AirJoule Technologies Corporation

Nasdaq: AIRJ

https://airjouletech.com

March 2025

DISCLAIMERS

Forward Looking Statements

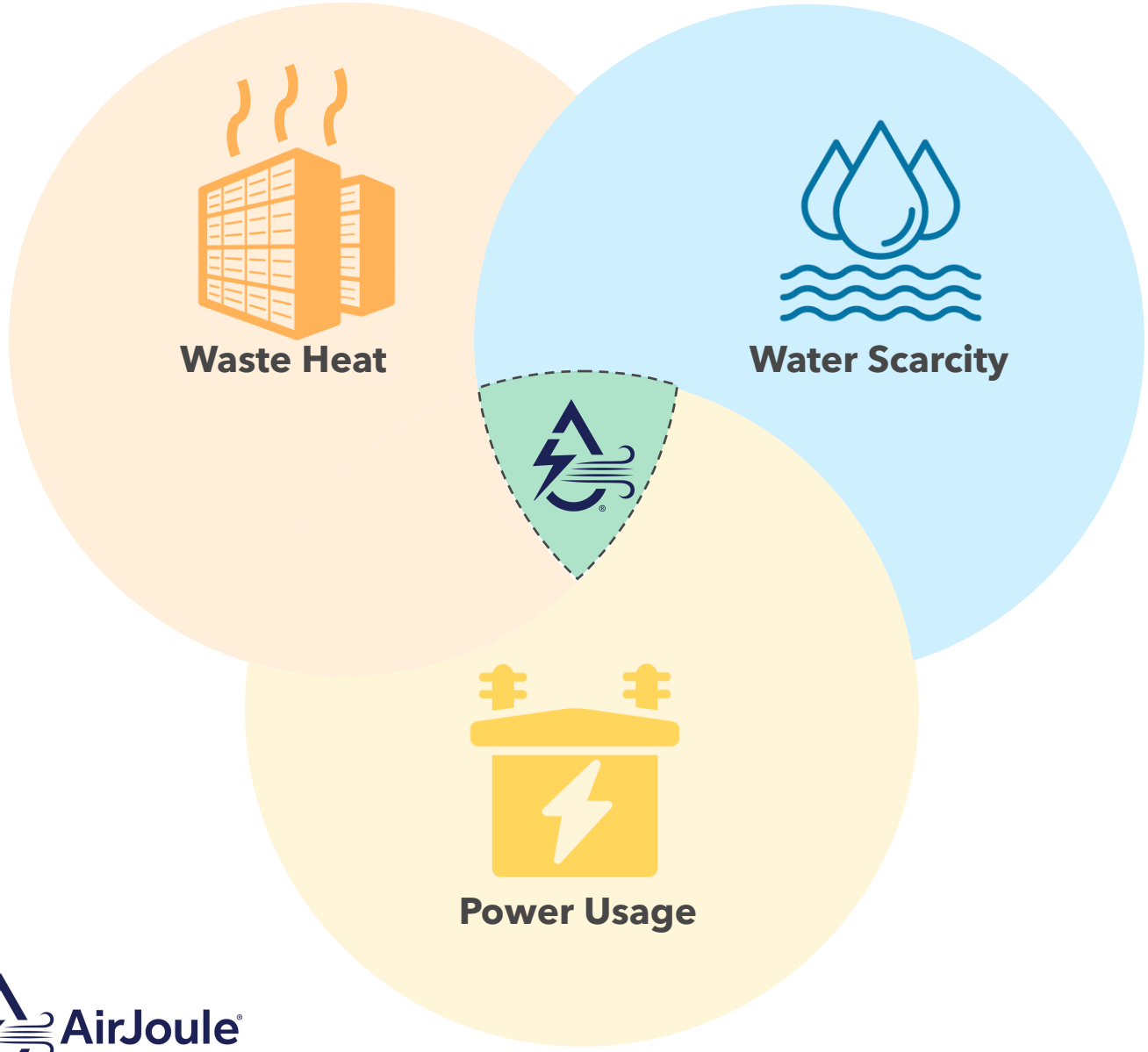
The information in this presentation includes "forward-looking statements" within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. All statements, other than statements of present or historical fact included in this presentation, regarding AirJoule Technologies and its future financial and operational performance, as well as its strategy, future operations, estimated financial position, estimated revenues, and losses, projected costs, prospects, plans and objectives of management are forward looking statements. When used in this presentation, including any oral statements made in connection therewith, the words "could," "may," "will," "should," "anticipate," "believe," "intend," "estimate," "expect," "project," "target", the negative of such terms and other similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain such identifying words. These forward-looking statements are based on management's current expectations and assumptions about future events and are based on currently available information as to the outcome and timing of future events. Except as otherwise required by applicable law, AirJoule Technologies expressly disclaims any duty to update any forward-looking statements, all of which are expressly qualified by the statements herein, to reflect events or circumstances after the date of this presentation.

AirJoule Technologies cautions you that these forward-looking statements are subject to numerous risks and uncertainties, most of which are difficult to predict and many of which are beyond AirJoule Technologies' control. These risks include, but are not limited to, our status as an early stage Company with limited operating history, which may make it difficult to evaluate the prospects for our future viability; our initial dependence on revenue generated from a single product; significant barriers we face to deploy our technology; the dependence of our commercialization strategy on our relationships with BASF, Carrier, GE Vernova, and other third parties, history of losses, and the other risks and uncertainties described under the heading "Risk Factors" in our SEC filings including in our Registration Statement (See Risk Factors) on Form S-1 filed with the Securities and Exchange Commission (the "SEC") on June 27, 2024 and the subsequently filed Quarterly Reports on Form 10-Q. Given these risks and uncertainties, readers are cautioned not to place undue reliance on such forward-looking statements. Should one or more of the risks or uncertainties described in this presentation occur, or should underlying assumptions prove incorrect, actual results and plans could differ materially from those expressed in any forward-looking statements. AirJoule Technologies' SEC Filings are available publicly on the SEC's website at www.sec.gov, and readers are urged to carefully review and consider the various disclosures made in such filings.

AirJoule is deploying innovative technologies at the nexus of energy and water

AirJoule®

AIRJOULE IS AT THE NEXUS OF ENERGY AND WATER



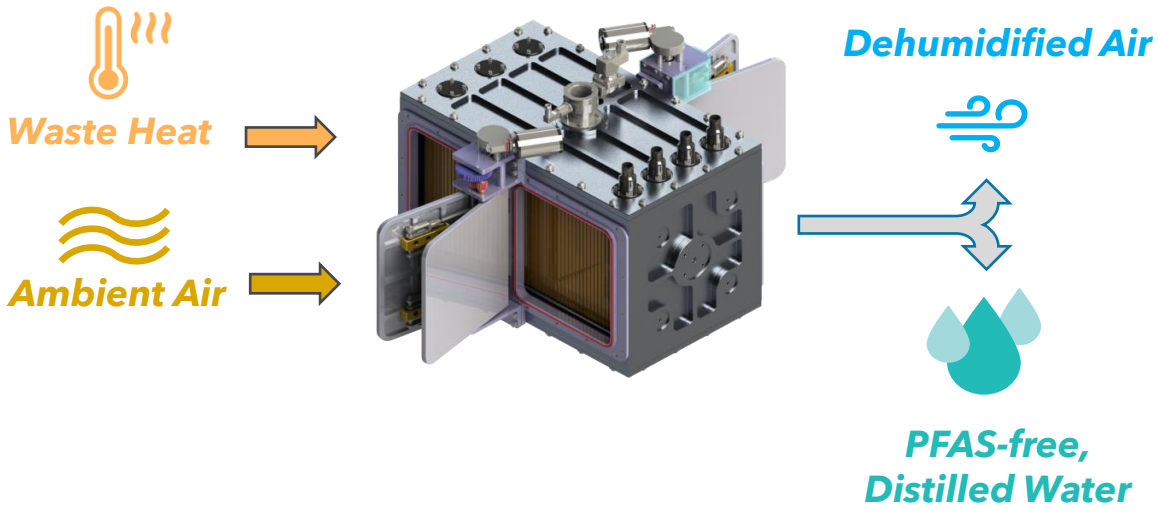
Harnessing low-grade waste heat to produce distilled water and dehumidified air

Addressing water scarcity for water-intensive industries

Improving energy efficiency for industrial dehumidification and air conditioning

AirJoule

AirJoule® separates water from air at unprecedented energetics



Applications

- Water production
- Moisture recapture
- Dehumidification

Target Industries

- Data centers
- Manufacturing
- Military
- HVAC

Key Investors / Partners

GE VERNOVA

Carrier

RICE INVESTMENT GROUP

TRANSITION EQUITY PARTNERS

BASF

AirJoule®

INVESTMENT HIGHLIGHTS

TRANSFORMATIONAL TECHNOLOGY

- *AirJoule® efficiently harvests pure distilled, PFAS-free, water from the atmosphere*
- *Proven technology validated by third party evaluation*
- *Supported by robust IP portfolio with strong moat*

LARGE ADDRESSABLE MARKET

- *~18,000 terawatt-hours of energy is lost as waste heat per year in the US[1]*
- *Increasing water scarcity, with water demand growing by 28% by 2050[2]*
- *Target applications include data centers, manufacturing, distributed water, HVAC*

GLOBAL PARTNERSHIPS IN PLACE

GE VERNOVA Carrier BASF

- *Commercializing AirJoule® through 50/50 joint venture with GE Vernova*
- *Supply agreement for proprietary sorbent manufacturing with BASF*
- *Joint commercialization term sheet with Carrier for HVAC applications*

ENERGETICS DRIVE CUSTOMER RETURNS

- *Superior performance compared to incumbent technologies (DX and desiccant systems)*
- *Increased energy efficiency and ultra low-cost water production create economic value*
- *Targeting customer payback periods of less than four years*

AirJoule®

1. Lawrence Livermore National Laboratory – Energy Flow Chart for 2023
2. BCG – "What is Water Really Worth?" (February 2025)

FROM TECHNOLOGY to INVESTMENT to COMMERCIALIZATION

Oct 2021

Licensed concept for "self-regenerating pressure swing dehumidifier" from Pacific Northwest National Laboratory

Sept 2022

Joint Development Agreement with BASF for MOF

Jan 2024

Joint Commercialization Agreement Term Sheet with Carrier for HVAC applications

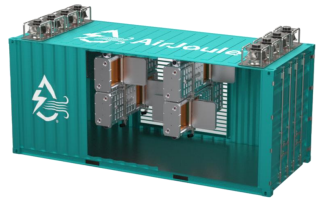
Jan 2024

Formed AirJoule, LLC (50/50 joint venture with GE Vernova) for commercialization of AirJoule technology

Mar 2024

Began Trading on Nasdaq

2H 2025



1,000 LPD pre-production unit expected for customer demonstrations

2026+

Commercial unit sales expected to commence

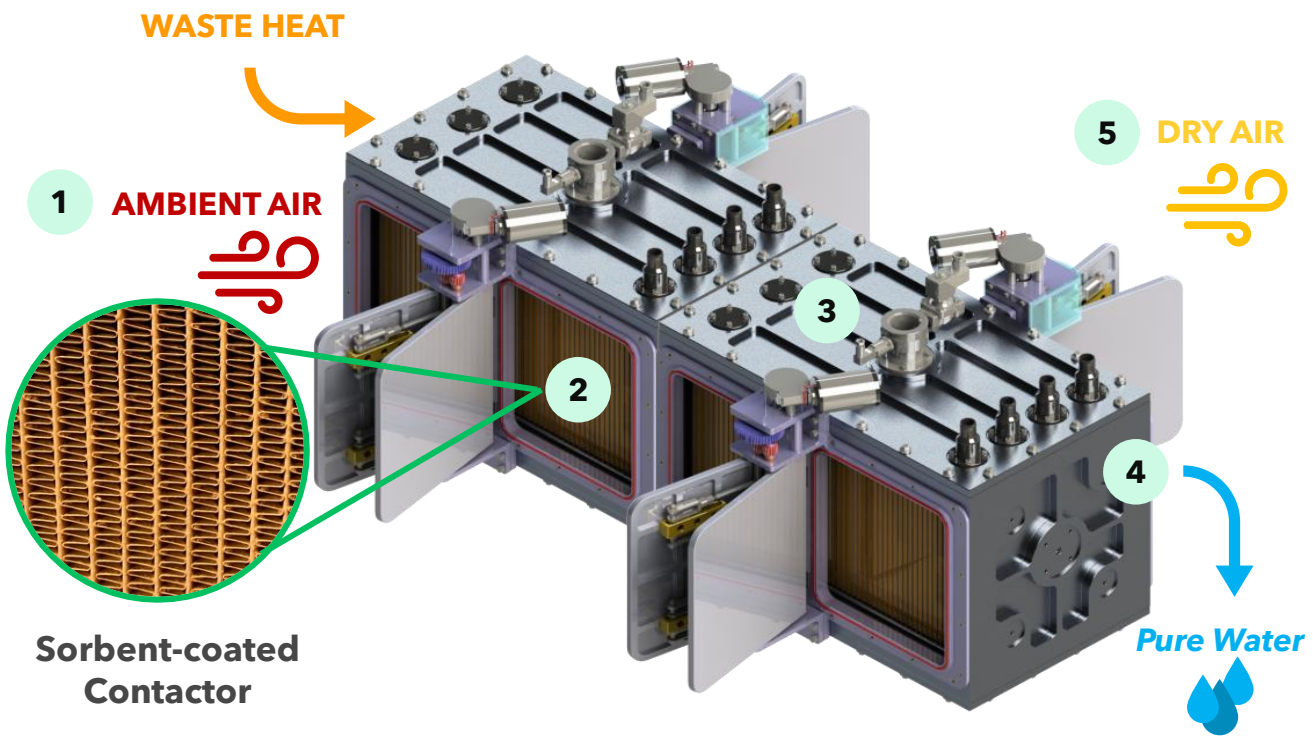
AirJoule

HOW AIRJOULE® WORKS

AirJoule® Process Description

1. Air is drawn through proprietary sorbent-coated contactors, and water vapor is captured
2. Once sorbent is full of water vapor, chamber doors close and vacuum is applied
3. Under vacuum, waste heat is added to optimize desorption, and water vapor is released
4. Water vapor condenses to liquid water inside the vacuum condenser
5. Water vapor capture and release cycles occur simultaneously in separate chambers; internal heat is recovered which enables superior energetics

AirJoule® Process Diagram

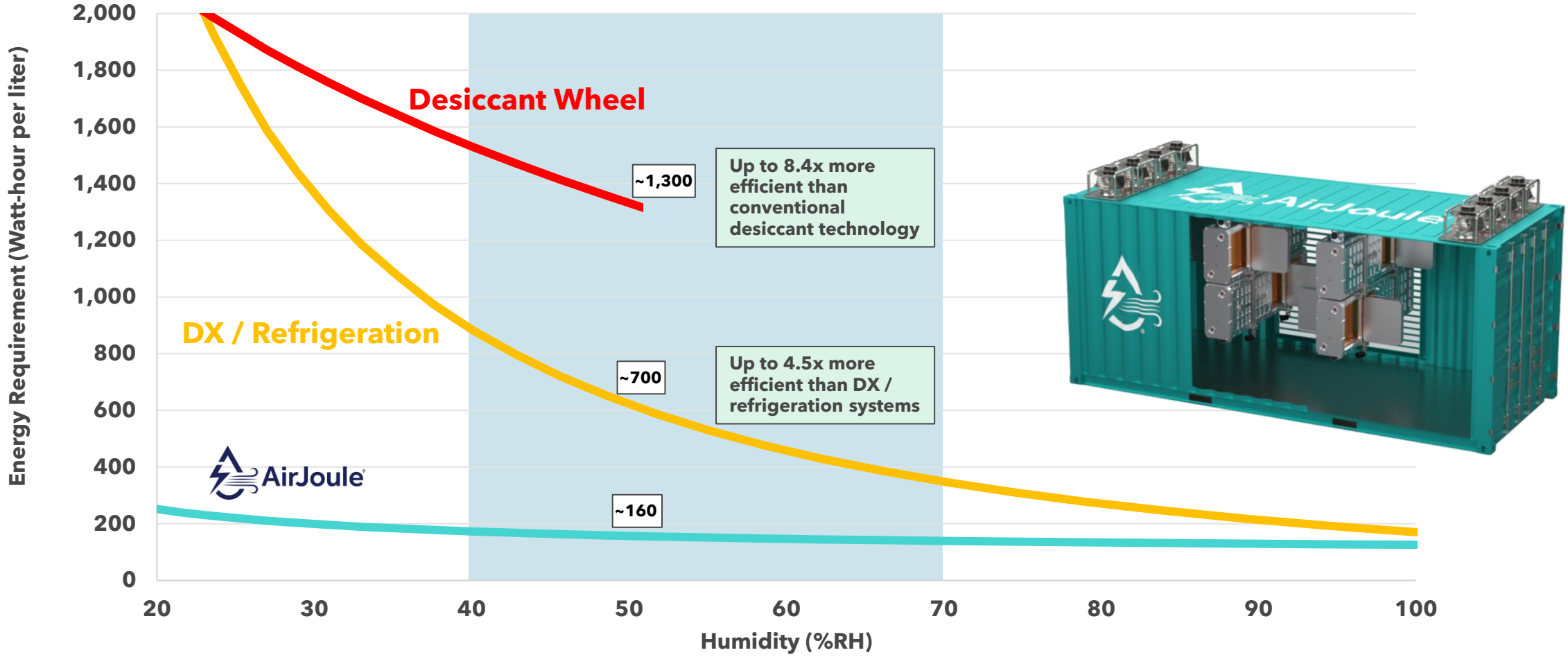


Proprietary AirJoule® technology efficiently produces pure distilled water from air using ambient air and waste heat

AirJoule

AIRJOULE PERFORMANCE VS COMPETITION

AIRJOULE®'S LEADING ENERGETICS RESULT IN GREATER CUSTOMER VALUE AND SHORT PAYBACK PERIODS



Across most environmental conditions, AirJoule® is more efficient than DX and desiccant systems at separating water from air.

Source: Company Data

MARKET OPPORTUNITIES

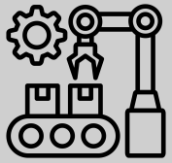
AIRJOULE'S SUPERIOR PERFORMANCE UNLOCKS A VAST ARRAY OF MARKET OPPORTUNITIES (ESTIMATED AT $450 BILLION)

Data Center Waste Heat & Cooling

~$20 billion market

- *All power that goes into a data center is converted to heat and must be cooled*
- *Data centers have increasingly shifted away from low-cost evaporative cooling technologies due to constraints on water availability*
- *AirJoule® utilizes low-grade waste heat to produce distilled water, enabling a refreshed look at energy-efficient evaporative cooling*
- *Data center industry is expected to grow by 15-25% through 2030, with significant expansion in water-scarce regions (Arizona, Texas, etc)[1]*

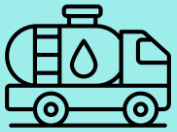
Advanced Manufacturing



~$20 billion market

- *US manufacturing sector is growing in response to macroeconomic and policy drivers (onshoring of supply chain, domestic content requirements, government incentives, US trade policy, etc)*
- *$114 billion has been spent on the construction of new manufacturing plants, with 60% for semiconductor and batteries[2]*
- *Tremendous waste heat resource (up to 50% of industrial energy input is lost as waste heat)[3]*
- *Applications for AirJoule® include distilled water production / recapture, dehumidification*

Distributed Water Generation



~$60 billion market

- *AirJoule®'s superior energetics can improve water security by enabling off-grid water supply for governments, militaries, NGOs, and businesses*
- *Water security is a key priority for Middle East governments, which currently rely on desalination and imports for most of their water supply*
  - *AirJoule Technologies' international office is in the United Arab Emirates*
- *In 2024, AirJoule Technologies signed an MOU to explore off-grid water generation for solar-powered hydrogen production*

Heating, Ventilation, and Air Conditioning

~$350 billion market

- *Air conditioning is responsible for ~10% of global electricity consumption, with demand expected to triple by 2050[4]*
- *Conventional air conditioners remove moisture by using refrigerants to cool below the dew point and condense moisture, an outdated and inefficient process*
- *AirJoule® more efficiently removes moisture from air, which can reduce energy requirements for air conditioning by up to 50%*
- *AirJoule Technologies is collaborating with Carrier to integrate AirJoule® into HVAC systems.*

Near term markets → **Longer term markets**

1. Lawrence Berkeley National Laboratory – "2024 United States Data Center Energy Usage Report" (December 2024)
2. Grid Strategies – "Strategic Industries Surging: Driving US Power Demand" (December 2024)
3. U.S. Department of Energy – Waste Heat Recovery Basics
4. Rocky Mountain Institute – "Solving the Global Cooling Challenge" (2018)

WASTE HEAT RECOVERY IS AN UNTAPPED RESOURCE

AIRJOULE® UTILIZES LOW-GRADE WASTE HEAT TO EXTRACT MOISTURE FROM AMBIENT AIR

Massive amount of wasted heat in nearly every market vertical

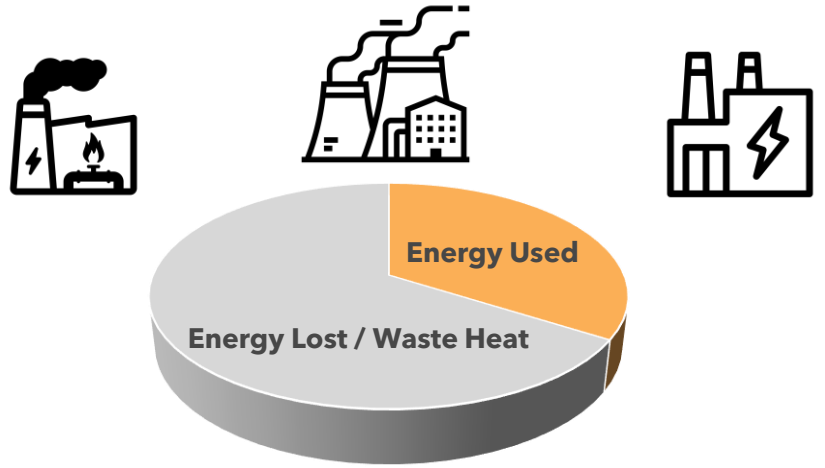
- ~66% of energy conversion is lost through inefficiencies
- Simple gas turbines can only achieve up to 30% efficiency

~63% of waste heat is below 100°C[1]

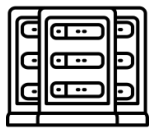
- ~Waste heat recapture for electricity typically requires high temperature heat

AirJoule® is uniquely capable of tapping into low-grade waste heat and using it to produce pure, distilled water

~70% of energy conversion is lost as waste heat[1]



Up to 50% of industrial energy input is lost as waste heat[2]



Data centers

Concrete

Manufacturing

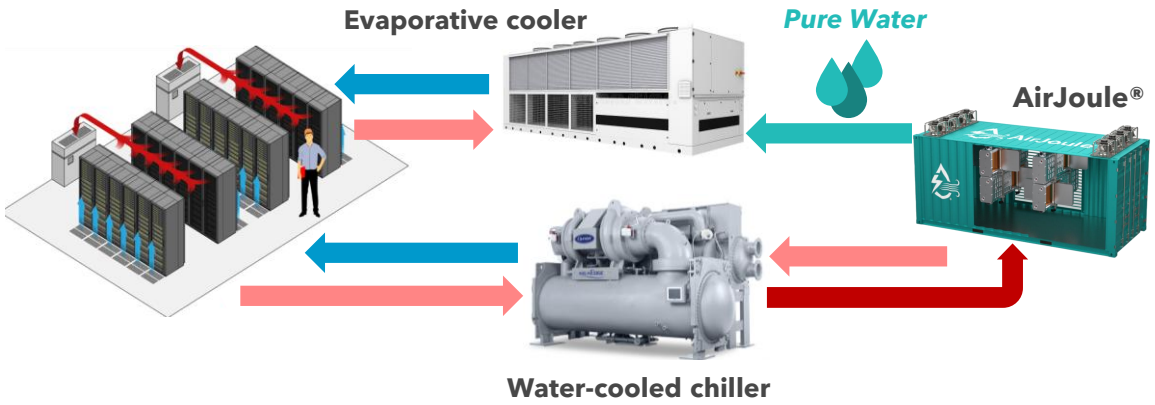
Steelmaking

AirJoule

1. "Estimating the Global Waste Heat Potential," published in Renewables and Sustainable Energy Reviews (2016)
2. U.S. Department of Energy – Waste Heat Recovery Basics

DATA CENTERS: WASTE HEAT TO WATER

TRANSFORMING DATA CENTERS INTO WATER GENERATORS



- All power that goes into a data center is converted to heat and must be cooled.
- Data centers have increasingly shifted away from low-cost evaporative cooling technologies due to constraints on water availability
- AirJoule® utilizes low grade waste heat from a data center to harvest pure distilled water from the atmosphere
- When used in evaporative cooling, the water can significantly reduce cooling costs and improve data center PUE (power usage effectiveness)

Illustrative 100 MW data center in Phoenix, AZ

	1 AirJoule® Unit	100 AirJoule® Units
AirJoule® Performance	3,000 liters per day 12.5 KW electrical need	300,000 liters per day 1.25 MW electrical need
Annual Data Center Cooling Cost(1)	$37.5 million	
Annual Energy Savings from AirJoule®(2)	**200 MWh** **Peak Shaving = 0.23 MW**	**20,300 MWh** **Peak Shaving = 23 MW**
Annual $ Savings from AirJoule® (2)	**$20k**	**$2.0 million**
Payback Period(4)	**3.9 years**	
Cost of Water Produced	*$1.43 / m^3 (cost of water offset from AirJoule®'s chiller function)*	
Levelized Cost of Water(5)	*$9.44 / m^3*	

Other Key Benefits from AirJoule® Distributed Water Generation:

- Reduces reliance on strained municipal water supplies
- Quicker construction and expansion timelines

Reduced Cooling Costs AND **Distributed Water Production** = ↓ **PUE** ↑ ***Water Sustainability***

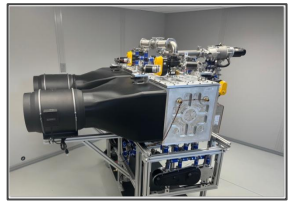
1. Data center assumptions: 100% capacity utilization, pPUE of 1.3, chiller COP of 2.5
2. Savings primarily from evaporative cooling when DC chiller is COP 3.5; AirJoule COP as a chiller of 5
3. MW reflects savings during peak shaving, using water 10% of the time (hottest portion of the day)
4. Assumes $80,000 sales price per AirJoule unit and power costs of $0.10 / kWh
5. Levelized cost of water assumes 15 year useful life of AirJoule unit and $5,000 annual maintenance cost

DEFINED PATHWAY TO COMMERCIALIZATION

CUSTOMER DEMAND AND GLOBAL PARTNERSHIPS ENABLE COMMERCIALIZATION

Pathway to Commercialization

2024 ACHIEVEMENTS



- Completed 5th generation prototype (P5)

GE VERNOVA Carrier

- Formed 50/50 joint venture with GEV and agreed to collaborate with Carrier on HVAC applications

DARPA

- Demonstrated AirJoule® technology for US Department of Defense

2025 MILESTONES

- Complete manufacturing and assembly lines at 35,000 sq ft facility in Newark, DE

- Standalone water harvesting units to be demonstrated for government agencies, military, and NGOs

- 1,000 liter per day preproduction unit for industrial customer demonstrations

2026 / 2027 MILESTONES

- Begin commercial sales of AirJoule® units

- Develop large modular AirJoule® units for "big water" deployments

- Pilot programs with US military for distributed water generation

- Ongoing work with Carrier engineering and design teams to integrate AirJoule® into HVAC systems

AirJoule®

1. Illustrative renderings; final products may differ in appearance and scale

INVESTMENT HIGHLIGHTS

TRANSFORMATIONAL TECHNOLOGY: AirJoule® Separates Pure Distilled Water from Air

LARGE ADDRESSABLE MARKET: Water and Energy Efficiency

GLOBAL PARTNERSHIPS IN PLACE: GE VERNOVA, Carrier, BASF

ENERGETICS DRIVE CUSTOMER RETURNS: Targeted Paybacks of Less than 4 Years

AirJoule®

Appendix

AIRJOULE TECHNOLOGIES – COMPANY LEADERSHIP

EXPERIENCED TEAM WITH A STRONG TRACK RECORD

Pat Eilers
Executive Chairman

- Founder & Managing Partner of Transition Equity Partners, LLC
- Over 24 years investing experience in energy transition; including renewables, energy efficiency, decarbonization infrastructure, and clean energy supply chain & services
- Previously Managing Director of the Energy & Power Private Equity practice at BlackRock
- Former Managing Director of Energy & Power practice, Madison Dearborn Partners, LLC

Matt Jore
Founder & CEO

- Over 30 years of experience successfully founding and leading innovative product-based companies
- Founded Core Innovation, predecessor to Montana Technologies, LLC
- Previously founded Jore Corporation, a power tool and accessories manufacturer that exceeded ~$50 million annual revenue
- Led Jore Corporation through a successful IPO

Stephen Pang
CFO

- Over 20 years of capital markets experience, including buy-side, sell-side, and public company leadership
- Former Managing Director and Portfolio Manager at TortoiseEcofin Investments
- Previously CFO of multiple successful special purpose acquisition companies
- Former investment banker at Credit Suisse and Citigroup

Chad MacDonald
CLO

- Over 15 years of experience advising companies on corporate governance matters and M&A, private equity, and capital markets transactions
- Former Senior Vice President and Deputy General Counsel at Permian Resources (NYSE: PR)
- Former Vice President and Associate General Counsel at Centennial Resource Development (NASDAQ: CDEV)
- Formerly at Latham & Watkins LLP and Paul Hastings LLP.

Bryan Barton
CCO

- Technology and innovation executive with expertise in scaling and commercializing new technologies
- Former Senior Director of Marketing at GE Vernova where he worked on the ventures team and launched startups powered by GE Research
- Previously Global Marketing Director at DuPont and Research Scientist at Dow Chemical Company
- Obtained B.S. and Ph.D. in Chemistry

AirJoule

AIRJOULE TECHNOLOGIES – BOARD OF DIRECTORS

ACCOMPLISHED BOARD WITH DIVERSE AREAS OF EXPERTISE

Pat Eilers,
Executive Chairman

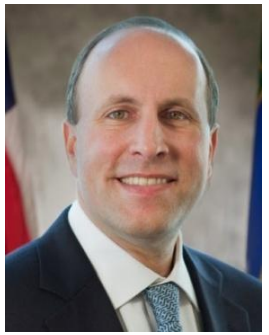
Founder & Managing Partner
Transition Equity Partners

Ajay Agrawal

Chief Strategy Officer
Carrier Global Corporation

Max Baucus

Former US Senator &
Ambassador to China



Paul Dabbar

Co-founder & former CEO
Bohr Quantum Technology

Kyle Derham

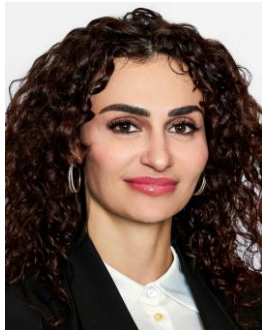
Partner, Rice
Investment Group

Matt Jore

Founder & CEO
AirJoule Technologies

Stu Porter

Founder & CEO
Denham Capital



Dr. Marwa Zaatari, Ph.D.

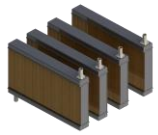
Chief Science Officer
D Zine Partners

AirJoule

THE AIRJOULE® TECHNOLOGY FUNDAMENTALS

AIRJOULE® TECHNOLOGY INCORPORATES MOF AND OTHER PROPRIETARY AIRJOULE TECHNOLOGIES COMPONENTS

Proprietary Key Components

1 

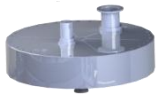
MOF-COATED CONTACTORS
- Proprietary cross-linked MOF coating process
- Comprises majority of total bill of materials for AirJoule®

2 

AIR PURGE PUMP
- Creates vacuum as it removes air from the desorption chamber
- Oil-free design is critical for clean air purge

3 

VACUUM SWING COMPRESSOR
- Critical for maintaining vacuum operation
- Utilizes majority of total AirJoule® power consumption

4 

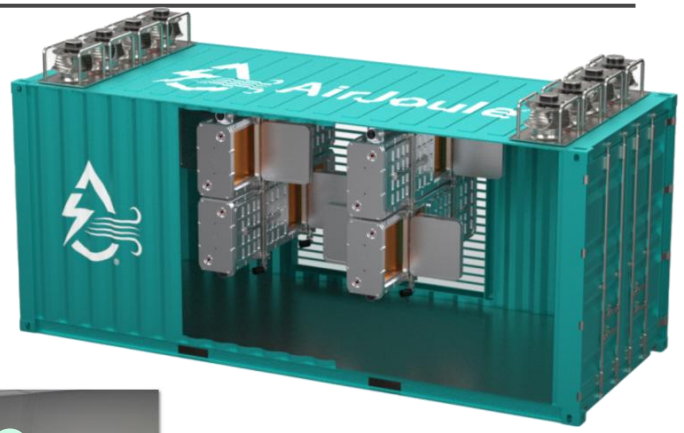
VACUUM CONDENSER
- Optimizes water vapor / liquid water density ratio under vacuum
- Water vapor is condensed into pure water *inside* vacuum condenser

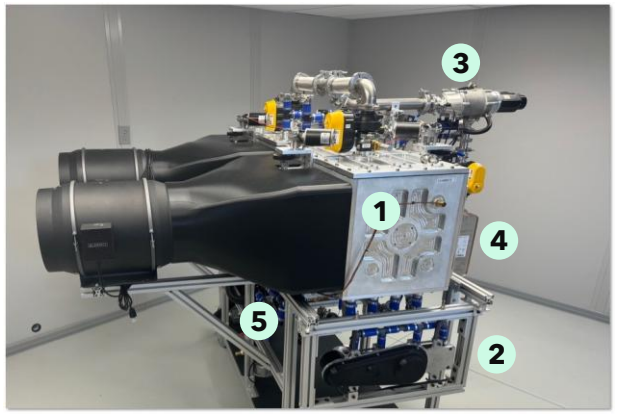
5 

CONTROLLER and SOFTWARE
- Proprietary software and controller hardware optimizes vacuum recovery and thermal sharing between adsorption and desorption

Preproduction Unit in Development

Rendering of 1,000 LPD unit





5th generation prototype

AirJoule Technologies enjoys a multi-pronged moat due to IP protections around AirJoule®'s proprietary key components

INTELLECTUAL PROPERTY / PATENTS

AIRJOULE TECHNOLOGIES HOLDS FOUNDATIONAL PATENTS RELATED TO ATMOSPHERIC LATENT ENERGY AND WATER HARVESTING, UNIQUELY POSITIONING THE COMPANY IN THE RAPIDLY DEVELOPING ATMOSPHERIC WATER HARVESTING SECTOR

Patent Highlights

In Q1 2021, the Company obtained an exclusive worldwide license from PNNL

- Issued Patent (11859863) in 2024 covers self-regenerating dehumidification technology (which includes heating, cooling, ventilation, dehumidification and conditioning of air)
- AirJoule Technologies also executed a strategic project partnership agreement with PNNL to further develop enhancements to this technology

Secured two master patent PCT applications

- The Company has also filed patent applications in 44 countries for the Latent Energy and Water Harvesting System
- Latent Energy Harvesting System across 4 countries (U.S., China, India, Taiwan)

Secured a portfolio of GE Advanced Research IP at AirJoule JV

- MOF-coating technology and process to enable resilient coatings
- Modification of MOF materials for improved performance

Pending new provisional patent applications for enhancements

- Various operation processes, technologies, and improved components

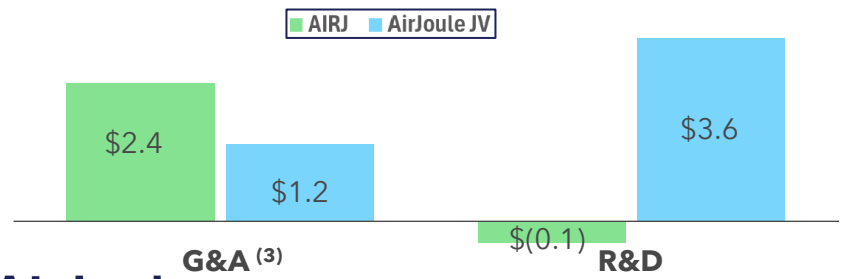
AirJoule® Patents

Title	Effective/Actual Filing Date	Patent/Publication/ Serial Number	Assignee
Latent Energy And Water Harvesting System	▪ 10/1/2021 ▪ 9/30/2022	▪ 2023/056400Pct/ US22/77316	▪ AirJoule Technologies LLC
Latent Energy And Water Harvesting System	▪ 10/1/2021 ▪ 9/30/2022	▪ Taiwan 111137211	▪ AirJoule Technologies LLC
Latent Energy Harvesting	▪ 10/1/2021 ▪ 12/8/22/2022	▪ Pct/US22/8134	▪ AirJoule Technologies LLC
Latent Energy Harvesting	▪ 10/1/2021 ▪ 12/8/22/2022	▪ Taiwan 111147076	▪ AirJoule Technologies LLC
Water Recovery System Including Integrated Contactor with Thermally-Enhanced Recovery	▪ 2/5/2021	▪ US11739506	▪ GE Infrastructure Technology LLC
System and Method for Fluid Capture using a Cross-Linked Binder	▪ 9/14/2022	▪ US17/932,158	▪ GE Infrastructure Technology LLC
Artificial Intelligence-Guided Molecular Screening for Coordination Framework Compounds	▪ 3/3/2023	▪ US63/488,307	▪ GE Infrastructure Technology LLC

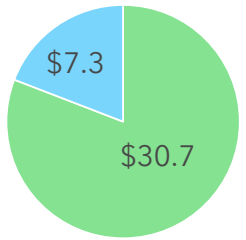
FINANCIAL RESULTS (UNAUDITED)

$ in millions	Q1 2024[1]	Q2 2024	Q3 2024
Operating expenses, gross	$(1.7)	$(4.3)	$(4.3)
SOW expense reduction	-	-	2.0
DeSPAC transaction expenses	(54.7)	-	-
Operating profit / (loss)	$(56.4)	$(4.3)	$(2.4)
Other income	323.7	17.1	38.4
Loss from investment in AirJoule JV	(0.0)	(0.6)	(2.3)
Income tax benefit / (expense)	(85.7)	1.2	1.3
Net income / (loss)	**$181.6**	**$13.4**	**$35.0**
Cash from operations	$(6.4)	$(11.2)	($3.9)
Cash from investing	(10.0)	(0.0)	(0.0)
Cash from financing	43.4	18.4	0.0
Net cash flow	**$27.0**	**$7.2**	**$(3.9)**
Ending cash balance	**$27.4**	**$34.6**	**$30.7**

Q3 2024 Operating Expenses [2]



Ending Cash (9/30) [2]



AirJoule Technologies (AIRJ)

- Gross operating expenses in line with prior quarter
- Net operating expenses of $2.4 million
  - Includes $2.0 million in expense reduction from AirJoule JV pursuant to Statement of Work reimbursement
- Other income primarily includes:
  - $31.8 million (non-cash) gain in the fair value of our earnout liabilities
  - $8.2 million (non-cash) gain in the fair value of subject vesting shares
  - $1.9 million (non-cash) loss in the fair value of true up shares liabilities
- Ended Q3 with $30.7 million of cash on the balance sheet

AirJoule JV [2]

- $4.8 million of operating expenses
- Ended Q3 with $7.3 million of cash

1. Reflects restated Q1 2024 figures as found in the Company's 10Q/A filed with the Securities and Exchange Commission on August 19, 2024
2. AIRJ accounts for its investment in the AirJoule JV through the equity method
3. Includes $24k and $27k of sales & marketing expense at AIRJ and AirJoule JV, respectively