AQUA METALS

LEADING A REVOLUTION

In Clean Metals Recycling

NASDAQ: AQMS

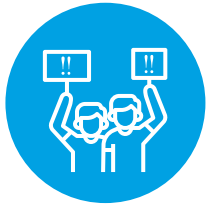
May 2023

Disclaimer

This presentation contains forward-looking statements concerning Aqua Metals, Inc. Forward-looking statements include, but are not limited to, our plans, objectives, expectations and intentions and other statements that contain words such as "expects," "contemplates," "anticipates," "plans," "intends," "believes", "estimates", "potential" and variations of such words or similar expressions that convey the uncertainty of future events or outcomes, or that do not relate to historical matters. The forward-looking statements in this press release include our expectations for our pilot recycling plant, our ability to recycle lithium-ion batteries and the expected benefits of recycling lithium-ion batteries. Those forward-looking statements involve known and unknown risks, uncertainties, and other factors that could cause actual results to differ materially. Among those factors are: (1) the risk that we may not be able to acquire the funding necessary to develop our recently acquired five-acre campus; (2) the risk that we may not be able to develop the recycling facility on the five-acre campus within the expected time or at all; (3) even if we are able to develop the recycling facility, the risk that we may not realize the expected benefits; (4) the risk that licensees may refuse or be slow to adopt our AquaRefining process as an alternative in spite of the perceived benefits of AquaRefining; (5) the risk that we may not realize the expected economic benefits from any licenses we may enter into; and (6) those other risks disclosed in the section "Risk Factors" included in the company's Annual Report of Form 10-K filed March 9th, or Quarterly Report on Form 10-Q filed on May 4, 2023. Aqua Metals cautions readers not to place undue reliance on any forward-looking statements. The Company does not undertake and specifically disclaims any obligation to update or revise such statements to reflect new circumstances or unanticipated events as they occur, except as required by law.

Investor Highlights

Patented recycling solution that has the potential to deliver the best economics and the lowest environmental impact



Surging demand

EVs, mobile devices, solar storage, everything uses batteries, and demand is only growing.

Component deficit

The minerals for making modern batteries are rare, expensive, and frequently mined in unfriendly regions. The US does not have a domestic supply chain and China is increasingly creating a monopoly.

Environmental disaster

Legacy recycling methods are dirty, hazardous, and inefficient. Current Lithium Ion (Li-Ion) recycling methods don't recover Lithium, which is worth $42,000/MT

Innovative solution with operational pilot proving technology, and plans for commercial-scale campus

Massive and growing global addressable market

Greenfield opportunity for partnerships and strategic alliances

Strong IP protection:
73 global patents; 43 patents pending
Only electro-hydrometallurgy recycler in North America

Sufficient cash to reach revenue

Only Li-Ion recycling method with pathway to net-zero operations

AquaRefining recovers all valuable materials, including Lithium Hydroxide and Manganese Dioxide, which are not recovered by competing methods

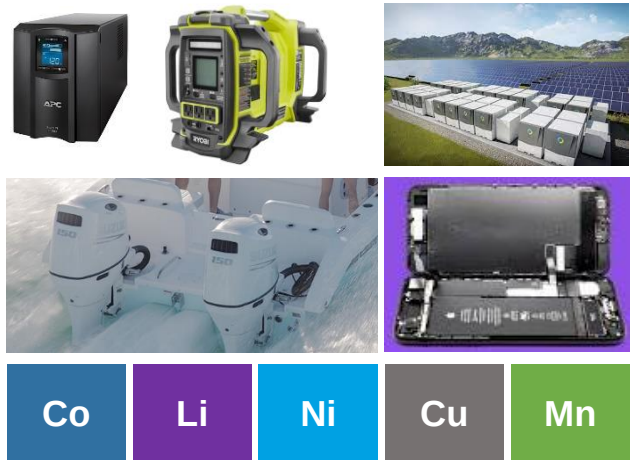
The World Is Powered By Batteries

Lead-Acid Batteries (LAB)

- Most of LABs are used in EVs/cars, forklifts, cranes, data centers and e-bikes
- LAB market is about $65B globally
- 95%+ of LABs are recycled, but at massive environmental cost through smelting, one of the top polluting industries in the world
- Typical LAB contains 60 to 80 percent recycled lead and plastic
- LAB market expected to rise at 5.2% CAGR from 2021-2031 [1]

Lithium-ion Batteries (LiB)

- Energy storage, microgrids, electric vehicles, and mobile electronics driving use-cases
- Only 5% of LiBs are recycled globally, from an estimated 8M tons/yr waste stream
- 145M EVs predicted to be on the roads globally by 2030
- Typical 10-year LiB life span, with an est. 6.5M tons available for recycling 2025-2030
- Legacy recycling processes generate polluting emissions and chemical waste streams
- Legacy process can not recover lithium hydroxide
- Demand for LiB expected to grow from $44B to $94B by 2025 [2]
- Global battery demand for lithium and nickel will be 12-13x of the current size, 2x of the current size for cobalt by 2040E [3]



1 Future Market Insights; 2 CNBC, March 2022; 3 - Goldman Sachs

Expensive, Scarce Components in Li-ion Batteries

As demand for EV batteries grows, countries are racing to build domestic supply chains
99% of raw and component materials for LiBs are produced outside the U.S.

Mineral	Pricing and demand growth[1]	Supply shortfall risks	Geopolitical challenges
COBALT Co	• **Currently $35,000/MT** • 9.26% CAGR 2021-2025.	• Cobalt market to move into deficit by 2024.	• US sees cobalt a strategic and critical to U.S. security. • More than 2/3s mined cobalt comes from politically sensitive DRC.
NICKEL Ni	• **Currently $25,000/MT** • Nickel usage in EV battery sector predicted to increase 62% in 2022; 26% in 2023. • 7.3% CAGR 2021-2028.	• Class I nickel, essential for electric vehicle batteries, is expected to face a shortage for the next three to five years (Oregon Group) • Ongoing LME market volatility	• Indonesia a major supplier; converts low-grade ore with high-carbon footprint to LiB quality. • Russia accounts for ~17% of production capacity.
MANGANESE Mn	• **Currently $2,500/MT** • High purity manganese needed for EVs. • Predicted 43% CAGR in next 5 years.	• Manganese dioxide is a critical link in the LiB supply chain that is driving EV adoption. • Many battery producers shifting to NMC vs. NCA batteries.	• US is 100% dependent on manganese imports. • China #1 miner and dominates manganese ore and concentrate imports, with 75% of imports.
COPPER Cu	• **Currently $9,000/MT** • Estimated 53% CAGR to 2040, driven by the electrification of transport and infrastructure (BNEF).	• By 2027, nearly 600,000 MT of additional copper needed to match EV demand (IDTechEx). • Forecasted deficit of 9M mt by 2030 (BMO Capital markets), and 14M mt by 2040 (BNEF).	• Supply chain issues at key copper Latin American countries, dearth of new mines.
LITHIUM Li	• **Currently $42,000/MT (LiOH)** • 20.6% CAGR 2020-2025. • Lithium use up 4x since 2010 (BNEF).	• Global LI market predicted to move into deficit starting in 2025. • Typically produced as lithium carbonate, requires additional refining.	• China dominates lithium refining. 96% of Australia's exports go to China; largest importer of Chile's lithium carbonate.

1 Pricing based on London Metal Exchange, www.lme.com, and company estimates.

The Next Generation Recycling Process

Replaces furnaces and heavy chemical use with 100% electricity-powered and closed-loop recycling, creating fundamentally non-polluting, cost-efficient solution that generates minimal waste

Proven for LABs and expanding to LiBs

Strong IP protection:

73 global patents

43 patents pending

Recovers the high-value metals lost in smelting (like lithium and manganese), and produces high purity products

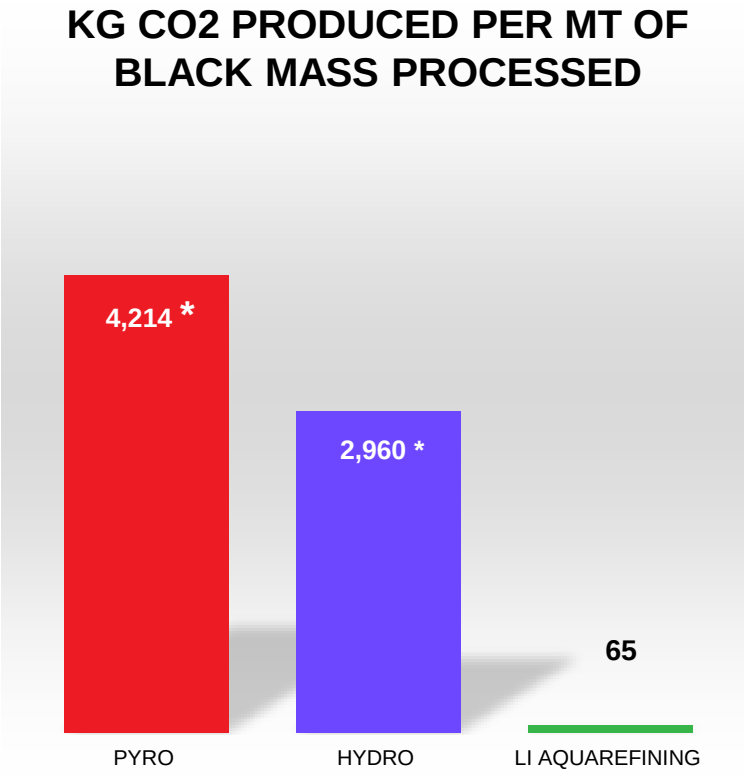
Safer work environment, less hazardous materials, eliminates constant trainloads of chemicals

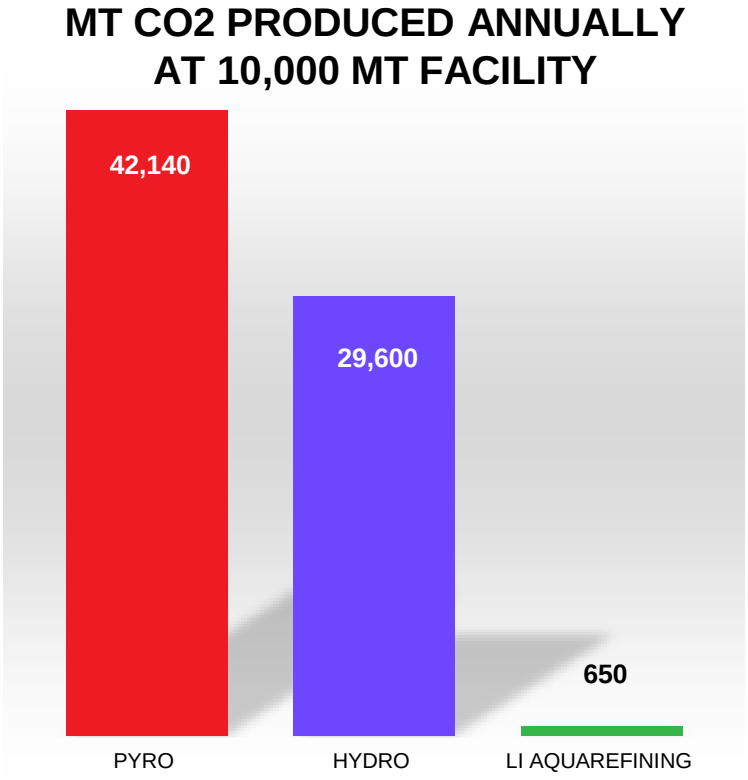
The only recycling process that:

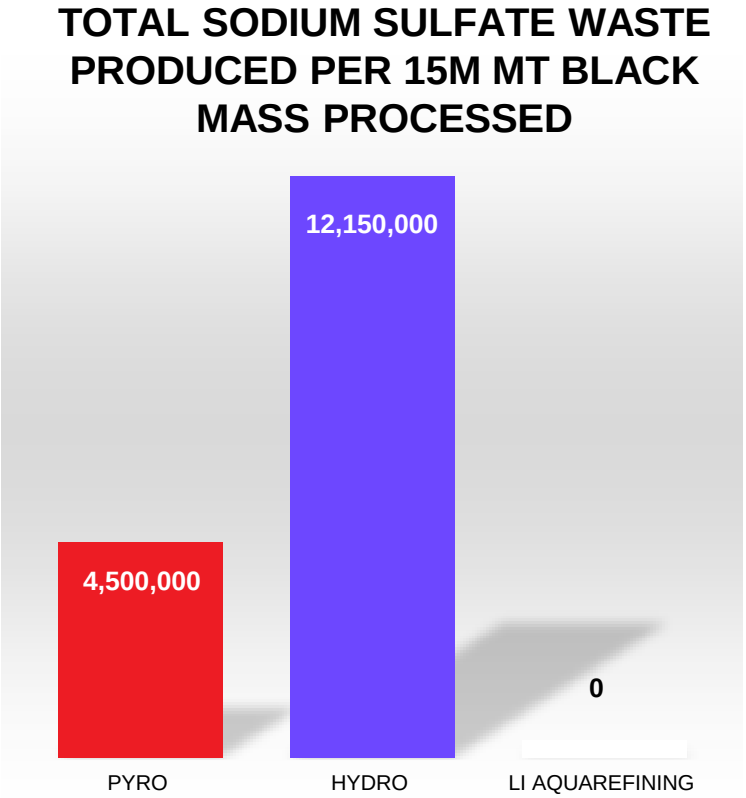
Produces lithium hydroxide directly, reclaims high purity metals (not salts), regenerates chemicals used in closed-loop system, and has a clear pathway to net-zero operations

Game Changing Environmental Performance

- Aqua Metals' Li AquaRefining technology uses drastically less energy – and is powered by electricity, instead of fossil fuels
- The process also produces markedly less waste than currently proposed solutions
- As we scale lithium recycling, these differences become very stark



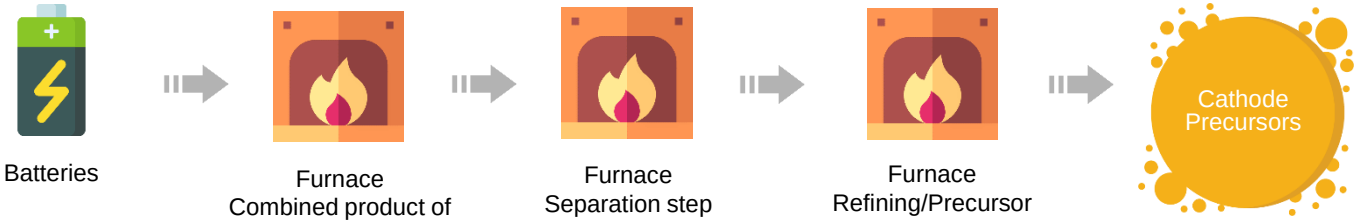




* Based on Argonne National Labs battery life-cycle model - Everbatt

PYRO

Smelting approach is currently a multistep pyro approach to get back into supply chain. Emissions will be unsustainable long term as recycling volume increases.



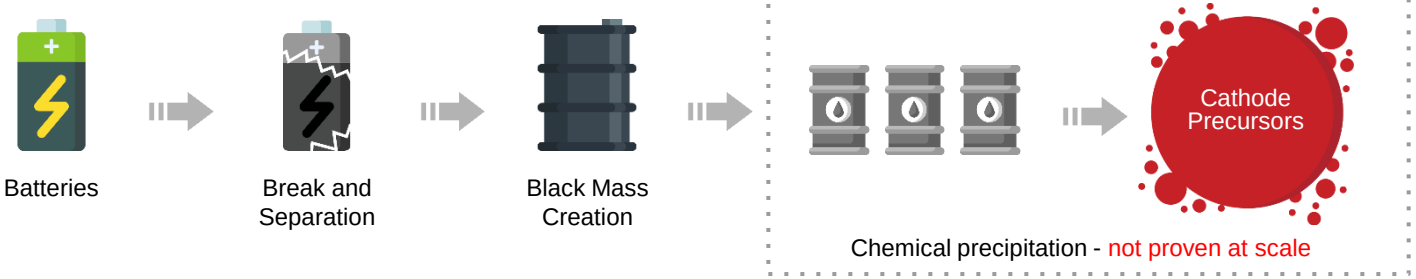
Co	Li	Ni	Cu	Mn
	X			X

High environmental impact – not viable long term. **Does not recover** lithium or manganese

Produces alloys (Ni-Co) requiring further refinement

HYDRO

Not commercially proven. High waste streams may prove economically inviable.



Co	Li	Ni	Cu	Mn
?	?	?	?	?

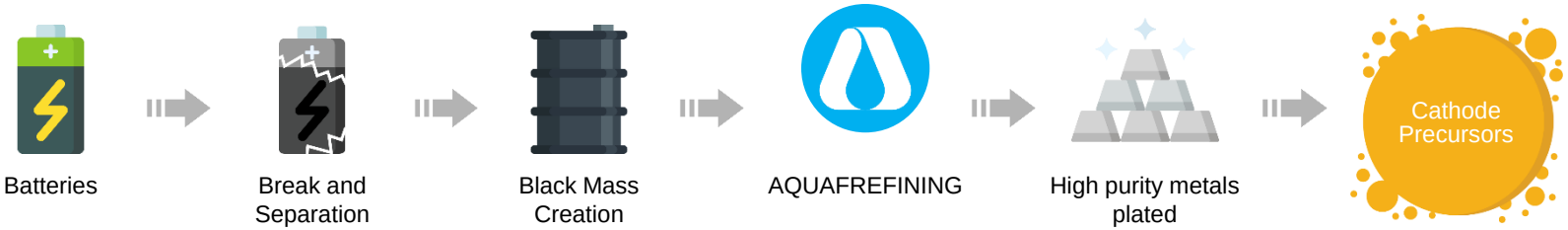
Expected to produce battery grade precursors **(High risk)**

Doesn't produce lithium hydroxide (only carbonate or salts)

Uses 200X the chemicals that Li AquaRefining uses

AQUAREFINING

Expected to be Economically and environmentally superior, producing higher quality product with better yield.



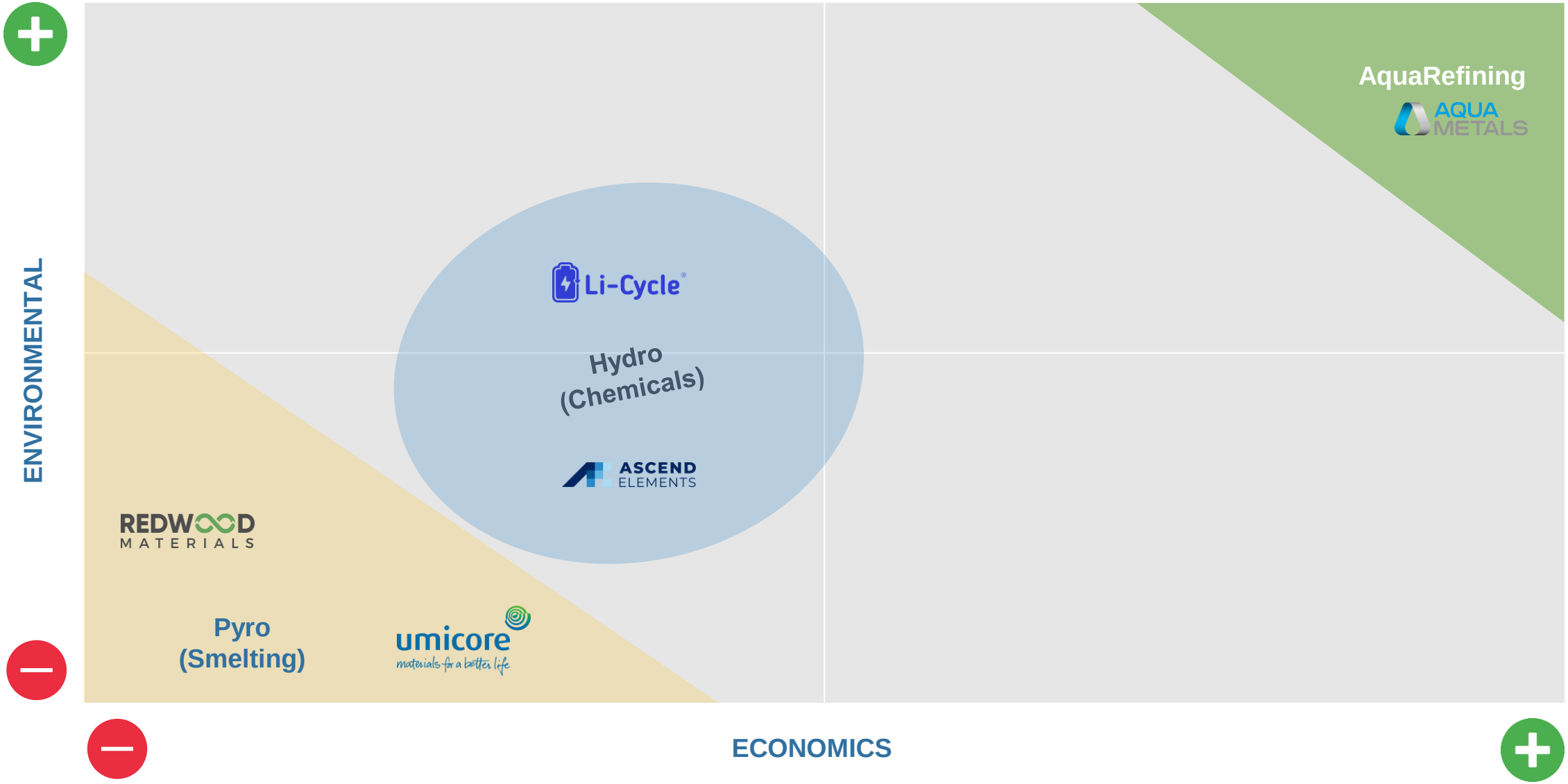
Co	Li	Ni	Cu	Mn

Produces pure metals (Co, Cu, Ni) for cathodes or adv mfg.

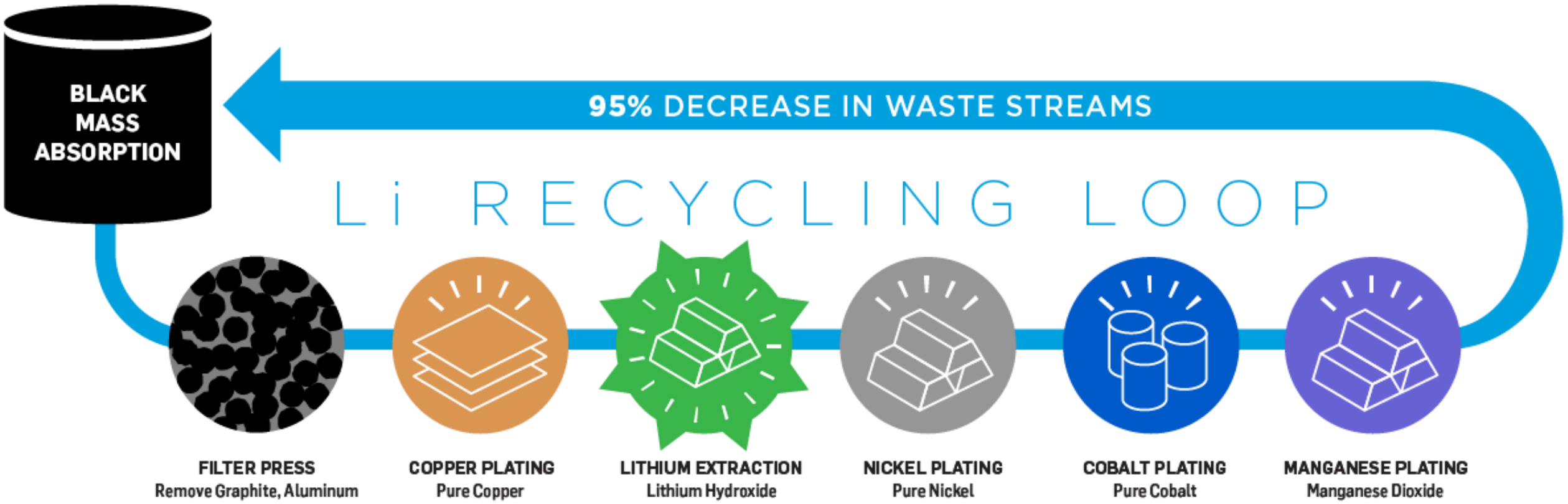
Directly produces **lithium hydroxide**

Electricity-powered, regenerates chemicals used in solution

Competitive Landscape Lithium Recycling



Li AquaRefining Flexibility



AQUA METALS: The Only Company To Recover All These Critical Minerals From Black Mass

AquaRefining's superior advantages

- ✓ **~95% reduction** in chemical waste streams compared to standard hydro processes
- ✓ **~96% reduction** in carbon reduction compared to standard hydro processes
- ✓ **~99%** carbon reduction over pyro
- ✓ **Negligible** greenhouse gas emissions that we cost effectively offset
- ✓ Produces **high purity, high value metals** that can be sold into the battery supply chain or metals industry
- ✓ **Recovers a higher percentage of the metals** from used lithium-ion batteries (cobalt, nickel, copper, lithium hydroxide & manganese)

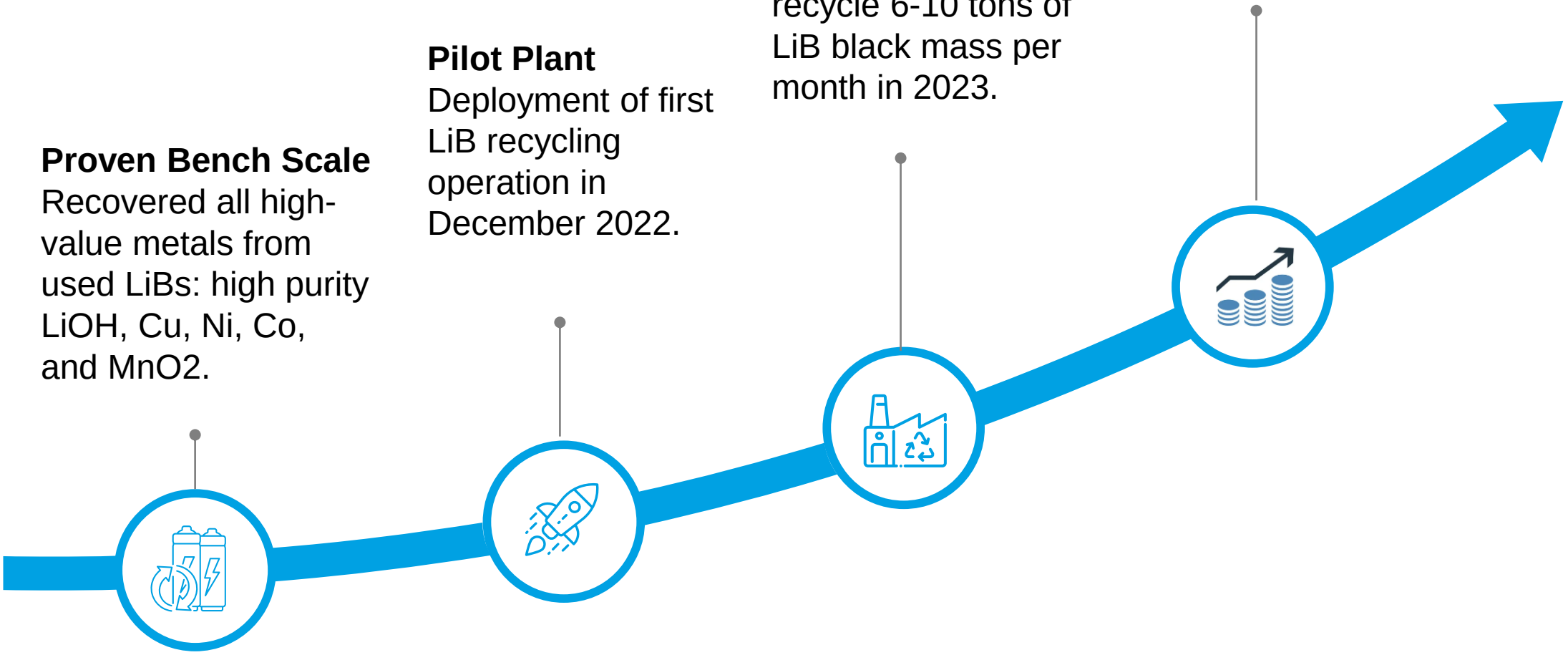
Recent Achievements

Proven Bench Scale
Recovered all high-value metals from used LiBs: high purity LiOH, Cu, Ni, Co, and MnO2.

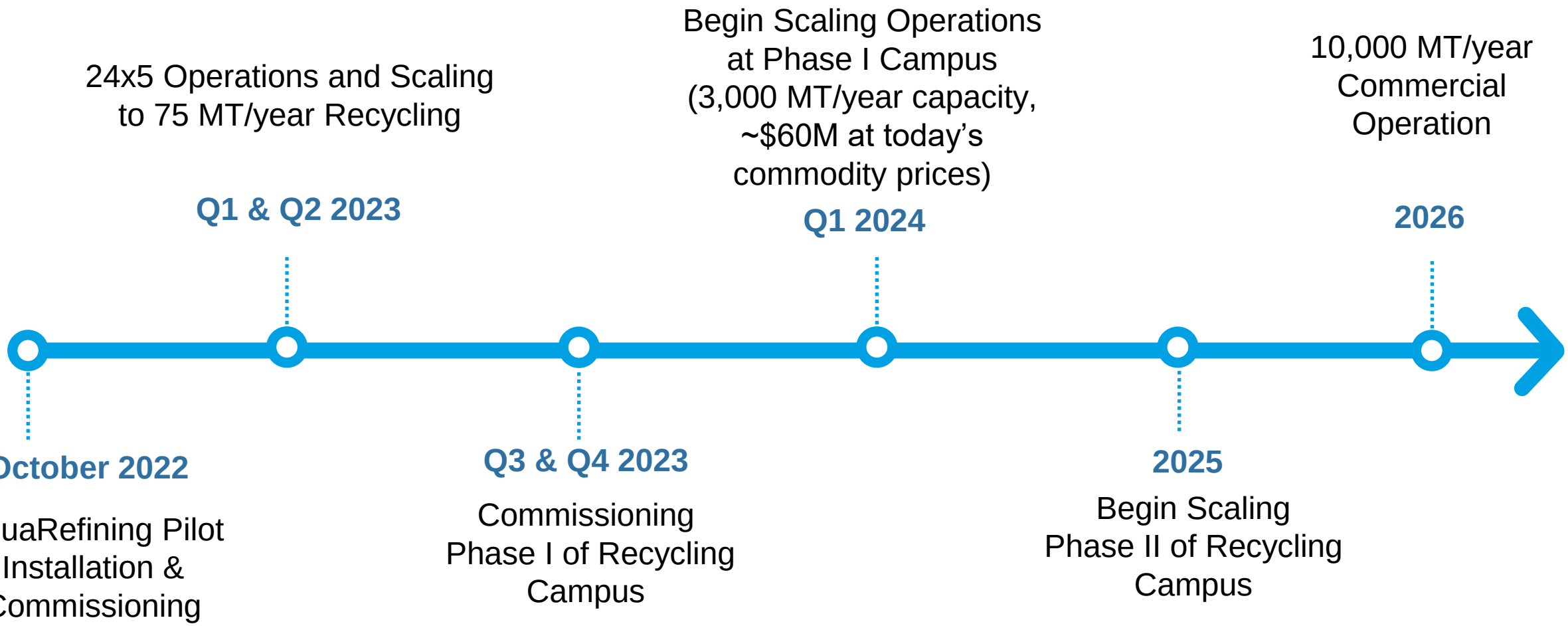
Pilot Plant
Deployment of first LiB recycling operation in December 2022.

Scaling Operations
Pilot plant operates 24x5 and expected to recycle 6-10 tons of LiB black mass per month in 2023.

Commercial Growth
Plans for new phased campus facility (at TRIC) with space for 10,000tpa.



Aqua Metals' Timeline



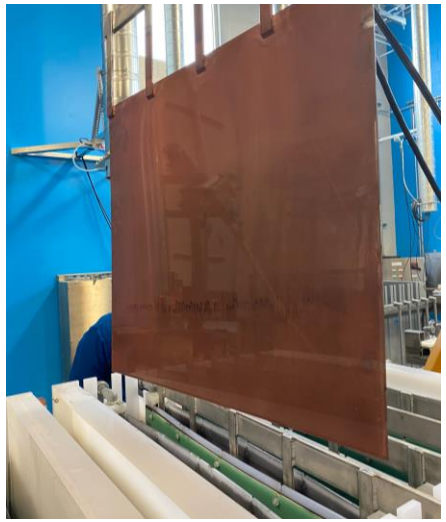
Pilot Plant Operational

Only sustainable lithium battery recycler operational in North America, with <10% emissions of hydro-recycling

Proven ability to remove valuable materials from black mass; scaling at Pilot facility

Black mass secured for operations through 2023 (and to reach commercial scale at new campus in 2024)

Only facility to natively produce LiOH directly from black mass, eliminating costly and polluting refining



Aqua Metals Converting Black Mass into Revenue

TAM: $165B based on 7.5M/MT of black mass x $22,000 of extracted value

LiB Recycling – An Exponentially Growing Market Opportunity

- LIB recycling predicted to hit $6.55B by 2028 with 18.5% CAGR vs. $1.7B in 2020 (Fortune Business Insights)
- 2025-2030, an estimated 6.5M tons of EV batteries will reach end of life and need to be recycled
- Battery recycling attracting major investments, infrastructure build out
- Upcoming DOE grant status, awards between $10M (applied for) - $100M (applying now through 2023)

Strategic Partnerships

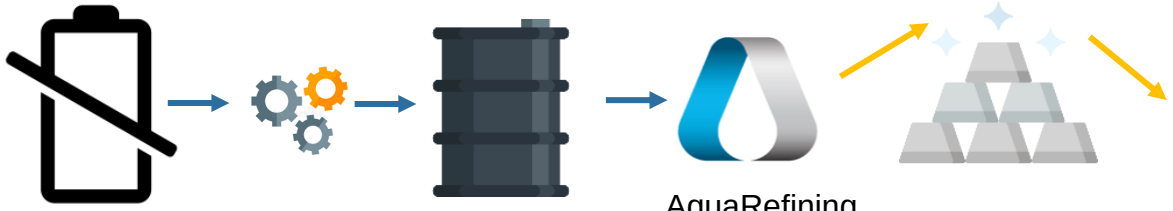
- Currently in discussions with 10+ EV manufacturers, cell component manufacturers, CAM manufacturers for additional partnerships
- 6K Energy Partnership to develop pCAM conversion technology from known pathway, long-term supply agreement for PlusCAM (13,000tpa CAM factory)
- LOI with Dragonfly Energy Corporation to qualify Aqua Metals' lithium hydroxide for use in Dragonfly batteries for its planned solid-state LiB Gigafactory

6K Energy & AQMS Partnership

Spent EV Batteries

Black Mass

High-Purity Recycled Metals



AquaRefining

Virgin Metals

6K & Aqua Metals Development Agreement:

Non-Recurring Engineering (NRE)

Novel pCAM Conversion Process

Under development by Aqua Metals in 2023 (<$1M Revenue)

Creates essential precursors for CAM manufacturing

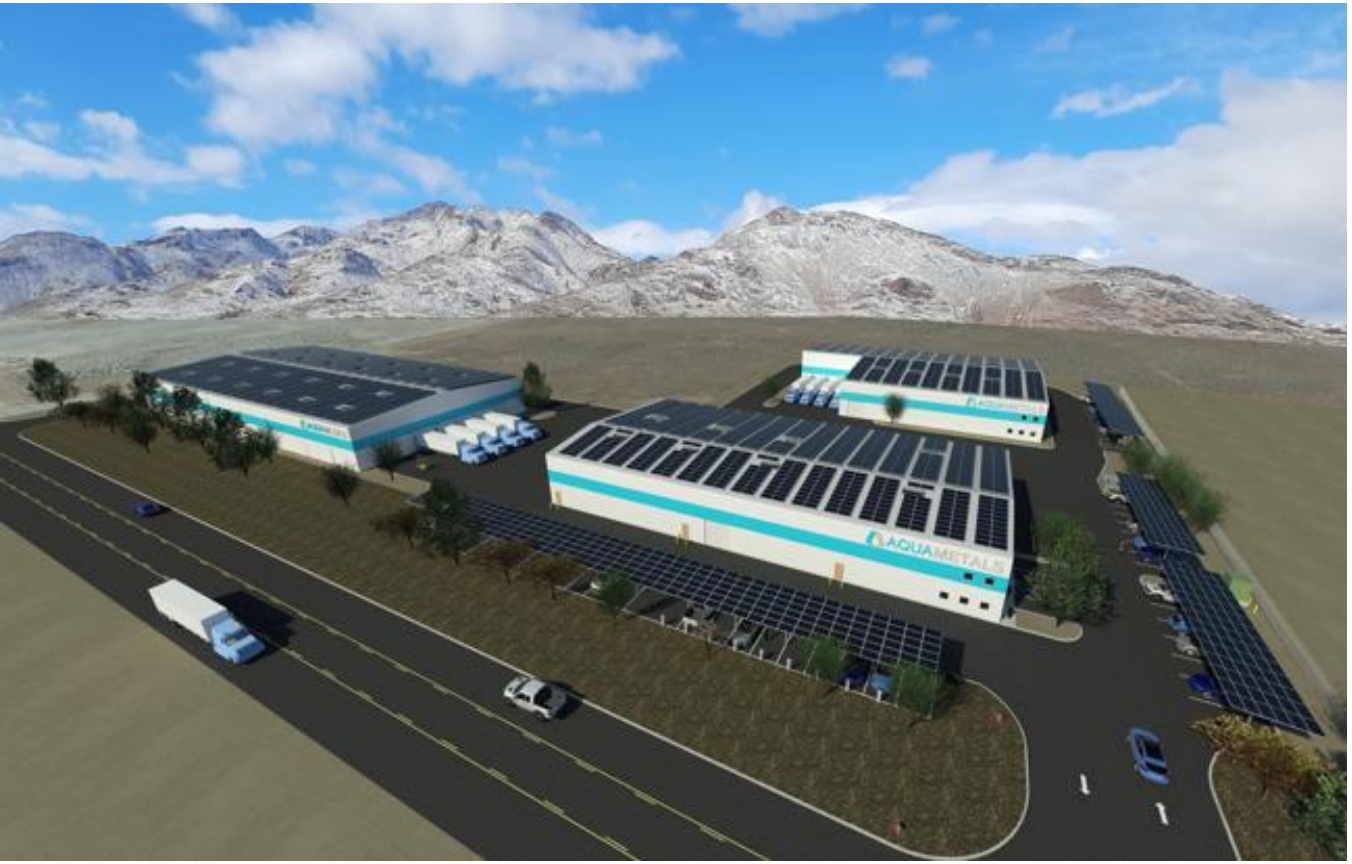
6K Energy UniMelt™ CAM Mfg.

New EV Batteries

ACME Partnership Phase 1 Deployment

- TAM $350M annual licensing based on ~3.5M MT of lead paste x $100/MT licensing
- 1st licensee in Taiwan operational, showcasing for industry leaders and investors
- Pursuing expansion & new licensees

Phased Development of Commercial Scale Plant



- Five-acre campus designed to ultimately process more than 20 million pounds of lithium-ion battery material annually (10,000tpa)
- Tahoe-Reno Industrial Center campus at the heart of Nevada's lithium battery supply chain
- Rendering of existing building (lower right) and planned future expansions
- Black mass materials secured to reach commercial scale at campus in H1 2024

Financials

As of Mach 31, 2023	
Cash and cash equivalents	**$3.4M**
Working capital	**$7.4M**
Quarterly burn rate (approx.)	**$3.0M**

Additional Sources of Capital	
Asset sale - 2500 Peru facility	**$6.0M (net received April 26, 2023)**
Non-dilutive loan financing (USDA) – potential	**$25.0M targeted**
U.S. Government grants – potential	**$5.0M - $100.0M range**

Management

Steve Cotton
Chief Executive Officer, President

Rejoined Aqua Metals in, 2018; Previously served as Chief Commercial Officer

Co-founded Canara, Inc. (formerly Data Power Monitoring and IntelliBatt) in 2001; served as CEO through its sale to a private equity firm in 2012; Then served as Founder and Executive Chairman until 2014.

Led a team to commercialize Sendmail; began his career at Octel Communications through its $1.1B exit to Lucent in 1997

Judd Merrill
Chief Financial Officer

Joined Aqua Metals in 2018 from Klondex Mines Ltd., an international mining company where he was Director of Finance/Accounting, responsible for overseeing the SEC compliance and the management of the Company's $200+ million budget over five subsidiaries.

Spent five years as CFO of Comstock Mining Inc., a publicly traded gold company where he was instrumental in establishing financial modeling and analytics.

Controller at Fronteer Gold Inc. as an assistant controller at Newmont Mining Corp. Began his career at Deloitte & Touche

Ben Taecker
Chief Engineering and Operating Officer

20+ years of experience in manufacturing and operations leadership

Spent six years in progressive leadership roles at the Johnson Controls Inc. Lead Acid Battery Recycling Center

Experience in startups, environmental regulation compliance, process development and operational excellence.

Dave McMurtry
Chief Business Officer

Experienced Silicon Valley high-tech executive; expertise in renewable energy and international markets development

Responsible for leading the team in exploring and strategically pursuing multiple paths to scalable growth for LI AquaRefining.

Global experience includes working in more than 80 countries on five continents.

Previously CEO of the Global Stars Foundation at the Al Dabbagh Group. For the last 25 years, Dave has held multiple executive positions, including with Intuit Inc, and Habitat for Humanity International.

The future is bright for Aqua Metals

Strong competitive advantages with environmentally friendly and cost-effective recycling process that creates high quality metals

$18 Billion addressable market in 2025 for both Pb and Li battery recycling for AquaRefining

Expanding opportunities through partnerships and government grants, e.g., Bipartisan Infrastructure Law with $3.1 billion in funding for battery manufacturing and recycling

Ability to sell into all metals markets and battery manufacturers, and work with any recyclers worldwide

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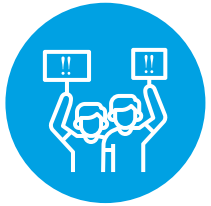

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NASDAQ: AQMS

WWW.AQUAMETALS.COM

Appendix


AQUA METALS
FINANCIAL OVERVIEW

AQUA METALS

Consolidated
Balance Sheets

AQUA METALS, INC.
Condensed Consolidated Balance Sheets
(in thousands, except share and per share amounts)

	March 31, 2023 (unaudited)	December 31, 2022 (Note 2)
ASSETS		
Current assets		
Cash and cash equivalents	$ 3,355	$ 7,082
Accounts receivable	—	12
Lease receivable, current portion	15,244	15,527
Inventory	302	278
Assets held for sale	—	47
Prepaid expenses and other current assets	286	263
Total current assets	19,187	23,209
Non-current assets		
Property, plant and equipment, net	11,894	7,343
Intellectual property, net	416	461
Investment in LINICO	2,000	2,000
Other assets	463	489
Total non-current assets	14,773	10,293
Total assets	$ 33,960	$ 33,502
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities		
Accounts payable	$ 770	$ 1,075
Accrued expenses	1,508	1,780
Building purchase deposit	3,250	3,250
Lease liability, current portion	312	307
Notes payable, current portion	5,945	5,899
Total current liabilities	11,785	12,311
Non-current liabilities		
Lease liability, non-current portion	197	275
Notes payable, non-current portion	2,902	—
Total liabilities	14,884	12,586
Commitments and contingencies (see Note 13)		
Stockholders' equity		
Common stock; $0.001 par value; 200,000,000 shares authorized; 83,180,801 and 79,481,751 shares issued and outstanding as of March 31, 2023 and December 31, 2022, respectively	83	79
Additional paid-in capital	223,453	220,114
Accumulated deficit	(203,883)	(199,277)
Treasury stock, at cost; common shares: 510,632 and nil as of March 31, 2023 and December 31, 2022, respectively	(577)	—
Total stockholders' equity	19,076	20,916
Total liabilities and stockholders' equity	$ 33,960	$ 33,502

Consolidated

Statement of Operations

AQUA METALS, INC.
Condensed Consolidated Statements of Operations
(in thousands, except share and per share amounts)
(Unaudited)

	Three Months Ended March 31, 2023	2022
Operating cost and expense		
Plant operations and clean up	$ 1,065	$ 994
Research and development cost	445	551
General and administrative expense	3,006	2,765
Total operating expense	4,516	4,310
Loss from operations	(4,516)	(4,310)
Other income and (expense)		
Gain (loss) on disposal of property, plant and equipment	20	(130)
Interest expense	(176)	—
Interest and other income	66	32
Total other expense, net	(90)	(98)
Loss before income tax expense	(4,606)	(4,408)
Income tax expense	—	(2)
Net loss	$ (4,606)	$ (4,410)
Weighted average shares outstanding, basic and diluted	81,285,740	71,927,523
Basic and diluted net loss per share	$ (0.06)	$ (0.06)

AQUA METALS

Consolidated
Statement of Cash Flows

AQUA METALS, INC.
Condensed Consolidated Statements of Cash Flows
(Unaudited)
(in thousands)

	Three Months Ended March 31, 2023	2022
Cash flows from operating activities:		
Net loss	$ (4,606)	$ (4,410)
Reconciliation of net loss to net cash used in operating activities		
Depreciation and ROU asset amortization	141	365
Amortization of intellectual property	45	45
Fair value of common stock issued for director fees	32	—
Fair value of common stock issued for consulting services	12	—
Stock-based compensation	687	605
Amortization of deferred financing costs	16	—
Loss (gain) on disposal of property, plant and equipment	(20)	150
Proceeds from leasing of building	283	185
Changes in operating assets and liabilities		
Accounts receivable	12	72
Inventory	(23)	78
Prepaid expenses and other current assets	(23)	(71)
Accounts payable	107	87
Accrued expenses	547	(221)
Other assets and liabilities	(73)	(289)
Net cash used in operating activities	(2,863)	(3,404)
Cash flows from investing activities:		
Purchases of property, plant and equipment	(5,255)	(258)
Proceeds from sale of equipment	67	1,145
Equipment deposits and other assets	(34)	30
Investment in LINICO	—	(500)
Net cash provided by (used in) investing activities	(5,222)	417
Cash flows from financing activities:		
Proceeds from employee stock purchase plan	14	—
Proceeds from notes payable, net	2,932	—
Cash paid for tax withholdings on RSUs vesting	(577)	—
Proceeds from ATM, net	1,989	3,890
Net cash provided by financing activities	4,358	3,890
Net increase (decrease) in cash and cash equivalents	(3,727)	903
Cash and cash equivalents at beginning of period	7,082	8,137
Cash and cash equivalents at end of period	$ 3,355	$ 9,040