

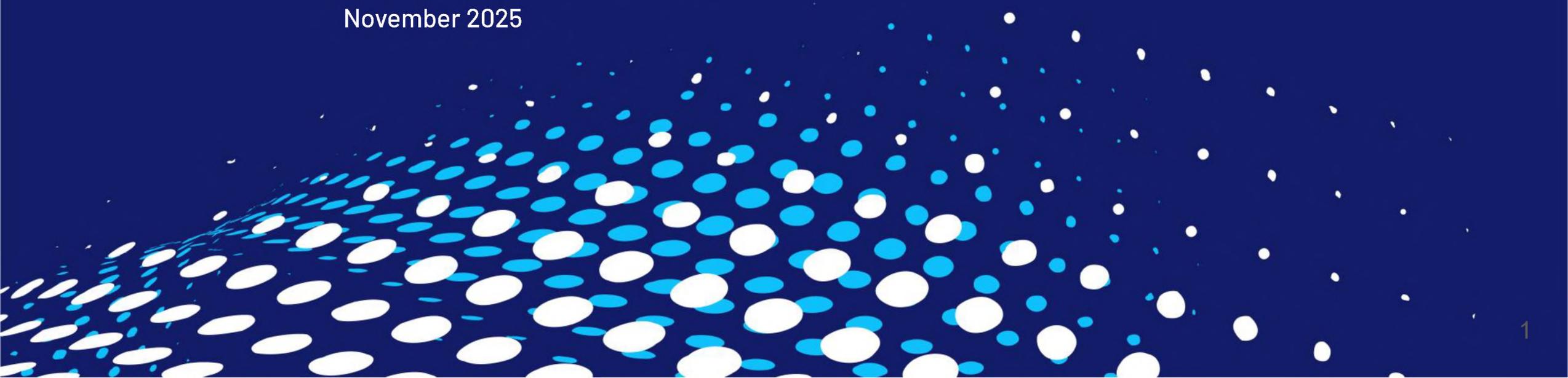


Capture the Future

# Nanomaterial Innovations Shaping Industry and Climate.

**Dotz Nano Limited [ASX:DTZ, OTC:DTZNY/DTZZF]  
Corporate Deck; [info@dotz.tech](mailto:info@dotz.tech)**

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# Driving innovation in material science & nanotechnologies.

## Vision

Delivering transformative high-performance materials for tomorrow's carbon neutral energy and industrial technologies

## Mission

We design, develop, and deploy customized nanomaterial-based solutions, enabling a cleaner, more efficient, and sustainable industrial future

## Key Innovations:

 **Dotz.EARTH**  
**Next gen sorbent materials for Carbon capture**  
Proprietary sorbents engineered for Direct Air Capture (DAC) and Point Source CO<sub>2</sub> Mitigation

 **Dotz.SHIELD**  
**In-product nano-markers**  
An industry-first commercial solution for real-time monitoring of corrosion inhibitors

# Dotz at a glance.

Perfectly positioned at the intersection of climate tech and advanced materials



**Surging Global Demand for High-Performance Sorbents, as the Key to Driving Down the Cost of Carbon Removal**



**Proprietary Sorbent Materials, Outperform Commercial Alternatives in Efficiency, Stability, and Energy Use**

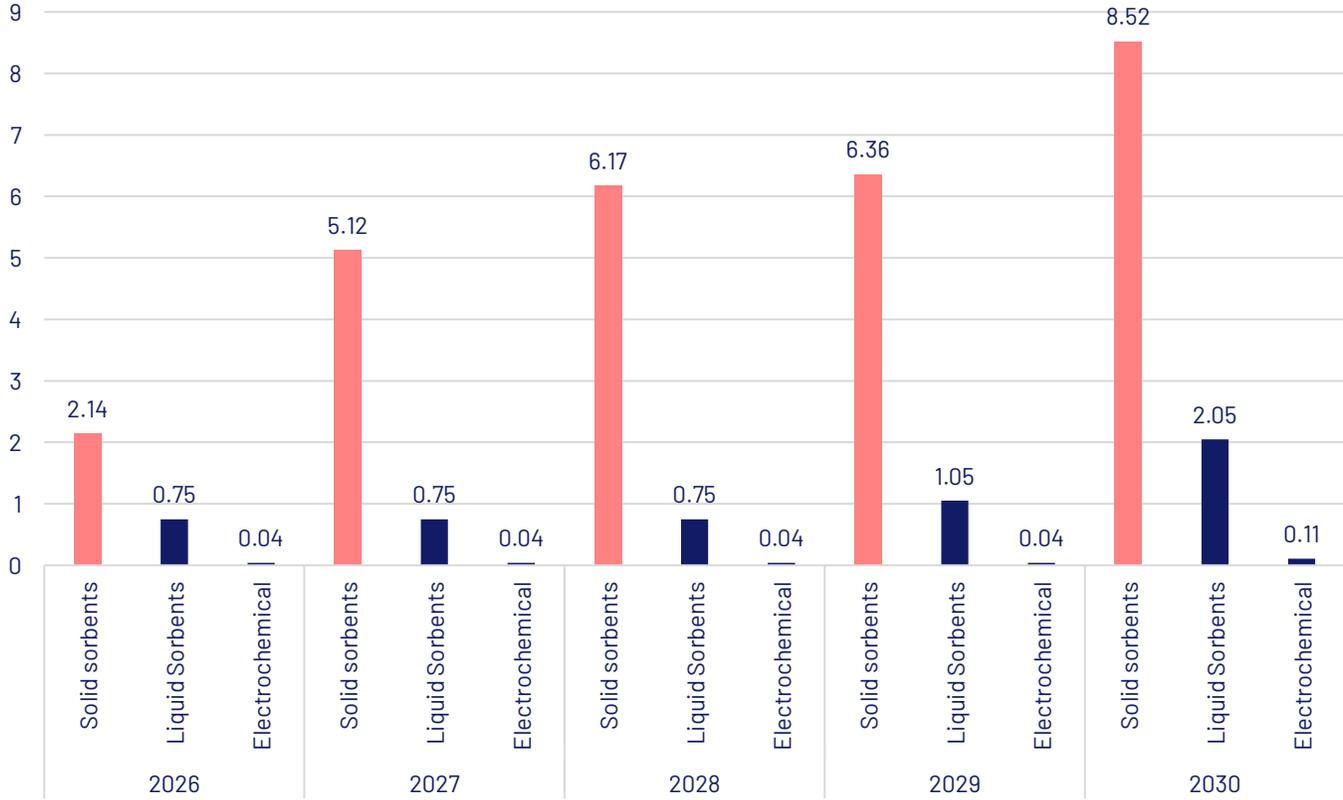


**Early Revenue Traction & Sustainable Growth Path, Leveraging Scalable & Capital-Efficient Model**

# Solid sorbents unlock a gigaton-scale carbon future.

Current sorbent materials are inefficient and can't scale affordably

Planned capacity (MT CO<sub>2</sub>) per DAC technology<sup>1</sup>



The path for gigaton-scale carbon removal starts with solid sorbents

**“Direct carbon capture falters as developers’ costs fail to budge”** *Financial times*

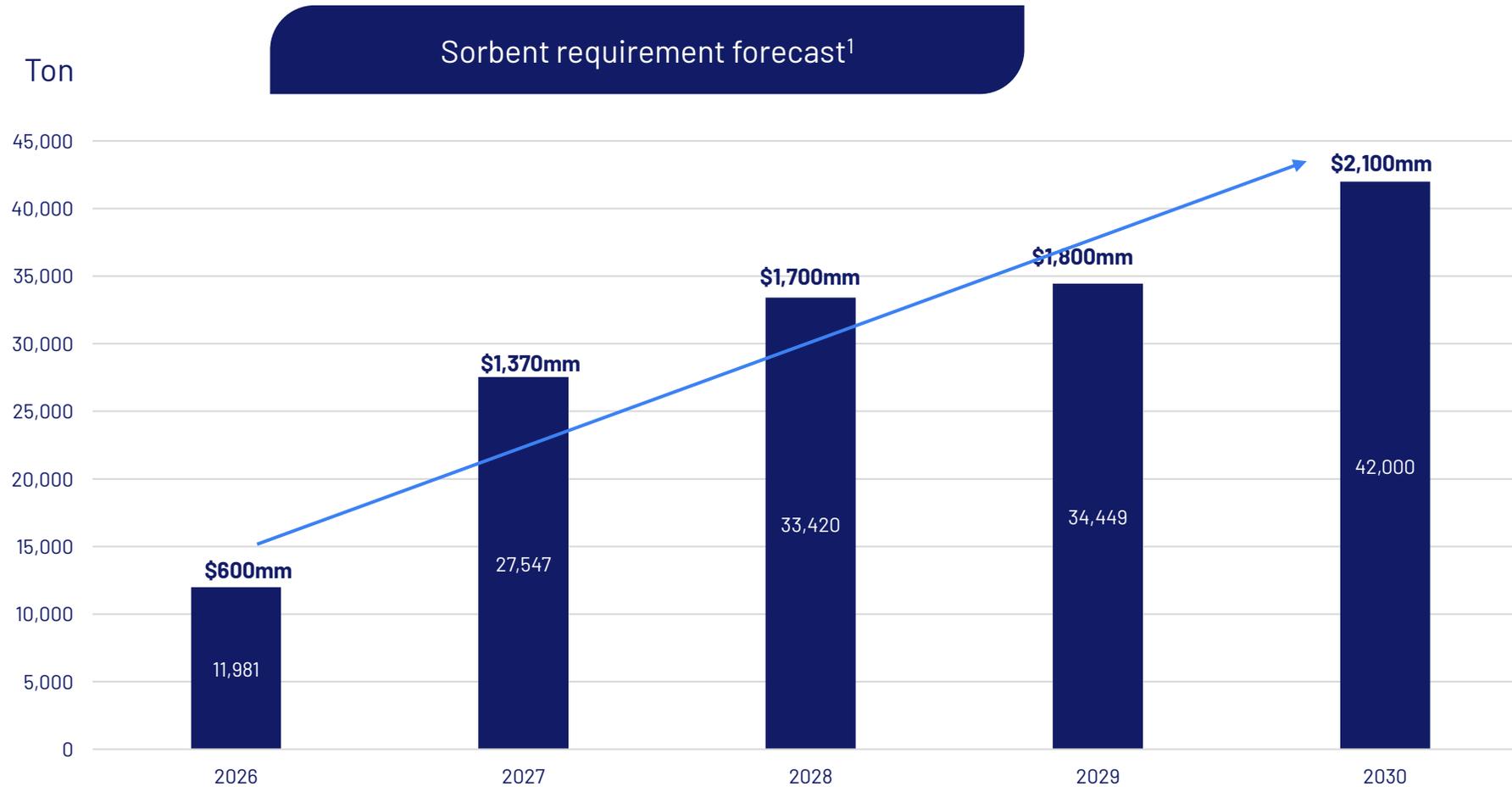
**CCI: “innovation in sorbent materials is a key lever for reducing the cost of CO<sub>2</sub> capture and enabling gigaton-scale deployment”**

**Sirona: “solid sorbents have the clearest path to rapid cost decline; staying sorbent-agnostic lets us ride material innovation”**

<sup>1</sup>IEA CCUS projects database 2025

# Surging global demand for high-performance sorbents.

A multi-billion-dollar global opportunity that's only beginning to scale



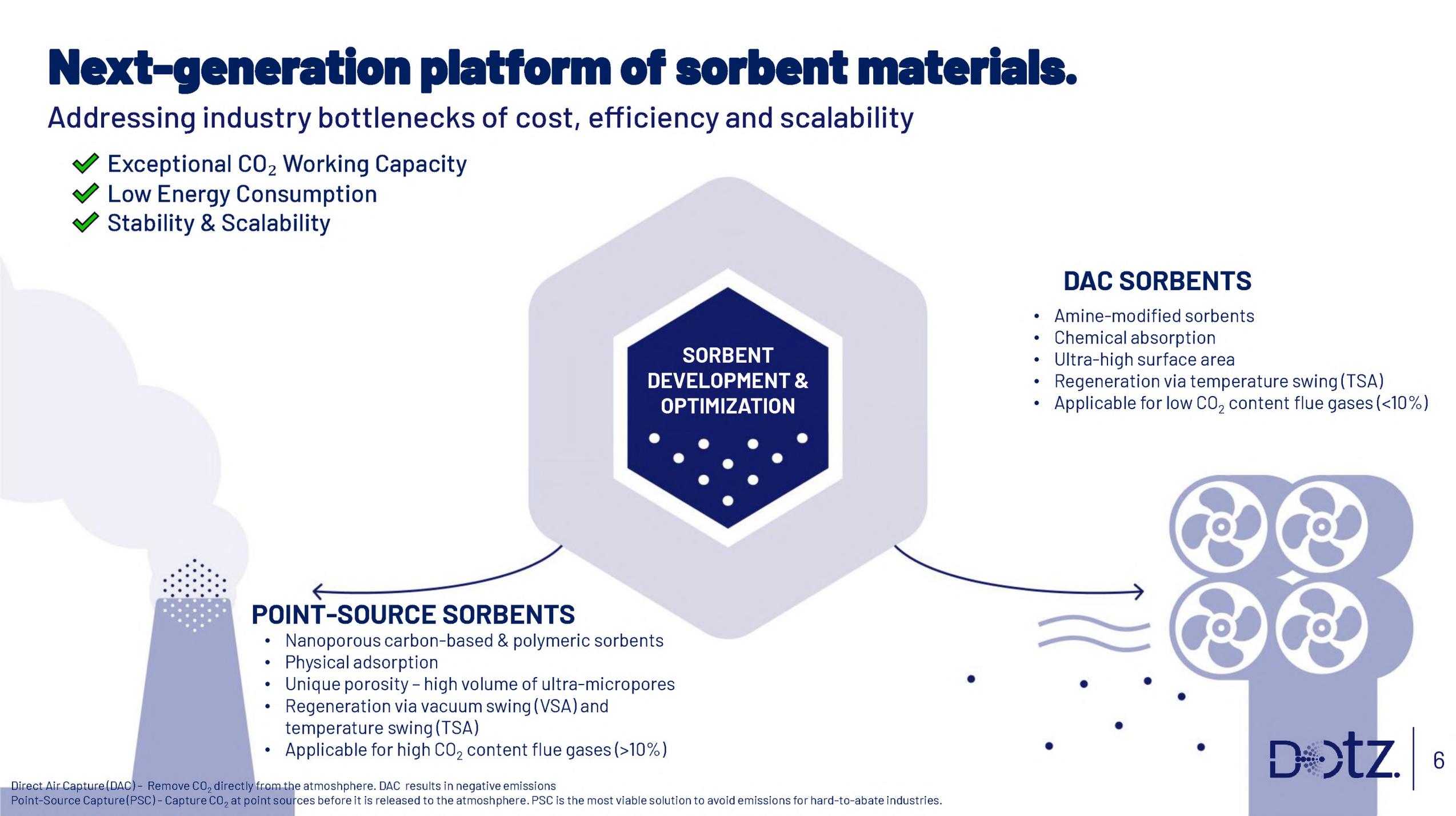
<sup>1</sup> Management estimation;

Key assumptions: sorbent durability of 3,000 cycles, 3-hour cycle, low-temp TVSA process, DAC unit capacity of 1 ton per annum, \$50k/ton of sorbent

# Next-generation platform of sorbent materials.

Addressing industry bottlenecks of cost, efficiency and scalability

- ✓ Exceptional CO<sub>2</sub> Working Capacity
- ✓ Low Energy Consumption
- ✓ Stability & Scalability



## SORBENT DEVELOPMENT & OPTIMIZATION

### POINT-SOURCE SORBENTS

- Nanoporous carbon-based & polymeric sorbents
- Physical adsorption
- Unique porosity – high volume of ultra-micropores
- Regeneration via vacuum swing (VSA) and temperature swing (TSA)
- Applicable for high CO<sub>2</sub> content flue gases (>10%)

### DAC SORBENTS

- Amine-modified sorbents
- Chemical absorption
- Ultra-high surface area
- Regeneration via temperature swing (TSA)
- Applicable for low CO<sub>2</sub> content flue gases (<10%)

# Ultra-efficient CO<sub>2</sub> capture sorbent material.

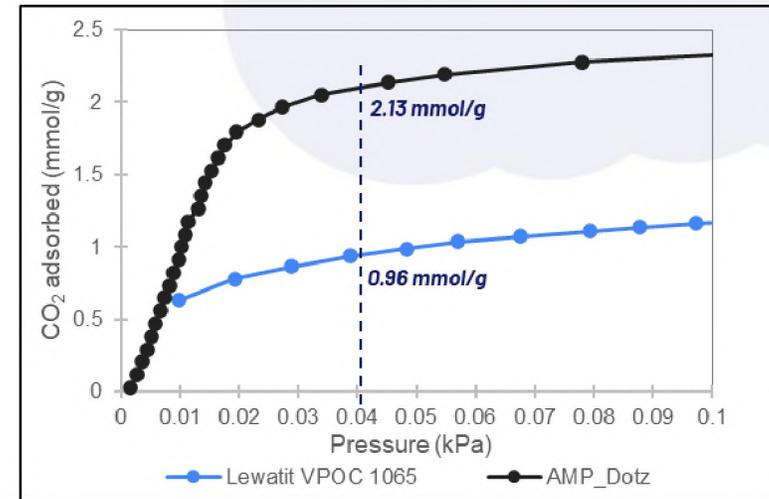
## Superior adsorption capacity, outperforming commercial sorbents

- **HIGH PRODUCTIVITY**  
SUPERIOR CO<sub>2</sub> WORKING CAPACITY
- **ENERGY EFFICIENT**  
LOW-TEMPERATURE REGENERATION
- **STABILITY & SCALABILITY**  
BUILT FOR LONG-TERM, REAL-WORLD USE

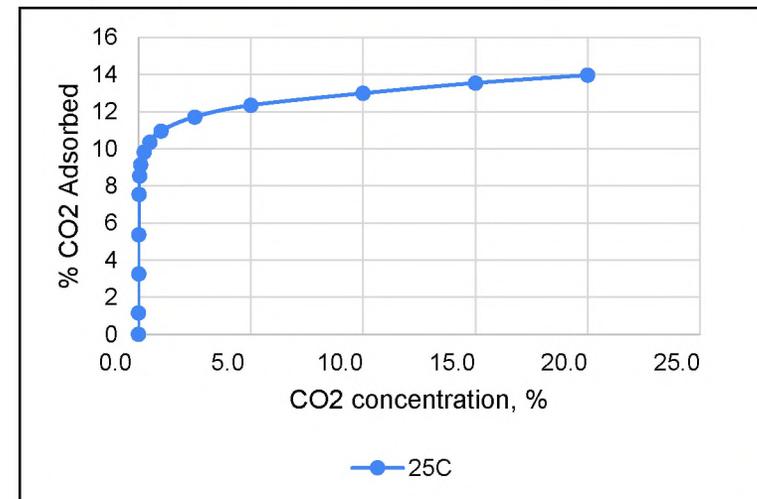
## Validated in lab-scale tests

- ✓ TVSA LAB-SCALE PILOT DEMONSTRATION RESULTED IN SUPERIOR PERFORMANCE COMPARED TO COMMERCIAL DAC SORBENT<sup>1</sup>

CO<sub>2</sub> adsorption capacity at 400ppm, 25°C<sup>1</sup> (dry)

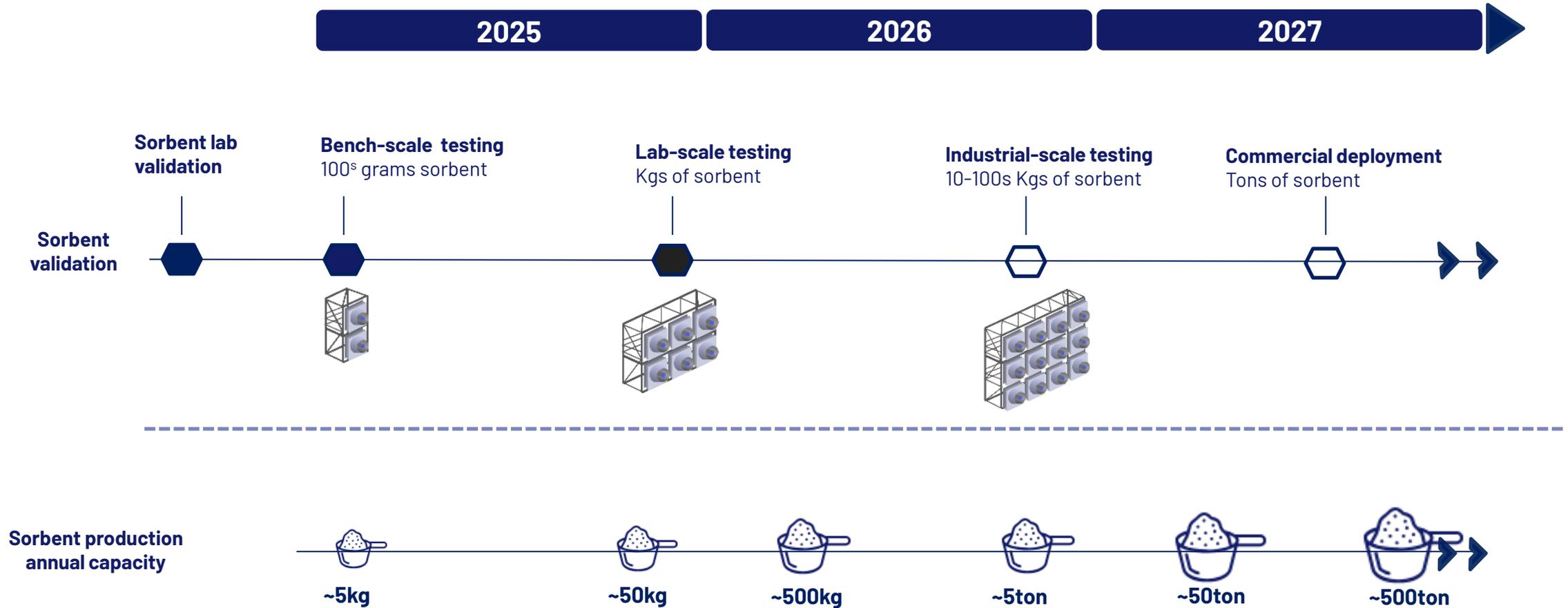


CO<sub>2</sub> adsorption capacity at variable CO<sub>2</sub> concentration



<sup>1</sup> Commercial DAC sorbent - VPOC 1065 amine grafted; Testing conditions: the feed ambient air was 22°C, 400ppm CO<sub>2</sub> and 30% relative humidity

# Validated by 3<sup>rd</sup> party users and research partners.



# Patent-protected deep tech IP.

## PATENTS

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- Global Filing Strategy: Patent protection in key markets (U.S., EU, Asia) to ensure worldwide coverage
- Utility Patents: Protect novel sorbent compositions and methods for CO<sub>2</sub> capture
- Process Patents: Safeguard unique CO<sub>2</sub> capture methods using proprietary sorbents

## KNOW-HOW & TRADE SECRETS

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- Advanced material science
- Formulation and Production Methods: Maintain confidentiality on proprietary sorbent manufacturing processes

## LICENSING AGREEMENTS

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- Licensing of proprietary sorbent technology to third parties
- Qualified Contract Manufacturing Organizations (CMO's)

# From innovation to commercialisation.

## ✓ **Product development**

First generation development & characterization completed

Continuous development of sorbent materials portfolio

## ✓ **Industry Validation**

Successful lab-pilot testing

Endorsed by 3<sup>rd</sup> parties user testing & verification

## **Monetization**

Actively engaged with potential customers

Strong traction from industry

Strategic alliances

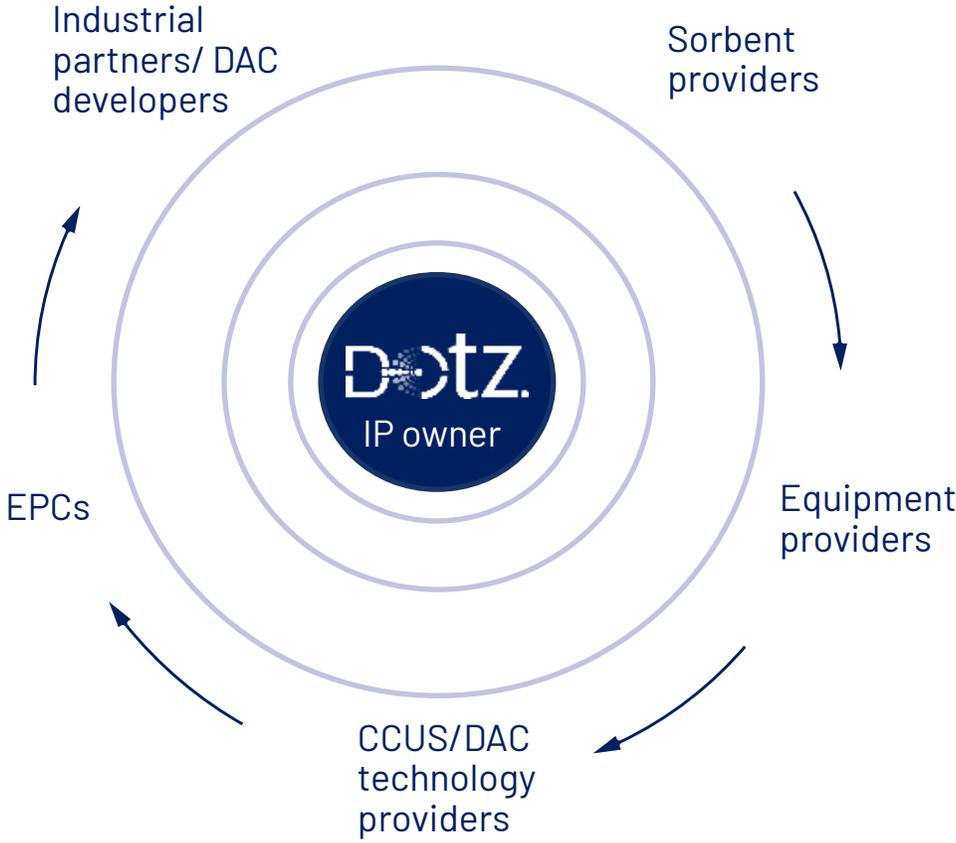
# Broad partnerships opportunities along the supply chains.

## Phased Go-To-Market strategy

Initial focus on early evaluation partners/customers

Converting early evaluation customers into collaboration agreements and supply orders for piloting and demonstration

Long-term commercial agreements in 2027+



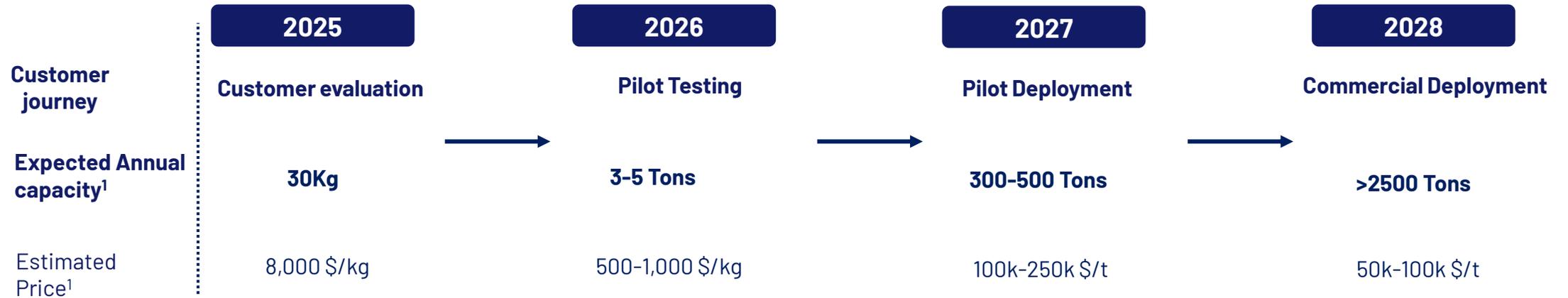
## Hybrid engagement model

Paid pilot programs with performance-based milestones

Long-term supply contracts or tech licensing after validation

Joint development agreements for integration into existing tech

# Revenue traction, momentum & sustainable growth path.



## Initial Revenues Secured in 2025

- ✓ Completed successful lab tests at gram-scale by more than a dozen potential clients/partners
- ✓ Signed MoU with CCI to advance POC evaluation at kg-scale
- ✓ Commenced performance testing & demonstration by multinational automotive manufacturer
- ✓ Initial revenue generated from early customer demand for product evaluation and testing

## Piloting and Integration in 2026

- Converting early evaluation customers into supply orders for pilot deployments and demonstration
- Modular capital-light production scale-up
- Secure strategic industry alliances

## Substantial Growth Expected in 2027+

- Revenue ramp driven by multi-year commercial agreements in 2027+
- Capital-light production scale-up

# Investment highlights.

## ✓ **Surging global demand for high-performance sorbents**

High-performance sorbents are the key to driving down the cost of carbon removal

## ✓ **Breakthrough Carbon Capture Technology**

Significantly outperform commercial alternatives in efficiency, stability, and energy use

## ✓ **Early Revenue Traction & Sustainable Growth Path**

Generating initial revenues in 2025 from customer evaluations, unlocking near-term revenue ramp up

## ✓ **Scalable, Capital-Efficient Model**

Modular production and partnership strategy enable rapid scale-up with minimal capex

## ✓ **Patent-Protected Deep-Tech IP**

Advanced material science form clear competitive edge and high technical barriers to entry

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## **Third party data**

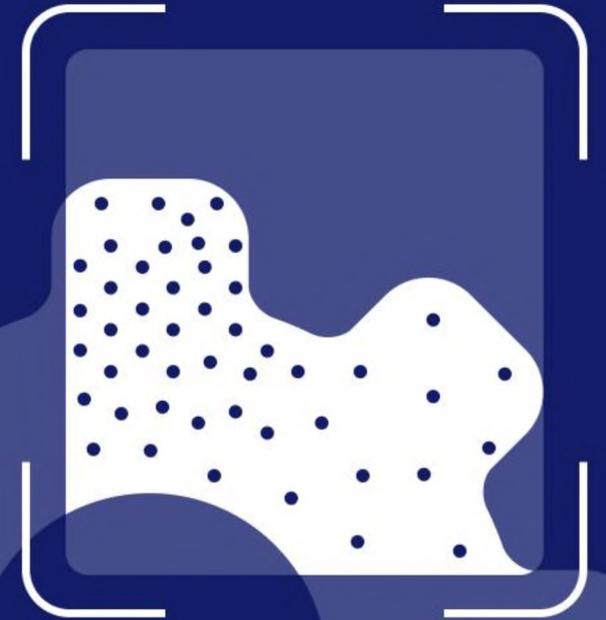
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# **Annex – Supplemental information**



# Cutting-edge solution for corrosion inhibitor (CI) management.

First commercial sale for the Oil & Gas industry in the U.S.

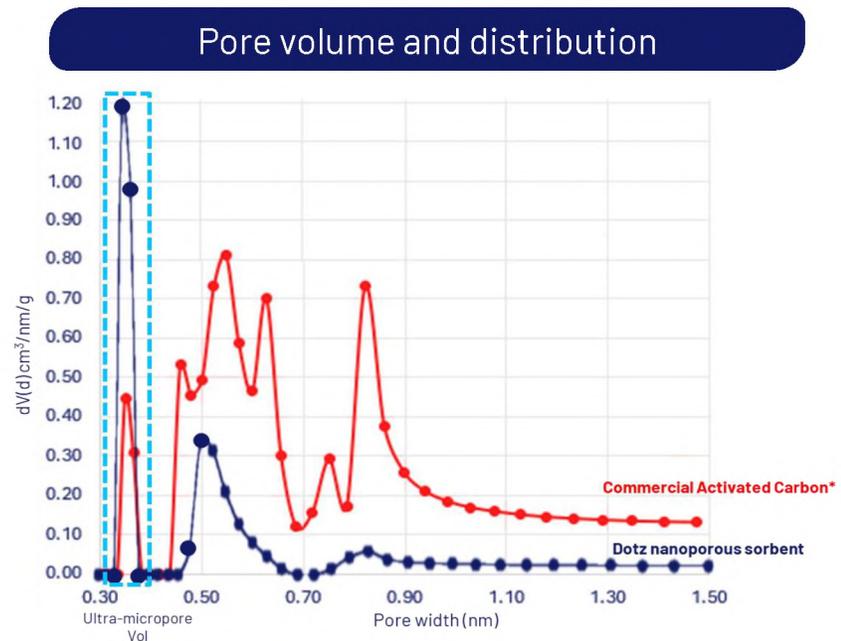
**Dotz**.SHIELD

- **CHALLENGE:** detection and quantification of corrosion inhibitor in drilling fluids – expensive, slow, inefficient
- **SOLUTION:** in-product optical markers enabling real-time on-site detection and quantification of CI
- **IMPACT:** significant maintenance cost savings, on-site dosage management , reducing risk of infrastructure damage
- **CI MARKET:** The CI industry is projected to grow from USD 8.79 Billion in 2024 to USD 12.22 Billion by 2032<sup>1</sup>

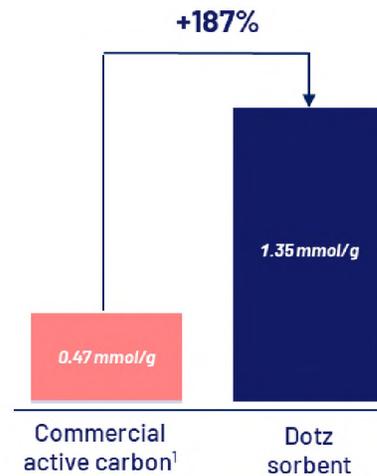


# Engineered pore volume & distribution, ideal for CO<sub>2</sub> capture from flue gases.

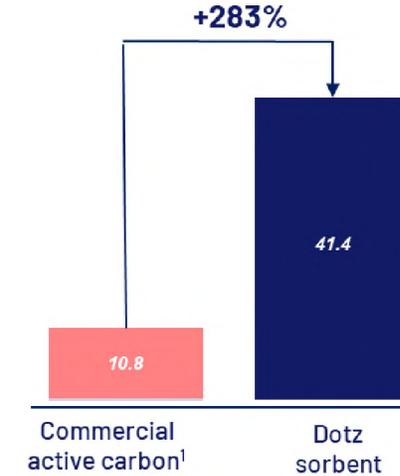
Dotz's innovative nanoporous sorbents have very high volume of ultra-micropores that are responsible for the physical adsorption of CO<sub>2</sub>  
(CO<sub>2</sub> molecule 0.33nm diameter)



3X higher CO<sub>2</sub> adsorption capacity  
(at 25°C, 15 kPa)



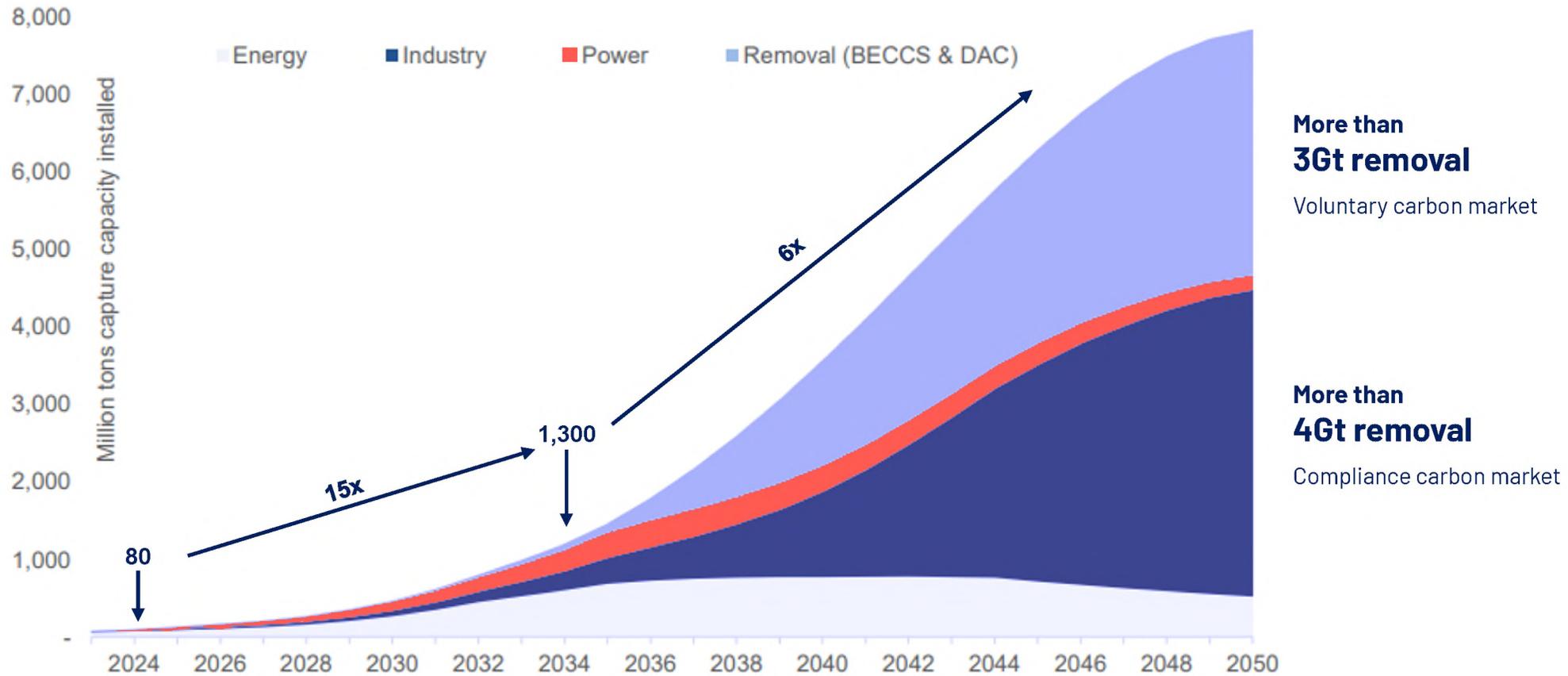
4X higher selectivity<sup>2</sup>  
(at 25°C, 10 kPa)



\*Provided by Blücher (Germany)

# Early phase of a rapidly expanding market.

Carbon capture capacity estimated to grow by more than 15x within the next decade



# CCS market poised for growth amid favorable market drivers.

Regulatory pressure, corporate commitments and government support & incentives



## Pricing

40% of global emissions presently covered by pricing mechanism



## Storage

Transportation and storage availability is accelerating



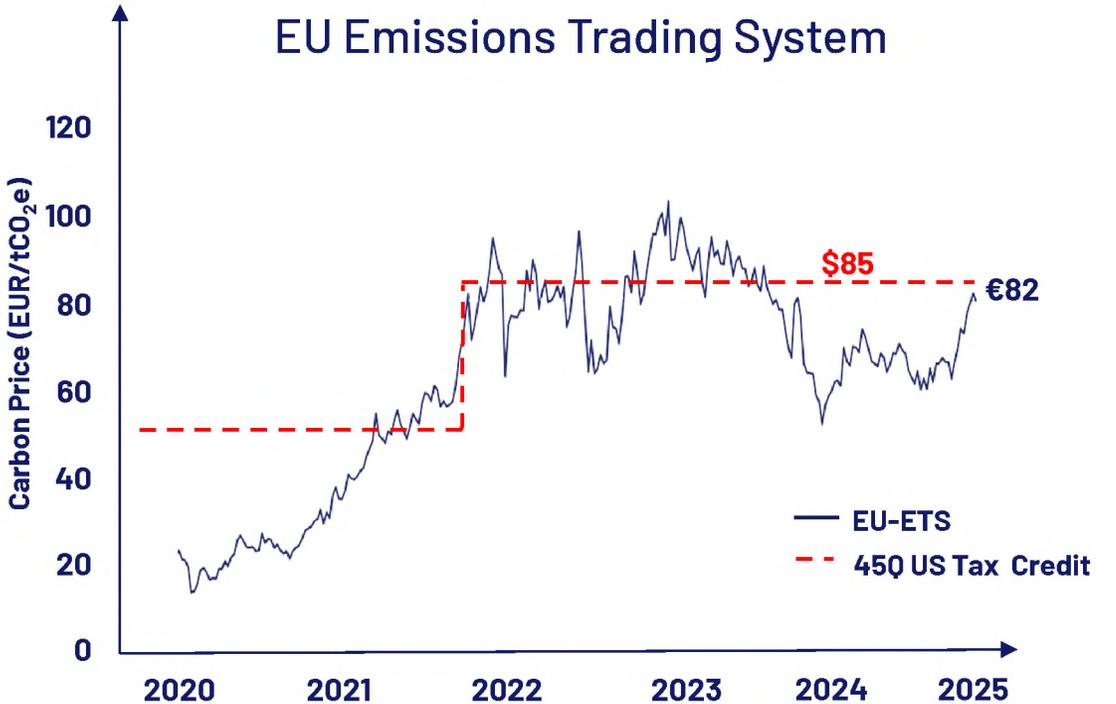
## Incentives

CCS incentives are increasing globally



## Lower costs

Costs are decreasing as technologies and projects mature





If you're a **PARTNER** looking to co-develop DAC or point-source capture solutions—**LET'S COLLABORATE.**

If you're an **INVESTOR** ready to scale transformative carbon capture solutions—**JOIN US.**

**Join our Journey.**

