



## Corporate Presentation

September, 2021

**Leading a Revolution**  
In the Lead and Lithium Battery Industries

## This document contains forward-looking statements concerning Aqua Metals, Inc.

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 uncertainty of future events or outcomes, or that do not relate to historical matters. The forward-looking statements in this presentation include our expectations for the outcome of our agreement with ACME and the expected benefits of our agreement with ACME. 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 the initial deployment of our AquaRefining technology at ACME's facilities may not produce satisfactory results; (2) even if the initial deployment of our AquaRefining technology at ACME's facilities are successful, the risk we may not be able to conclude a long-term commercial license agreement with ACME or, if we do, derive the expected benefits from such agreement; (3) the risk that we may not be able to satisfactorily demonstrate to potential licensees the technical and commercial viability of our V1.25 electrolyzer and AquaRefining process; (4) the risk that licensees may refuse or be slow to adopt our AquaRefining process as an alternative to smelting 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; (6) the risk that we may not be able to access additional capital as and when needed and (7) those other risks disclosed in the section "Risk Factors" included in our Annual Report on Form 10-K filed on February 25, 2021 and subsequent SEC filings. 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.



To provide **sustainable metal recycling** for materials strategic to energy storage applications

**Our proven breakthrough technology, AquaRefining, delivers** raw materials back into the manufacturing supply chain in a clean economical way that reduces overreliance on mining to meet demand

- 💧 Developed AquaRefining, a commercially-ready sustainable battery recycling technology
- 💧 AquaRefining uses water and organic acids to create 99.996+% ultra pure lead, one atom at a time, for the ~\$20B lead recycling industry
- 💧 Seeking to extend AquaRefining to lithium-ion batteries through IP, strategic investment, and R&D
- 💧 Transformative technology that benefits the industry and Earth  
Environment – Worker Safety – Battery Performance – Economics

**Ticker:** AQMS (NASDAQ)

**Incorporated:** 2014

**Cash on Hand:** \$10.7M as of 06.30.21 (\$5.25M ins. rec'd July)

**Corporate HQ:** Tahoe-Reno, NV

**Shares Outstanding:** 69.5M last 10-Q

**Debt:** Debt free and strong balance sheet

## Horizon 1

Recycled lead market is slated to surpass \$19 billion by 2026

More than 6M tons of lead collected for reuse each year

Lead batteries power 1.4B automobiles worldwide

Over 80% of lead in every new lead acid battery is secondary or recycled lead

## Horizon 2

Last year, lithium-ion batteries containing nearly \$1 billion in strategic metals are landfilled

This is expected to grow to \$12 billion by 2025 if not recycled

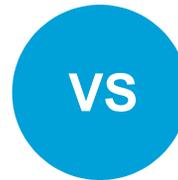
30M EVs to be produced annually by 2027, requiring 1.8M MT of lithium, 5X what is mined today

**99+% of All LABs are Recycled** (Source BCI)  
**80+% of All LABs use Recycled Lead**



**Smelting**

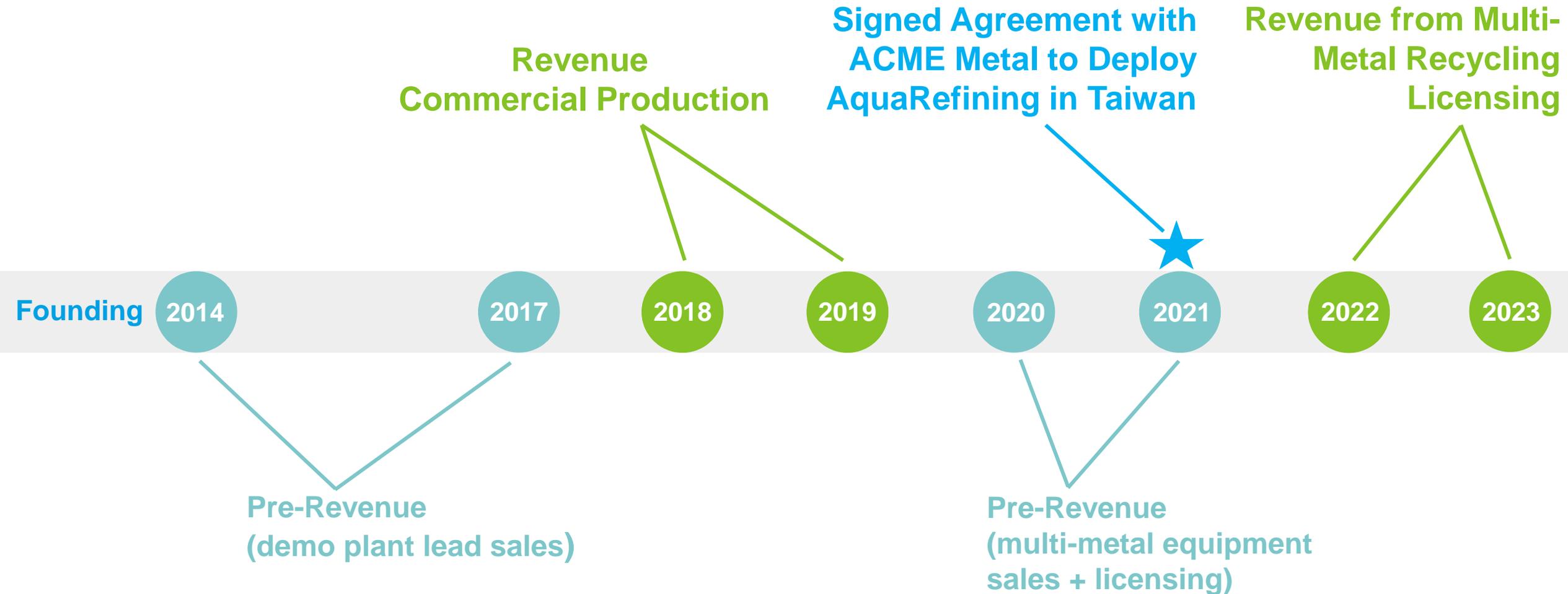
The current method of Lead Acid Battery (LAB) recycling  
Dirty – Fire – Dangerous



**AquaRefining**

Electrochemical alternative to smelting  
Clean – Water – Safe

-  **Commercially ready to sell AquaRefining equipment, license operation, provide services**  
Announced 1<sup>st</sup> sales licensing agreement with Taiwan's ACME with multiple other candidates in pipeline
-  **Industry and planet badly needs an environmentally friendly metals recycling technology to increase sustainability and grow capacity through permittable infrastructure**
-  **AquaRefining de-risked & demonstrated at commercial quantities** – 35,000 ingots produced and sold for premium. Leading strategic investors and partners have included industry giants.
-  **Strong and broad intellectual property** – Over \$200M invested towards commercialization – 68 patents issued/allowed and 49 additional patent applications pending in the US and internationally – for lead *and* other metals. New recent patent allowances, include China.
-  **Go forward business model**
  - 1) Core technologies, process and commerciality of AquaRefined lead is already proven
  - 2) Focus is on global equipment + licensing opportunity to incorporate AquaRefining in industry upgrades/builds



- 💧 Signed Definitive Agreement to license and deploy AquaRefining technology in Taiwan
- 💧 Established first licensee in the largest and fastest growing global lead market
- 💧 Plan to begin shipping Aqualyzers soon, for initial deployment later this year
- 💧 Envisions partnership with global battery manufacturer to develop a second methodology to produce oxide directly from AquaRefined material
- 💧 Potential to produce oxide using the only two industry standard processes available – a direct link from AquaRefining to battery manufacturing



## Companies will cooperate to offer AquaRefining to battery recyclers

BASF has established relationships with battery recyclers globally



## Companies will explore enhanced BASF made electrolyte and additives for AquaRefining

Partnering through chemistry creates the potential for further improved performance & longevity for AquaRefining

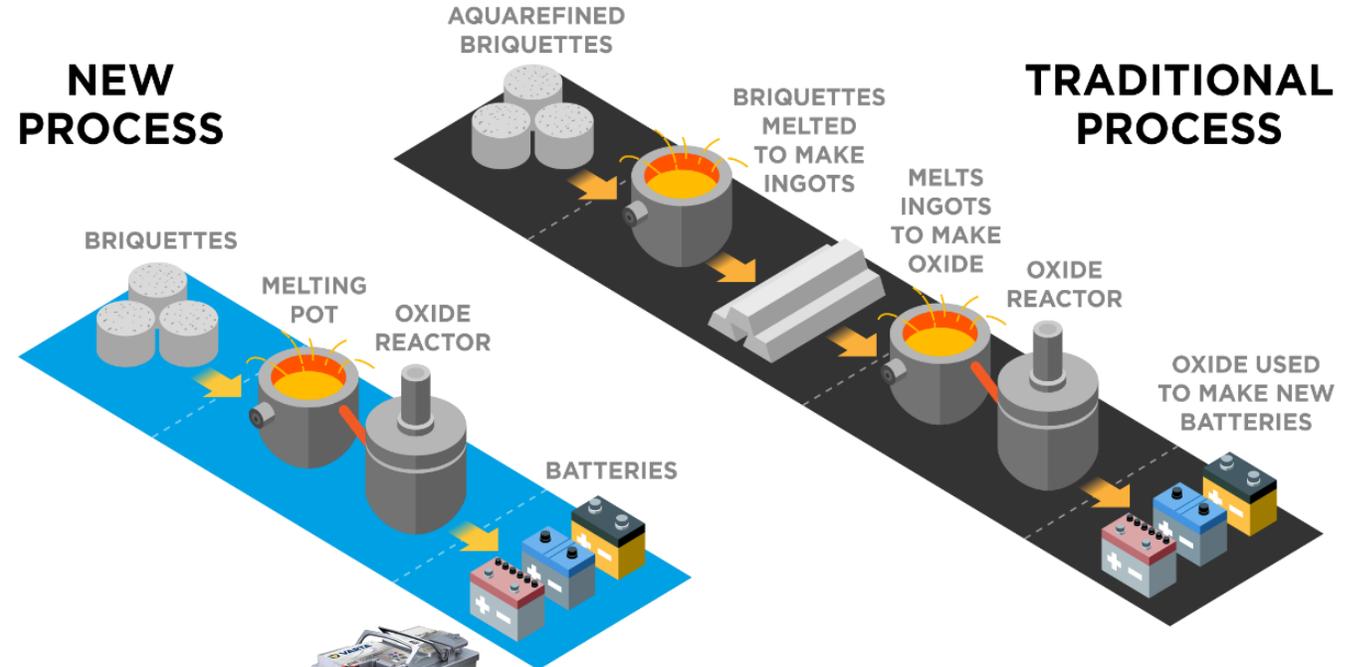


## Aqua Metals will supply BASF electrolyte for AquaRefining

From system fill revenue through cooperating through Aqua Pure Metrics™ for ongoing electrolyte needs



## Collaboration on sustainability through improving chemistry



**AquaFormed™  
Briquettes**

Added to Patent Prosecution Portfolio  
Briquettes as Pictured Go Straight to Oxide Production

**Direct to Battery  
Manufacturing**

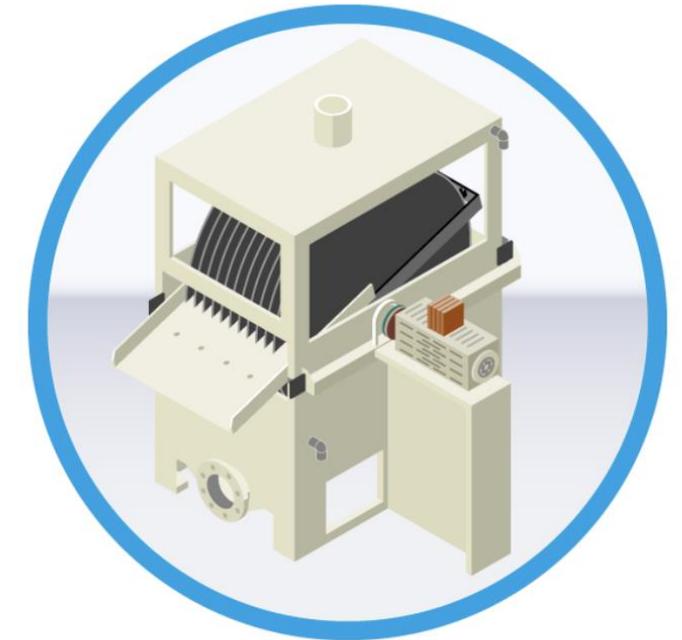
Streamlined Cheaper Economics  
Further Improved Environmental Impact



- ~35,000 ingots or 55 truckloads produced and shipped to Clarios, the Worlds' largest battery manufacturer and investor in Aqua Metals for test battery production
- In 2018 and 2019, AquaRefinery operated at demonstration commercial quantities
- Produced 99.996+% pure lead ingots and ran entire plant 24x7 for several months and 6-24 AquaRefining electrolyzers 24x7 for up to a month at a time

- 💧 V1.25 produced 32+ kg of ultra-pure lead an hour, DOUBLE of V1.0 during 24x7 production in 2019; Now V1.5 produces 54+ kg or TRIPLE of V1.0
- 💧 Modular deployment allows for flexible production sizing
- 💧 Fully automated – runs with little to no manual intervention
- 💧 Installing AquaRefining at a smelting facility lowers overall emissions, improves lead quality, and reduces overall operating costs
- 💧 Produces 99.996+% pure metal – for ingot production or our new process to take direct to battery manufacturing

Aqualyzer™



**Integrated software and portal that keeps track of lead production, key operating metrics and more...**



## Pure Metrics™

- Real-time data logging
- Remote access for both licensee and for Aqua Metals support
- Alerts
- Daily production dashboard
- Continuous improvement
- Potential extension to other plant operations

## High-Growth LAB Applications Require More High-Purity Lead



Auto growth in emerging markets - China, India and South America Cars are using additional lead batteries for start stop functionality



Renewable energy economy is growing and dependent on energy storage to be efficient and effective

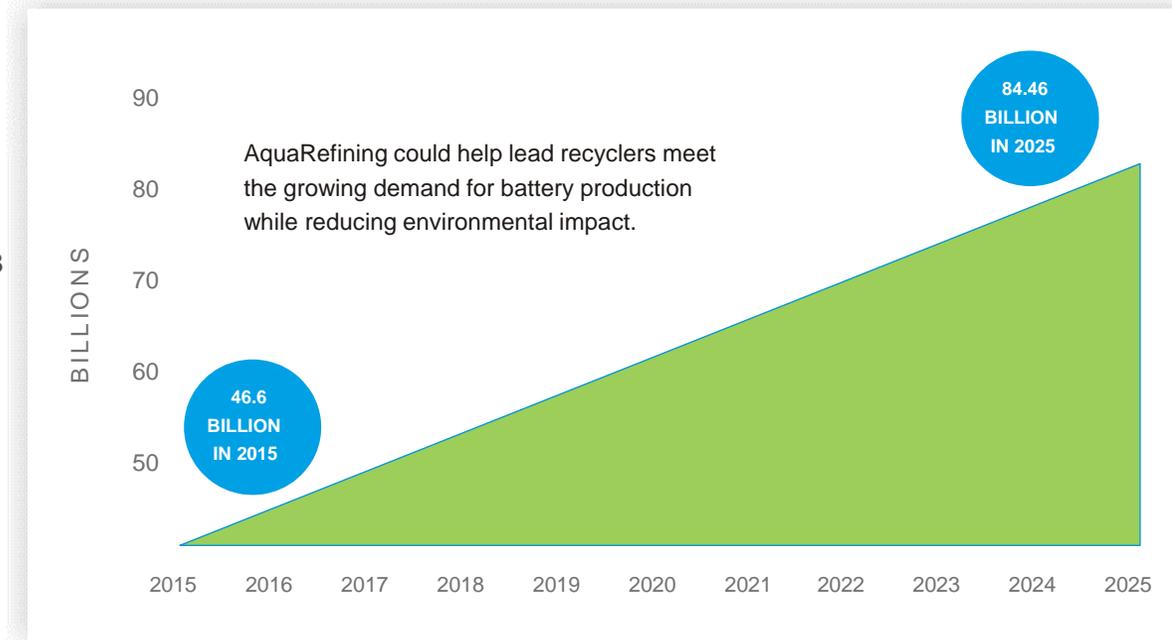


Data Center & Telecom industries are growing rapidly and utilize mostly recyclable lead and some lithium batteries for backup power



Electric Vehicles use recyclable lead batteries to support electronics and lithium batteries to propel

- Annual LAB sales expected to nearly double to \$84+ billion by 2025<sup>1</sup> driving demand for lead
- LAB production constitutes the largest use of lead today<sup>2</sup>
- LABs still represent over 95% of all batteries produced<sup>3</sup> due to improved recyclability, safety and performance compared to Li-ion and NiMH
- Over 99% of used LABs are sent to recycling for lead extraction<sup>4</sup> to address growing shortage
- Secondary (recycled) lead comprises ALL the lead produced in the US<sup>2</sup> as well as >50% of all lead produced elsewhere worldwide, 74% in Europe



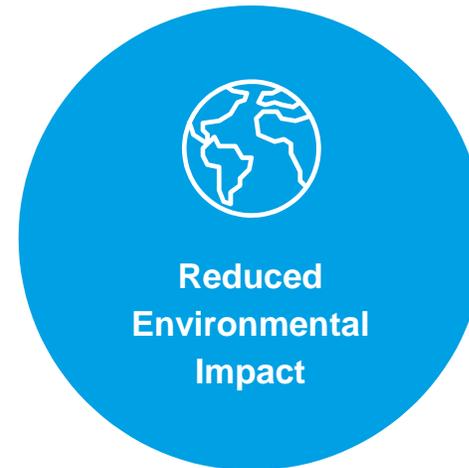
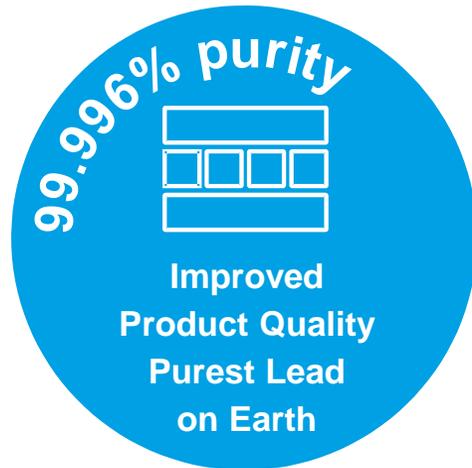
<sup>1</sup> Grand View Research Report.

<sup>2</sup> International Lead Association Research.

<sup>3</sup> Sandia National Laboratories, 25th International Materials Congress Presentation.

<sup>4</sup> BCI International, "Study Finds Lead Batteries Are Most Recycled Consumer Product".

Compared to traditional recycling technologies, AquaRefining offers large advantages:



The potential for improved battery performance and life



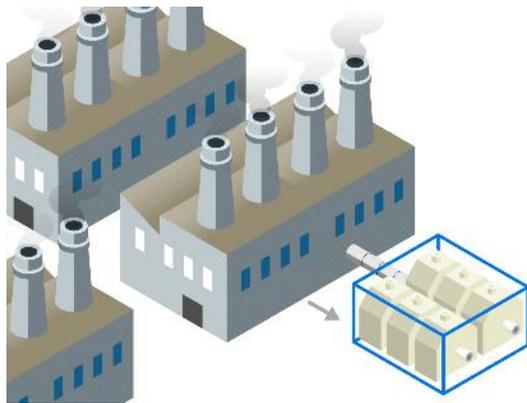
Higher premium for lead and value-add for licensing AquaRefining technology

Aqua Metals' vision is to partner with battery recycling centers across the globe to increase production without increasing emissions – over 300 potential plants already identified

**We believe recycling centers have two models for retrofitting with AquaRefining:**

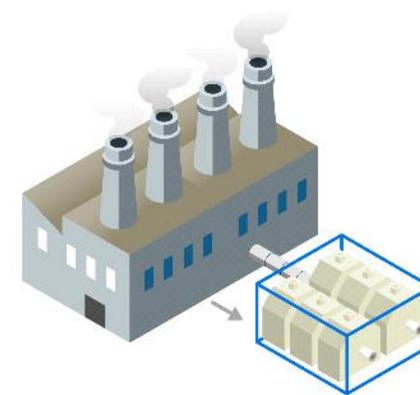
1

Increase production without increasing emissions by adding AquaRefining but keeping furnace capacity



2

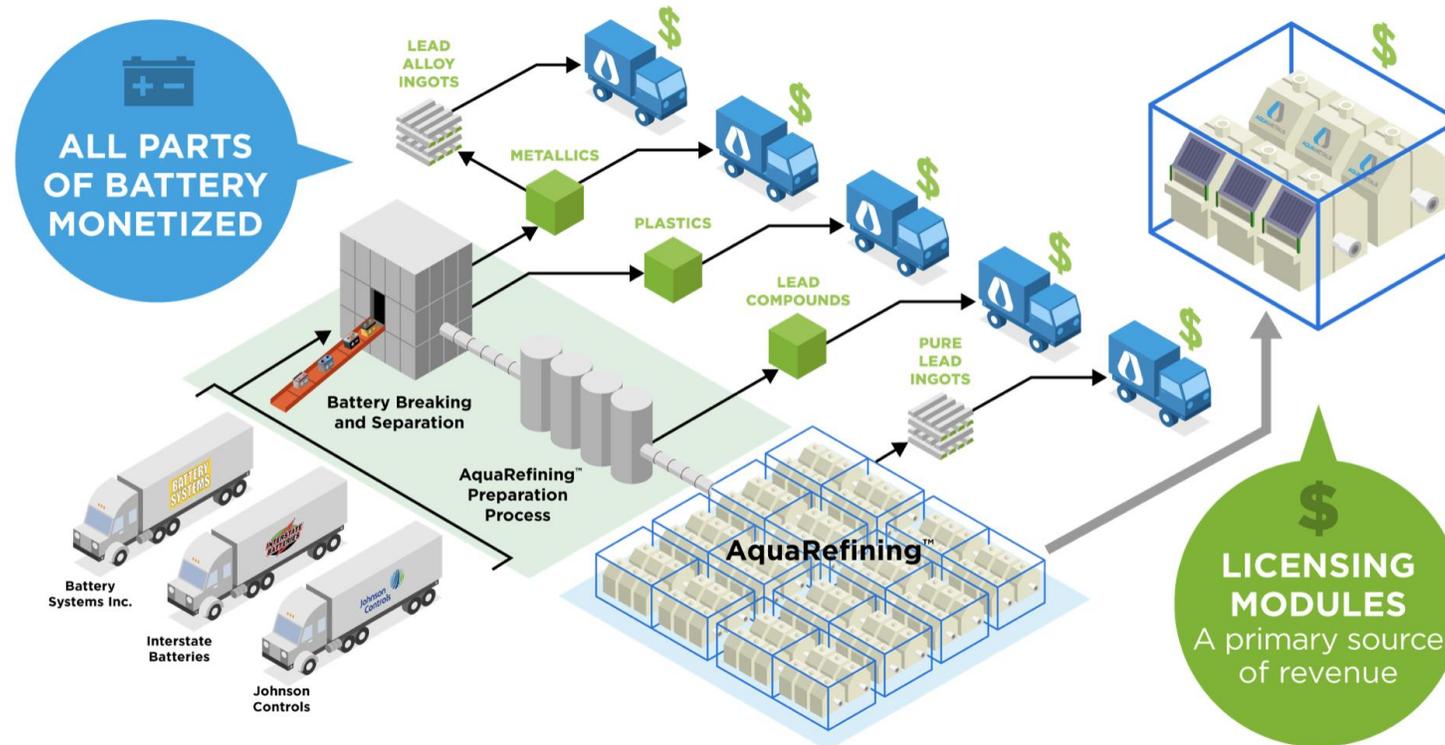
Keep total production the same by adding AquaRefining and reducing furnace usage while reducing emissions



# A Third Model – AquaRefining Designed into Greenfield Builds

3

In developing countries, as battery demand rises rapidly, new recycling and manufacturing centers are in planning stages and governments want them to be **sustainable**



## Equipment Supply + Licensing Sales Funnel Increased to Span 3 Continents

- 💧 **Licensing model is built; licensee pipeline started**
- 💧 **Seeking engineering revenues of 6 - 7 figures per project**
- 💧 **Projecting possible equipment supply revenue of over \$10M+ per project**
- 💧 **Recurring running royalties on lead produced with AquaRefined lead commanding ~10% premium in 2018/2019, potentially shareable with licensees**
  - A 100 tonne/day facility could generate ~\$70M+ of AquaRefined lead/year
  - Premium value for sharing could be ~\$7M
  - Premium value can rise as ultrapure lead demand increases
- 💧 **Additional millions of dollars in revenues could potentially be generated for maintenance and upgrades over plant lifetime**

## Addressable Market based on 2018 Secondary lead production

Secondary Lead Production

7,240,000 Tonnes

Total Paste available for AquaRefining

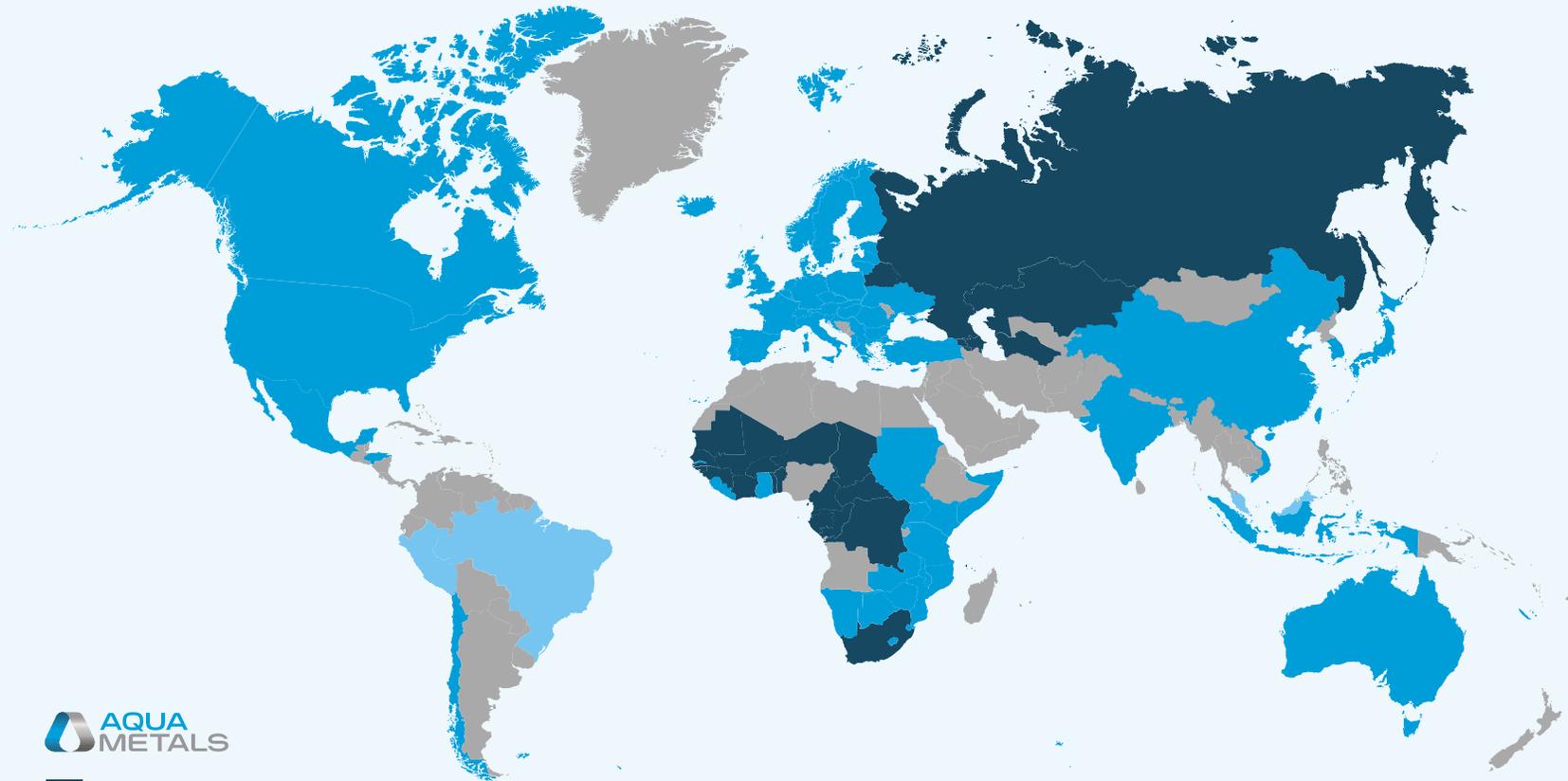
3,600,000 Tonnes

Total Addressable market (\$2000.00 per T lead)

\$7,200,000,000

- 💧 **Secondary lead demand is projected to increase by an estimated 1,803,000 tonnes between 2018 and 2030<sup>1</sup>**
- 💧 **All new batteries need 70% - 85% recycled lead**
- 💧 **Secondary lead demand will eventually surpass Secondary lead smelting capacity due to environmental limits on furnace permitting**
  - The EU and CA are considering outlawing lead batteries/products/smelting
  - Environmental regulations are tightening in China
  - Battery manufacturers rely on unregulated smelters and smelters under pressure from regulators to meet demand currently - they understand this to be a big risk

<sup>1</sup>Source: Wood McKenzie



## Robust Strategic IP Portfolio

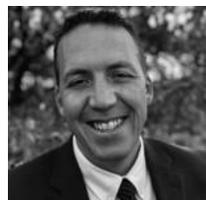
- Only company with IP for clean lead battery recycling
- 68 total patents issued/allowed
- 49 additional patent applications pending
- New patent allowances, including China

## Executive Management Team



**Stephen Cotton, President and CEO, Executive Director**

Aqua Metals' Chief Commercial Officer from January 2015 to June 2017  
15 years as Co-Founder and CEO of data center battery-monitoring company, Canara; exited to a private equity firm in 2012



**Judd Merrill, CFO**

Former Director of Finance / Accounting for Klondex Mines Ltd., former CFO of Comstock Mining with proven skills in SEC compliance and reporting, budgeting, forecasting, inventory management, M&A and project management



**Ben Taecker, Chief Engineering & Operations Officer**

20 years of experience in manufacturing and ops leadership including 6 years at Johnson Controls' (now Clarios) lead acid battery recycling center in Florence, SC handling engineering, planning, construction, commissioning and scaling

## Independent Directors



**S. Shariq Yosufzai, Non-Executive Chairman**

Held executive positions at Chevron for 20+ years, including Pres. of Global Marketing, numerous board/chairman positions  
Chair of Compensation Committee, Chair of Nom./Corp. Gov. Committee, Audit Committee



**Vincent DiVito, Chair of the Audit Committee**

Experienced NASDAQ audit committee chair; former CFO of fast-growing specialty chemicals company  
Chair of Audit Committee, Compensation and Nom./Corp. Gov. Committees



**Molly P. Zhang**

Seasoned executive and corporate director in chemical and other sectors, led Dow Chemical's \$250 million global licensing and catalyst business through global expansion phase  
Audit and Nom./Corp. Gov. Committees



**Edward Smith**

President and CEO, Board of Directors of SMTC Corporation  
25+ years experience in manufacturing and electronic components distribution industries  
Compensation and Nom./Corp. Gov. Committees

- 💧 **First of its kind environmentally friendly LAB recycling technology**  
Creates purest lead on Earth (99.996+% pure) while lowering polluting emissions
- 💧 **Over \$200M invested**  
117 Patents Issued/Allowed and Pending
- 💧 **Partners have included industry giants – BASF, Clarios, ACME, Interstate Batteries, Veolia, Wirtz**
- 💧 **\$20B+ and growing addressable global market for lead, 50% of which is eligible for licensed AquaRefining; Actively extending AquaRefining into LiB metals recovery (\$15B+ by 2025)**
- 💧 **1<sup>st</sup> Equipment Supply and Licensing Agreement done – Robust pipeline for more**
- 💧 **Focused on growing significant cash resources – debt free**  
Strong cash runway
- 💧 **Management is fully committed to the execution of capital light business plan**

# Financial Overview



# Consolidated Balance Sheet

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

	June 30, 2021 (unaudited)	December 31, 2020
<u>ASSETS</u>		
Current assets		
Cash and cash equivalents	\$ 10,704	\$ 6,533
Accounts receivable	290	32
Lease receivable, current portion	779	—
Inventory	662	1,091
Assets held for sale	4,339	—
Prepaid expenses and other current assets	381	702
Total current assets	<u>17,155</u>	<u>8,358</u>
Non-current assets		
Property and equipment, net	1,930	24,883
Intellectual property, net	730	819
Investment in LiNiCo	1,500	—
Lease receivable, non-current portion	16,037	—
Other assets	776	1,078
Total non-current assets	<u>20,973</u>	<u>26,780</u>
Total assets	<u>\$ 38,128</u>	<u>\$ 35,138</u>
<u>LIABILITIES AND STOCKHOLDERS' EQUITY</u>		
Current liabilities		
Accounts payable	\$ 1,236	\$ 1,552
Accrued expenses	4,634	1,253
Lease liability, current portion	545	620
Notes payable, current portion	—	29
Total current liabilities	<u>6,415</u>	<u>3,454</u>
Lease liability, non-current portion	17	242
Notes payable, non-current portion	—	303
Total liabilities	<u>6,432</u>	<u>3,999</u>
Commitments and contingencies		
Stockholders' equity		
Common stock; \$0.001 par value; 100,000,000 shares authorized; 68,607,326 and 64,461,065 shares issued and outstanding as of June 30, 2021 and December 31, 2020, respectively	69	64
Additional paid-in capital	209,382	196,728
Accumulated deficit	(177,755)	(165,653)
Total stockholders' equity	<u>31,696</u>	<u>31,139</u>
Total liabilities and stockholders' equity	<u>\$ 38,128</u>	<u>\$ 35,138</u>



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

# Consolidated Statement of Operations

	Three Months Ended June 30,		Six Months Ended June 30,	
	2021	2020	2021	2020
Product sales	\$ —	\$ —	\$ —	\$ 18
Operating cost and expense				
Cost of product sales	2,138	1,306	3,749	2,760
Research and development cost	176	217	465	459
General and administrative expense	2,129	2,245	4,428	4,630
Total operating expense	<u>4,443</u>	<u>3,768</u>	<u>8,642</u>	<u>7,849</u>
Loss from operations	<u>(4,443)</u>	<u>(3,768)</u>	<u>(8,642)</u>	<u>(7,831)</u>
Other income and (expense)				
Insurance proceeds net of related expenses	460	(52)	448	(255)
PPP loan forgiveness	201	—	332	—
Loss on disposal of property and equipment	(4,254)	—	(4,254)	—
Interest expense	(4)	(164)	(9)	(347)
Interest and other income	<u>24</u>	<u>3</u>	<u>25</u>	<u>25</u>
Total other income (expense), net	<u>(3,573)</u>	<u>(213)</u>	<u>(3,458)</u>	<u>(577)</u>
Loss before income tax expense	(8,016)	(3,981)	(12,100)	(8,408)
Income tax expense	<u>—</u>	<u>(2)</u>	<u>(2)</u>	<u>(2)</u>
Net loss	<u>\$ (8,016)</u>	<u>\$ (3,983)</u>	<u>\$ (12,102)</u>	<u>\$ (8,410)</u>
Weighted average shares outstanding, basic and diluted	<u>68,152,296</u>	<u>60,136,374</u>	<u>67,518,650</u>	<u>59,859,493</u>
Basic and diluted net loss per share	<u>\$ (0.12)</u>	<u>\$ (0.07)</u>	<u>\$ (0.18)</u>	<u>\$ (0.14)</u>



## Consolidated Statement of Cash Flows

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

	<b>Six Months Ended June 30,</b>	
	<b>2021</b>	<b>2020</b>
<b>Cash flows from operating activities:</b>		
Net loss	\$ (12,102)	\$ (8,410)
Reconciliation of net loss to net cash used in operating activities		
Depreciation	724	1,236
Amortization of intellectual property	90	90
Accretion of asset retirement obligation	—	24
Fair value of RSUs issued for consulting services	34	24
Stock-based compensation	1,299	1,510
Amortization of deferred financing costs	—	18
Inventory NRV adjustment	146	—
Loss on disposal of property and equipment	4,254	—
Forgiveness of PPP Loan	(332)	—
Changes in operating assets and liabilities		
Accounts receivable	(258)	244
Inventory	283	49
Prepaid expenses and other current assets	320	733
Accounts payable	222	(1,953)
Accrued expenses	680	(1,671)
Other assets and liabilities	(300)	(217)
Net cash used in operating activities	<u>(4,940)</u>	<u>(8,323)</u>
<b>Cash flows from investing activities:</b>		
Purchases of property and equipment	(1,217)	(2,239)
Proceeds from sale of equipment	275	—
Equipment deposits and other assets	43	(36)
Insurance proceeds	—	7,625
Investment in LiNiCo	(232)	—
Net cash (used in) provided by investing activities	<u>(1,131)</u>	<u>5,350</u>
<b>Cash flows from financing activities:</b>		
Proceeds from PPP Loan	—	332
Payments on notes payable	—	(158)
Lease of building	184	—
Proceeds from exercise of stock options	727	—
Proceeds from ATM, net	9,331	—
Net cash provided by financing activities	<u>10,242</u>	<u>174</u>
Net increase (decrease) in cash and cash equivalents	4,171	(2,799)
Cash and cash equivalents at beginning of period	6,533	7,575
Cash and cash equivalents at end of period	<u>\$ 10,704</u>	<u>\$ 4,776</u>



NASDAQ: AQMS

[WWW.AQUAMETALS.COM](http://WWW.AQUAMETALS.COM)