

## THE WORLD HAS A CO<sub>2</sub> PROBLEM

And industries worldwide are under immense pressure to reduce their carbon footprint

- Construction materials like concrete and wood panels generate over 10% of global CO<sub>2</sub> emissions and are often difficult to recycle due to fossil-based binders.
- Packaging materials, especially paper and board, depend on energy-intensive adhesives and high-temperature drying, driving up emissions and energy costs.

Sustainable growth demands both advanced materials and more efficient processes



## 2Dx® GRAPHENE ENABLES A NEW GENERATION OF MATERIALS \*\*

- Stronger and more durable
- Sustainable and circular
- More energy-efficient

Delivers performance without trade-offs

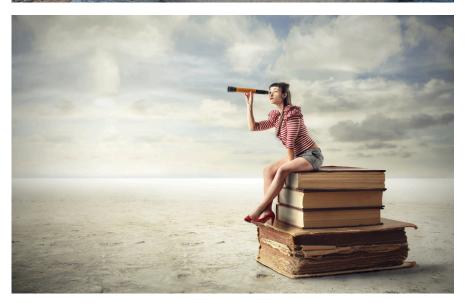


# MARKET TRACTION FROM MAJOR INDUSTRY PLAYERS

Focus on applications that actively contribute to reducing carbon emissions







## **Advanced adhesives**

- 30-60% faster drying
- 20-30 % lower temperatures
- Stronger more durable bonds
- Reduced energy consumption







## Sustainable concrete

- Stronger and more durable
- Up to 2× longer lifespan
- Enhanced resource efficiency
- Up to 50–80% lower CO<sub>2</sub> emissions





## **Future solutions**

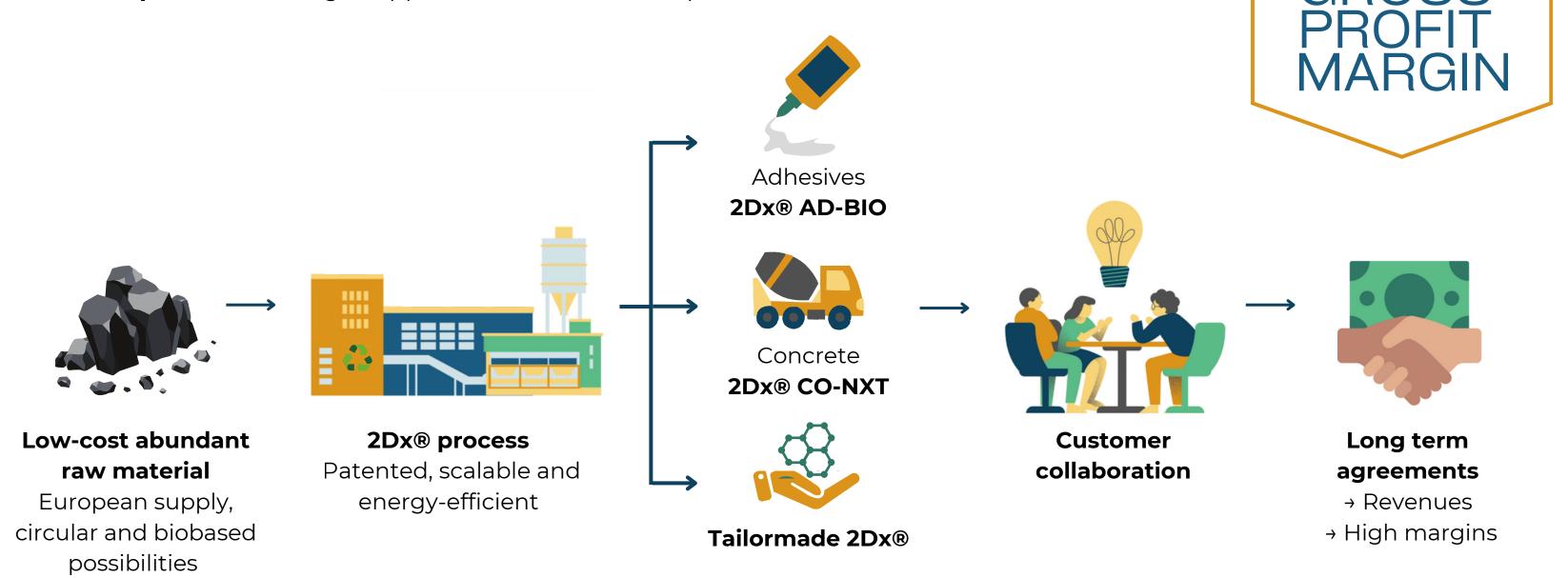
Our Tailored 2Dx® solutions delivers custom graphene-based products for cutting edge applications such as electronics, energy storage, coatings and composites





## SCALABLE AND PROFITABLE BUSINESS MODEL

- Direct sales of 2Dx® additives recurring revenues from adhesives and concrete industries
- High gross margins (up to 80%) enabled by full control of raw material, process, and quality
- Customer integration pilots convert into long-term supply contracts with multi-ton volumes
- Scalable production modular capacity expansion aligned with customer demand
- Future upside licensing of application IP and on-site production at customer facilities



## MILESTONES AND EXPONENTIAL REVENUE GROWTH

## 2025/26

**Adhesives**: First commercial agreements

Concrete: Initial revenues from pilot projects

Future Solutions: Exploratory projects

## 2026/27

Adhesives: Client expansion and scaling.

Concrete: Larger projects and broader adoption

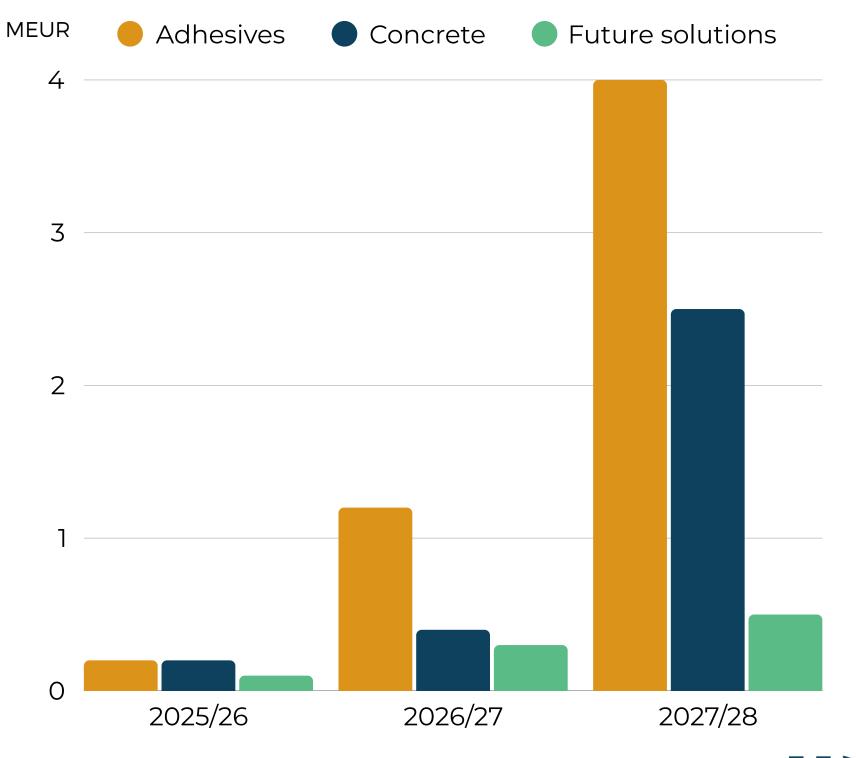
Future Solutions: Prototyping tailored solution development

## 2027/28

Adhesives: Established market position; steady revenue growth

Concrete: Full commercialization drives significant growth

Future Solutions: Early commercialization of innovative solutions





## NOW RAISING €2M

Use of proceeds:

Accelerate commercialization and secure longterm customer contracts.

Enhance operational efficiency by automating and optimizing processes for large-volume orders.

Expand our team to further strengthen sales, production and product development.

Join us. Let's make an impact.



## THANK YOU!

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## €2.8B MARKET OPPORTUNITY IN ADHESIVES & CONCRETE

2D fab is positioned to lead in high-impact, large-volume sectors, with a primary focus on adhesives and concrete. These industries have a massive global market potential, where 2D fab's graphene solutions enable a sustainable transition by enhancing material efficiency and reducing emissions.

Just by reducing cement use in concrete and lowering energy consumption in adhesives, 2D fab's technology has the potential to save up to 61.5 million tons of CO<sub>2</sub> annually—equivalent to the yearly emissions of over 13 million cars.

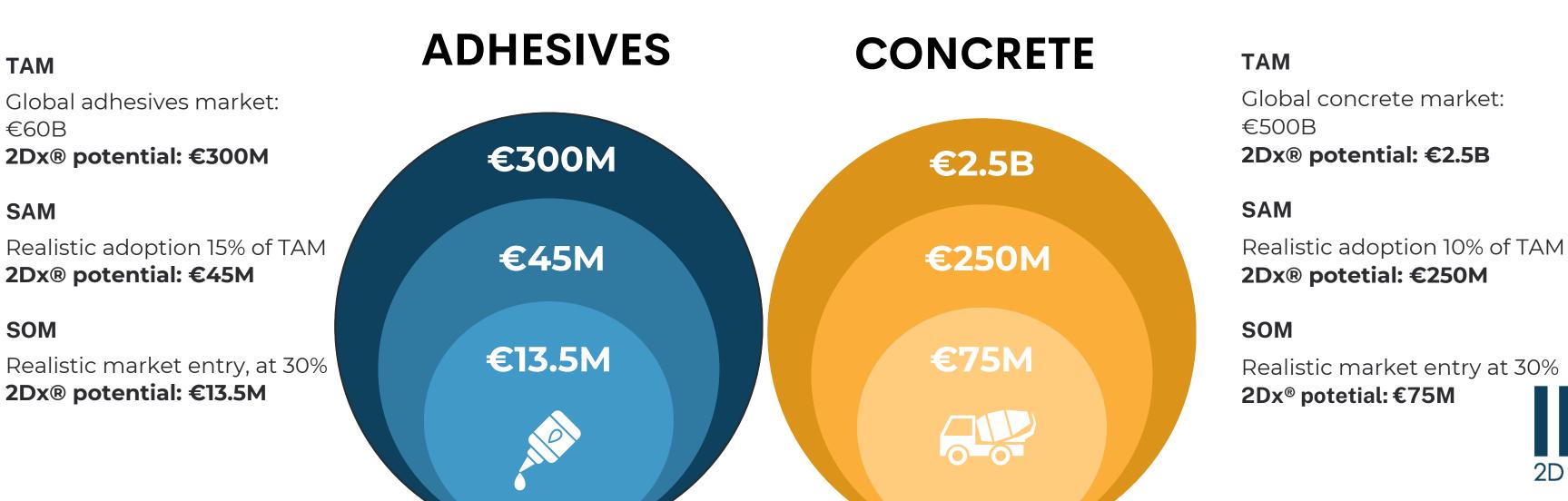
**TAM** 

€60B

SAM

SOM

2Dx® potential: €45M



## 2D FAB – FROM RESEARCH TO INDUSTRIAL IMPACT

Founded in 2013 in Sundsvall, Sweden, 2D fab is Europe's leading large-scale producer of green graphene, marketed under the brand 2Dx®.

Our mission is to unlock graphene's potential in real industrial applications - enabling stronger, more efficient and more sustainable materials.

With 2Dx®, we deliver the world's most cost-effective, high-quality graphene products, built on over a decade of research and industrial know-how.

For a better, more sustainable world.



## CREATING VALUE FOR OUR CUSTOMERS WITH OUR PATENTED PROCESS - 2Dx®

- Our 2Dx® production is energy-efficient and environmentally friendly, with near-zero emissions
- The process is water-based, with no need for harmful chemicals and has undergone thorough validation, demonstrating both its robust capacity and efficiency
- The current facility has a capacity of more than 10 t/a and offers excellent scale-up conditions due to the modular technology that ensures rapid and reliable expansion at low CAPEX
- Our patented exfoliation and conversion process are key components of our innovative production approach, giving us a sustainable competitive edge in the market
- With industrial-scale production in place, we are fully equipped to meet the evolving needs of our customers and seize global business opportunities



## MEET OUR TEAM

2D fab has a highly skilled team of technical experts with backgrounds in materials development, chemistry, industrial production and business development.



Helena Henke
CEO
MSc in Business Administration with management of growing enterprises as specialty



Jan Nordin

Application engineer

PhD in Chemistry and more than
20 years' experience from productand application development



Magnus Larsson
CTO
MSc in Materials Science and Engineering with nano-materials as specialty



Carolina Costa

Quality engineer

PhD in Chemical
Engineering



Britta Andres

R&D Engineer

PhD in Engineering Physics with a major in Materials Physics



Johnny Johansson
Operations manager
Extensive experience of process development within the chemical industry



Roland Bäck

Process developer

Extensive experience of research and development within the pulp and paper industry



Frida Forsberg

Marketing coordinator

Bachelor of Science in

Journalism



## KEY MARKET SEGMENTS DRIVING GRAPHENE DEMAND

### 1. Concrete and Construction

Graphene is transforming concrete by enabling cutting cement use, enhancing strength, durability and water resistance. It can significantly reduce CO₂ emissions and improve recyclability, aligning with sustainable construction goals.\* The graphene-enhanced concrete market is projected to reach €1.1 billion by 2034, driven by demand for low-carbon, high-performance building materials.\*\*

## 2. Electronics & Energy Storage

Graphene's high conductivity and flexibility make it ideal for next-generation semiconductors, sensors, batteries, and supercapacitors.\*\*\* The energy storage market alone is set to exceed €400 billion by 2030, where graphene-based anodes, cathodes, and electrolytes are already improving performance and lifespan in lithium-ion and solid-state batteries.\*\*\*\*

## 3. Composites & Coatings

Graphene is increasingly used in lightweight, ultra-strong composite materials for automotive, aerospace and industrial applications. It enhances durability, reduces weight and improves heat and chemical resistance.\*\*\* The global composites market is forecasted to reach €160 billion by 2030, with graphene adoption growing rapidly.\*\*\*\*



## ROAD MAP TO MARKET LEADERSHIP

2026

## **Market Entry**

Convert 2–3 pilot customers into first commercial orders

Demonstrate industrialscale deliveries and profitability per deal

Secure food-contact approval and broaden pilot portfolio 2027

## Scale-Up

≥3 recurring contracts signed, each at multiton scale

Reach break-even through stable recurring revenue

Expand production capacity to meet demand

2028

## **Expansion Phase**

≥6 customers in ongoing deliveries across adhesives and concrete

Establish on-site production with at least one strategic customer

Strengthen IP portfolio with additional patents

2029

## **Industrial Roll-Out**

Accelerate penetration in Europe, expand first customers in Japan & US

Secure long-term framework agreements with global industry leaders

Continuous capacity expansion (multiple production modules operational) 2030

## **Market leadership**

≥10 strategic customers with long-term supply contracts

Recognized market leader for industrial graphene solutions in EU

Delivering tens of tons annually, driving significant CO<sub>2</sub> reduction across industries



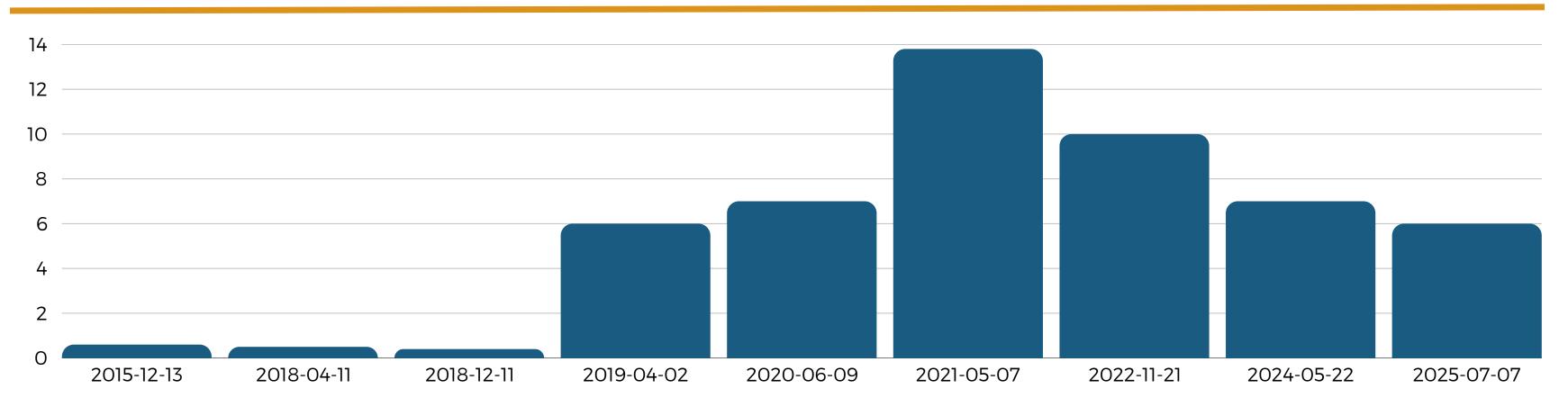
## **COMPANY OWNERSHIP**

2D fab is an independent Swedish limited company with a diverse ownership structure, including private investors and industrial stakeholders. The 10 largest owners together hold 72.1% of the company:

- Akribi Kemikonsulter AB (Sven Forsberg, Founder) 24.6%
- Rigil AB (Private) 10.2%
- Almi Invest Mitt AB (Institutional) 8.5%
- Fastighets AB Lilium (Private/Industrial) 6.8%
- Polynom Investment AB (publ) (Institutional) 5.0%
- Björnberget Invest AB (Private) 4.9%
- 5J Holding AB (Private) 4.8%
- Mikael Ölund AB (Private) 4.0%
- Gerd Margareta Jonsson (Private) 1.9%
- E14 Invest AB (Institutional/Regional fund) 1.5%



## PREVIOUS ISSUES



Since 2015 we have successfully closed several equity rounds, raising a total of **51.5 MSEK**.

### **Key milestones include:**

2025: 6.0 MSEK raised at 95 SEK/share

2024: 7.1 MSEK raised at 119 SEK/share

2022: 10.1 MSEK raised at 119 SEK/share

**2021**: 13.8 MSEK raised at 110 SEK/share

2020: 7.0 MSEK raised at 77 SEK/share

2019: 6.0 MSEK raised at 75 SEK/share, valuation 30 MSEK

2018: Major split (100:1) and two rounds, incl. 15.0 MSEK at 4 114 SEK/share (valuation 15 MSEK) and 6.0 MSEK at 3 002 SEK/share

2015: First external round, 0.6 MSEK at 215 SEK/share

