AQUA METALS

LEADING A REVOLUTION

IN CLEAN METALS & BATTERY RECYCLING

NASDAQ: AQMS

September 2024

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 Reports of Form 10-K. 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 lowest environmental impact

SURGING DEMAND

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

BATTERY COMPONENT DEFICIT

Aqua Metals is building the necessary infrastructure to electrify the economy – and Asia is leading the race.

ENVIRONMENTAL DISASTER

Legacy recycling methods are dirty, hazardous, and inefficient. Current lithium-ion recycling produces far more carbon pollution and landfill waste than valuable material recovered.

- 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
- Adaptable business models (build & operate, joint venture, license)
- Li AquaRefining has the pathway to net-zero operations
- AquaRefining recovers all valuable materials, including Lithium Carbonate or Hydroxide, which are not recovered by competing methods

AQUA METALS: A PIONEER IN SUSTAINABLE LITHIUM BATTERY RECYCLING

ESSENTIAL FOR CLEAN ENERGY:
Pioneering the first sustainable lithium battery recycling technology, vital for the energy transition and clean energy economy.

RAPID MARKET GROWTH:
Company is positioned to capitalize on the booming domestic battery manufacturing and growing EV sales, which are growing demand for battery materials and recycling operations.

INNOVATIVE TECHNOLOGY:
Proven at pilot scale, the first commercial-scale recycling facility using our groundbreaking AquaRefining™ process is underway – targeting production in 2025.

MARKET POTENTIAL:
Over 1.2TWh of battery manufacturing expected in North America alone by 2030, driving immense growth opportunities to recycle from and supply to domestic manufacturing.

CLOSED-LOOP ECOSYSTEM:
Partnering with leading companies in battery manufacturing and materials to produce low-carbon, incentive-eligible battery metals domestically for the first time.

RAPID EXPANSION OF NORTH AMERICAN BATTERY INDUSTRY

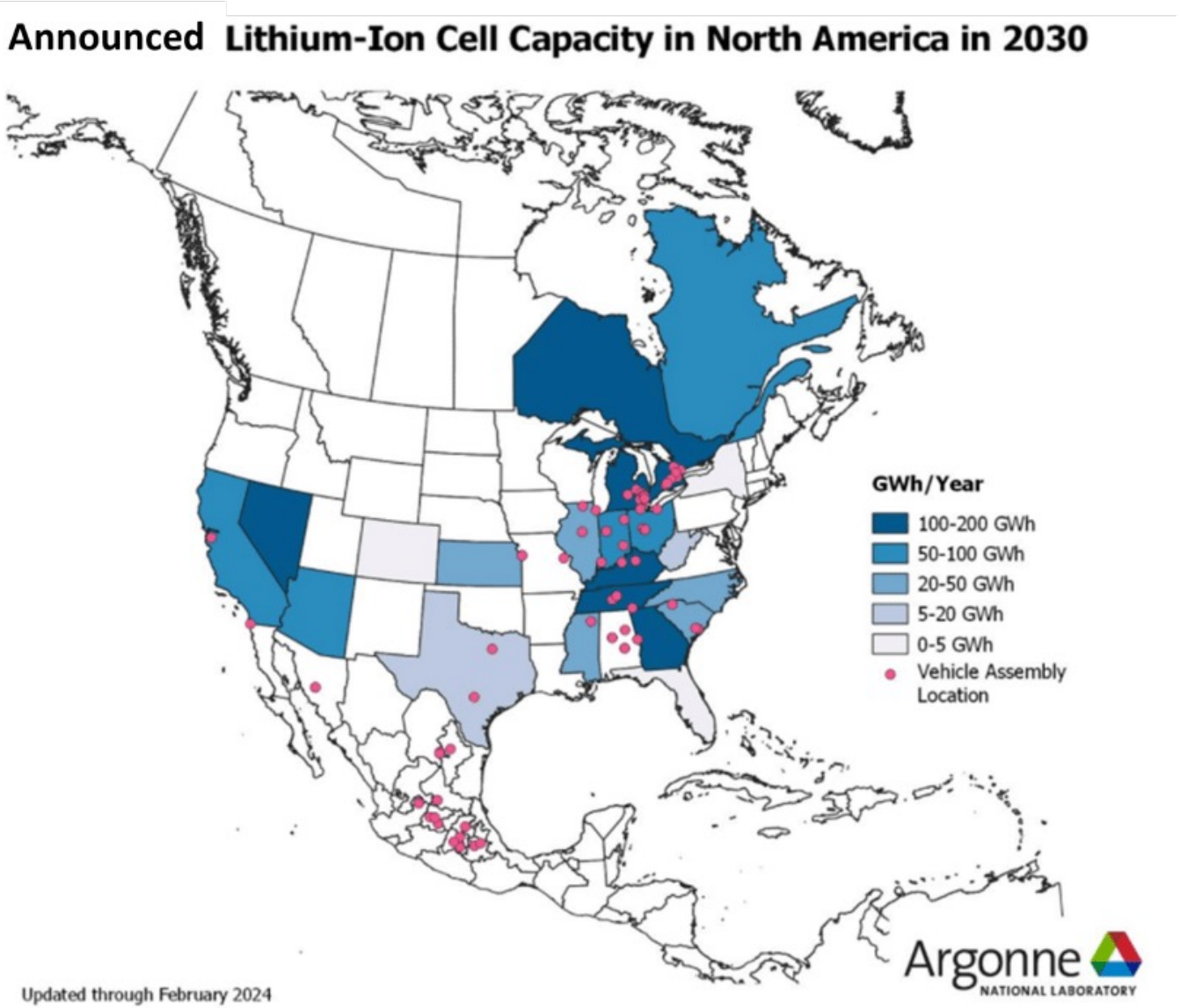
BY 2030…

the US alone is projected to have nearly 1.2 terawatt hour of lithium battery cell manufacturing.

- Enough for 16M electric vehicle each year
- $92B total investment and counting
- 80+ processing & manufacturing facilities

Supply chain for lithium batteries is growing rapidly throughout North America.

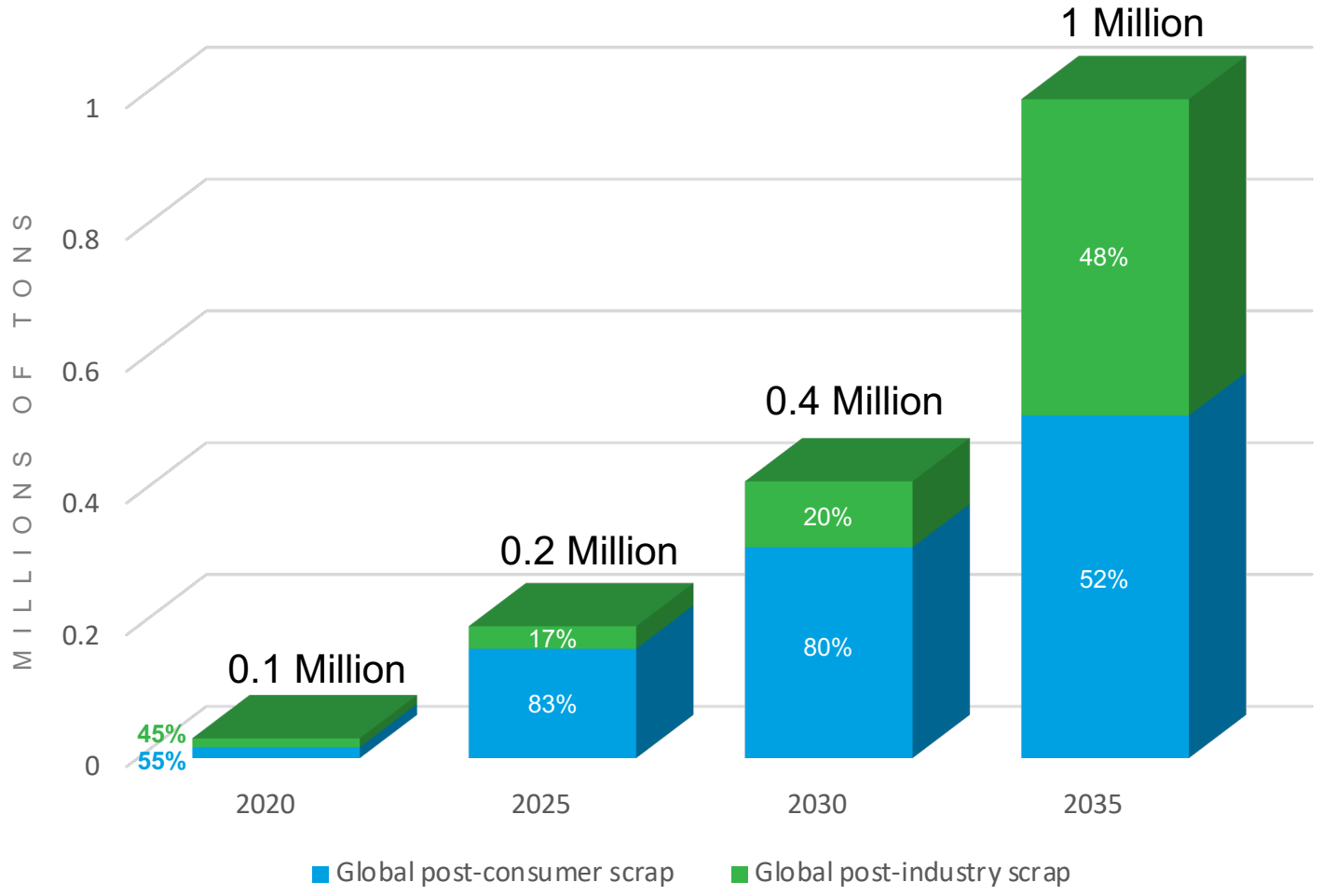
- Creating immense demand for critical minerals
- Requiring significant new battery EOL and recycling infrastructure
- This planned build out will produce more material for recycling than processing capacity.



END-OF-LIFE + MANUFACTURING SCRAP GROWING RAPIDLY

Nearly one million tons of cumulative scrap will be available from our supply chains 2025-2030.

Total cathode material supply per scrap origin, 2025-2036 in millions tons.



DATA FROM BOSTON CONSULTING GROUP

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 PILOT OPERATIONS Demonstrated effective and efficient performance for AquaRefining at Pilot scale

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 (or Li2CO3), reclaims high purity metals (not salts), regenerates chemicals used in closed-loop system, and has a clear pathway to net-zero operations

LEGACY RECYCLING PROCESSES NOT SUSTAINABLE

Furnaces and trainloads of chemicals are not clean solutions

PYROMETALLURGY

Energy intensive, fossil-fuel powered

- Furnaces incinerate & oxidize valuable materials (even electric)
- Creates slag and alloys needing further refining
- Requires additional steps to salvage lithium, manganese, graphite

HYDROMETALLURGY

Chemical intensive, embedded emissions

- Trainloads of consumable chemicals required (i.e., NaOH, H2O2)
- Embedded emissions from chemicals production & transport
- More sodium sulfate & other waste than valuable material recovered

Smelting process for LiB recycling

Chemical storage for hydromet

Massive crystallizer for Na2SO4 waste

CURRENT LIB RECYCLING TECHNOLOGY COMPARISON

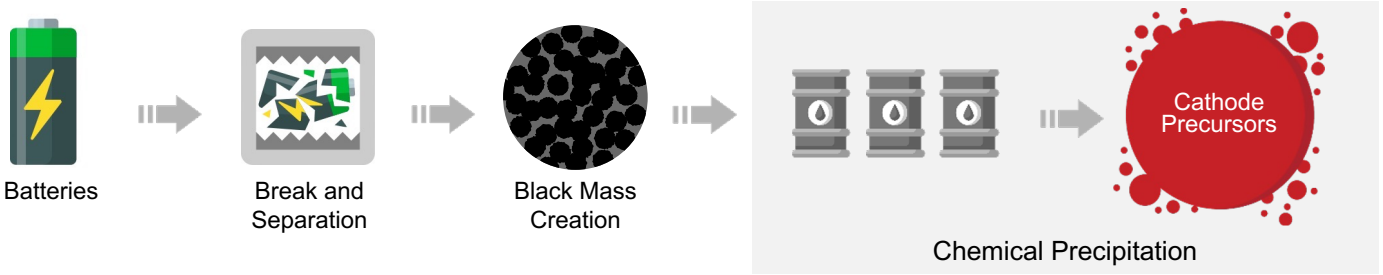
PYRO

Smelting approach is currently a multistep pyro. Emissions will be unsustainable long term as recycling volume increases.

- Significant carbon pollution, toxic emissions
- Produces metal alloys needing further refinement
- **Does not recover** lithium or manganese

HYDRO

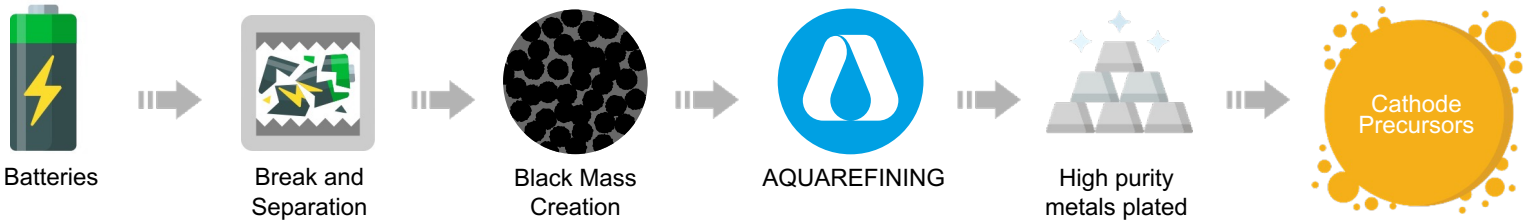
Operating only in Asia. High waste streams and high embedded emissions in one-time-use chemcials



- Unproven at scale in North America - high risk
- Recovers sulfates & salts, not pure metals
- Immense **embedded emissions in chemicals**
- Tons of unmitigated sodium sulfate waste

AQUAREFINING

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



- Produces **high-purity metals** for any pCAM/CAM
- Eliminates need for trainloads of chemicals
- **No sodium sulfate waste** streams to landfill
- Multiple pathways (LiOH, Li2CO3, salt conversion)

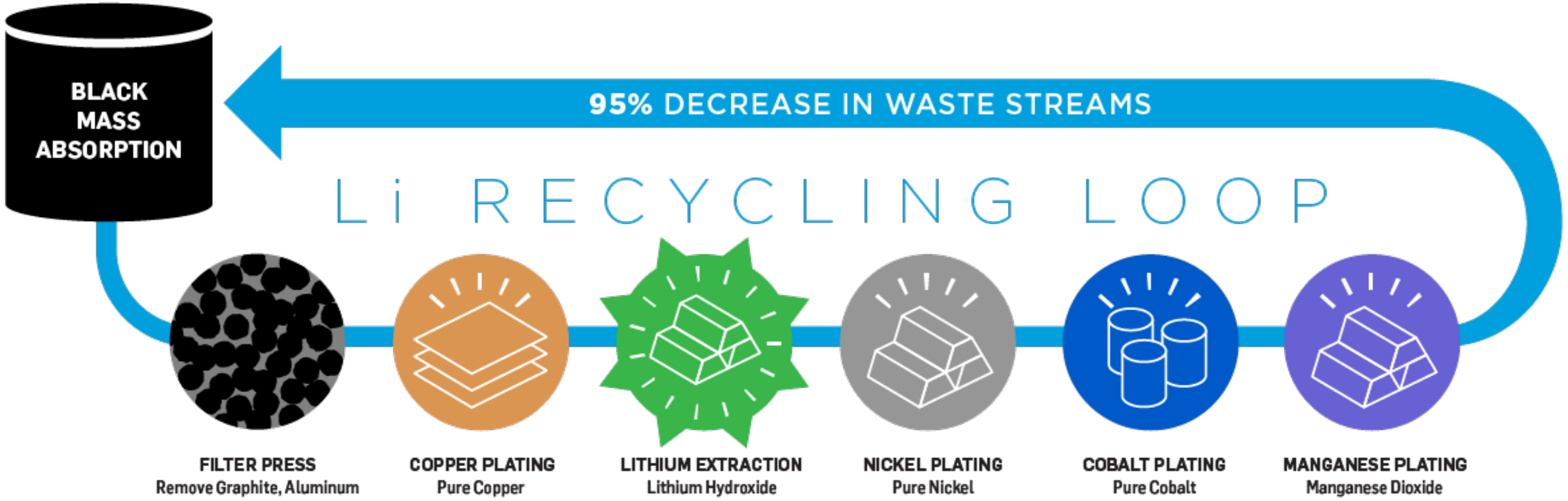
Li AquaRefining: Driving Closed Loop Process with Renewable Electricity vs One-time Use Chemicals

Li AquaRefining™ recovers critical materials using electricity in a closed-loop system

99% less CO2 than pyro or mining and no polluting furnaces

95% less chemicals than hydro, regenerative process lowers costs and emissions

95%+ recovery rate of all valuable materials



GAME CHANGING ENVIRONMENTAL & ECONOMIC PERFORMANCE

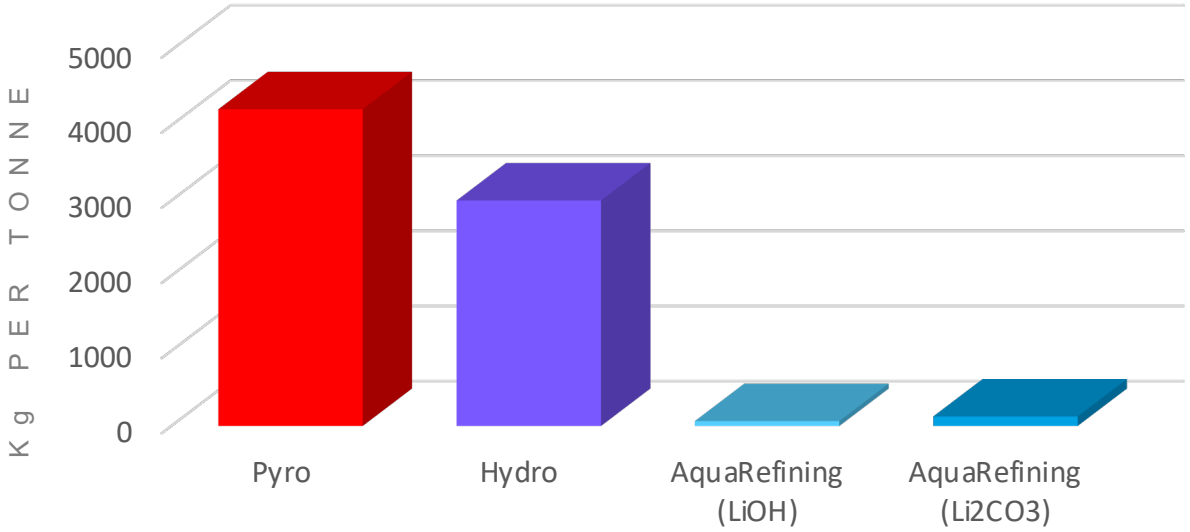
Electrifying lithium battery recycling to reduce emissions and waste

Aqua Metals' Li AquaRefining technology uses dramatically less energy – powered by electricity, instead of fossil fuels

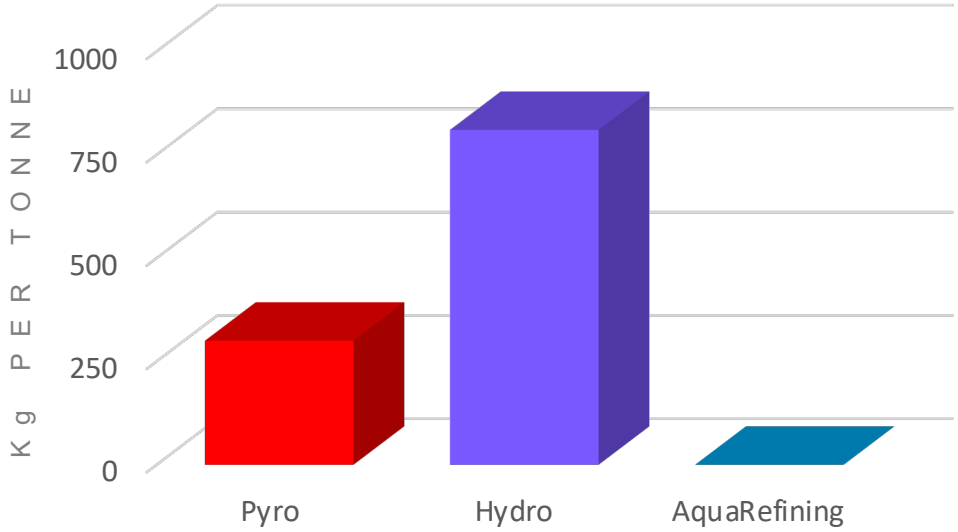
Much lower emissions per tonne recycled than pyro- and hydrometallurgical processes

AquaRefining also produces substantially less waste than competing solutions – and no sodium sulfate

CO_2 PRODUCED (KG) PER TONNE BLACK MASS RECYCLED



SODIUM SULFATE (KG OF NA2SO4) PER TONNE BLACK MASS PROCCESSED



*Based on Argonne National Labs battery life-cycle model —EverBatt

AQUA METALS' AQUAREFINING PILOT

SUSTAINABLE LIB RECYCLING PIONEERS

Electrifying the next generation of lithium battery recycling

AquaRefining: a regenerative form of electro-hydrometallurgy

An innovative application of electroplating – recover critical metals by plating them in electrochemical cells

No furnaces, vastly reduced one-time-use chemicals, no Na2SO4 waste, and regenerates proprietary solution

Low-Carbon: No direct emissions, sourcing clean electricity to power operations & processes

Pilot operating for over one year many times 24 hours a day and produces in spec product

SUSTAINABLE LIB RECYCLING PIONEERS

Electrifying the next generation of lithium battery recycling

Recovers pure metals (Co, Cu, Ni) instead of battery metal salts, achieving LME purity

- Ability to deliver to various CAM/battery manufacturers, not spec'd to one customer
- De-risks revenue model as compared to working salts into battery grade specs
- Pure metals valuable in multiple industries
- 5X cost reduced shipping advantage shipping pure metals vs. wet salts

AquaRefining also produces either lithium hydroxide or carbonate, depending on application, and manganese dioxide

- Battery grade and validated by lithium battery manufacturer

Electroplated copper recovered from black mass

An LFP cell made from Aqua Metals recycled lithium (Dragonfly Energy)

PILOT RECYCLING OPERATIONS LIFECYCLE ANALYSIS

Independent Technical Report conducted by global engineering firm **ICF International** including Lifecycle Analysis (LCA) of Aqua Metals' AquaRefining Pilot

TECHNICAL REPORT CONCLUSIONS:

- AquaRefining has industry leading ~95% reduction in climate emissions vs. virgin mined materials
- 83% reduction in carbon emissions vs. current hydrometallurgy recycling methods-

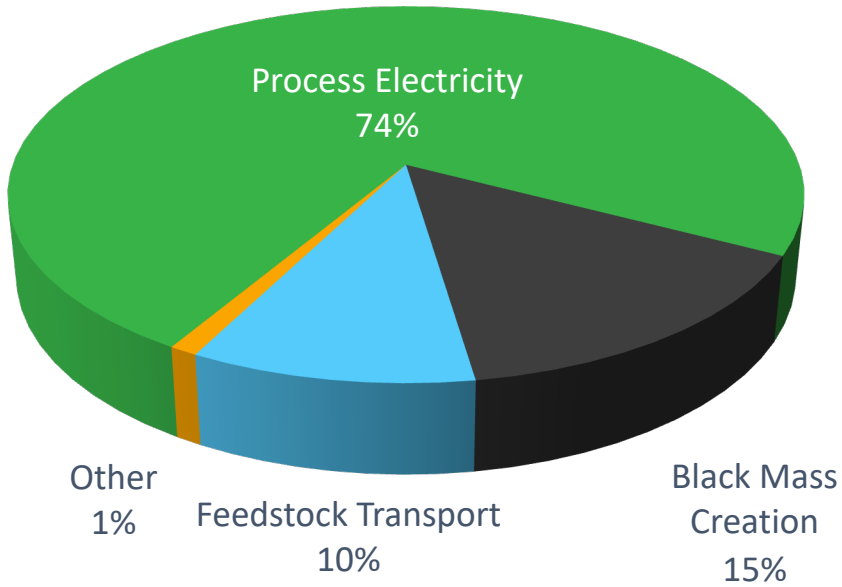
AQUA METALS PATHWAY TO ZERO CARBON:

~75% of current emissions from grid electricity
Sourcing carbon-free electricity lowers CO2 even further – beyond capabilities of other battery recyclers

~25% from feedstock creation & transport
Partnerships with low-carbon black mass producers actively reducing emissions

LOWER CLIMATE EMISSIONS BY DESIGN, AND A CLEAR PATHWAY TO NET-ZERO LIB RECYCLING

Li AquaRefining Lifecycle Emissions (by Source)



SIERRA ARC COMMERCIAL SCALE FACILITY UPDATE

SIERRA | ARC

SIERRA | ARC

UPFITTING COMPLETION + EQUIPMENT BEING DELIVERED

Tahoe-Reno Industrial Center, 10,000 tonnes-per-year target capacity.

Targeting production in 2025, full campus operational by 2028.

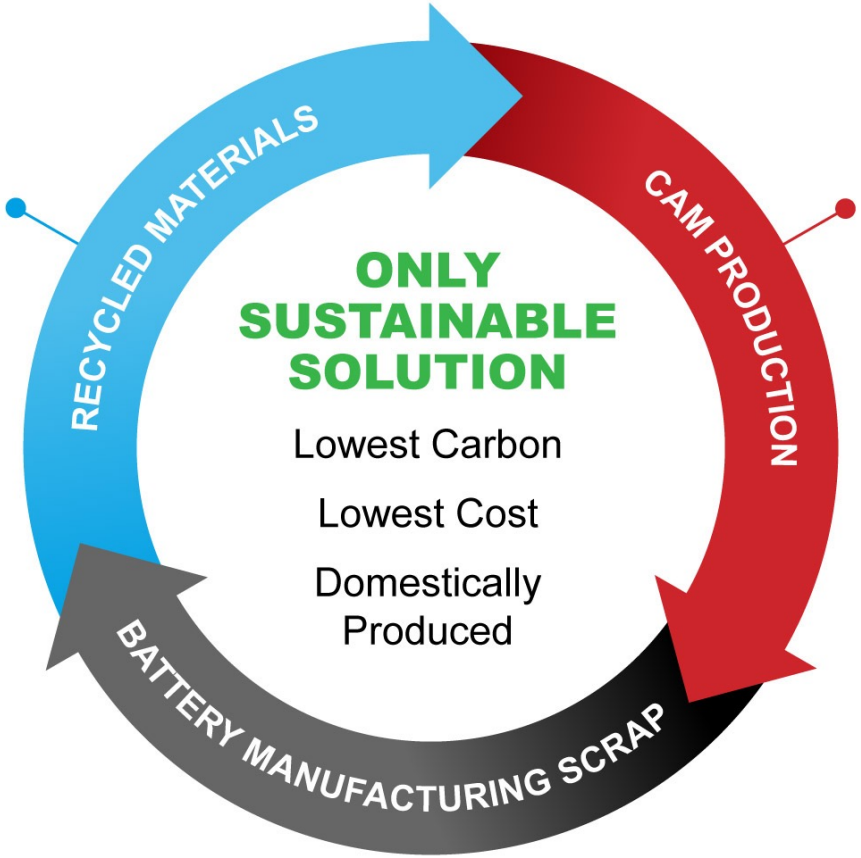
AQUA METALS

BUSINESS UPDATE & PARTNERSHIPS

6K ENERGY & AQUA METALS - CLOSING THE LOOP

North America's first sustainable lithium battery supply chain

AQUA METALS



6K ENERGY

Creates CAM for any lithium battery type from Aqua Metals recycled materials.

Able to accept manufacturing scrap from any major global producer.

EXPANDING PARTNER ECOSYSTEM

Providing samples to manufacturers and suppliers throughout the battery supply chain

Innovative Battery Materials Manufacturer (CAM/pCAM)

- Building 13,000tpa PlusCAM facility in Jackson, TN
- Executed a long-tern strategic supply agreement
- Aqua Metals has already delivered recycled materials for testing, samples

NEXT STEPS:

- Commence nitration pilot plant development, co-location agreement
- Deliver CAM samples made with recycled materials to tier one battery manufacturers

Leading Battery Materials Company in South Korea

- SK's largest black mass facility, expanding to 24,000tpa
- Strategic investment and partnership
- Established partner with South Korea battery & EV companies

NEXT STEPS:

- Yulho Materials completing commissioning of black mass processing facility
- AQMS & Yulho targeting large-scale, AquaRefining licensing agreement for Korea

Leading LFP Battery & Energy Storage Company

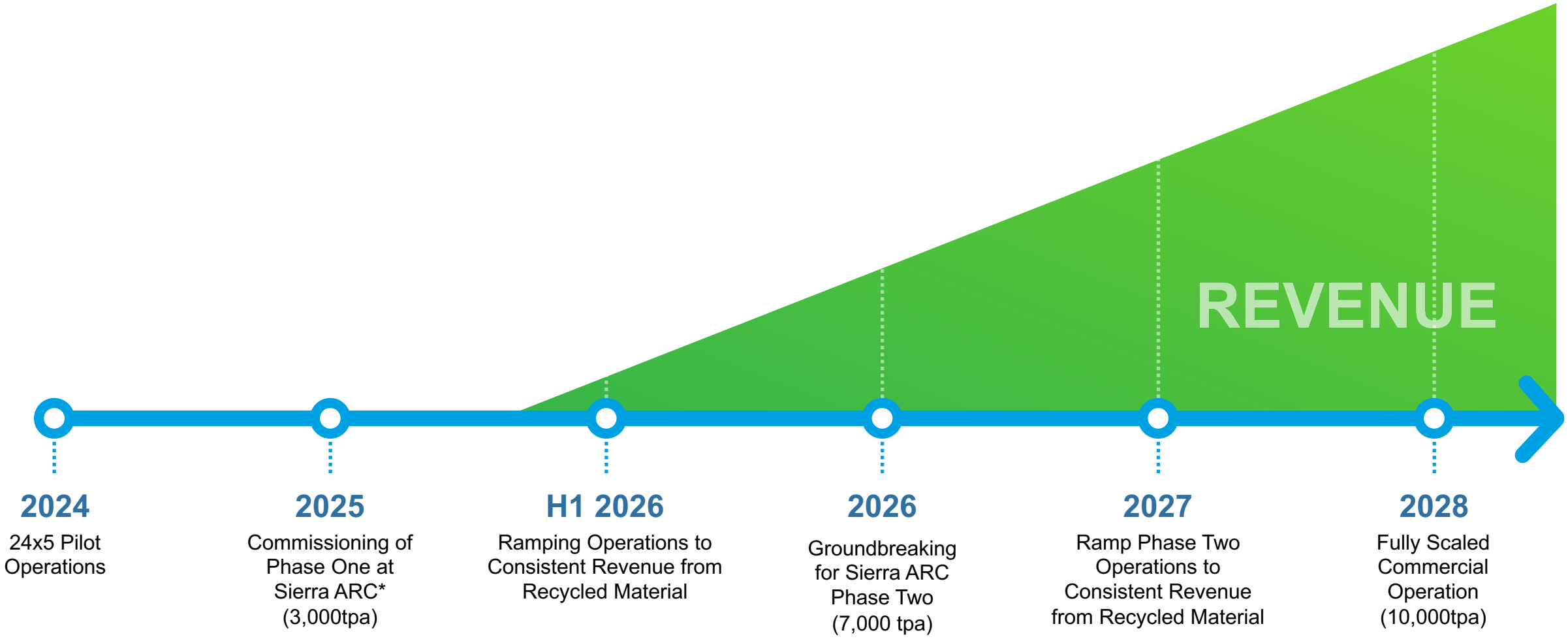
Lithium Ferro Phosphate (LFP) & Solid-State Battery Tech

- Validated Aqua Metals materials as part of advanced manufacturing process

NEXT STEPS:

- Advance LOI to a formal agreement for regional (NV) supply chain & off-taker for recycled lithium

AQUA METALS' COMMERCIAL-SCALE TIMELINE



* Pending completion of project financing of remainder of Sierra ARC buildout by Q4 2024

FINANCIALS

As of June 30, 2024	
Cash and cash equivalents	**$7.8M**
Total Assets	**$33.7M**
Quarterly burn rate (approx. starting Q4 2024)	**$1.5M**

Additional Sources of Capital	
Non-dilutive project financing	**Up to $85M targeted**
Non-dilutive short-term financing	**$25.0M targeted**
Potential asset backed equip financing	**Up to $4M targeted**

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.

INVESTOR HIGHLIGHTS

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SURGING DEMAND

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BATTERY COMPONENT DEFICIT

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NASDAQ: AQMS

WWW.AQUAMETALS.COM

APPENDIX

AQUA METALS

Consolidated
Balance Sheets

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

	June 30, 2024	December 31, 2023
ASSETS		
Current assets		
Cash and cash equivalents	$ 7,833	$ 16,522
Note receivable - LINICO	400	600
Accounts receivable	—	67
Inventory	908	929
Prepaid expenses and other current assets	174	181
Total current assets	9,315	18,299
Non-current assets		
Property, plant and equipment, net	17,009	10,347
Intellectual property, net	191	281
Other assets	7,706	4,673
Total non-current assets	24,906	15,301
Total assets	$ 34,221	$ 33,600
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities		
Accounts payable	$ 1,679	$ 1,836
Accrued expenses	2,908	2,467
Lease liability, current portion	288	275
Note payable, current portion	2,979	35
Total current liabilities	7,854	4,613
Non-current liabilities		
Lease liability, non-current portion	593	—
Note payable, non-current portion	—	2,923
Total liabilities	8,447	7,536
Commitments and contingencies (see Note 12)		
Stockholders' equity		
Common stock; $0.001 par value; 300,000,000 shares authorized; 134,257,193 and 133,800,547, shares issued and outstanding as of June 30, 2024, respectively and 108,308,661 and 107,880,095, shares issued and outstanding as of December 31, 2023, respectively	134	108
Additional paid-in capital	260,554	249,687
Accumulated deficit	(234,554)	(223,215)
Treasury stock, at cost; common shares: 456,646 and 428,566 as of June 30, 2024 and December 31, 2023, respectively	(360)	(516)
Total stockholders' equity	25,774	26,064
Total liabilities and stockholders' equity	$ 34,221	$ 33,600

AQUA METALS

Consolidated
Statement of Operations

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

	Three Months Ended June 30,		Six Months Ended June 30,	
	2024	2023	2024	2023
Operating cost and expense				
Plant operations	$ 2,373	$ 1,481	$ 4,582	$ 2,546
Research and development cost	363	525	951	970
Gain on disposal of property, plant and equipment	—	(3)	—	(23)
General and administrative expense	2,863	2,849	5,858	5,855
Total operating expense	5,599	4,852	11,391	9,348
Loss from operations	(5,599)	(4,852)	(11,391)	(9,348)
Other income and (expense)				
Interest expense	(84)	(255)	(190)	(431)
Interest and other income	99	348	245	414
Total other income (expense), net	15	93	55	(17)
Loss before income tax expense	(5,584)	(4,759)	(11,336)	(9,365)
Income tax expense	(3)	—	(3)	—
Net loss	$ (5,587)	$ (4,759)	$ (11,339)	$ (9,365)
Weighted average shares outstanding, basic and diluted	123,793,140	84,184,884	116,923,889	82,743,345
Basic and diluted net loss per share	$ (0.05)	$ (0.06)	$ (0.10)	$ (0.11)

AQUA METALS

Consolidated
Statement of Cash Flows

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

	Six Months Ended June 30,	
	2024	2023
Cash flows from operating activities:		
Net loss	$ (11,339)	$ (9,365)
Reconciliation of net loss to net cash used in operating activities		
Depreciation and ROU asset amortization	575	455
Amortization of intellectual property	90	90
Fair value of common stock issued for director fees	—	64
Fair value of common stock issued for consulting services	—	12
Stock-based compensation	1,525	1,286
Amortization of deferred financing costs	20	112
Gain on disposal of property, plant and equipment	—	(23)
Non-cash accrued interest expense	24	—
Inventory net realizable value adjustment	240	—
Changes in operating assets and liabilities		
Proceeds from leasing of building	—	12,278
Accounts receivable	67	(90)
Inventory	(219)	(353)
Prepaid expenses and other current assets	6	80
Accounts payable	(29)	49
Accrued expenses	1,068	1,024
Other assets and liabilities	(30)	(147)
Net cash provided by (used in) operating activities	(8,002)	5,472
Cash flows from investing activities:		
Purchases of property, plant and equipment	(6,440)	(5,503)
Proceeds from sale of equipment	—	67
Proceeds from note receivable	200	—
Equipment deposits	(3,522)	(75)
Net cash used in investing activities	(9,762)	(5,511)
Cash flows from financing activities:		
Proceeds from issuance of common stock and warrants, net of transaction costs	7,306	—
Proceeds from employee stock purchase plan	35	14
Payments on note payable	—	(6,000)
Principle payments on finance leases	(35)	—
Proceeds from note payable, net	—	2,932
Cash paid for tax withholdings on RSUs vesting	(360)	(577)
Debt issuance costs	(413)	—
Proceeds from ATM, net	2,542	2,784
Net cash provided by (used in) financing activities	9,075	(847)
Net decrease in cash and cash equivalents	(8,689)	(886)
Cash and cash equivalents at beginning of period	16,522	7,082
Cash and cash equivalents at end of period	$ 7,833	$ 6,196