

**25 March 2024**

## **INVESTOR PRESENTATION**

Dotz Nano Limited (ASX: **DTZ**, **Dotz** or the **Company**) provides the following, updated Investor Presentation for the information of shareholders in the Company, investors and other interested parties.

Copies of the Investor Presentation can also be downloaded from the Company's website.

**-ENDS-**

This announcement has been authorised for release by the Board of Dotz Nano Limited.

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### **About Dotz Nano Limited**

Dotz Nano Limited (ASX: DTZ) is a nanotechnology company developing innovative climate and industrial nano-technologies.

The Company's primary focus is centered around ground-breaking carbon dioxide (CO<sub>2</sub>) management technologies leading towards carbon-neutral future. The company's proprietary carbon-based solid sorbent, offering an efficient and sustainable approach, facilitating industrial deep decarbonization.

To learn more about Dotz, please visit the website via the following link: [www.dotz.tech](http://www.dotz.tech).



# **Nanotechnology Powering Industry and Environment**

**Dotz Nano Limited [ASX:DTZ] Corporate Deck**

**March 2024**



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# Dotz at a glance.

- ✓ **VALIDATED** PROPRIETARY TECHNOLOGIES
- ✓ **ATTRACTIVE** TARGETED MARKETS
- ✓ **EXPERIENCED** TEAM
- ✓ **STRATEGIC** PARTNERSHIPS
- ✓ **CLEAR** GROWTH PATHWAYS



## Partners & Supporters



SINTEF



RICE UNIVERSITY

STARTUP  
NATION  
CENTRAL



PLANETech  
Climate Change Technologies



GLOBAL CCS  
INSTITUTE



SIBF



# Experienced leadership team with proven experience in leading growth and value.

## EXECUTIVE TEAM



**Sharon Malka**

CEO



**Michael Shtein, Ph.D.**

Founder, CTO



**Liat Bar Ziv Alperovitz**

CFO



**Shirley Shoshaney-Kleiner**

CMO

## BOARD OF DIRECTORS



**Bernie Brookes**

Chairman



**Doron Eldar**

Director



**Kerry Harpaz**

Director



**Glenn Kelly**

Director



**Mitchell Board**

Director

# dotz.EARTH

## CO<sub>2</sub> Capture



An urgent problem



A large and growing market



Superior technology



The right time



📌 An urgent problem

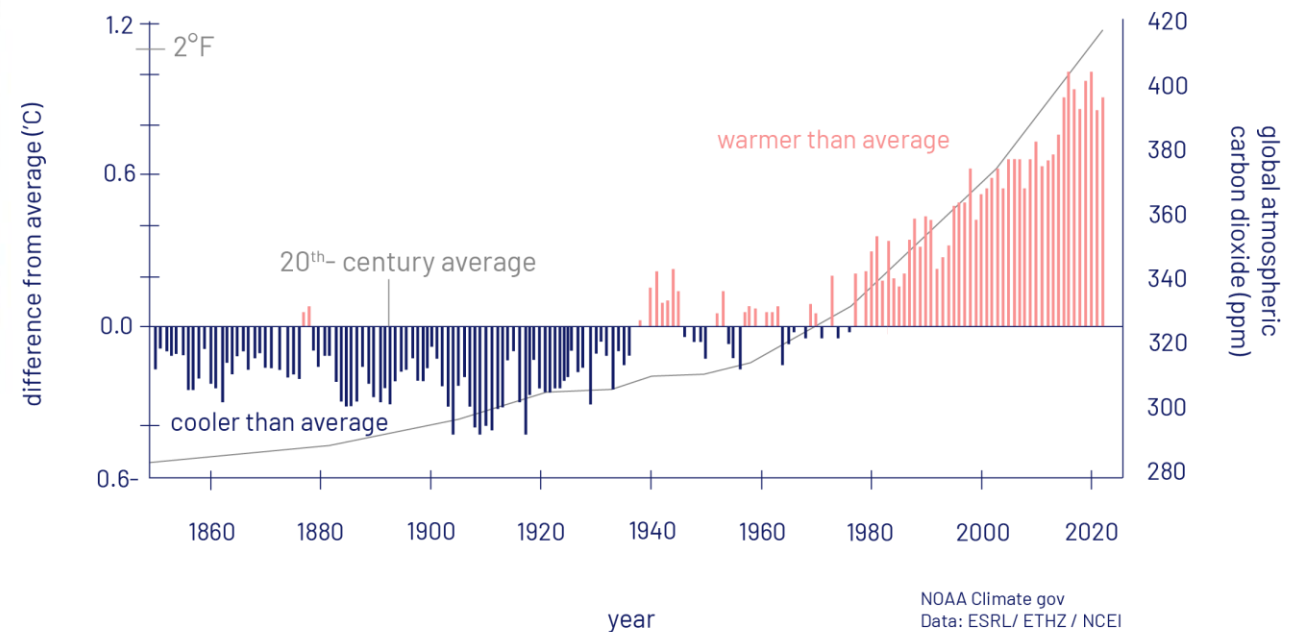
# Fossil fuel increases CO<sub>2</sub> concentration in the atmosphere resulting in global warming and catastrophes....

Average global temperatures  
have already risen

1.2°C

due to increasing atmospheric CO<sub>2</sub>  
concentration

Yearly global surface temperature and atmospheric carbon dioxide (1850-2022)

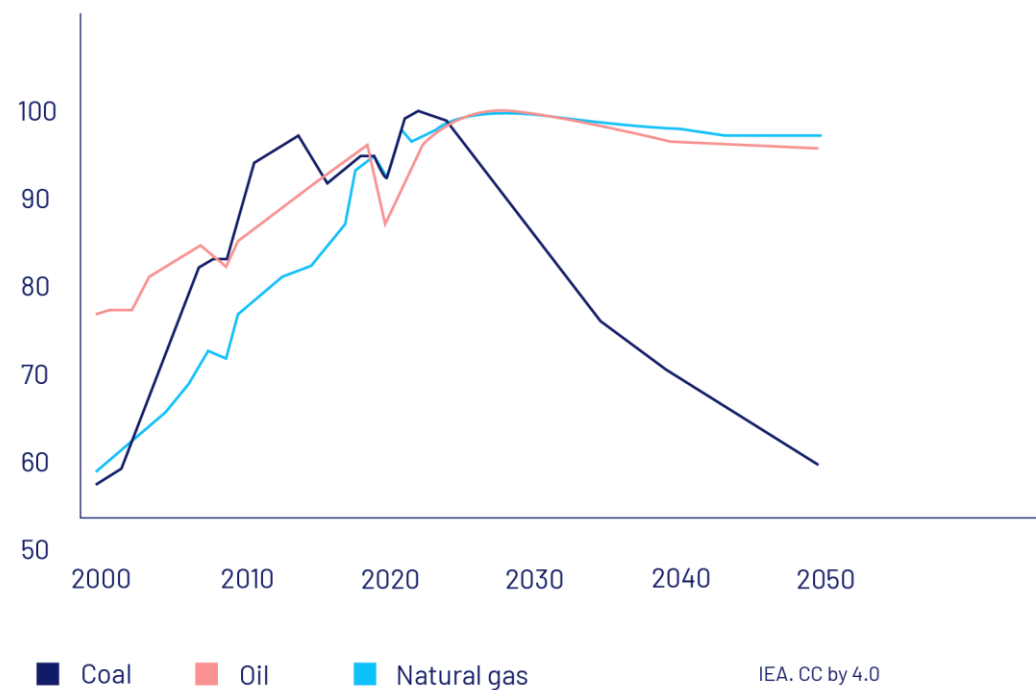


📁 An urgent problem

**...While remaining a key energy source for years to come, carbon capture plays pivotal role in energy transition.**

Fossil fuel use  
will remain  
**A major**  
energy source

Fossil fuel consumption by fuel in the STEPS, 2000-2050



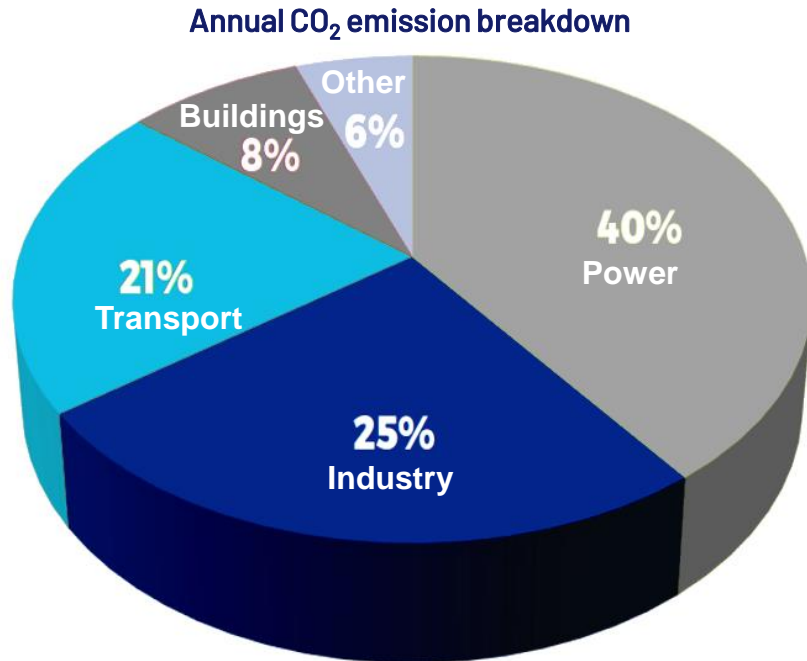
Source: International Energy Association

IEA. CC by 4.0



🕒 A large and growing market

# Energy combustion and industrial processes account for ~65% of global CO<sub>2</sub> emissions.



Source: International Energy Association, Net Zero by 2050

## Target markets



Power Generation



Cement



Iron & Steel



Chemical & Petrochemical



Aluminum

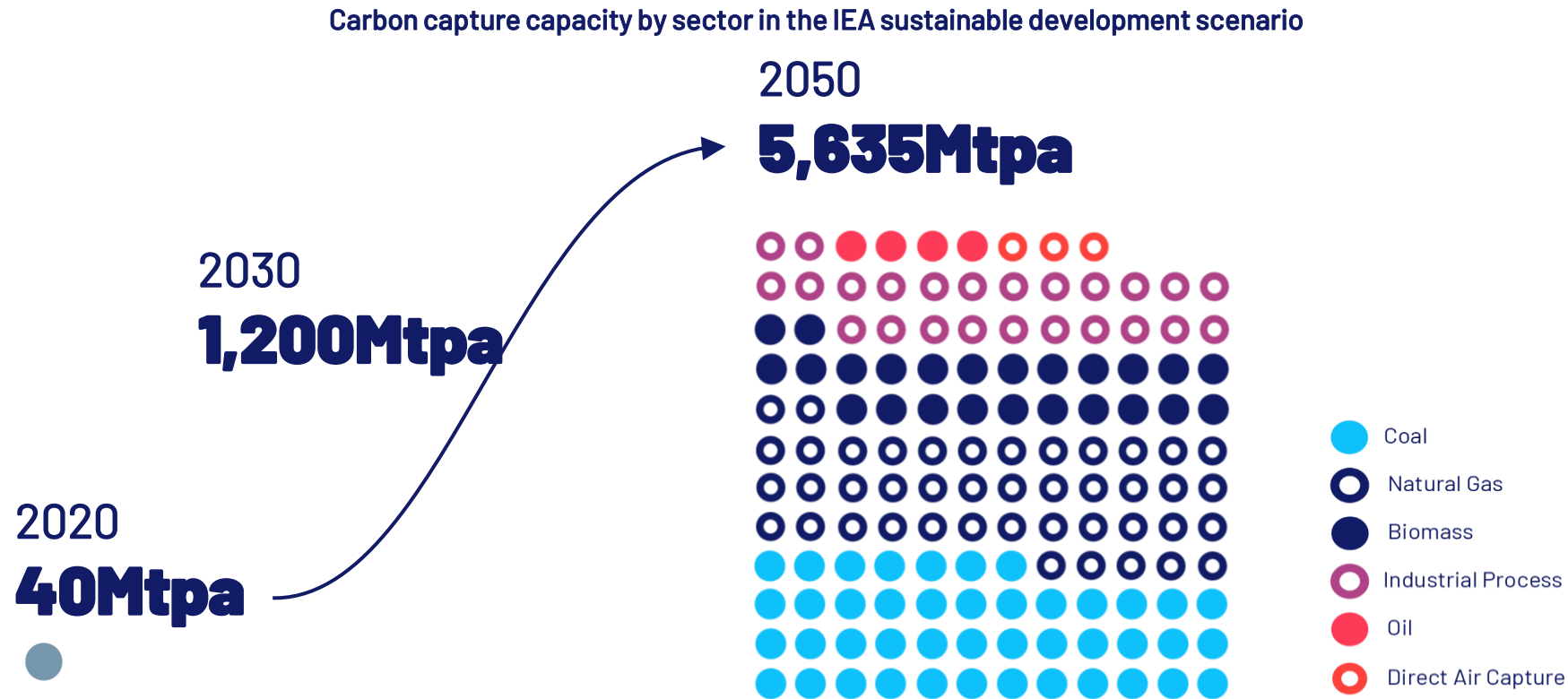


Pulp & paper

And more

📈 A large and growing market

# Carbon capture capacity must grow 140x from today to limit temperature rise to 1.5°C.



Source: International Energy Association

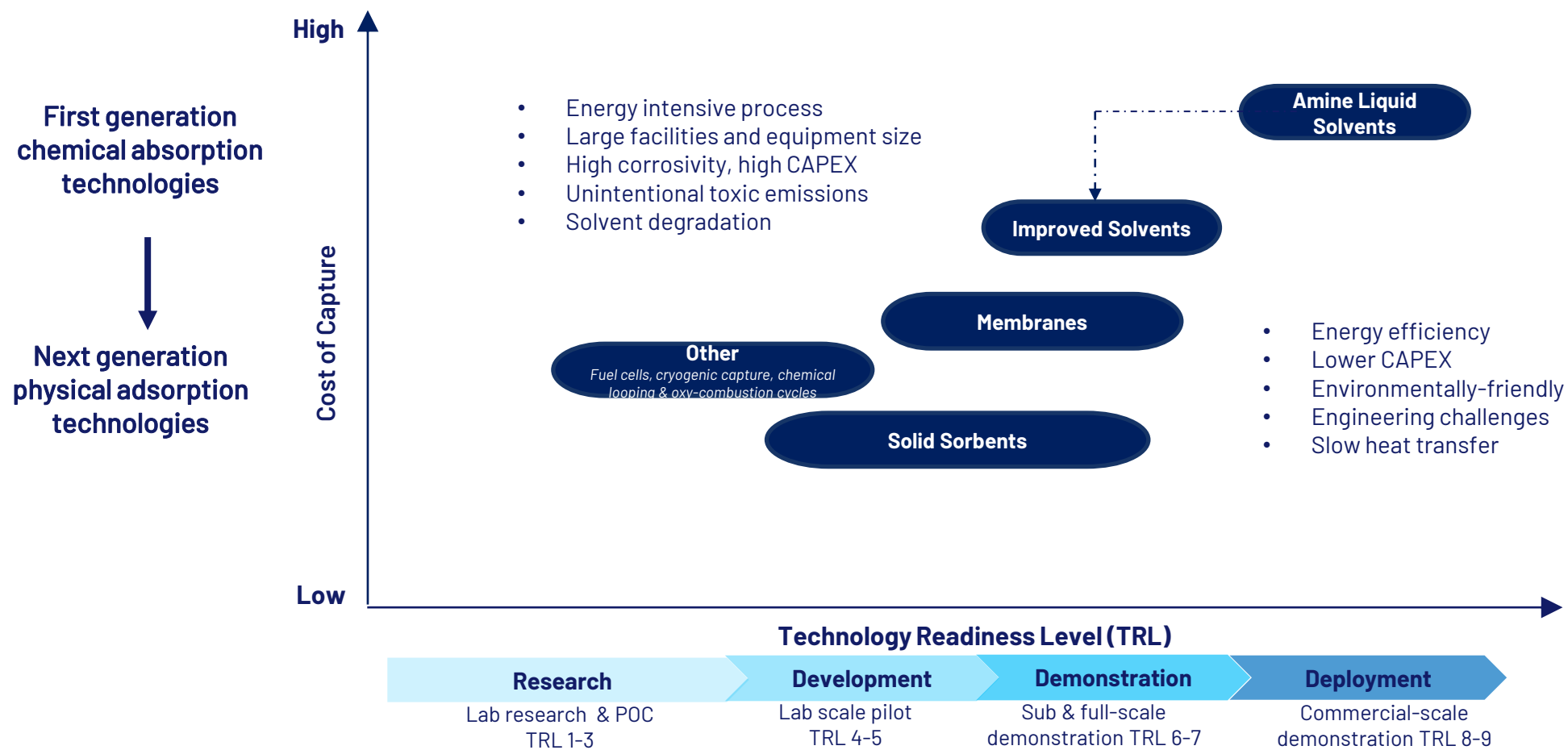
 A large and growing market

**“CARBON CAPTURE REPRESENTS  
AN ADDRESSABLE MARKET OF  
NEARLY \$100 BILLION BY 2030  
AND \$600 BILLION BY 2050 JUST  
IN THE UNITED STATES.”**

David Crane Director, Office of Clean Energy Demonstrations

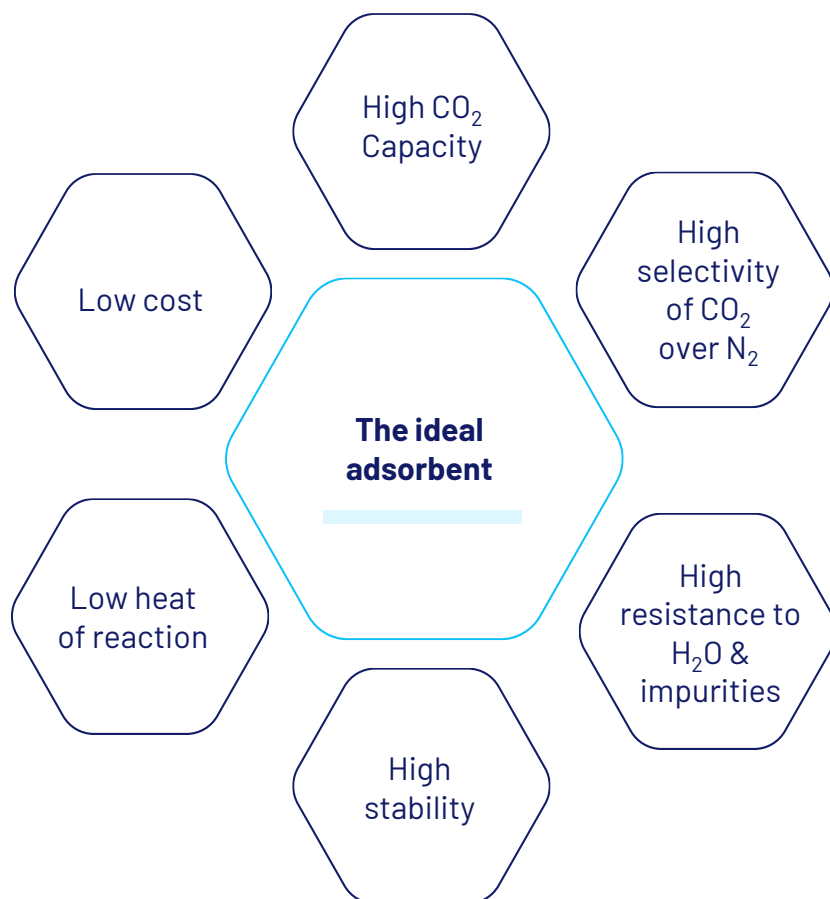


# Energy efficiency, resistance to degradation and low cost, make solid sorbents ideal for carbon capture.

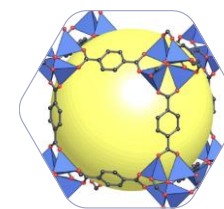




# Porous carbon excels in cost-efficiency and resistance to impurities.

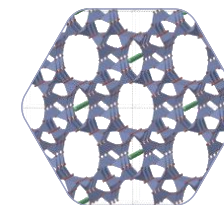


## Metal organic frame-work



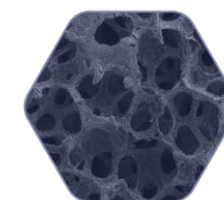
- CO<sub>2</sub> capacity
- Selectivity
- H<sub>2</sub>O resistant
- Expensive

## Zeolite



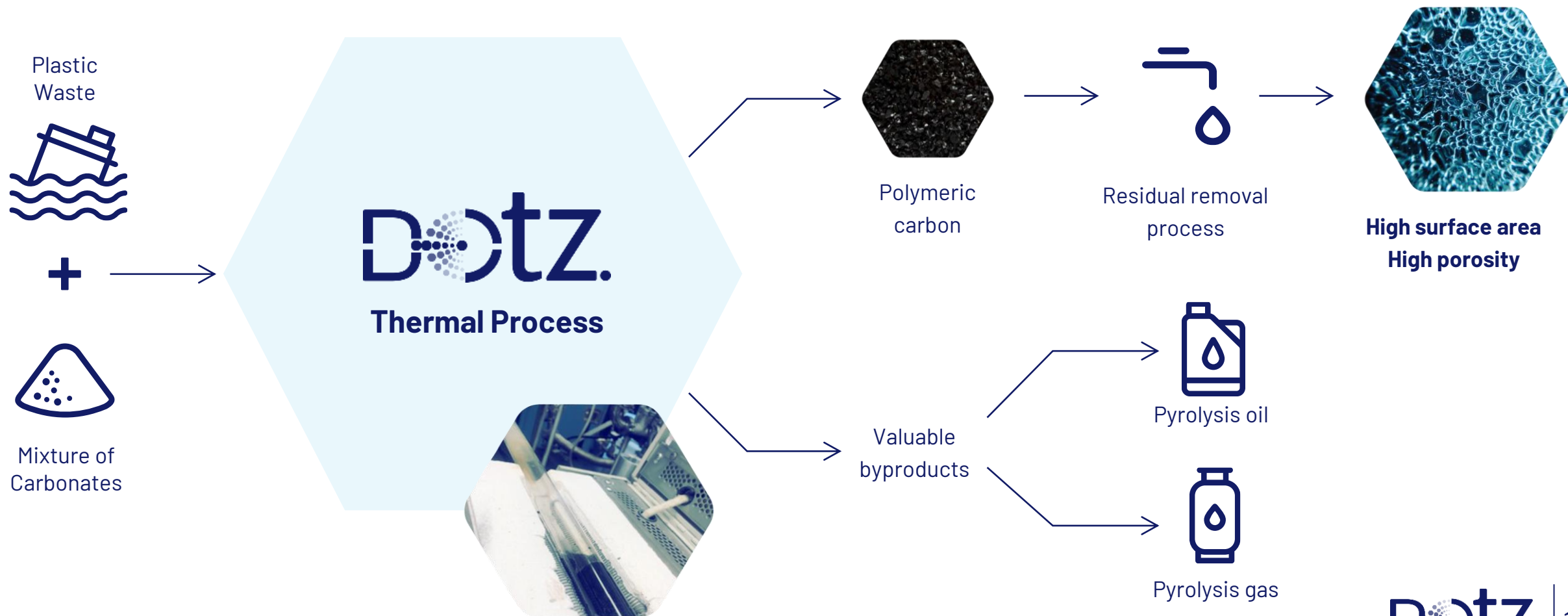
- CO<sub>2</sub> capacity
- Selectivity
- Regen. cost

## Porous Carbon



- CO<sub>2</sub> capacity
- Selectivity
- Resistive to impurities
- Inexpensive

# Proprietary synthesis method for converting plastic waste to porous carbon sorbents.



# A new era of sorbents powered by nanotechnology enabling wide-scale, cost effective CO<sub>2</sub> capture.

**NANO-POROUS CARBON SORBENT** demonstrates enhanced performance and potential to **drive down cost of carbon capture**



## **3X higher adsorption capacity<sup>1</sup>**

Facilitated by unique structure  
& surface area



## **Higher CO<sub>2</sub> selectivity<sup>1</sup>**

& low moisture sensitivity



## **Lower energy penalty<sup>1</sup>**

Less energy is required for  
sorbent regeneration



## **Regenerable and reusable**

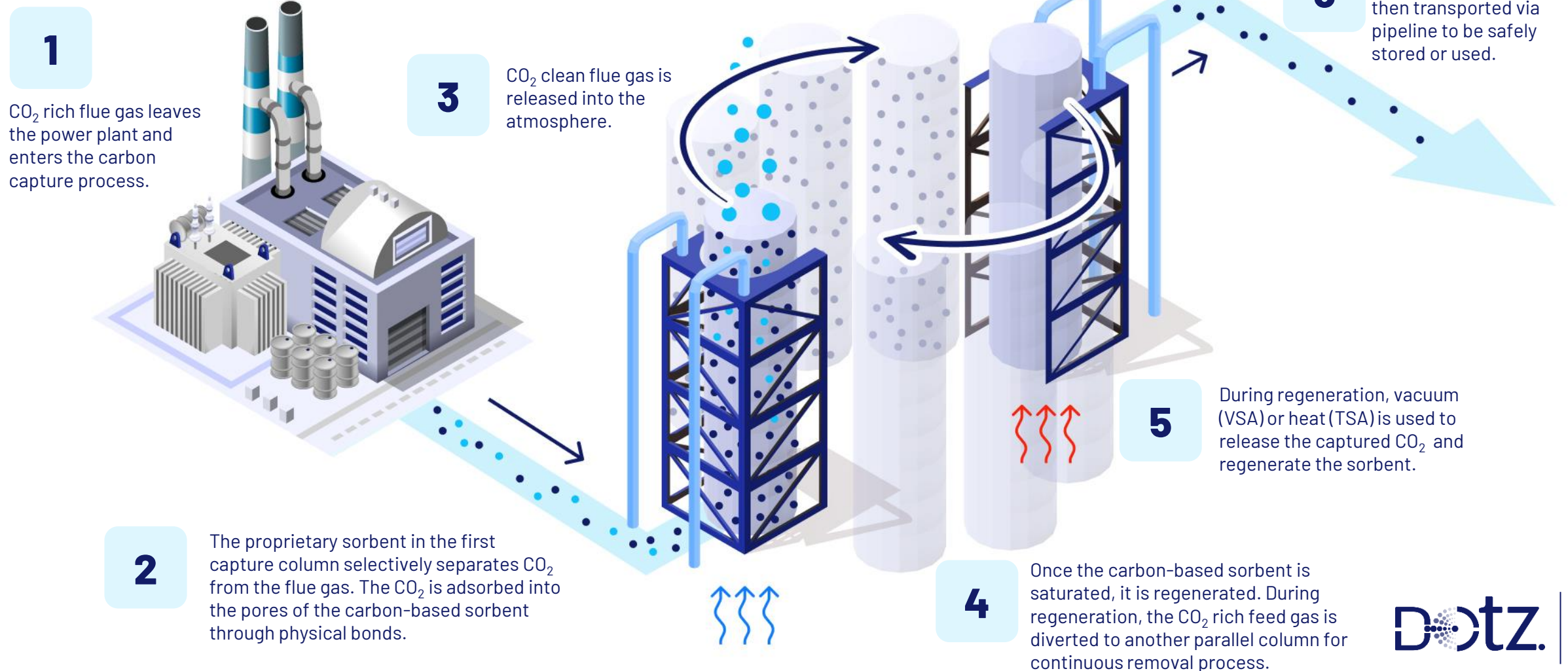
For multiple cyclic capture  
processes



## **Tailorable surface properties**

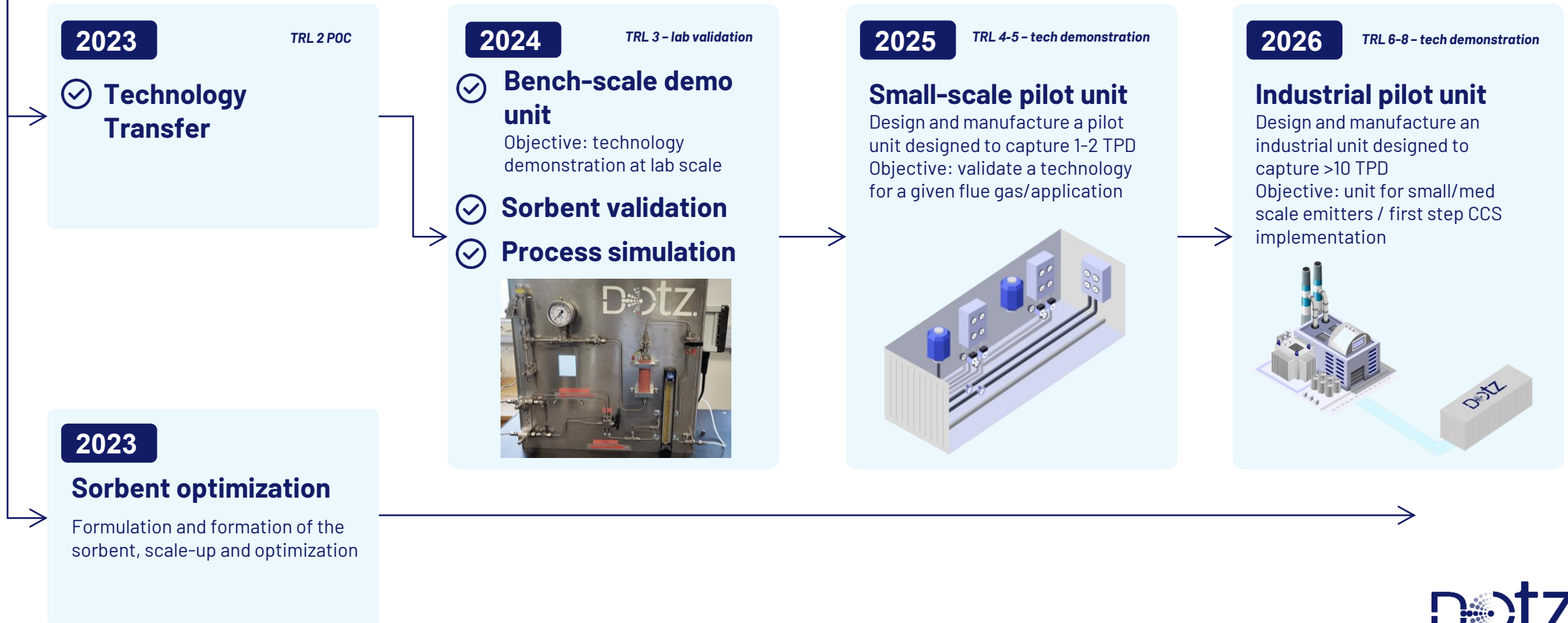
Compatible with diverse  
CO<sub>2</sub> sources

# Simple, straightforward and modular process facilitates lower cost of capture and easy integration.





# Technology development roadmap: clear value creation development milestones.



🕒 The right time

# 2024 is a turning point in the fight against global warming with governmental incentives and regulation...

Australia, Europe, and the US push aggressive economic incentives to meet emission reduction targets.

Department of Energy

**Biden-Harris Administration Announces  
Over \$2.3 Billion Investment To Cut U.S.  
Carbon Pollution**

ELECTRIC POWER | ENERGY TRANSITION | LNG | NATURAL GAS | PETROCHEMICALS — 29 Mar 2022 | 15:50 UTC

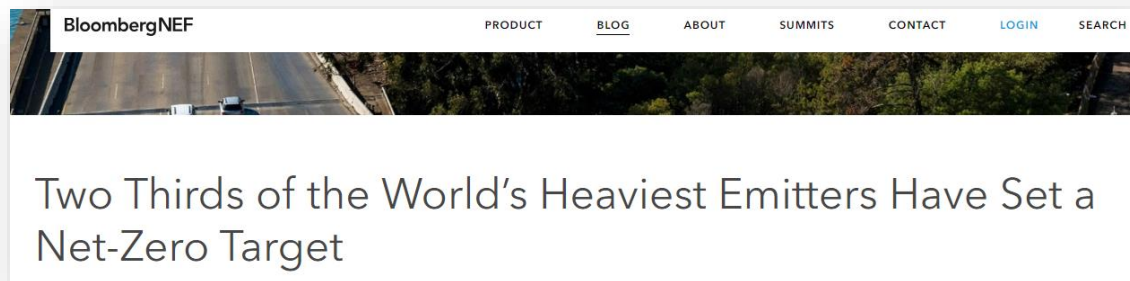
**Australia assigns \$975 million for  
hydrogen, clean energy, CCUS in budget**

**European Union to provide €3 billion in  
funding to help CCS projects**

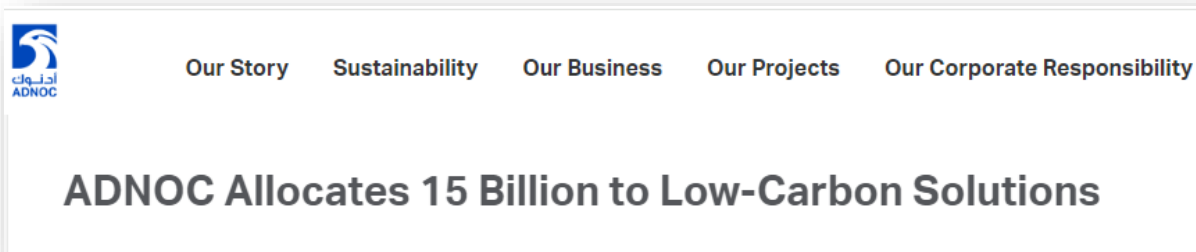
Some 300 million to 640 million tonnes per annum of carbon dioxide needs to be captured to meet emission targets

🕒 The right time

**...while more and more companies accelerate their Net Zero strategies and targets.**



**ExxonMobil announces ambition for net zero greenhouse gas emissions by 2050**

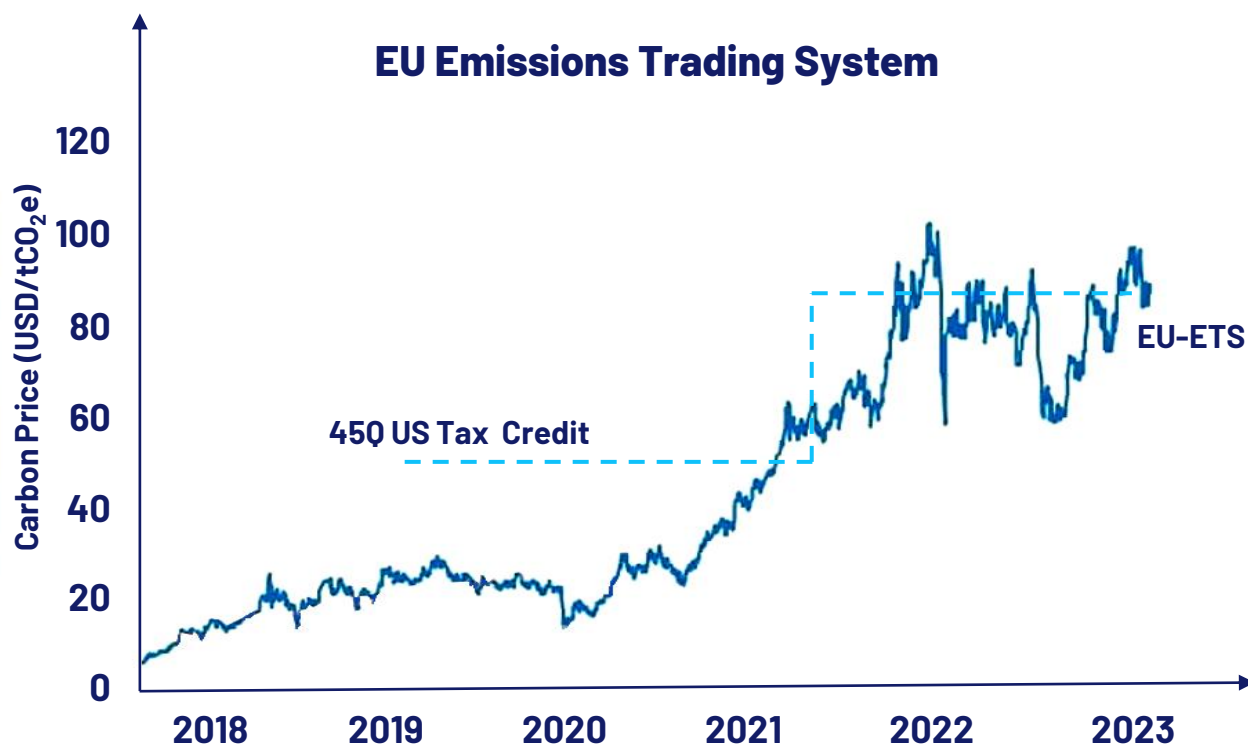


News | **Woodside Petroleum's \$5bn emerging energy investments**

🕒 The right time

# Carbon prices and pricing mechanism provides economic viability.

**~ 40%**  
of global emissions  
presently covered by  
pricing mechanism  
(Emissions Trading Systems, Carbon  
Taxes, or Tax Credits)







Dotz.SHIELD

**In-product Authentication**

📈 Large and growing market

# Attractive and focused industrial markets<sup>1</sup> with unmet need.

- Stricter environmental and social regulations
- Increased losses due to counterfeiting and parallel markets
- Product ownership validation becomes common
- The need to connect physical goods to the digital world



<sup>1</sup>Source: McKinsey's market research, 2023

# Advanced and validated authentication solutions for anti-counterfeiting and monitoring.



## VALIDOTZ™

- Dozens of optical taggants
- Embedded in the product
- Compatible with a range of hosting materials



## INSPEC™

- Hand-held devices
- Easy-to-operate
- Real-time, on-site, information reading



## INSIGHT

- Management platform IT
- Mobile app
- User-friendly presentation of the collected data

## Dotz solution benefits:

In-field real-time  
Detection & measurement

Compatible with a range of  
hosting materials

Simple, **easy-to-use** solution

**Validated solution** – various  
successful field trials

**Multiple applications across  
range of industries**

# Value proposition addressing established industry challenges.

## **Anti-counterfeiting & anti-alteration**

Authenticating bulk product in a robust way

## **Product liability & anti-dilution**

Providing insight into how customers are using a product

## **Quality Assurance (QA)**

A tool to monitor production and manufacturing processes

## **ESG validation & circular economy**

Providing proof of origin and increase transparency along supply chains

## **In-field measurement**

Allowing lab tests to be conducted in the field, saving on time and expenses





**Join our Journey**

