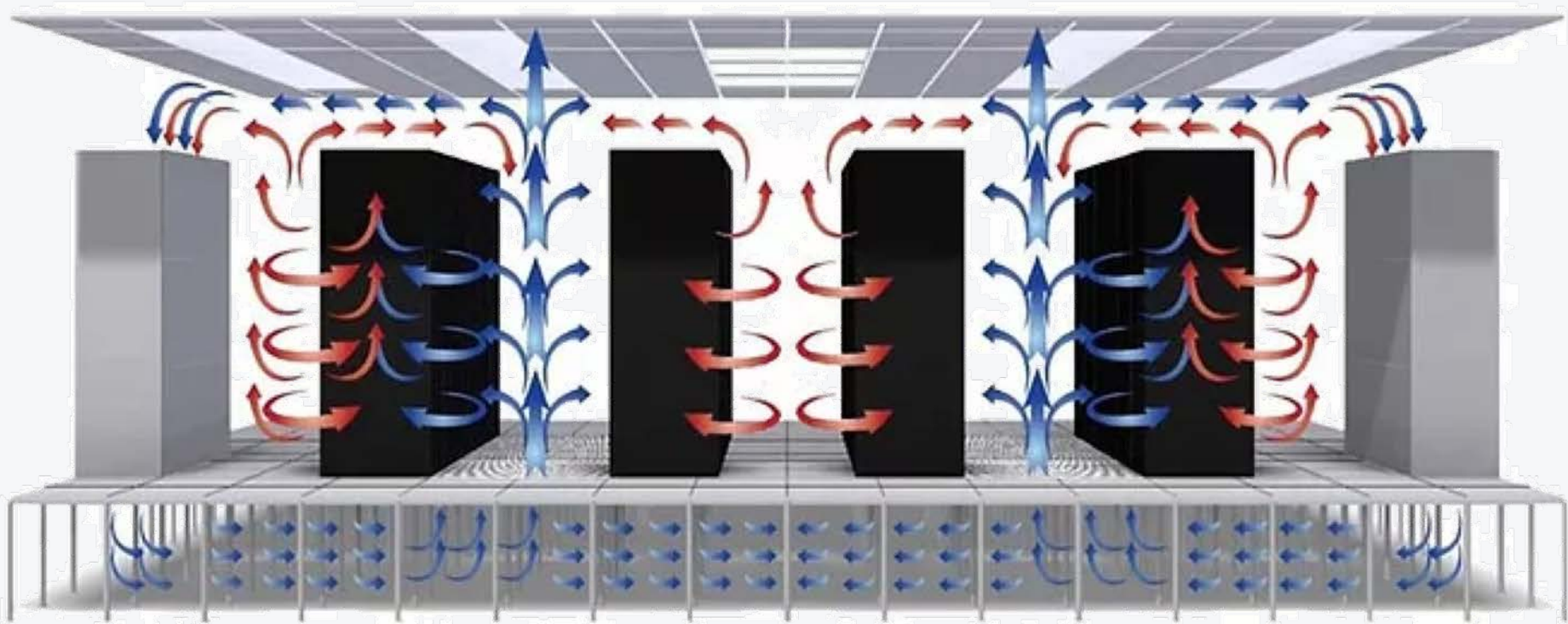


Cabomba

Hello, we are Cabomba — we are giving the compute power back to the data centers by making air filtration efficient



99.9%

capture
efficiency

50–80%

lower energy
demand

\$5M

seed round

High efficiency and low energy have always been a tradeoff — until now.

- High-efficiency air filters in data centers require denser media, which increases pressure drop and raises fan energy demand.
- No filter on the market today achieves high capture efficiency without the energy penalty.
- HVAC accounts for ~35% of data center energy; air-handling fans are 7–10% of total facility load (Uptime Institute).
- Data centers are under acute pressure to reduce energy consumption as AI workloads scale.

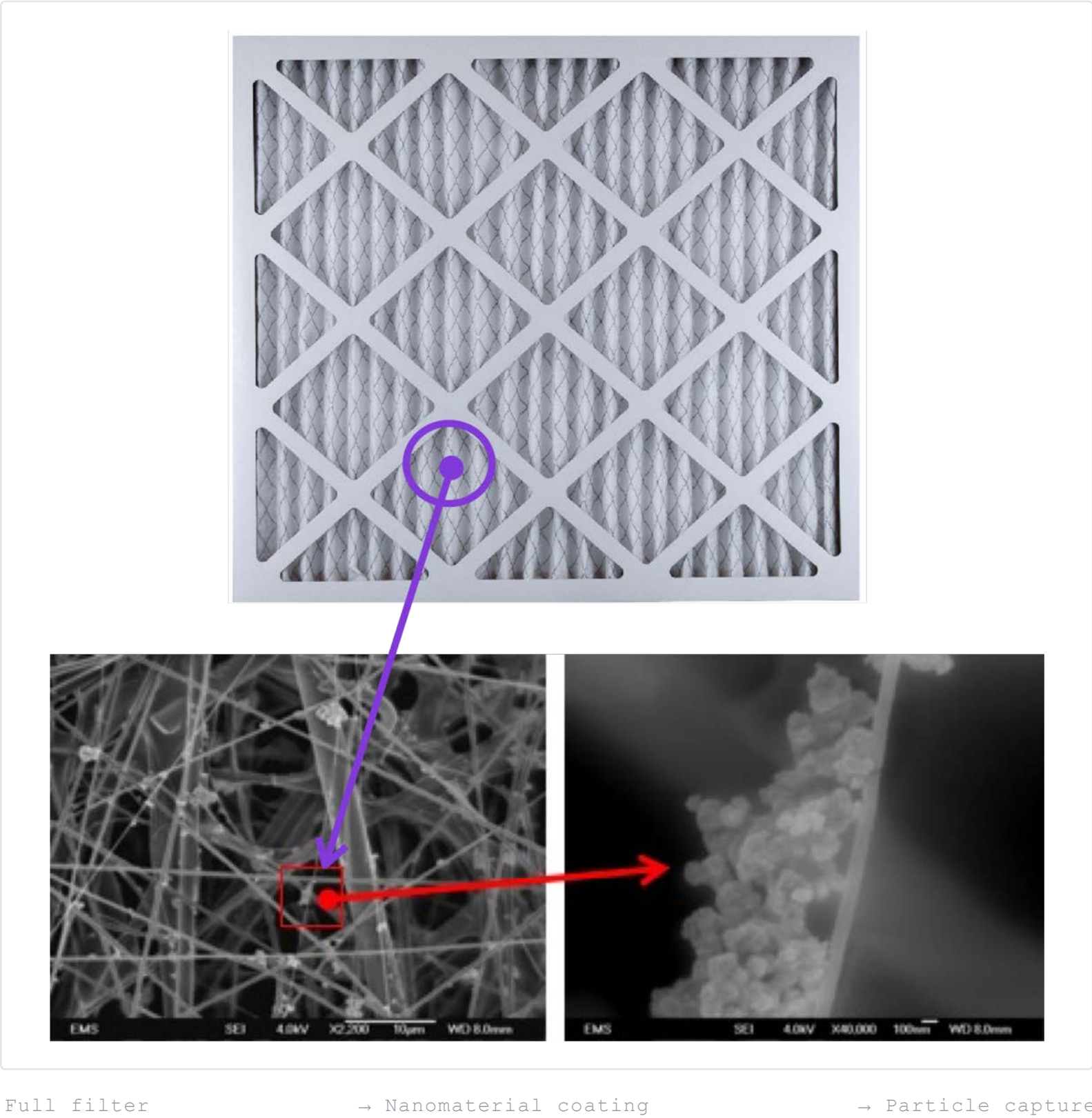
Capture by attraction, not by sieving

A **nanomaterial coating** applied to existing HVAC filters captures particles through **molecular attraction forces** rather than mechanical sieving.

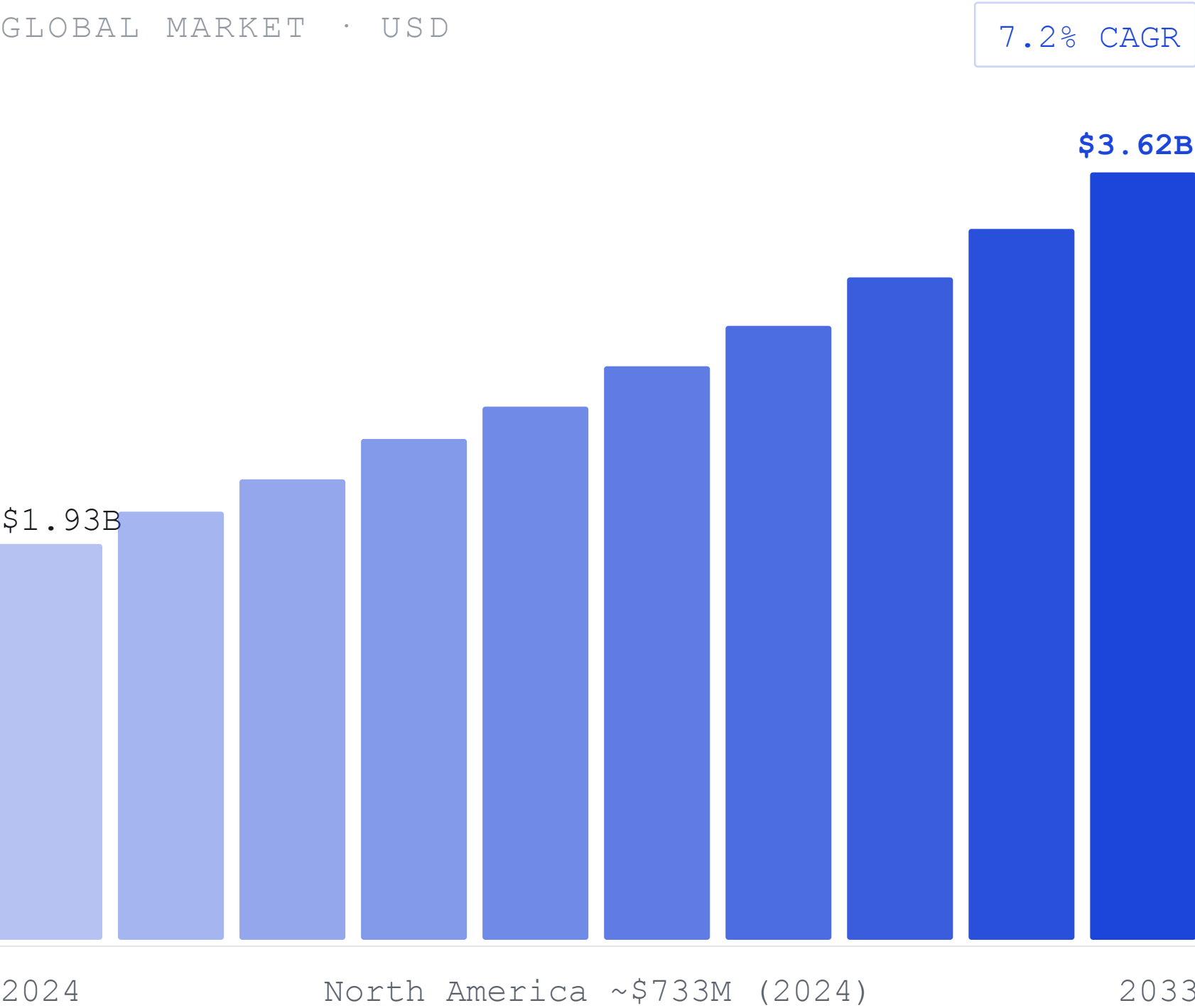
~1/6
the pressure drop, at the same
capture efficiency

99.9%
capture at 50–80% lower energy
demand

U.S. Patent 12,654,135 B2



Data center air filtration — the beachhead



ENERGY MECHANICS

HVAC is **35%** of facility energy; fan & air-handling is **7–10%** of total facility energy. (Uptime Institute)

POSITIONING

Higher-performance capture at lower energy cost than today's standard high-efficiency filters.

PRICING

20% premium over conventional filters — conservative; the market already supports ~2× premium for V-Bank low-pressure-drop filters.

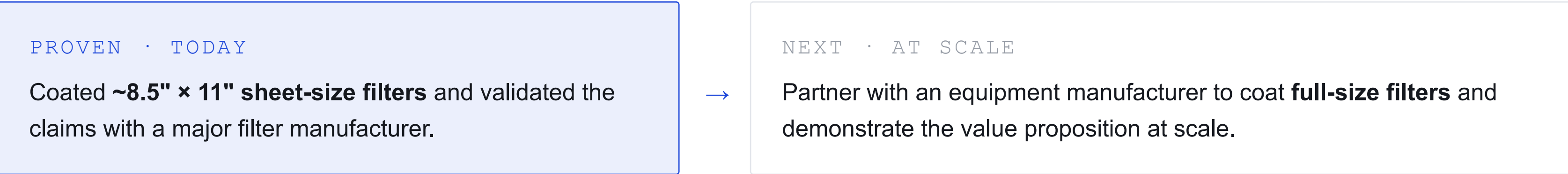
\$2.5M+ annual savings for a 50 MW data center

METRIC	Typical (PUE 1.55)	Hyperscale (PUE 1.10)
IT load	50 MW	50 MW
Total facility energy	678.9 GWh/yr	481.8 GWh/yr
Base-case energy savings	\$2.81M / yr	\$2.35M / yr
Savings range	\$1.78M – \$4.07M	\$1.45M – \$3.47M
Incremental filter investment	\$640K / yr	\$640K / yr
Simple payback	~2.7 months	~3.3 months
Year 1 ROI	+339.6%	+267.0%

Annual ROI of 300%+ and payback of 2–3 months for a 20% price premium on filters.

Validation at scale

The Science is de-risked — now scaling to prove the value proposition.



01

Coat full-size filters with an equipment-manufacturer partner.

02

Protect the manufacturing-process IP generated during scale-up.

03

Build toward a long-term supply / co-development agreement.

Cabomba Inside

A supply partnership model, not a licensing model — per-unit fee structure under a co-development and supply agreement.

01

NOW – 12 MO

Coat full-size filters with equipment manufacturer partner. Secure first anchor customer LOI from a data center operator.

02

12 – 24 MO

Validate energy savings on full-size air-handling equipment. Execute supply/co-development agreement with a major filter manufacturer.

03

YEAR 3+

Scale to additional hyperscale customers. Expand to liquid/direct-to-chip cooling and industrial HVAC.

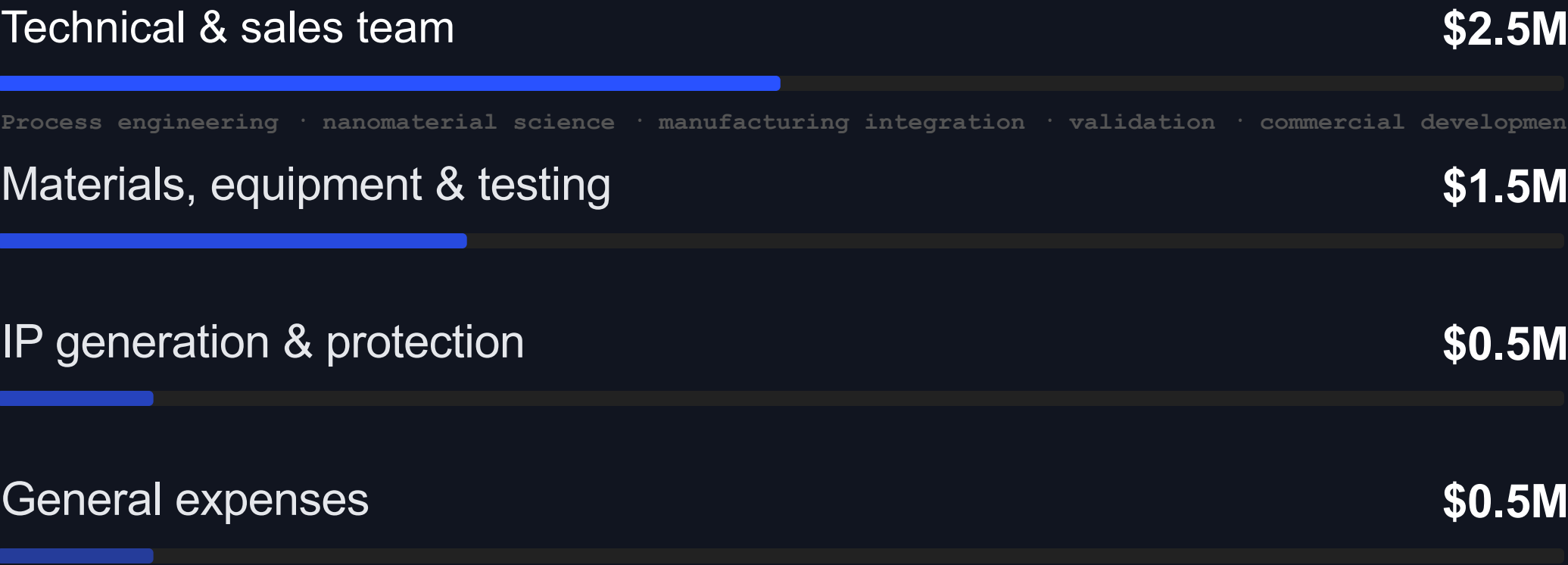
\$5M

Seed investment

2-year timeline

The \$5M funds the step change from lab-proven coating to full-size commercial manufacturing — the hardest remaining engineering problem.

USE OF FUNDS



What success looks like

- 01 Scaled, low-cost manufacturing process protected by patents and trade secrets
 - 02 Energy savings validated on full-size air-handling equipment used in data centers
 - 03 Signed supply / co-development agreement with a major filter manufacturer
-

Team & key details



Suman Sinha Ray, PhD

CEO · Co-founder



Kumar Natesaiyer, PhD

COO · Co-founder



Sumit Sinha Ray, PhD

Co-founder



Eric Schmidt

Former Dir. of Makerspace



Chris Staszal, PhD

Non-Wovens Expert

MFG. PARTNER

Elmarco (elmarco.com) — leader in nanomaterial manufacturing equipment.

STRUCTURE

C-Corp, funded via SAFE.

Beyond data centers

One core technology — the growth trajectory this seed round unlocks.

