regulated to ensure positive people, nature and climate outcomes.



Healthy managed forests deliver sustained ecological, economic and social outcomes.

Thank you

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