

April 2026

CURIA

DECARBONIZED CEMENT, TODAY

PRIVILEGED & CONFIDENTIAL



TEAM

CURA's founding team are deep experts in **carbon capture** and **cement**, with proven operating experience in building and scaling breakthrough climate tech. Together, the founders have raised **over \$200M in venture funding**.



CEO

Erin Bobicki

- Co-founder and CTO at **Aurora Hydrogen** (\$20M VC-backed hydrogen startup)
- VP R&D at **Brimstone** (\$80M VC-backed green cement startup), built pilot within 7 months
- Professor at **University of Alberta** and **University of Toronto**, \$5M Crush-It Challenge Winner
- 20+ years building and scaling hardtech



CTO

Phil De Luna

- CSO and CCO at **Deep Sky** (\$100M VC-backed DAC startup), designed and built pilot in a year
- Led carbontech in **McKinsey** sustainability practice
- Director at **National Research Council** (\$60M national lab program)
- 10+ years in carbon capture, **Forbes 30 Under 30**, XPRIZE finalist



COO

Sabrina Scott

- Postdoctoral fellow at **University of British Columbia** and inventor of multiple patents (including core CURA IP)
- Non-profit operations Director at **Mid-Sun Community Association**
- Inflection Awardee by **Marble and Breakthrough Energy Fellows**, **Forbes 30 Under 30**
- 5+ years in tech development



PROBLEM

Cement is responsible for **8%** of global CO₂ emissions

EMISSIONS BREAKDOWN

The average emission intensity of cement is **830 kg CO₂ per tonne**

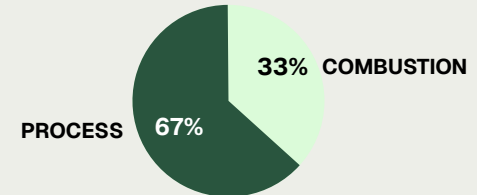
Globally, over **4.5 billion tonnes** of cement are produced

PROCESS EMISSIONS

limestone + heat → lime + CO₂

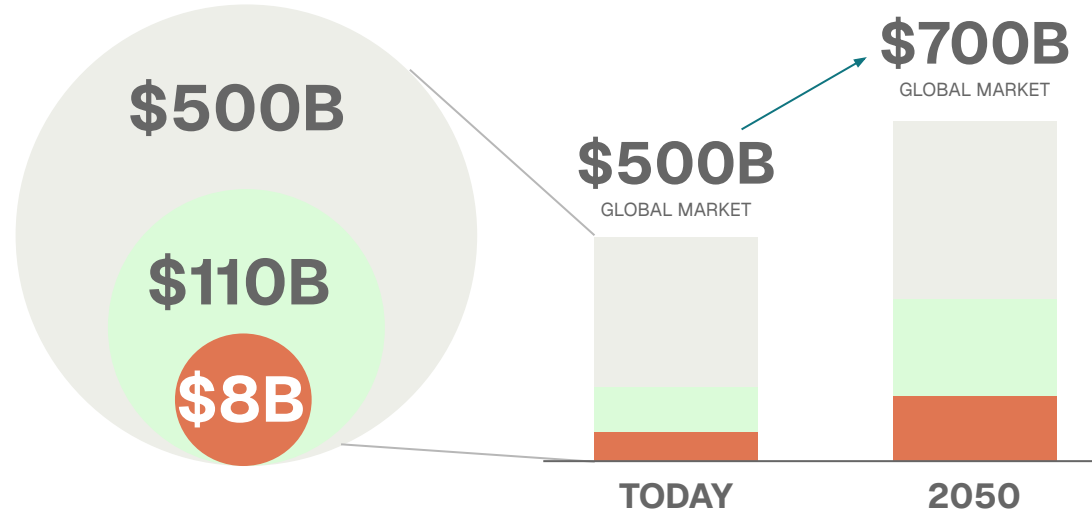
COMBUSTION EMISSIONS

fuel → heat + CO₂



MARKET OPPORTUNITY

The global cement market represents a **USD \$500 billion TAM**, with decarbonization-driven regions and segments in North America, Europe, and parts of Asia comprising a **USD \$110 billion SAM** where low-carbon materials command a premium. Within this, CURA's **USD \$8 billion SOM** targets applications where electrochemical $\text{Ca}(\text{OH})_2$ can directly replace conventional inputs—enabling immediate, drop-in decarbonization in cement, high-purity lime, and emerging carbon-removal markets.



TAM
Global cement and lime market today

SAM
North America, Europe, and parts of Asia with climate policies

SOM
Retrofit-ready plants for CURA installation

THE COST OF CARBON

\$80M
ANNUAL COST

In carbon tax costs for a 1MT cement facility with a carbon price of \$100/tCO₂

- **EU ETS:** CO₂ allowances now trading at **€60–€100/tonne**, with the Carbon Border Adjustment Mechanism (CBAM) phasing in by 2026
- **Canada:** Carbon price set to reach **CAD \$170/tonne** by 2030

WHAT WE OFFER

CURA's solution is for cement producers who need low-energy and low-cost decarbonization of their manufacturing process today

SUPPLY CHAIN READY

We **use limestone** and **produce industry standard cement**, saving billions and avoiding multi-decade development and permitting timelines



LOW COST & ENERGY

Our modular process uses **half the energy** and requires **10x less CAPEX** than conventional CCUS



ULTRA LOW CARBON

CURA enabled cement has an **85% reduction in carbon footprint** compared to traditional cement

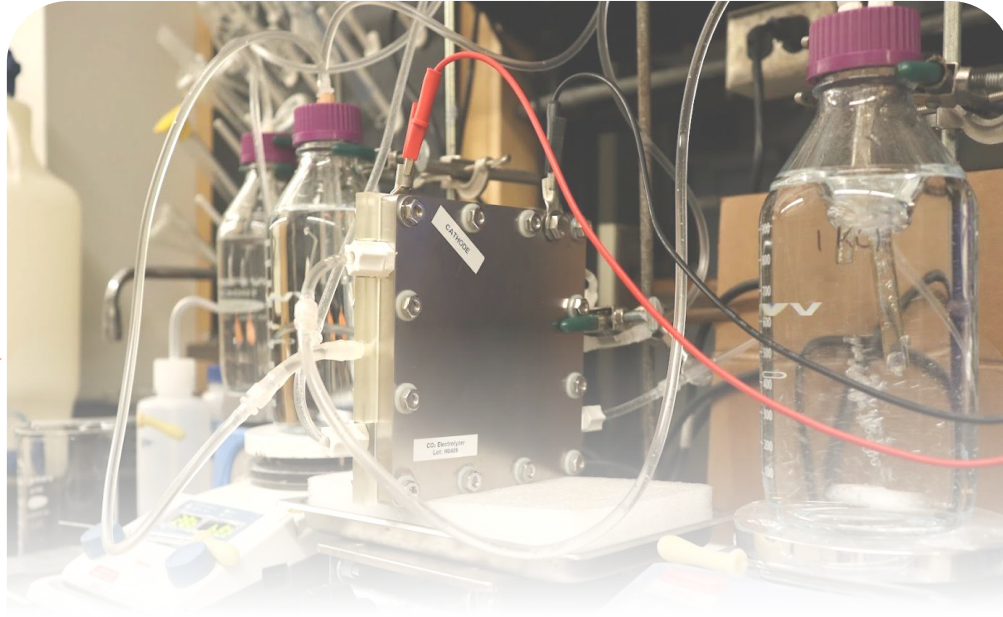


OUR SOLUTION

CURA's patented electrochemical technology uses **clean electricity - not heat - to split limestone into lime and pure CO₂**, enabling production of low-carbon lime and Ordinary Portland Cement (OPC) with existing feedstocks. Our **CURALYTE™ chemistry allows operation at 1/3 the thermodynamic minimum potential of a hydrogen electrolyzer.**



LIMESTONE
 CaCO_3



ELECTROCHEMICAL CEMENT PRODUCTION



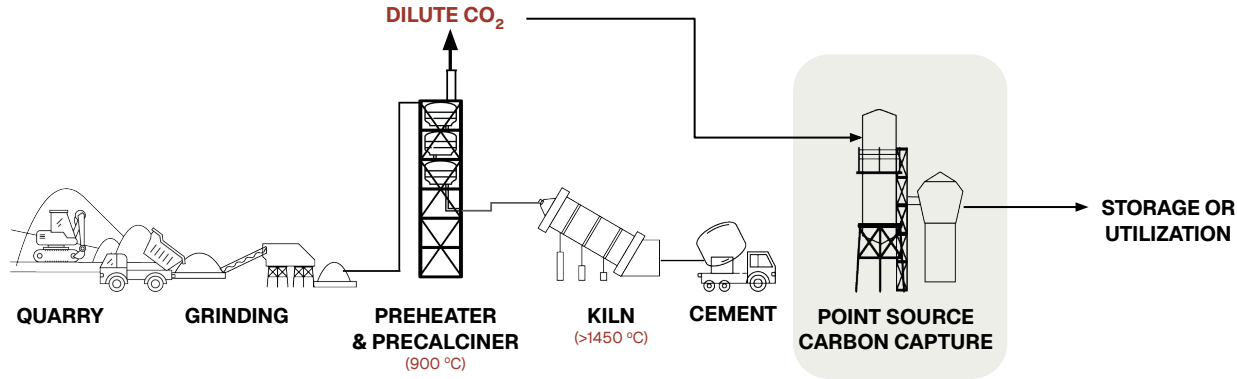
PURE CO₂



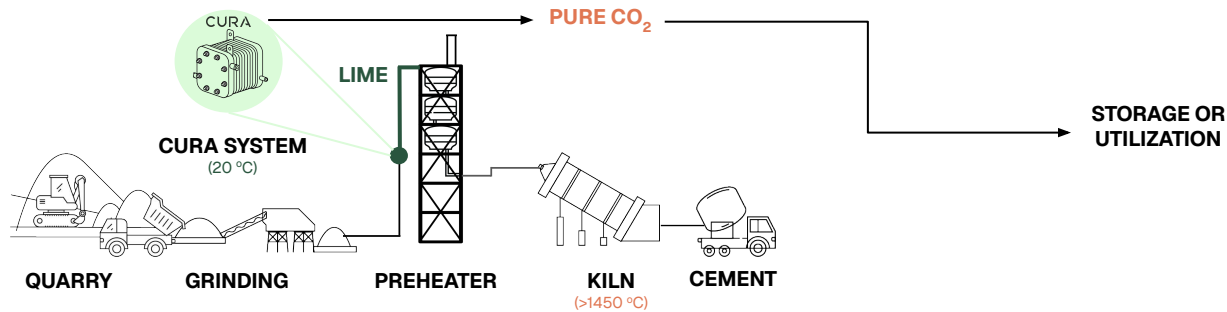
**DECARBONIZED
CEMENT**

RETROFIT READY

CEMENT PRODUCTION USING CARBON CAPTURE AND STORAGE (CCS)



ELECTROCHEMICAL DECARBONIZED CEMENT PRODUCTION USING CURA'S TECHNOLOGY



OUR VALUE PROPOSITION

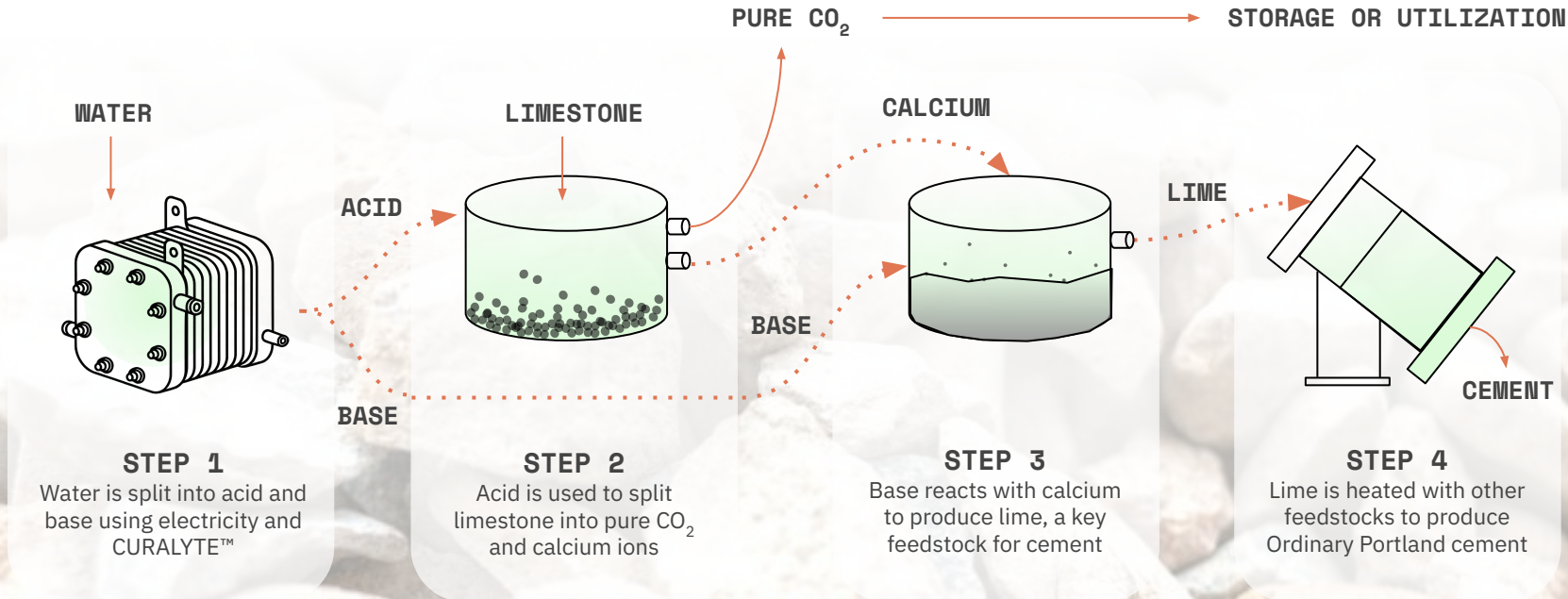
CURA's technology is a drop-in replacement for the precalciner and **readily replaces expensive CCS** for carbon capture, simplifying operations, reducing footprint, and lowering cost

BENEFITS

- Save energy costs while reducing carbon footprint
- Reduce downtime through modular prefabricated units and rapid installation
- Smaller footprint than CCS
- Hydrated lime product can also be solid directly

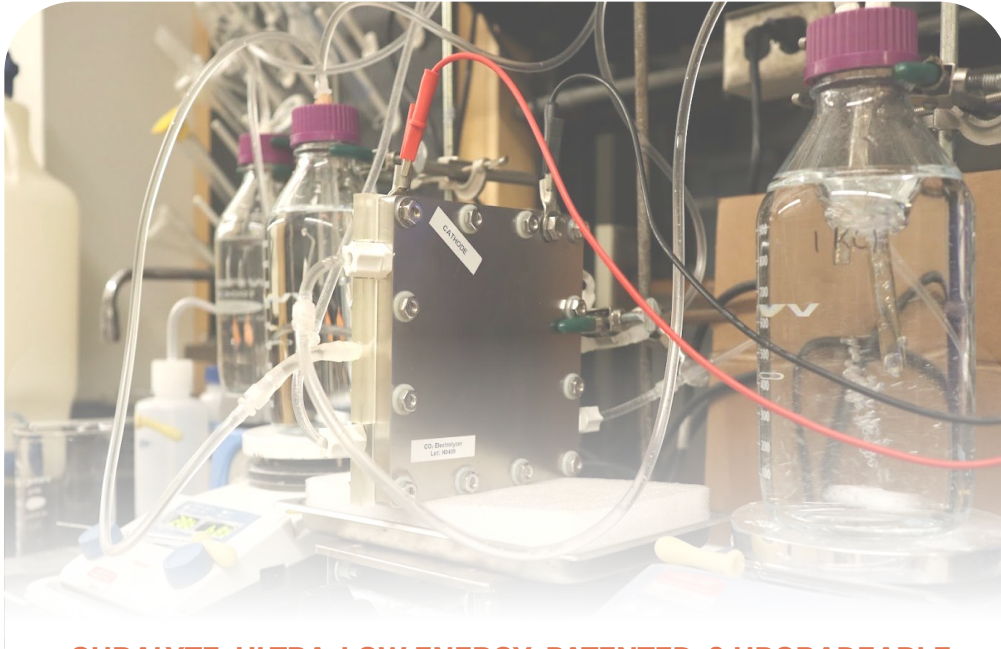
HOW IT WORKS

CURA's electrochemical technology uses clean electricity—not heat—to split limestone into lime and pure CO₂, enabling production of low-carbon lime and Ordinary Portland Cement (OPC) with existing feedstocks

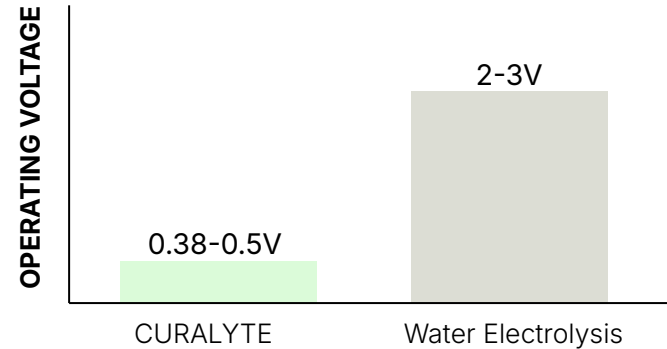
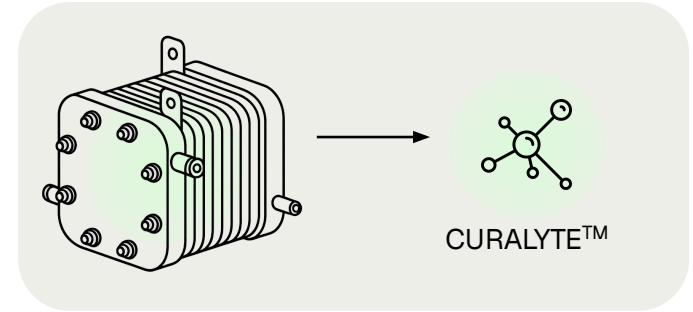


OUR TECHNOLOGY

Our proprietary patent-pending **redox-mediator electrolyte**-CURALYTE™- technology enables ultra-low voltage operation, and significantly **reduces energy consumption**, lowering both the carbon intensity and operating costs to produce cement and lime



CURALYTE: ULTRA-LOW ENERGY, PATENTED, & UPGRADEABLE



DEVELOPMENT ROADMAP



MINI-PILOT (5 MONTHS)

ENG & CONSTRUCTION | COMMISSIONING

PILOT (18 MONTHS)

ENGINEERING | CONSTRUCTION | COMMISSIONING

DEMO (28 MONTHS)

ENGINEERING | CONSTRUCTION | COMMISSIONING

FOAK (36 MONTHS)

ENGINEERING | CONSTRUCTION

MINIPILOT



PILOT



DEMO



FOAK




CAPACITY	5 kg per day	100 TPA	30,000 TPA	500,000 to 1,000,000 TPA
CAPEX	\$250,000	\$4M	\$20-30M	\$200-500M
TARGET METRICS	250-500 cm ² total surface area, ~4 V, water electrolysis baseline, 10 cell stack	500 cm ² cell surface area, ~3 V, water electrolysis baseline, 50-100 cell stack	1 m ² cell surface area, 1-2 V, CURALYTE redox platform, 200-cell stack	2 m ² cell surface area, 0.5-1 V, fully optimized CURALYTE redox platform, 500 cell stack

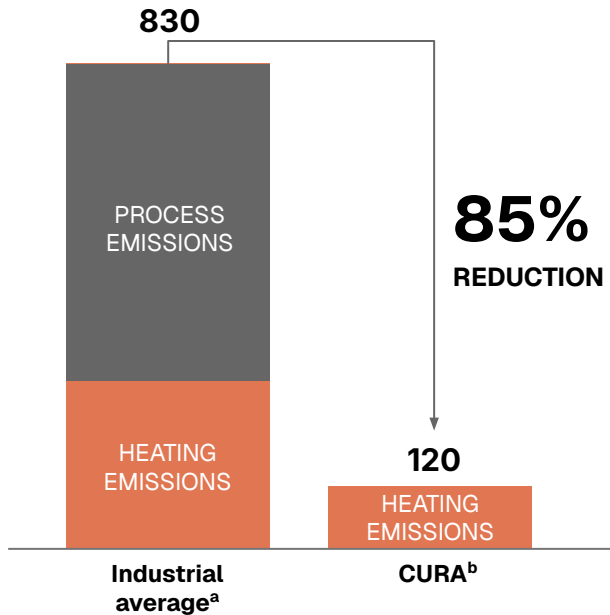
EMISSIONS & ENERGY SAVINGS

CURA's pre-calcination carbon capture **completely eliminates all process emissions** and reduces the amount of heating emissions leading to an 85% total emissions reduction.^b CURA's replacement for the precalciner is **more energy efficient**, resulting in a 45% reduction in energy consumption per tonne of clinker compared to a plant with CCS. Third party-assessment by **Sylvera validated 85% emissions reduction LCA**.

EMISSIONS INTENSITY

kg CO₂ per t cement

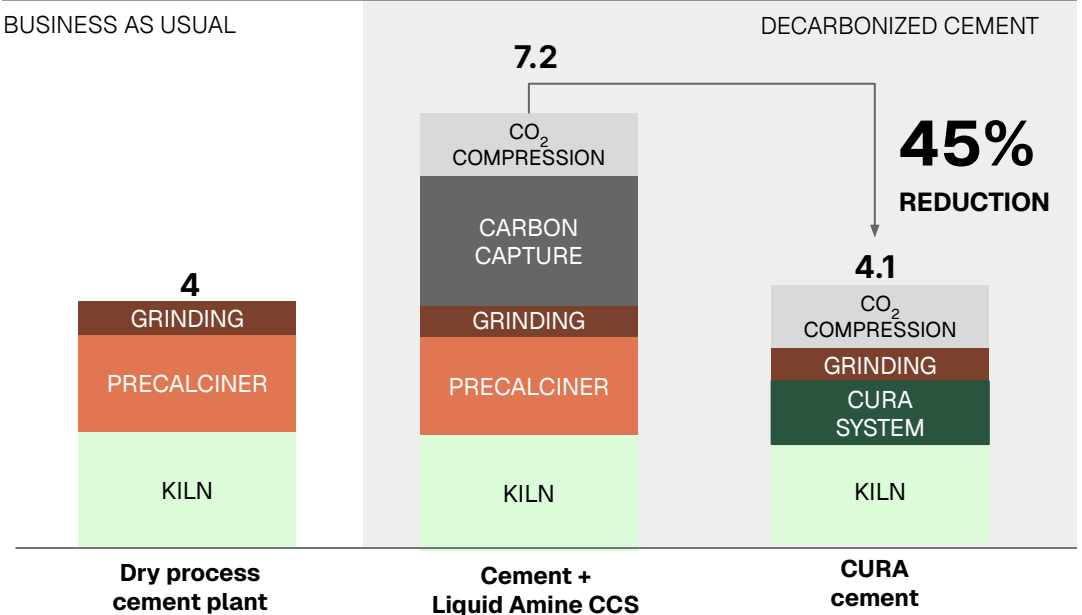
 Sylvera VALIDATED



ENERGY REQUIREMENT

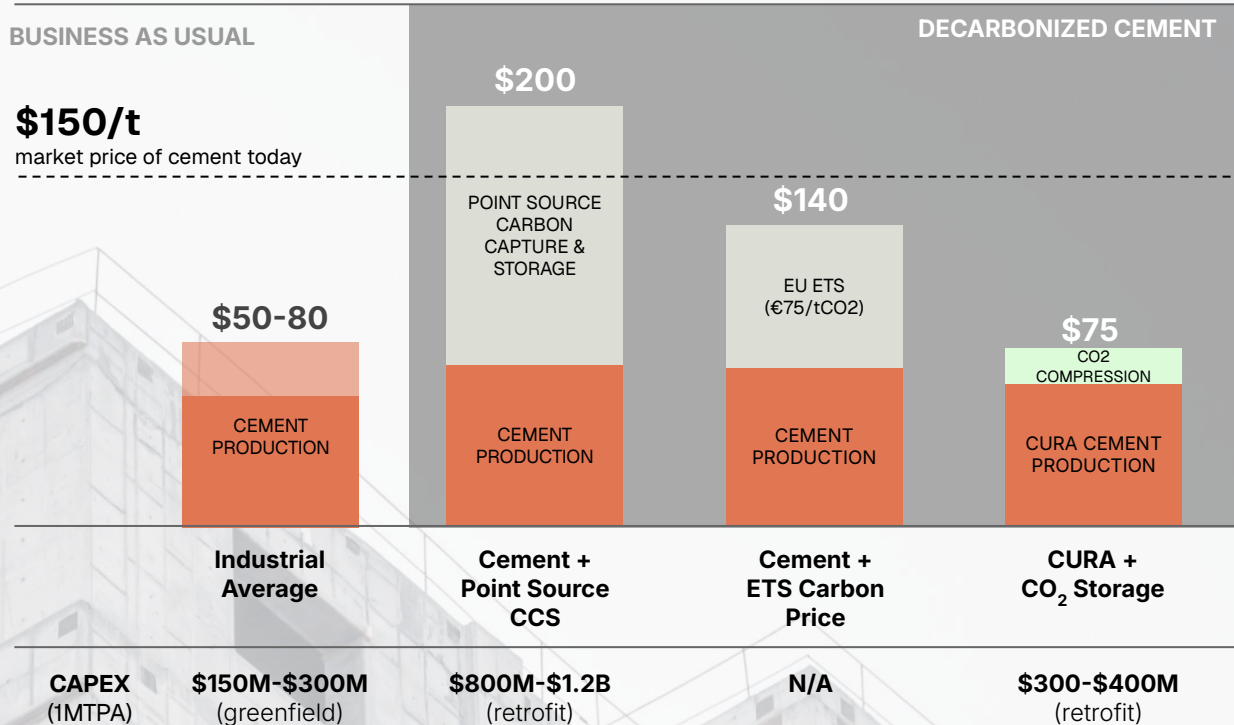
GJ per t cement

BUSINESS AS USUAL



COST PARITY WITHOUT CARBON

LEVELIZED COST OF PRODUCTION (\$ per tonne of cement)



DECARBONIZED CEMENT AT TODAY'S COST

In a future defined by rising carbon prices and tightening regulation, the industry faces a choice: higher costs from CCS and carbon pricing, or structural decarbonization.

CURA is the only pathway to net-zero cement at cost parity.

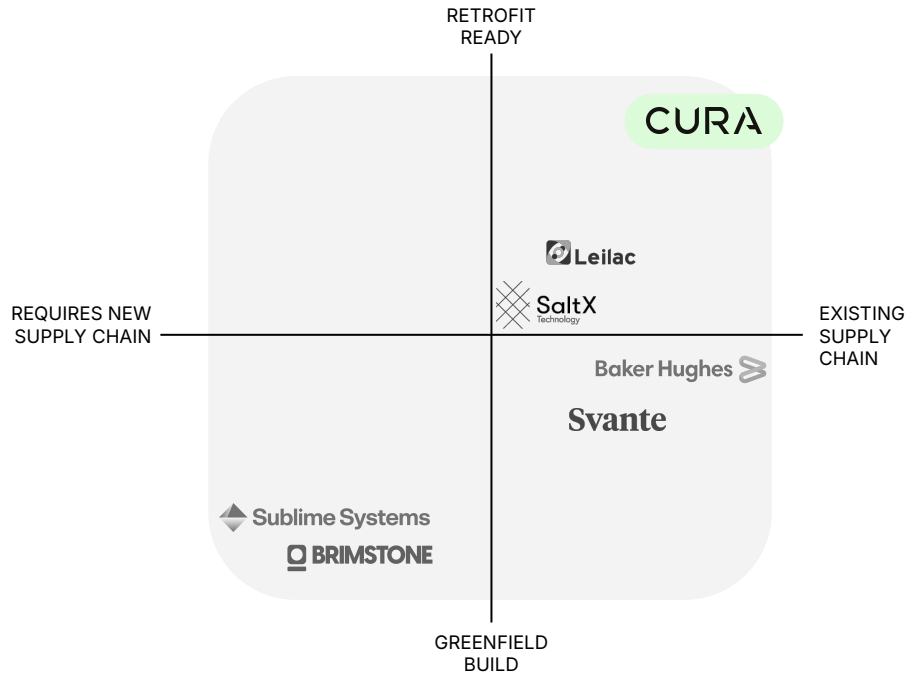
CURA ABATES 85% OF CO₂ EMISSIONS AT COST PARITY

The **average market price of cement is \$150/t**. This is expected to triple when combined with post-combustion carbon capture

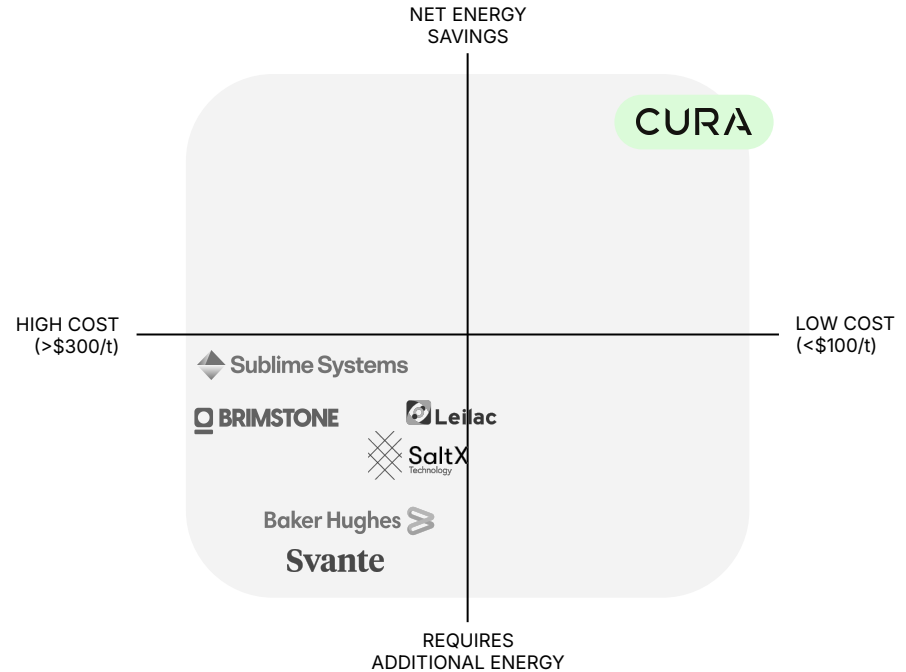
COMPETITIVE LANDSCAPE

While many focus on reducing cement use to reduce the carbon footprint of concrete, few tackle emissions at the source. CURA decarbonizes cement production itself without disrupting the existing supply chain, is low cost and low energy, and doesn't require building new supply chains.

FASTEST TIME TO MARKET

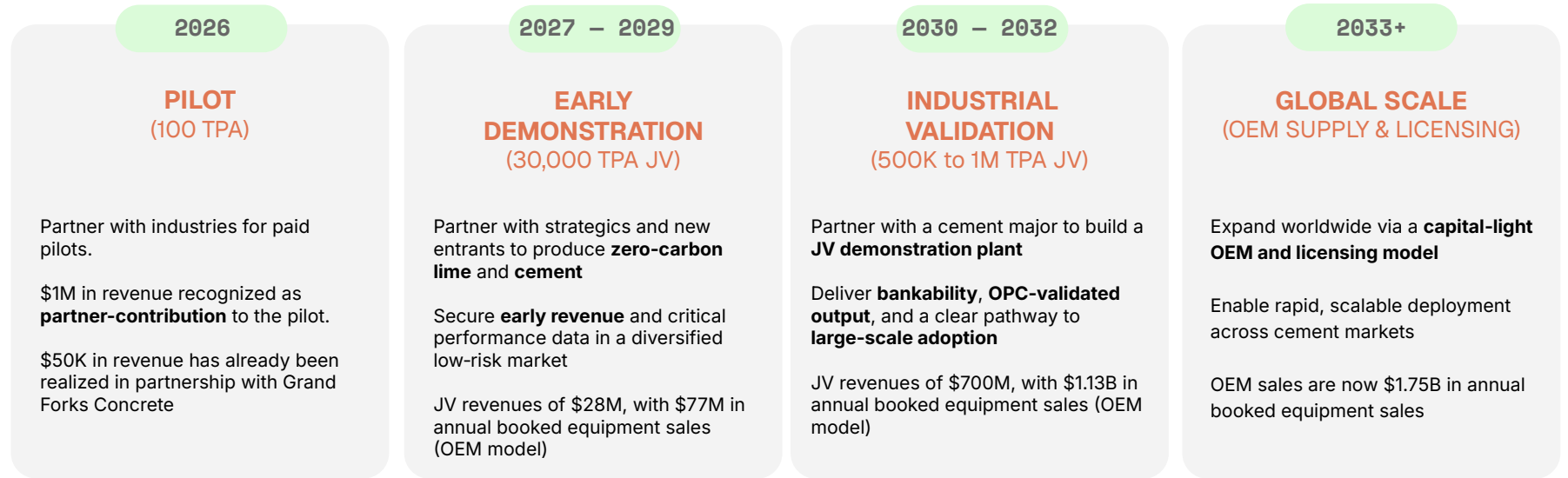


LOWEST COST & ENERGY



PATH FROM PILOT REVENUE TO OEM SCALE

CURA's path to scale accelerates cement decarbonization **by integrating with, not replacing**, current industry infrastructure. We take a stepwise approach towards OEM sales through paid pilots and joint-ventures to demonstrate our technology at scale.












TARGET CUSTOMERS



EARLY TRACTION

Over 100 customer interviews show industry needs **decarbonized solutions** to reduce their operational CO₂ footprint.

COMPANY	DESCRIPTION	STAGE	NEXT STEPS
 acciona	Multinational infrastructure and renewables developer	MOU SIGNED	CURA cement testing and validation, deployment in flagship project, and procurement agreement
 AECOM	Canadian integrated construction company	MOU SIGNED	CURA cement testing and validation, deployment in flagship project, and procurement agreement
Fast+Epp	Award-winning structural engineering firm	MOU SIGNED	CURA cement testing and validation, deployment in flagship project, and procurement agreement
 GFC GRAND FORKS CONCRETE	Alberta based pre-cast concrete company	MOU SIGNED	Pilot plant partnership discussions with potential joint venture to commercialize CURA lime and cement
 TITAN	Multinational cement and concrete company	MOU SIGNED	CURA cement testing and validation, pilot plant partnership discussions, and procurement agreement
 Molins ^{co}	Multinational cement and concrete company	MOU SIGNED	CURA cement testing and validation, pilot plant partnership discussions, and procurement agreement
 CEMEX	Multinational cement and concrete company	MOU IN REVIEW	CURA cement testing and validation, pilot plant partnership discussions, and procurement agreement
 PLANETARY	Ocean enhanced alkalinity CDR startup	EOI SIGNED	Hydrated lime testing and validation for CDR applications
 AMRIZE	Multinational cement and concrete company	LOS received	Letter of support (LOS) received to support non-dilutive funding applications, site-toured October 2
 Heidelberg Materials	Multinational cement and concrete company	LOS received	Letter of support (LOS) received to support non-dilutive funding applications. Engaged global innovation leads

“There is no silver bullet to get the industry to net zero, and we need more R&D into clinker chemistries, carbon capture, and materials innovation.

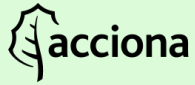
CURA’s cement electrolyzer utilizes only water and electricity inputs. As the availability of renewables grow, this tech has the potential **to be competitive with traditional cement while also reducing emissions”**

HEAD OF SUSTAINABILITY, WESTERN CANADA

AMRIZE



STRATEGIC COLLABORATIONS



**\$10B MULTINATIONAL
INFRASTRUCTURE DEVELOPER**



AECON

**\$2B CANADIAN INTEGRATED
CONSTRUCTION COMPANY**



Fast+Epp

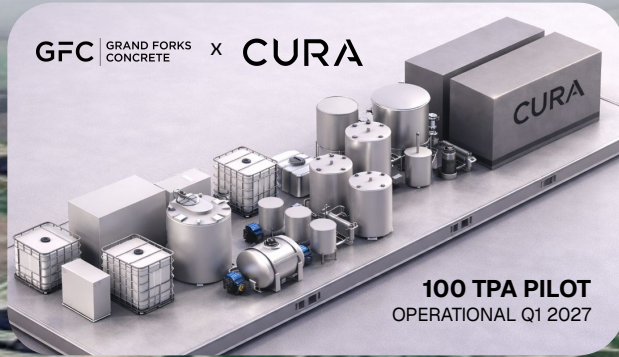
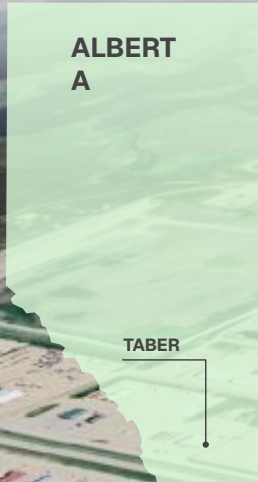
**INTERNATIONALLY AWARDED
STRUCTURAL ENGINEERING FIRM**



CURA has **signed MOUs** with leading infrastructure and construction companies covering **material testing, R&D, deployment in flagship projects and strategic procurement**. These partnerships across the value chain of cement end users position

PILOT LOCATION IDENTIFIED

CURA has identified pilot partners with **Grand Forks Concrete** and **Lantic Sugar** in Taber Alberta. CURA will convert Lantic's spent lime tailings into lime which will be recycled into Lantic's sugar processing plant, and to produce low-carbon cement for Grand Forks Concrete. Alberta Innovates has granted CURA \$500K CAD in non-dilutive funding to support this project.



SPENT LIME TAILINGS

Lantic

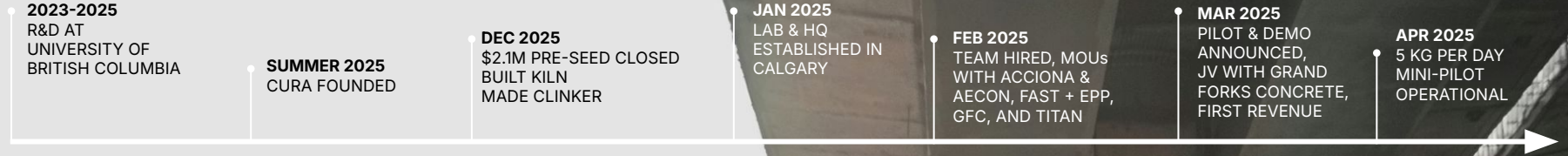
PILOT

CAPACITY	100 TPA
CAPEX	\$4,000,000
ELECTRICITY	70 kW

DEMO

CAPACITY	30,000 TPA
CAPEX	\$20,000,000
ELECTRICITY	4 MW

COMPANY STATUS



TECHNOLOGY

- 2 patent families (1 national phase, 1 PCT)
- 5 peer-reviewed publications
- 5 technology-readiness level

Exclusive license with the University of British Columbia for IP on electrolyzer design and CURALYTE™

Independent lab space secured in Calgary and **hired 6 technical FTEs (scientist, engineers, technician)**

Prototype **kiln built** with initial clinker production trails run

FUNDING TO DATE

\$2.1M

PRE-SEED CLOSED



Oversubscribed Pre-Seed investment raised in Q4 2025, co-led by **Zacua Ventures** and **Amplify Capital** with follow-on from **UCeed**

\$1.9M

NON-DILUTIVE (CAD)



Non-dilutive grants awarded by **Alberta Innovates, Alberta Technology and Innovation Strategy, Emissions Reduction Alberta, Lab2Market, and NorthX.**

MANUFACTURING

- 4 Strategic suppliers, contract manufacturers, and pilot plant EPC partners engaged

Contracts to produce the pilot balance of plant, electrolyzer stack, and scale-up engineering have been signed

PILOT MINI-PILOT



PILOT ELECTROLYZER



PILOT BALANCE OF PLANT



DEMO ENGINEERING



SEED RAISE

CURA is raising an **\$8M Seed** to scale the core technology, continued R&D on CURALYTE™ to lower energy consumption, build a 100 TPA pilot to generate revenue within 18 months, and begin engineering for our 30,000 TPA demo.

SEED FUNDING WILL UNLOCK KEY MILESTONES

- **100 TPA pilot** built, and operating with third-party validation
- **FEED engineering completed** for ~30,000 TPA demonstration plant
- **Core team expansion** to 20 FTE and key supply chain established
- **2+ strategic partnerships** with cement majors
- **5-7 commercial contracts/MOUs** secured for low-carbon lime supply
- Additional **\$8M in non-dilutive** funding

USE OF PROCEEDS

CATEGORY	DESCRIPTION
Technology R&D	Expand lab space, equipment, and consumables
Pilot Deployment	Design, build, and operate a 100 tonne per year pilot system
Team Building	Expand to 20 FTEs over 18-24 months
SG&A / Operations	Rent, legal, accounting, HR, corporate set up, insurance, licensing fees, etc.
Business Development	Travel, customer discovery, industrial site visits, pilot site scoping
IP & Regulatory	Patent filings, FTO analysis, compliance with CSA/ASTM/cement standards
Contingency Buffer	Risk mitigation and runway extension buffer (e.g., cost overruns, hiring delays).

WE MOVE FAST & BUILD THINGS

CURA HAS ACCOMPLISHED MORE IN 6 MONTHS THAN OUR COMPETITORS HAVE IN 6 YEARS WITH 25X LESS FUNDING

CURA hits milestones ahead of schedule:

- Built out independent lab and hired key staff (12 employees)
- Built a kiln and produced clinker and cement from $\text{Ca}(\text{OH})_2$
- Built a 5 kg per day mini-pilot, advancing to TRL 6
- Real customer traction with 5 MOUs signed and 5 more in review across the whole value chain (e.g., lime, cement, project developers, etc.)
- Achieved first pilot revenue of \$50K
- Awarded \$1.9M CAD in non-dilutive funding
- Covered by media (The Logic, Carbon Herald, IEA, BetaKit, etc.)

CURA delivers:

- Only cost-parity or less decarbonization solution for cement
- Capital light and efficient, retrofit ready
- Profitable first commercial demo plant (30,000 TPA) by 2028
- Project finance bankable with blended capital stack
- First million in revenue by 2028, first billion by 2031



CONTACTS

ERIN BOBICKI

CEO

erin@curaclimate.com

PHIL DE LUNA

CTO

phil@curaclimate.com

SABRINA SCOTT

COO

sabrina@curaclimate.com

CURRA