



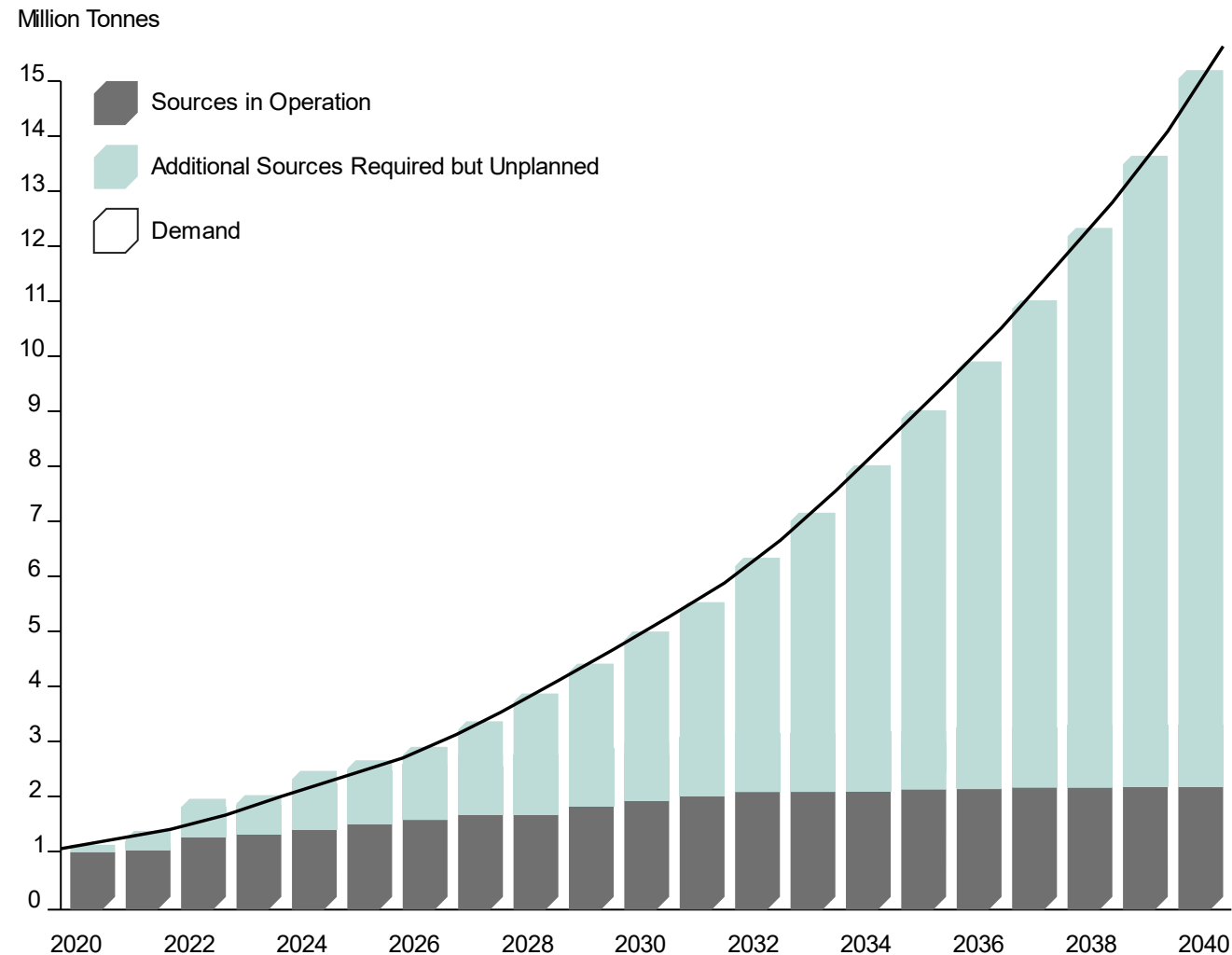
WORLD'S FIRST SCALABLE TECHNOLOGY UTILIZING **CO₂** EMISSIONS **INTO** VALUABLE **CARBON RAW MATERIAL**

Producing sustainable carbon for energy storage applications

CHALLENGE: THE BOOMING EV MARKET NEEDS GRAPHITE

66 kg

for each EV battery.



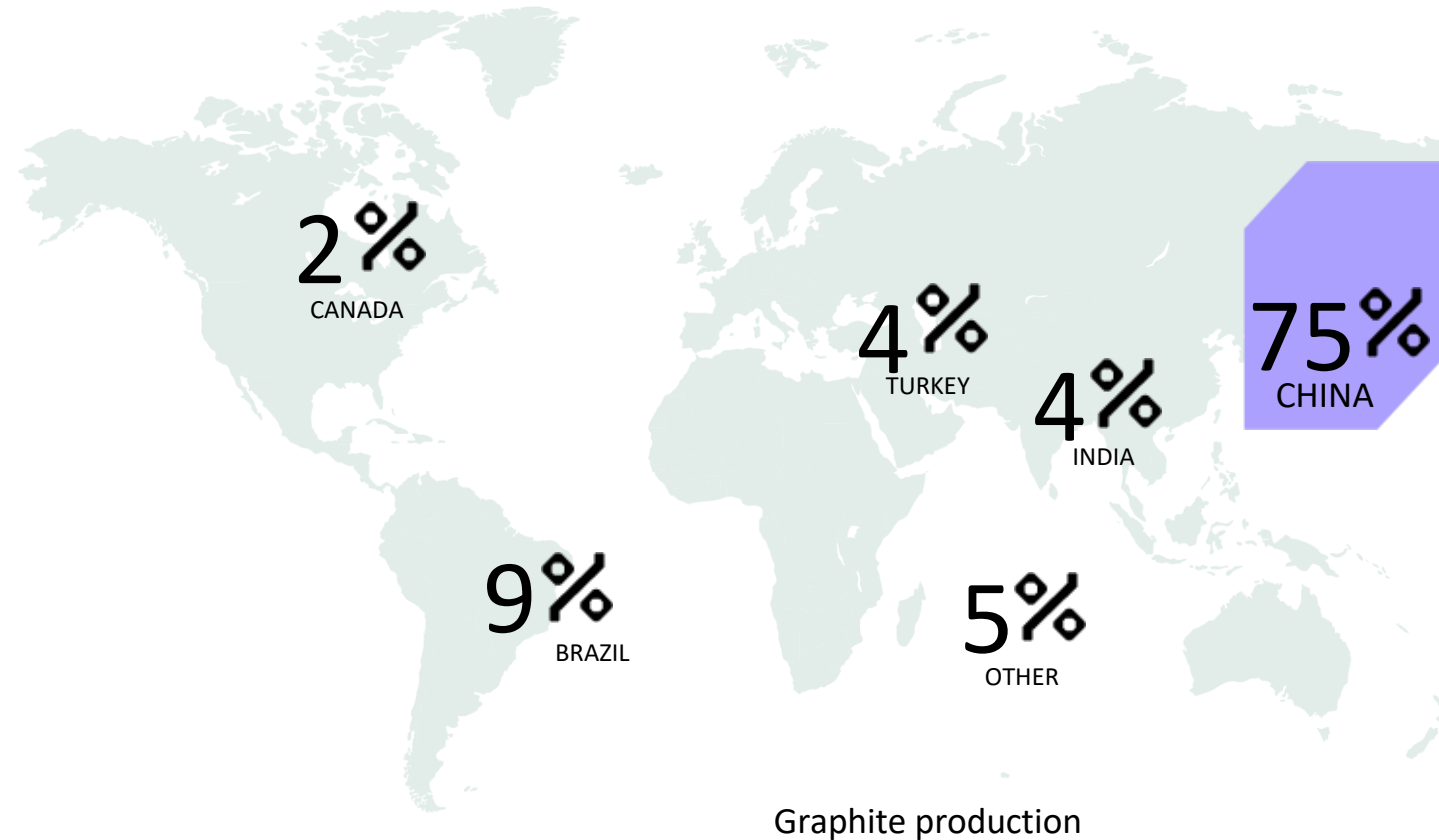
Source: Benchmark Mineral Intelligence

PROBLEM: THERE IS NO GRAPHITE SECURITY IN EUROPE

Europe imports

98%

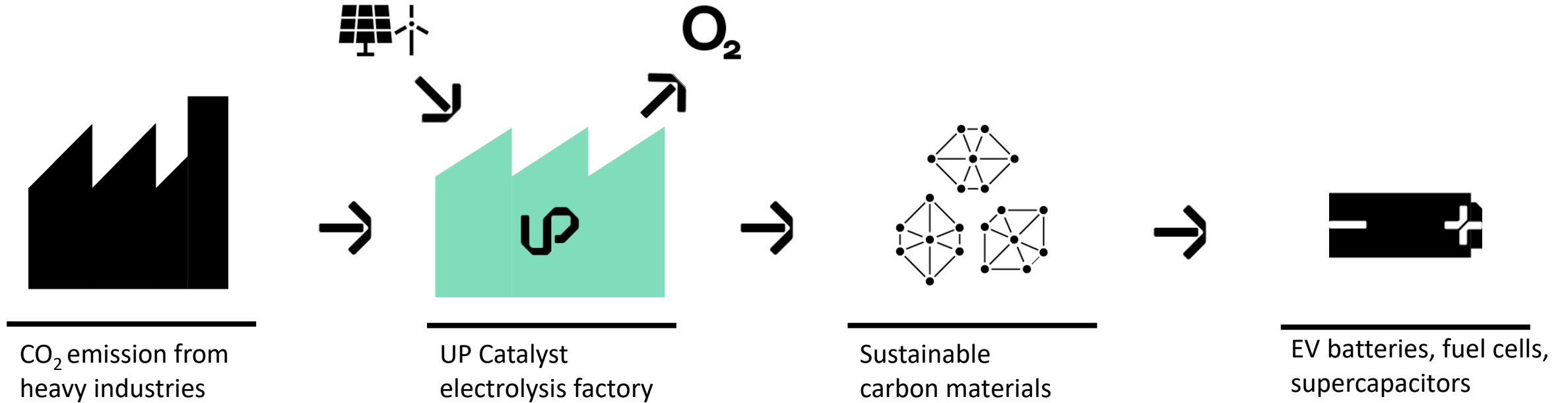
of the graphite it uses.



Graphite production

The EU and US have declared graphite as a critical raw material

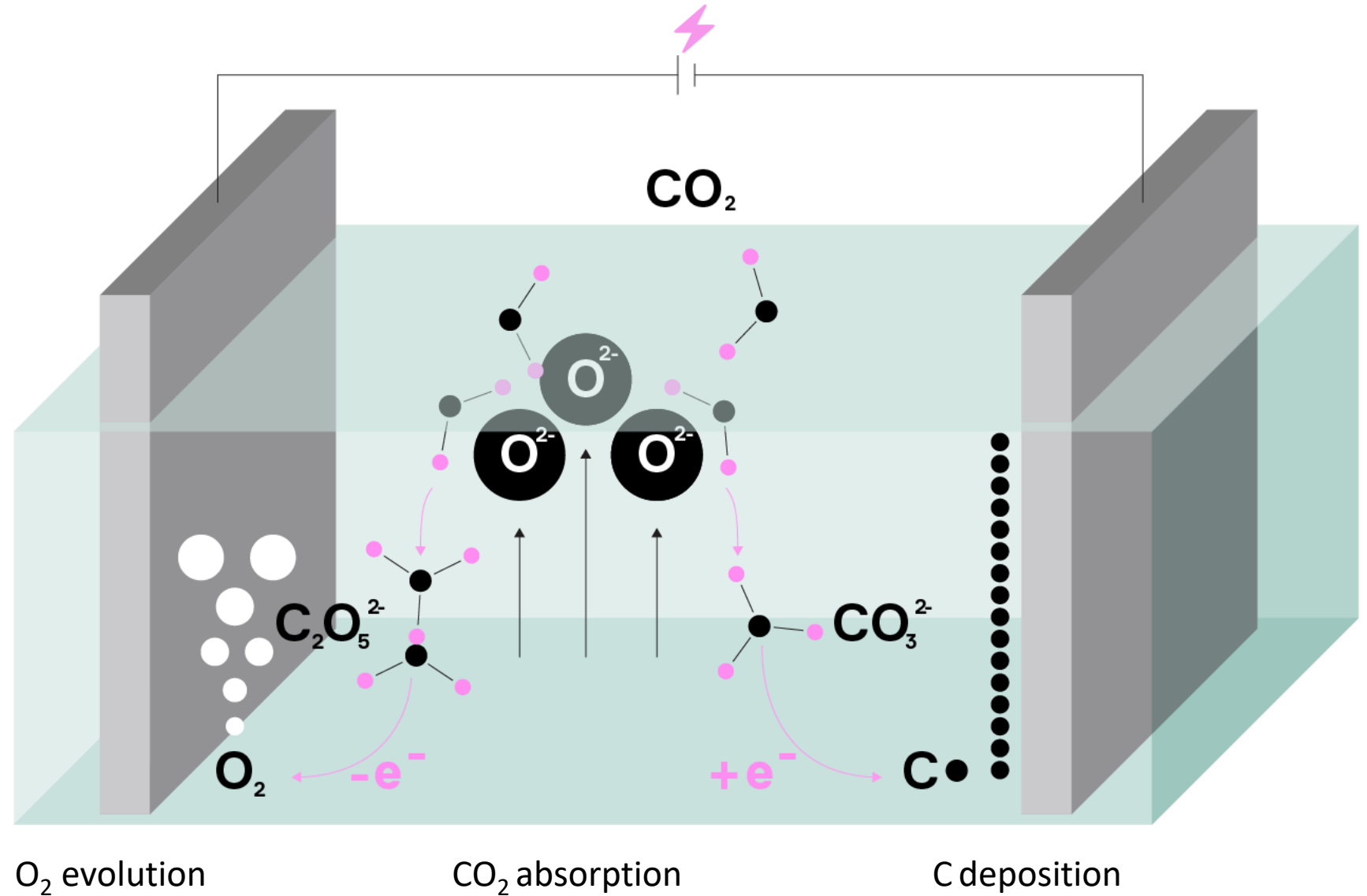
SOLUTION – USE CO₂ EMISSIONS TO PRODUCE CARBON MATERIALS



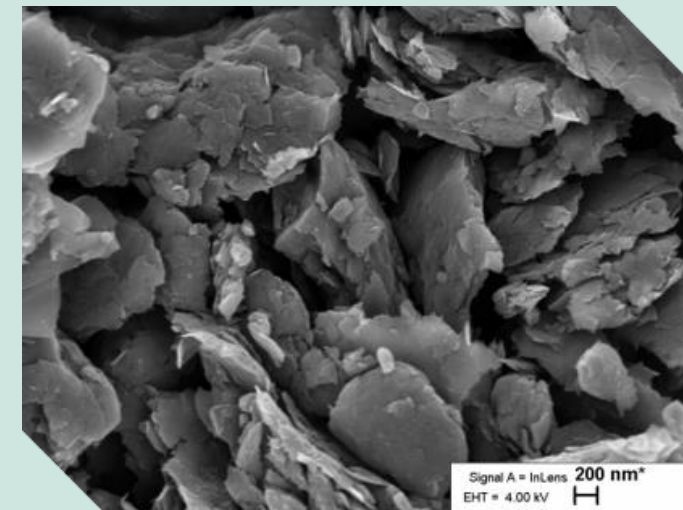
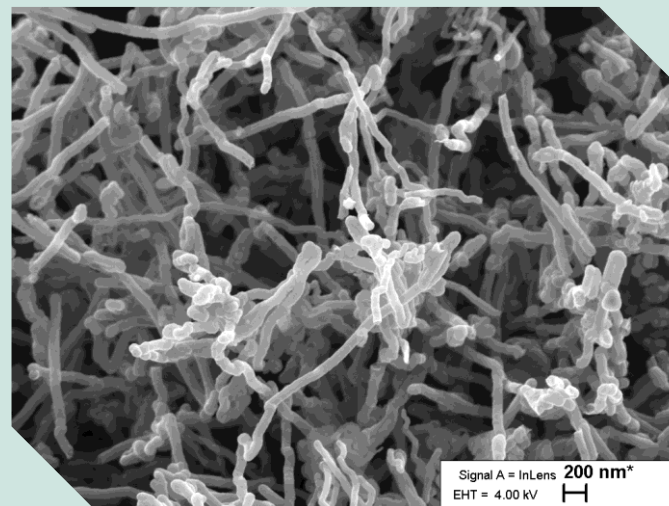
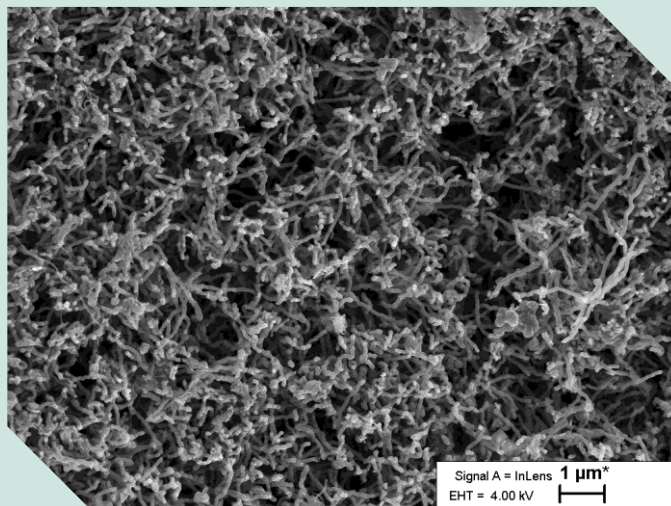
TECHNOLOGY

Revolutionary MSCC-ET
based synthesis method

Proprietary reactor
and system design



PRODUCT LINE UP



Multi-walled carbon nanotubes (CNT)

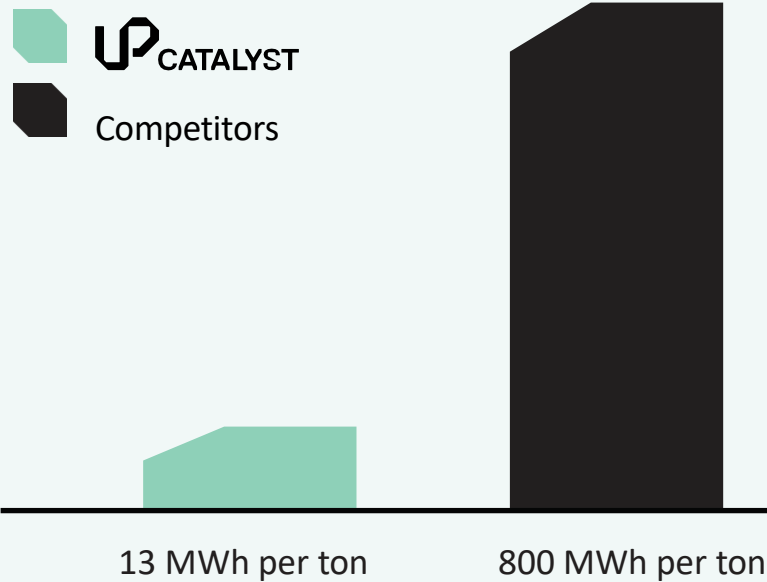
Conductive additives for enhancing
battery performance

Graphite

Most widely used anode
material in batteries

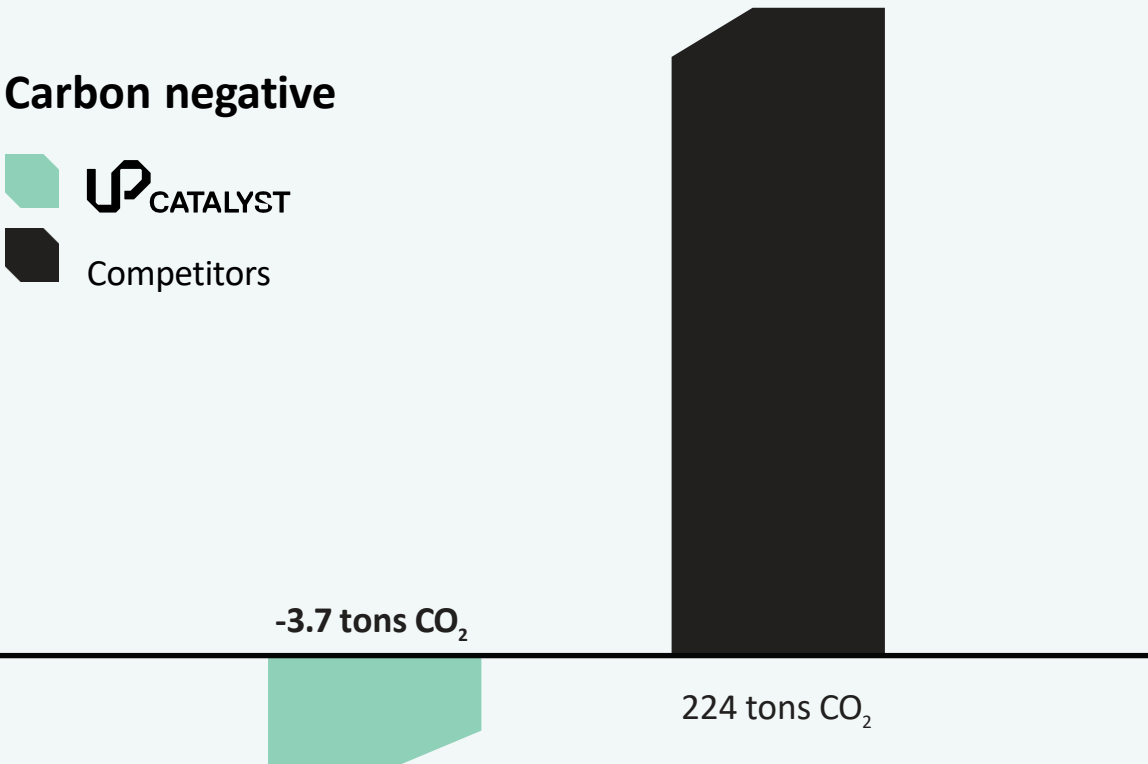
HOW ARE WE DIFFERENT FROM COMPETITORS?

Energy efficiency



UP Catalyst technology is 60 times more energy efficient

Carbon negative



Competitors emit 224 tons of CO₂ per each ton of material produced,
UP Catalyst consumes 3.7 tons of CO₂ per each ton of material

PERFORMANCE

93.75 %

capacity retention after exceeding 4000
charge and discharge cycles¹

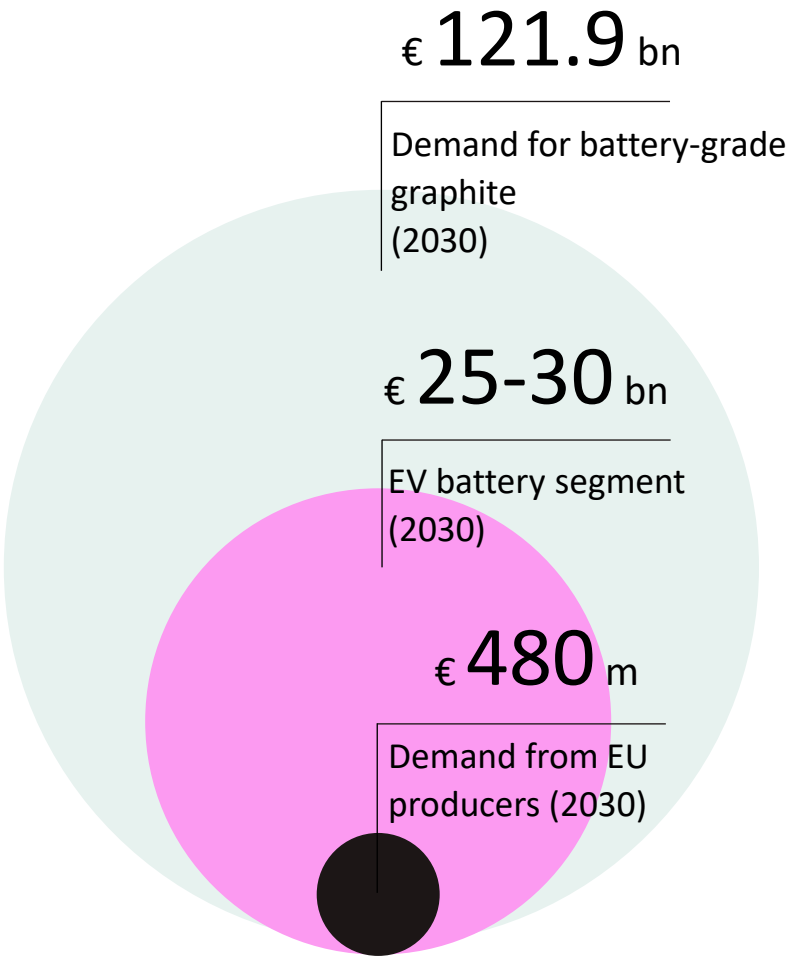
+

improved charge rate and energy density

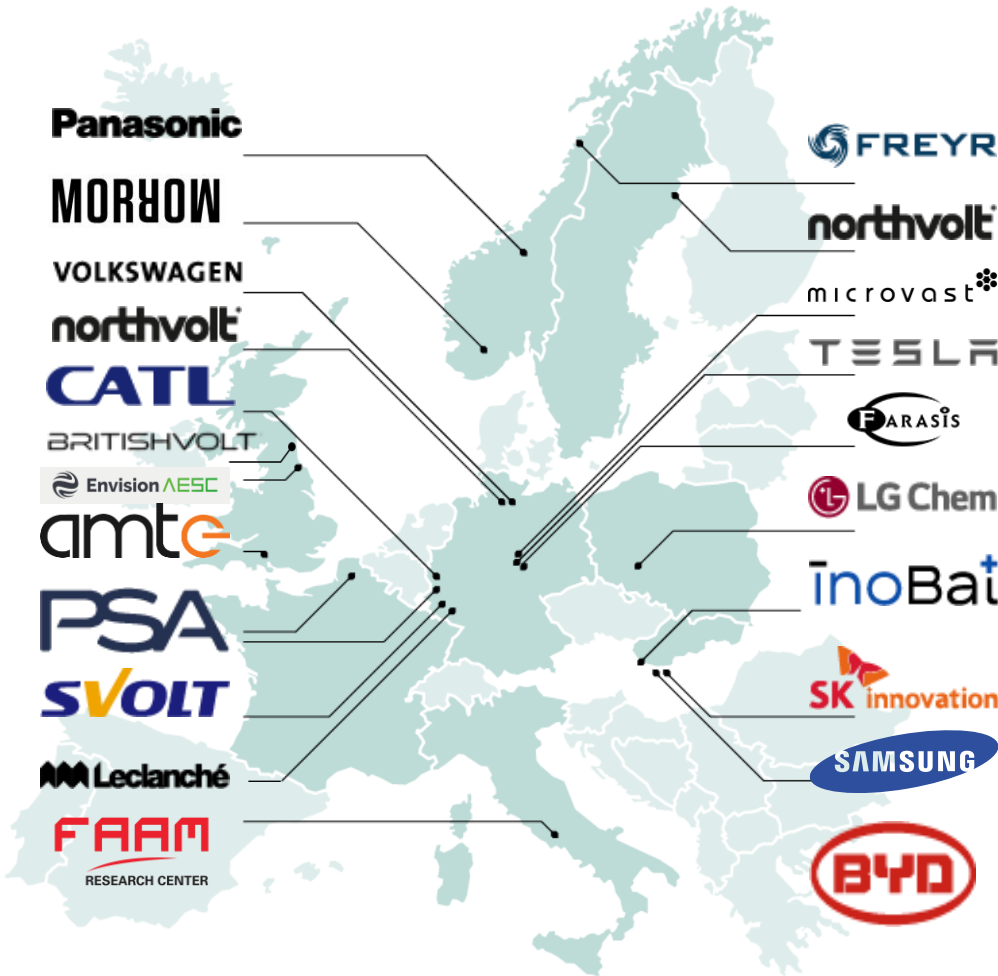
Imperial College
London

¹<https://batteriesnews.com/up-catalyst-electrode-material-co2-leads-exceptional-performance-sodium-ion-batteries/>

CHALLENGE: 10 MILLION TONS OF CARBON IS NEEDED BY 2030 FOR EV-S

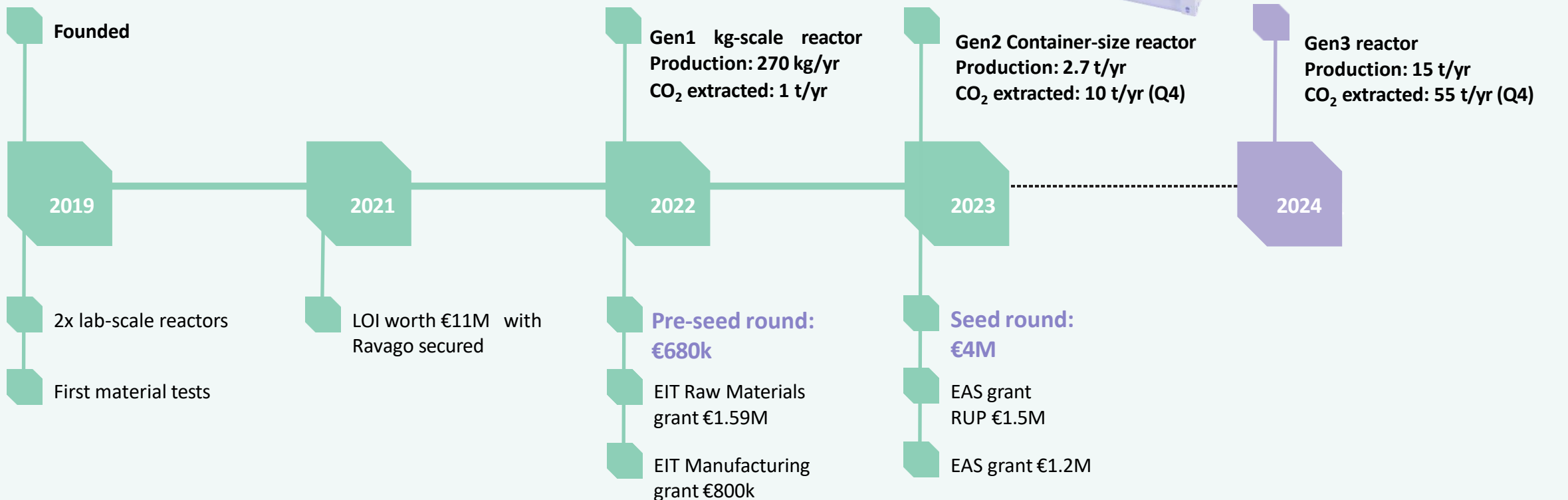


MARKET POTENTIAL



BATTERY MANUFACTURERS NEED GRAPHITE AND CARBON NANOMATERIALS IN THOUSANDS OF TONS

TIMELINE



Gen 1 reactor

Gen 2 reactor

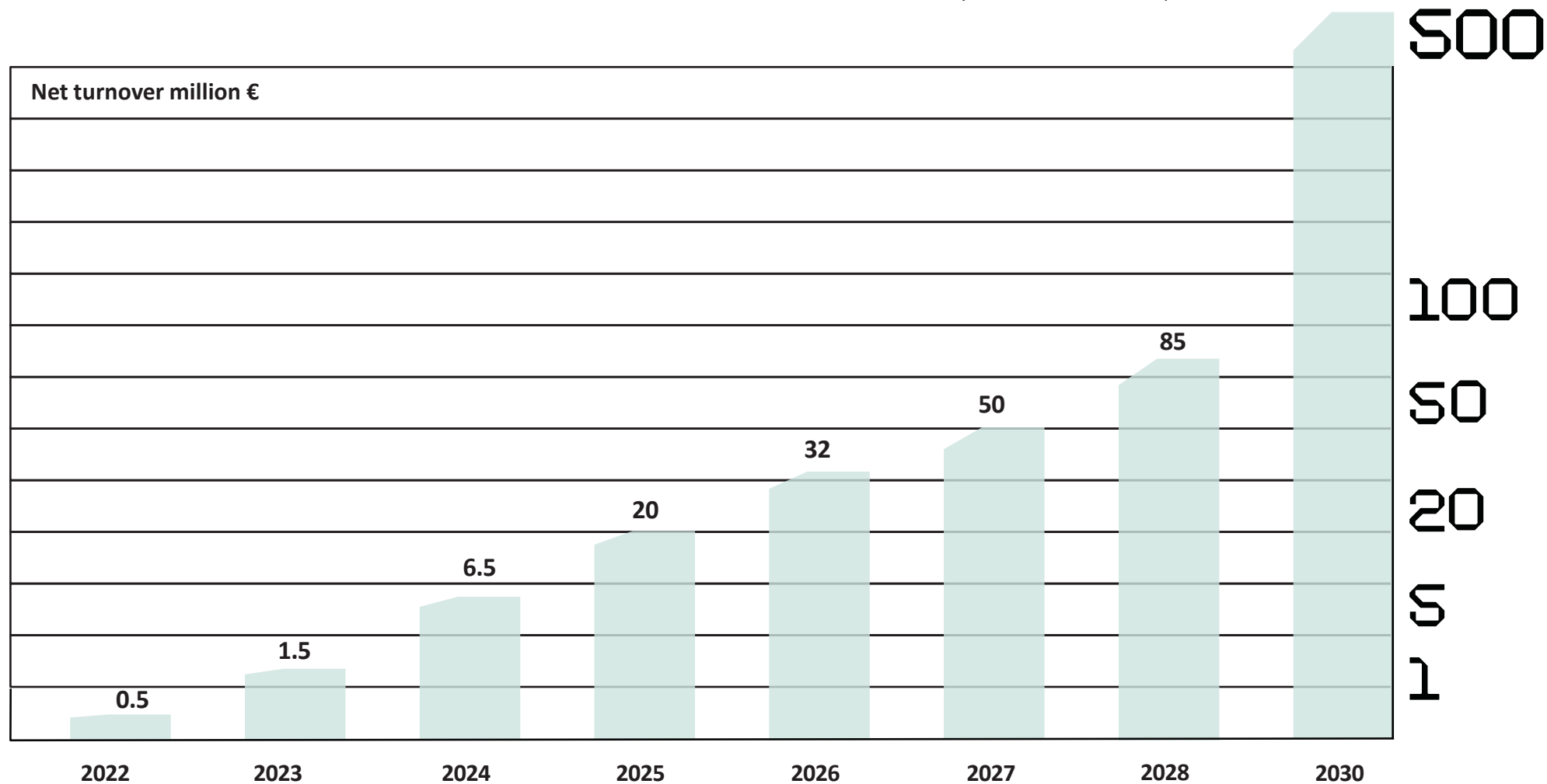
Gen 3 reactor

Gen 4 reactor

Industrial facility

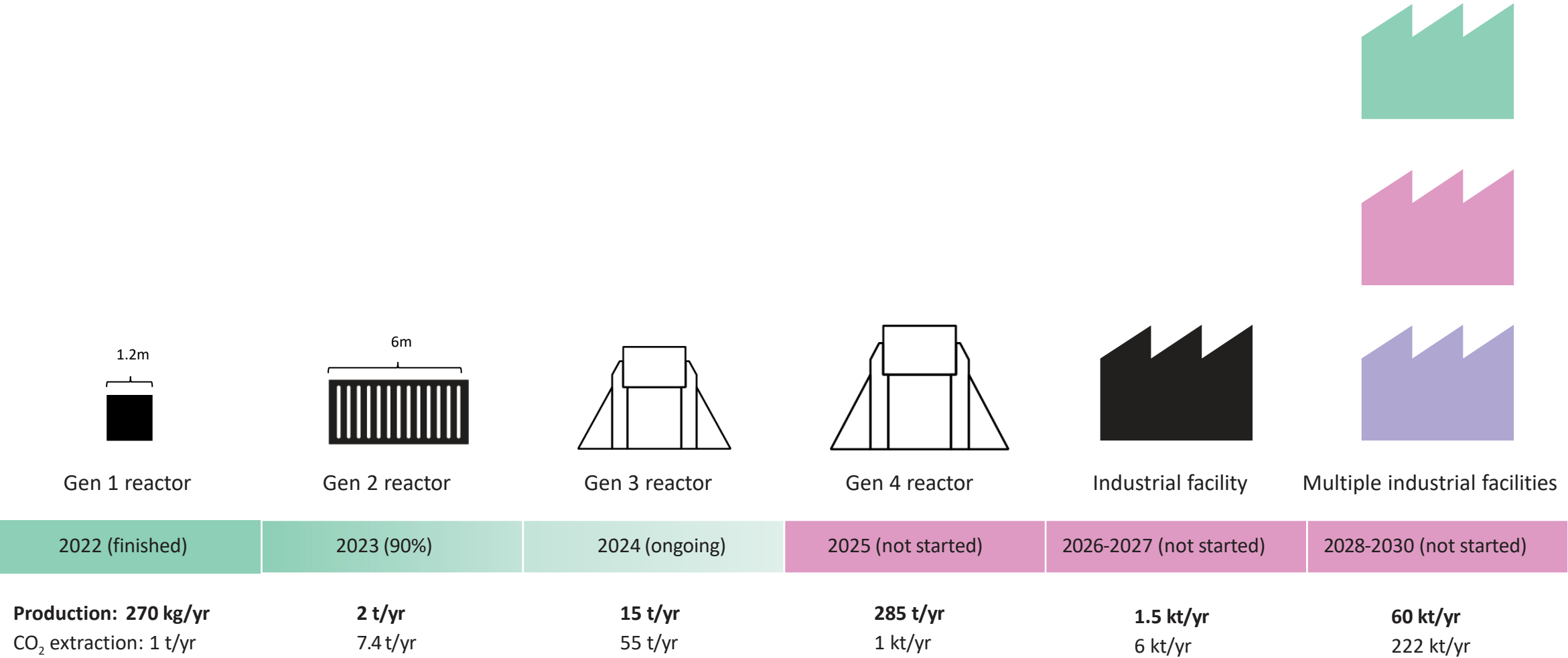
Multiple industrial facilities

FINANCIAL
FORECAST



UP CATALYST

SCALE-UP PLAN



OUR TEAM OF EXPERTS

22 Employees

8 Phd's

40% Women



Dr. Gary Urb
CEO, co-founder

13+ years AkzoNobel
& WolfGroup



Dr. Einar Karu
CTO

6+ years Max Planck
Institute for Chemistry



Teele Niidas
CMO

7+ years marketing and
international relations



Rait Maasikas
CFO

18+ years in international
banking



Karl-Gustav Tamberg
Head of Sales

7+ years international
sales in Ravago Group



Dr. Kätlin Kaare
R&D Manager Pyrolysis,
co-founder

6+ years research in
electrochemistry



Dr. Ivar Kruusenberg
Board member, co-founder

14+ years research in
nanomaterials and fuel-cells



MSc, Mirjam-Kim Rääbis
Product Developer

4+ years in chemical
research



Sander Trofimov
Production Manager

4+ years automotive industry
quality engineer



LET'S LEAD THE WORLD
TO SUSTAINABLE
CARBON!