

THE CHALLENGE: CAPTURING CO2 FROM VERY DILUTED SOURCES

1ST APPLICATION ON ALUMINIUM SMELTING EMISSIONS

1.

Carbon-free aluminium demand driven by automotive & solar, but the challenge is the emissions, totaling ~270MtCO₂/year

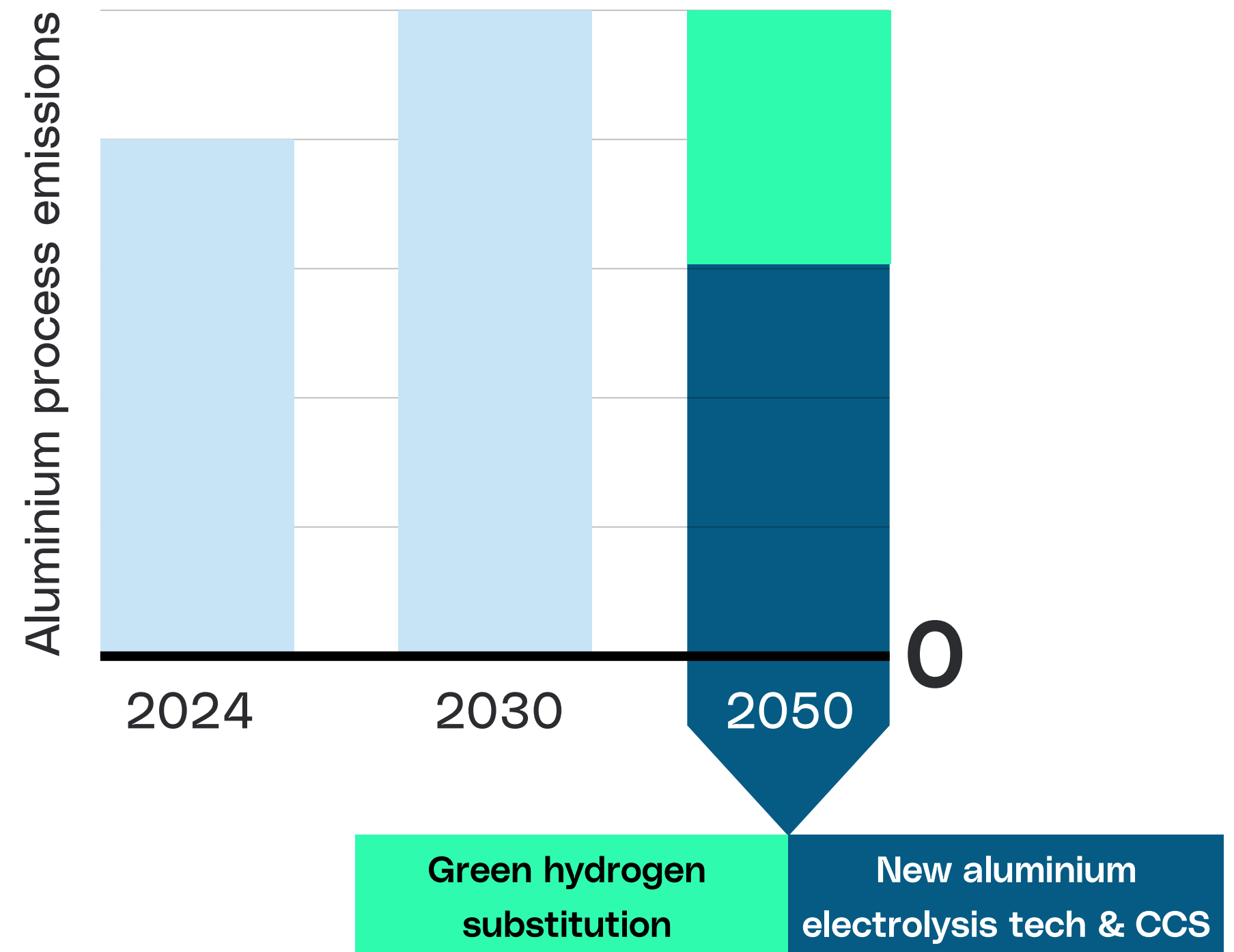
2.

Aluminium smelting emits CO₂ @ 1% concentration

3.

Amine-based capture solutions are NOT effective @1% concentration
→ cost over \$100/t

Implement New Technologies



REPAIR, HIGHLY EFFICIENT CAPTURE FOR HIGHLY DILUTED SOURCES

1% ALUMINIUM APPLICATION

1.

Lowest Energy Consumption

<300 kWh/t

2.

Lowest Capture Cost

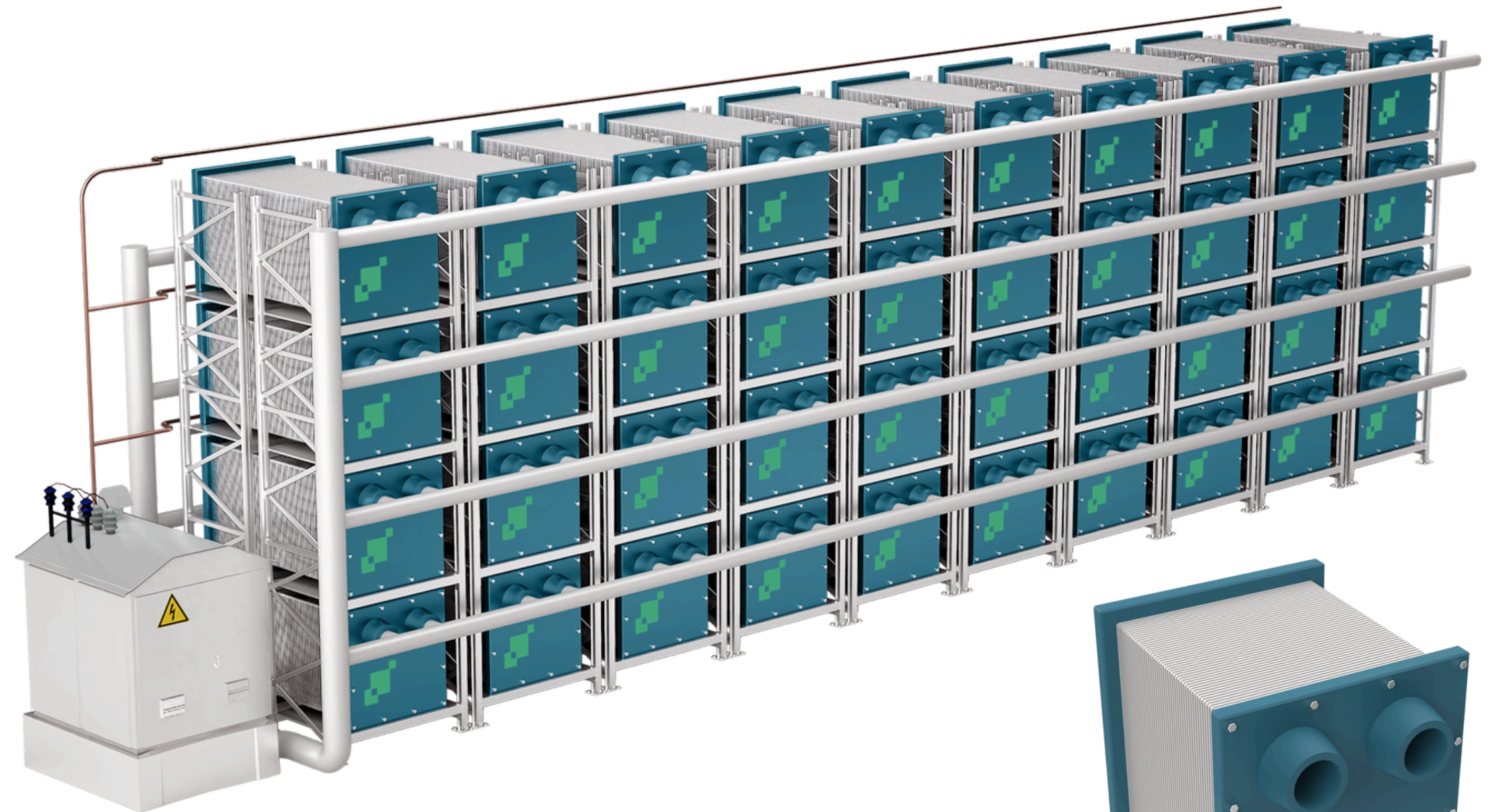
<\$40/t @ the megaton scale

3.

Shortest Path to Scale

2 field pilots in 2025

THE ELECTROCHEMICAL "STACKDAC" MODULE



**NEXT STEP:
3% CCGTS APPLICATION**