

SUSTAINABLY MEETING THE CHALLENGES OF WATER SECURITY AND COMFORT COOLING



Nasdaq: AIRJ
<https://airjouletech.com>

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AIRJOULE TECHNOLOGIES - COMPANY LEADERSHIP

EXPERIENCED TEAM WITH A STRONG TRACK RECORD



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



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



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

- Former Senior Vice President and Deputy General Counsel at Permian Resources (NYSE: PR)
- Former Vice President and Associate General Counsel at Centennial Resource Development
- Experience advising public and private clients on M&A, private equity, and capital markets transactions at Latham & Watkins 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

COMPANY OVERVIEW

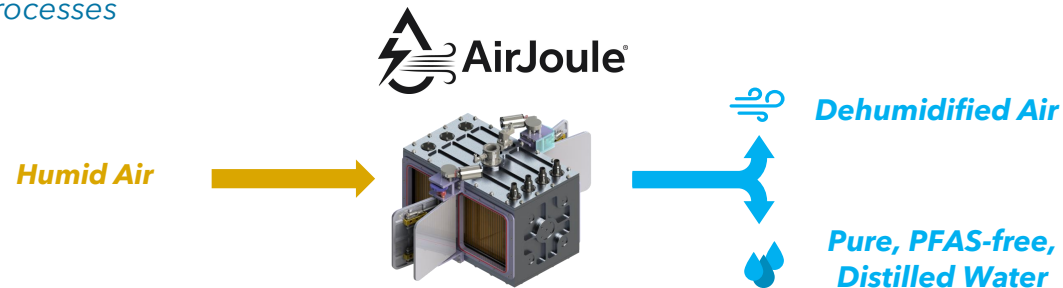
AIRJOULE TECHNOLOGIES OPERATES AS AN ATMOSPHERIC ENERGY AND WATER HARVESTING TECHNOLOGY COMPANY

Company Overview

Name (Ticker)	AirJoule Technologies Corporation (NASDAQ:AIRJ)
Year Founded	2019
Locations	Ronan, Montana and Newark, Delaware
Employees	38 ⁽¹⁾
Industry	Machinery and Supplies and Components
Market Cap.	\$350 million ⁽²⁾

Technology

AirJoule® utilizes a Metal Organic Framework (“MOF”) and a dual-chamber vacuum system to produce dehumidified air and pure, PFAS-free, distilled water from ambient air, which are key inputs for a variety of industrial processes



Recent Developments

- **Q3 2024:** Established first international office in the United Arab Emirates
- **Q3 2024:** Announced MOUs with international customers to explore the deployment of AirJoule® to support water security in the UAE, to provide water for solar-powered hydrogen production, and to provide dehumidified air for direct air capture of carbon dioxide
- **Q2 2024:** Raised \$12 million from a private placement financing with existing and new investors
- **Q1 2024:** Completed de-SPAC transaction and raised more than \$50 million from Carrier, GE Vernova, and Rice Investment Group, among others

Key Partnerships

AirJoule Technologies has partnerships with global industry leaders



1. Includes 15 full time employees (“FTEs”) at AirJoule Technologies and 23 FTEs at the AirJoule JV
2. As of 11/11/2024

INVESTMENT HIGHLIGHTS



TRANSFORMATIONAL TECHNOLOGY: AirJoule Low Cost of Energy and Water



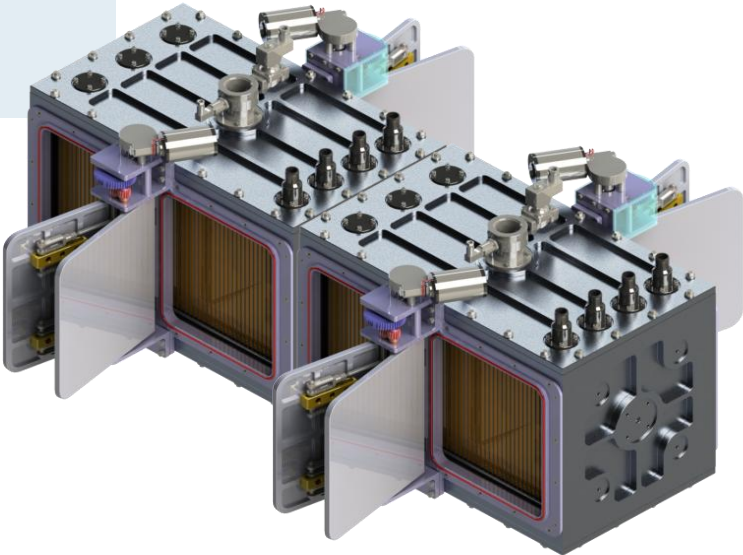
~\$450 BILLION ADDRESSABLE MARKET: Air Conditioning and Air to Water



GLOBAL PARTNERSHIPS IN PLACE:    



CAPITAL EFFICIENT BUSINESS MODEL: Key Components "AirJoule Inside"



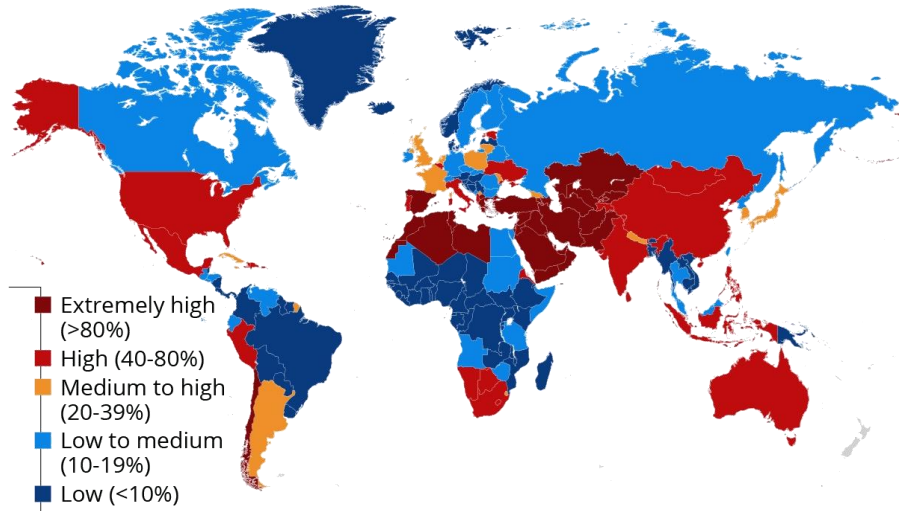
SOLVING DEMAND FOR WATER SECURITY AND AIR CONDITIONING

AIRJOULE® ADDRESSES TWO OF THE WORLD'S MOST PROBLEMATIC ISSUES: WATER SECURITY AND AIR CONDITIONING

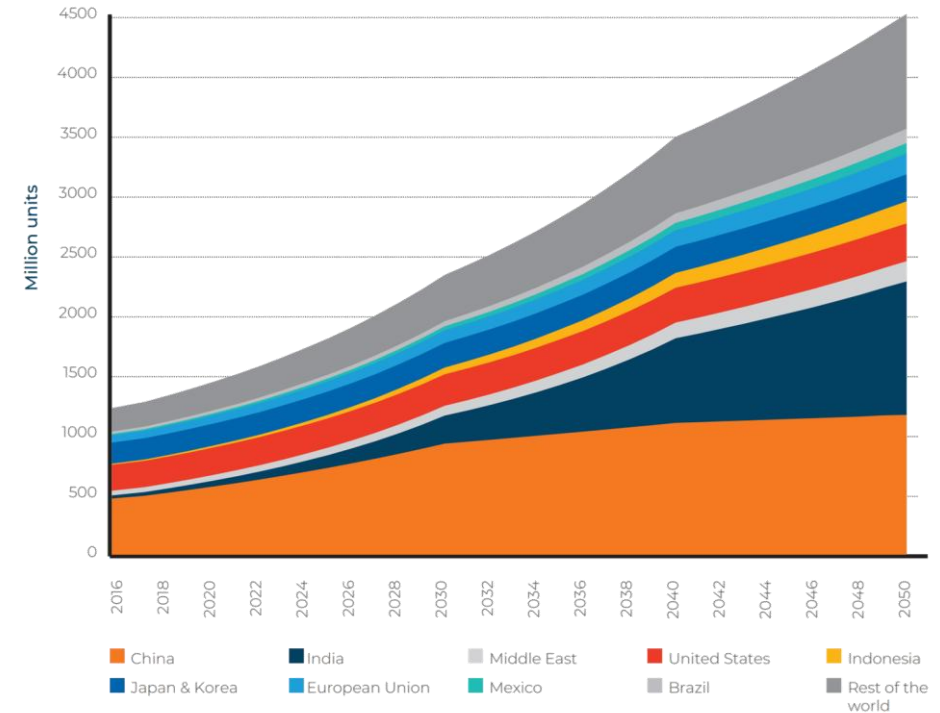
Water Security⁽¹⁾

Where Water Stress is Expected to Be Highest by 2040

Projected ratio of water withdrawals to water supply (water stress level) in 2040



Demand for Air Conditioning⁽²⁾



AirJoule® technology has the potential to help address increasing water stress around the world, as well as mitigate the projected increases in electricity from rising demand for air conditioning

ATMOSPHERIC MOISTURE IS A CHALLENGE AND OPPORTUNITY

AIRJOULE®'S TECHNOLOGY HARVESTS PURE DISTILLED WATER FROM AIR

Key Challenges and Opportunities in HVAC

Conventional air conditioning requires significant energy and environmentally-harmful refrigerants

- 120-year-old process relies on vapor compression of refrigerants to remove heat and moisture from the air stream
- Air conditioning and electric fans account for ~10% of global electricity consumption⁽¹⁾

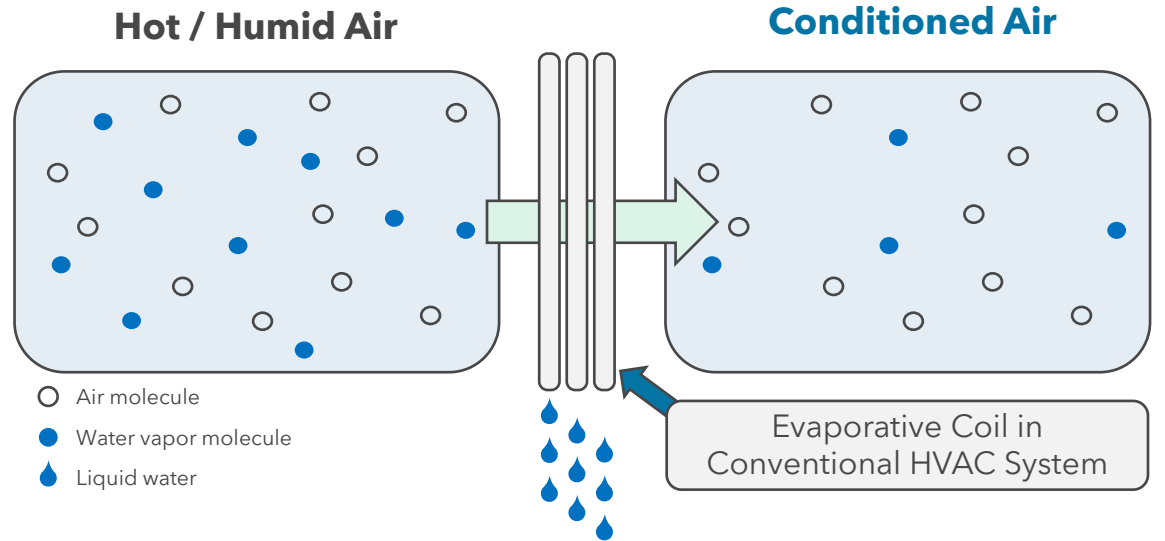
Humidity control / moisture removal is a critical aspect of air conditioning

- Moisture must be removed from the ambient air during the air conditioning process through condensation

Moisture removal requires additional energy consumption in HVAC systems

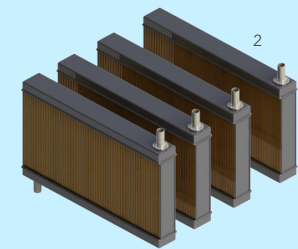
- Condensed water is typically discarded as a waste byproduct of air conditioning

Illustrative Traditional Air Conditioning Concept



AirJoule® technology provides for an unprecedented reduction in energy consumption for moisture removal and the elimination of refrigerants in the cooling process by commercializing MOFs

- MOFs are the Company's core technology
- MOF-coated contactors would replace traditional evaporative coils
 - 4 - 11x performance improvement over baseline regarding the moisture removal efficiency
 - Up to 75% energy savings compared to conventional HVAC technology
- Water is removed and harvested at such a high rate and low cost that the technology can be utilized by industries and societies to mitigate water scarcity



THE TECHNOLOGY BREAKTHROUGH

AIRJOULE® ENABLES COMMERCIALIZATION OF MOFs

MOF Technology Highlights

MOFs are highly adsorbent coatings, engineered to capture specific molecules (in this case, water vapor)

- AirJoule Technologies has engineered a proprietary MOF coating (MTMOF1) that can hold more than half its weight in water vapor

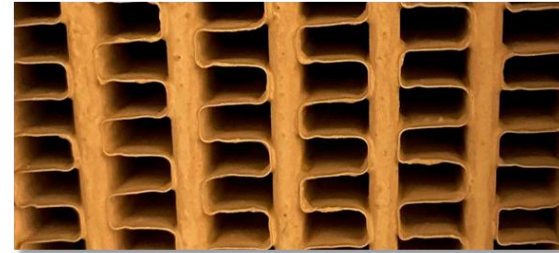
Thermal constraints have limited the potential of MOFs in historical dehumidification efforts

- Heat generated by adsorption cycle and additional heat required to desorb the MOF are problematic for cooling applications

AirJoule® solves the energetics issue, resulting in an unprecedented reduction in energy consumption for dehumidification

- Proprietary pressure swing system integrates adsorption and desorption functions, so the heat of adsorption can be used to assist desorption under vacuum, eliminating the need for additional energy

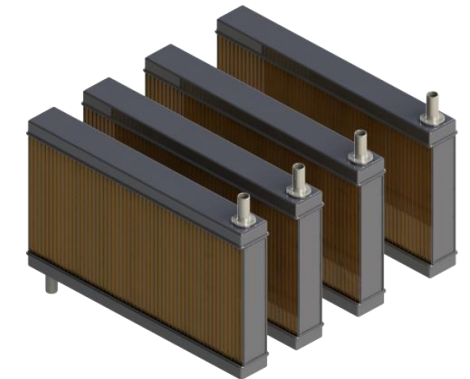
MOF-Coated Contactor Design



- Proprietary cross-linked MOF coating reliably adheres to aluminum heat exchanger⁽¹⁾
- Extraordinary surface area of MOF allows for very thin coating and high capacity of water vapor adsorption



- MOF-coated contactor is a microchannel heat exchanger coated with MOF
- MOF coating comes in contact with humid air and adsorbs water vapor



AirJoule Technologies uses MOFs to improve efficiency of dehumidification process

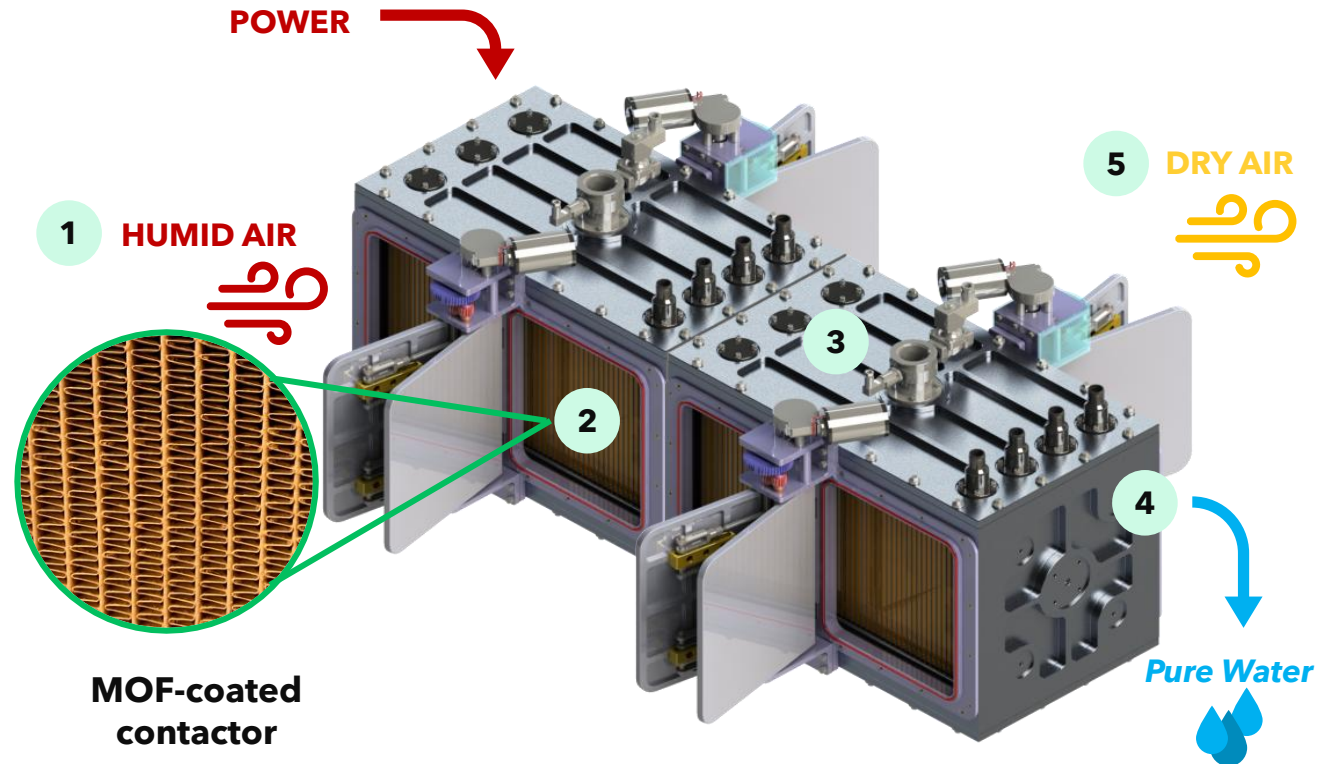
1. MOF coating process protected by trade secrets / patent applications

THE AIRJOULE® PROCESS

AirJoule® Process Description

- 1** Fans push air through MOF-coated contactor and water is adsorbed
- 2** Once MOF is saturated, doors close and chamber goes under vacuum
- 3** Under vacuum, water vapor is released
- 4** Going through condenser, vapor condenses into liquid
- 5** Adsorption and desorption cycles occur simultaneously in separate chambers, the heats are shared, and superior energetics are achieved

AirJoule® Process Diagram


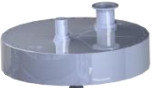


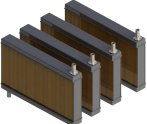


AirJoule®'s proprietary technology efficiently dehumidifies ambient air, resulting in pure PFAS-free, distilled water

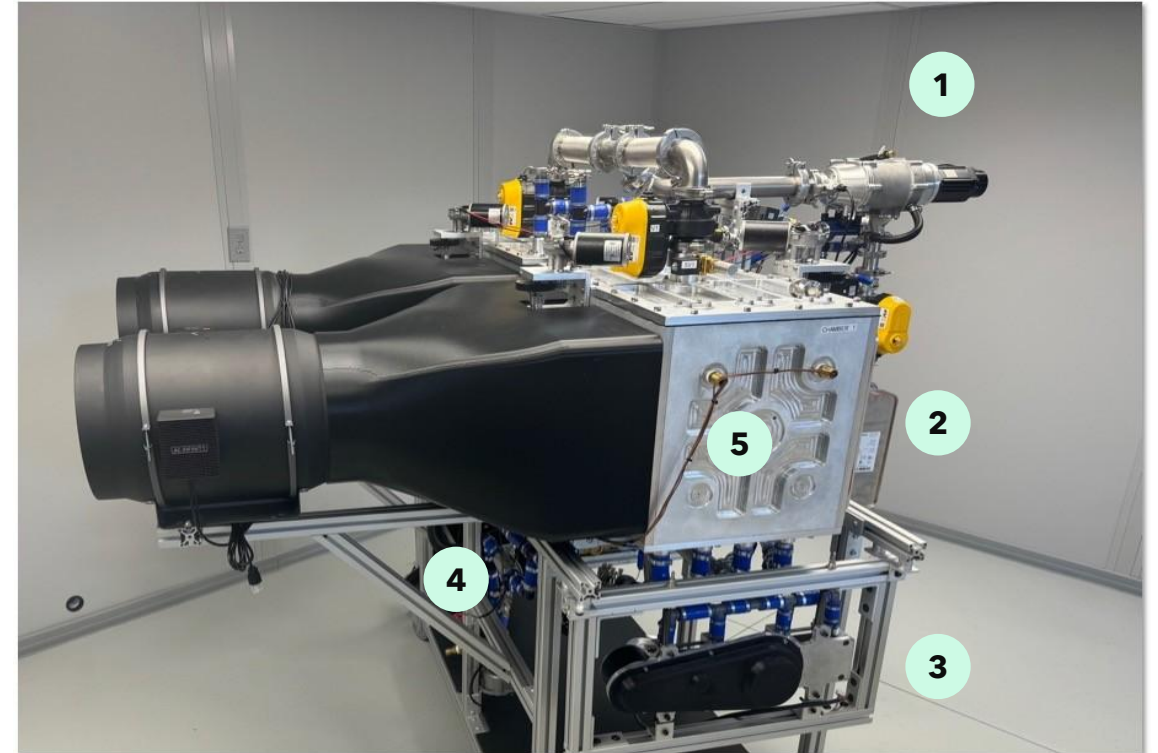
THE AIRJOULE® TECHNOLOGY FUNDAMENTALS

AIRJOULE® TECHNOLOGY INCORPORATES MOF AND OTHER PROPRIETARY AIRJOULE TECHNOLOGIES COMPONENTS

Key Components

- **VACUUM SWING COMPRESSOR**
 - Critical for maintaining vacuum operation
 - Utilizes majority of total AirJoule® power consumption
- **VACUUM CONDENSER**
 - Optimizes water vapor / liquid water density ratio under vacuum
 - Water vapor is condensed into pure water *inside* vacuum condenser
- **AIR PURGE PUMP**
 - Creates vacuum as it removes air from the desorption chamber
 - Oil-free design is critical for clean air purge
- **CONTROLLER and SOFTWARE**
 - Proprietary software and controller hardware optimizes vacuum recovery and thermal sharing between adsorption and desorption
- **MOF-COATED CONTACTORS**
 - Proprietary cross-linked MOF coating process
 - Comprises majority of total bill of materials for AirJoule®

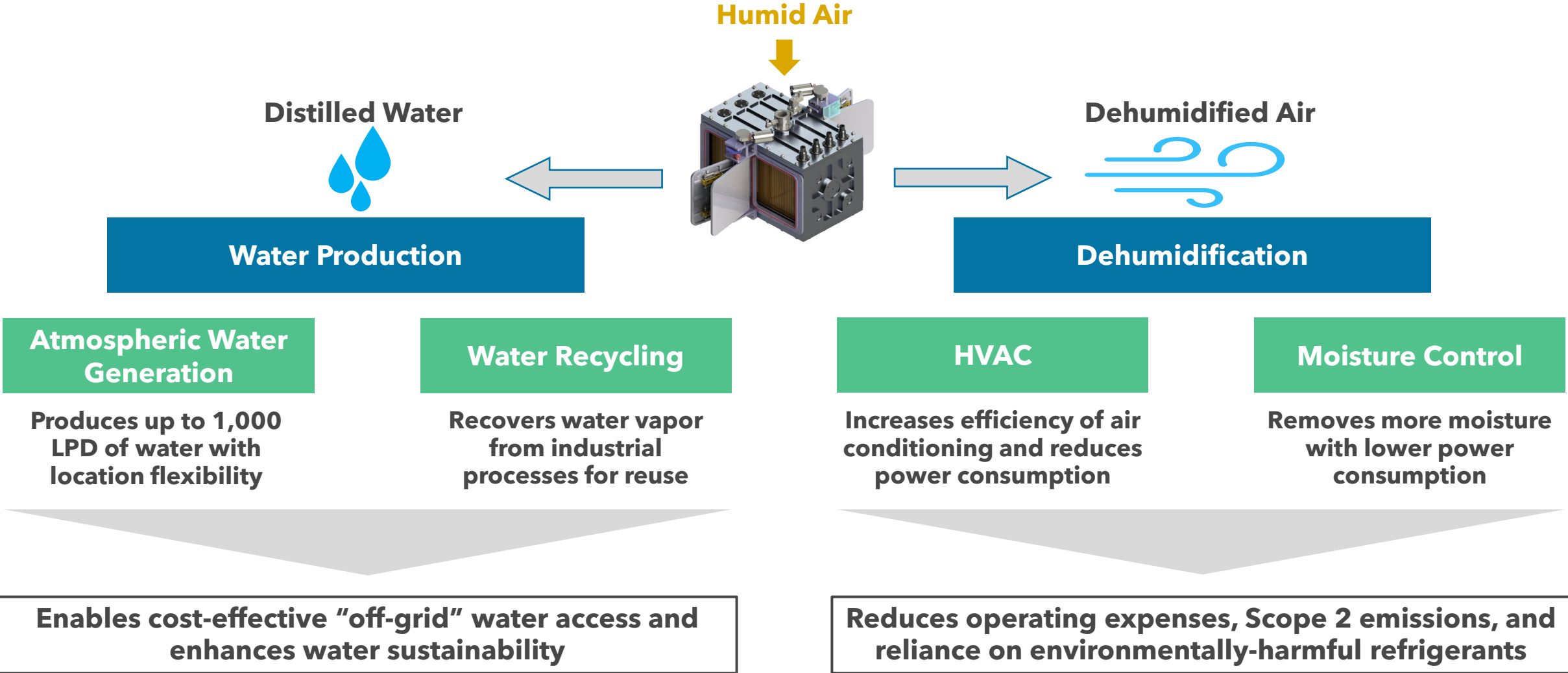
Pre-Production Prototype



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

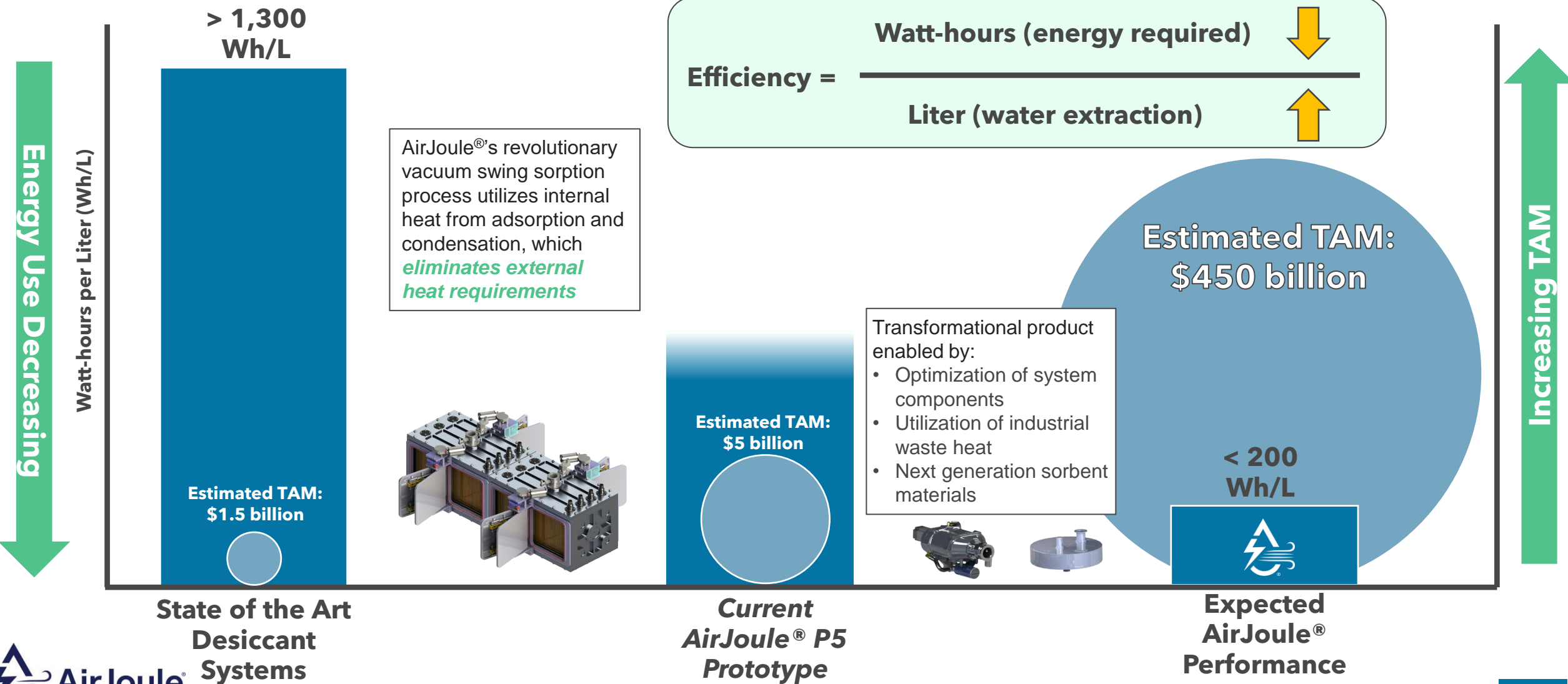
AIRJOULE® TECHNOLOGY HAS MULTIPLE USE CASES

TRANSFORMATIONAL MOISTURE REMOVAL EFFICIENCY UNLOCKS ARRAY OF SOLUTIONS



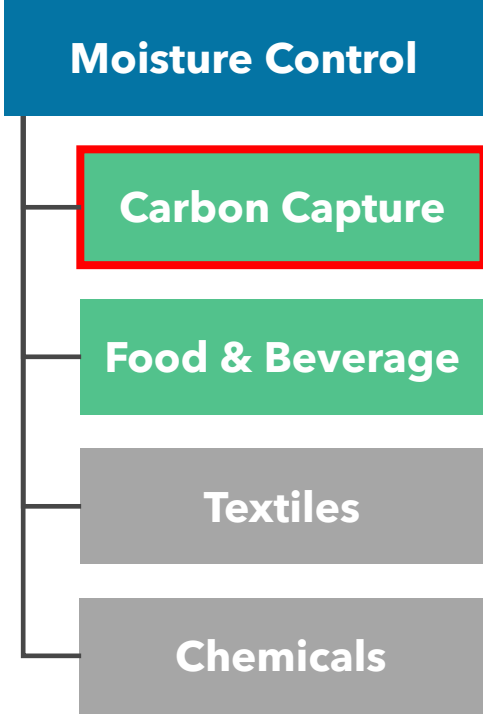
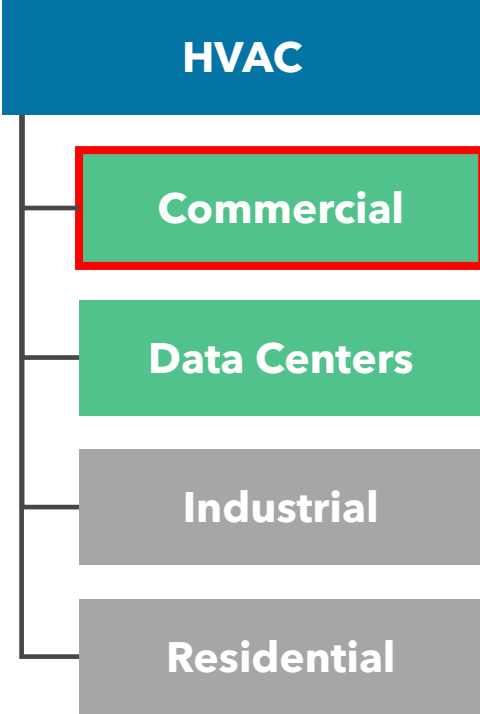
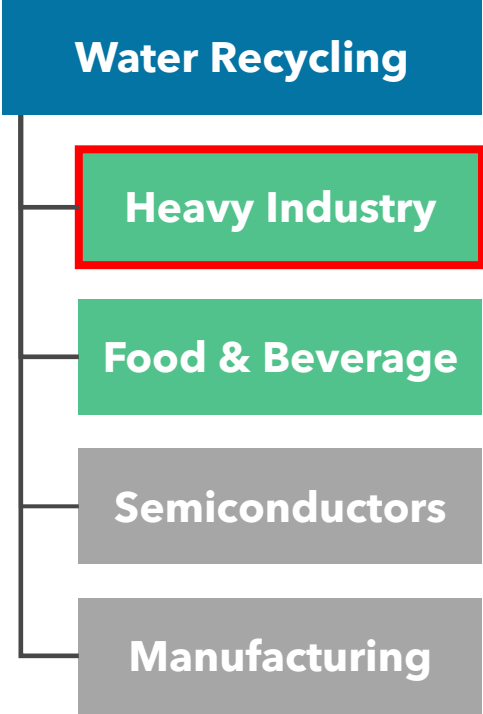
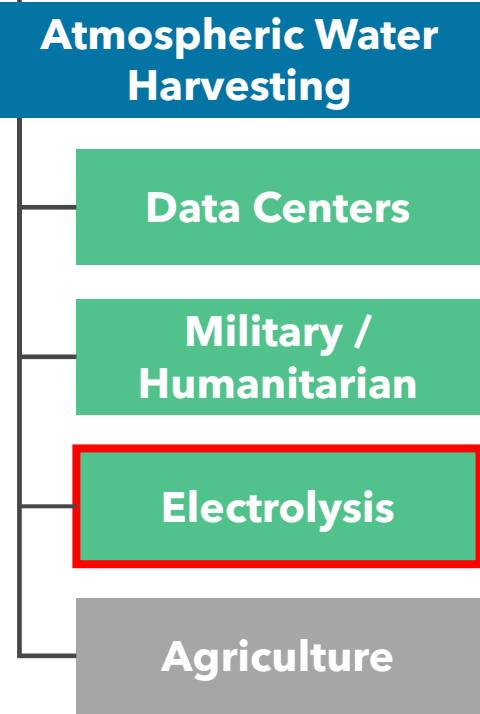
UNLOCKING VAST MARKET OPPORTUNITIES

AIRJOULE® IS ON TRACK TO ACHIEVE SUB-200 WATT-HOURS PER LITER OF WATER EXTRACTION



AIRJOULE® PRODUCT APPLICATIONS

TRANSFORMATIONAL MOISTURE REMOVAL EFFICIENCY UNLOCKS ARRAY OF SOLUTIONS



Combined Total Addressable Markets for Atmospheric Water Harvesting and HVAC are estimated at ~\$450 billion with multiple applications in various sectors and geographies

Announced MOU | Current Areas of Focus | Future Areas of Focus



COMMERCIAL DEVELOPMENT ACTIVITY

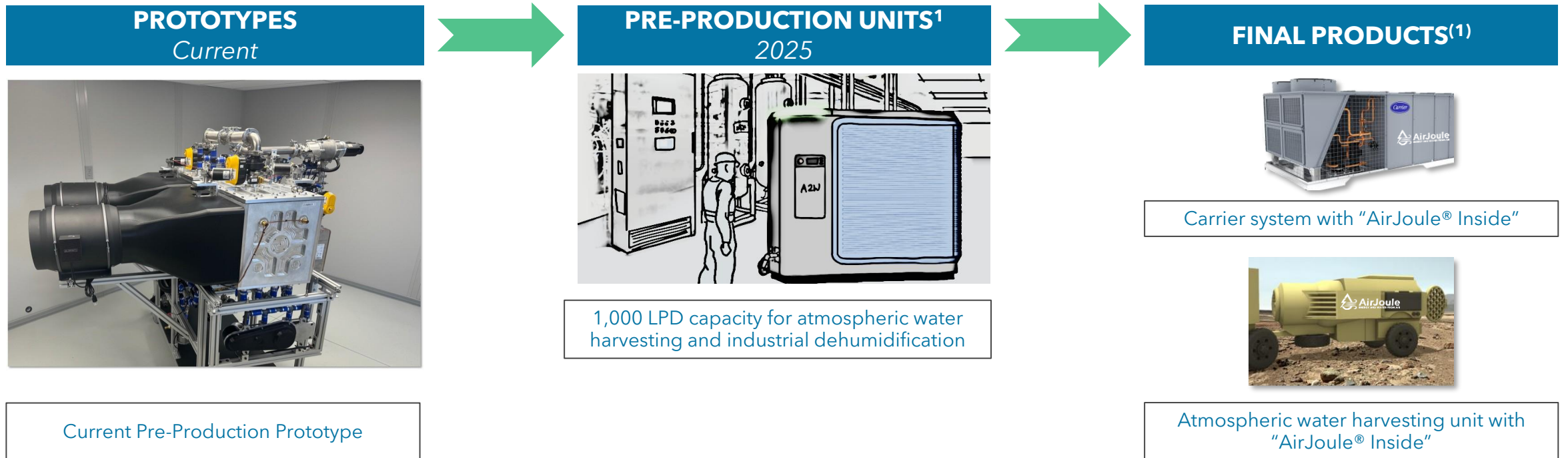
DEVELOPING STRONG CUSTOMER ENGAGEMENT WITH PATH TO MARKET ADOPTION AND COMMERCIAL SALES

Customer		Q1'24	Q2'24	Q3'24
Tier 1 Food & Beverage Manufacturer (USA)	Industrial water recapture			Data Gathering
Tier 1 Food & Beverage Manufacturer (USA)	Industrial dehumidification			White Paper Analysis
Department of Defense (USA)	Water harvesting for military			Field Testing & Validation Trials
TenX (UAE)	Water harvesting & water recapture			Memorandum of Understanding ("MOU")
Climate Impact Corporation (Australia)	Water harvesting for solar-powered hydrogen production			MOU
Clairity (USA)	Moisture control for CO ₂ direct air capture			MOU
Carrier (Americas)	HVAC commercialization	Binding Term Sheet	Product Market Alignment	

DEFINED PATHWAY TO COMMERCIALIZATION

CUSTOMER DEMAND AND GLOBAL PARTNERSHIPS ENABLE COMMERCIALIZATION

Pathway to Commercialization



Key Partnerships in Place



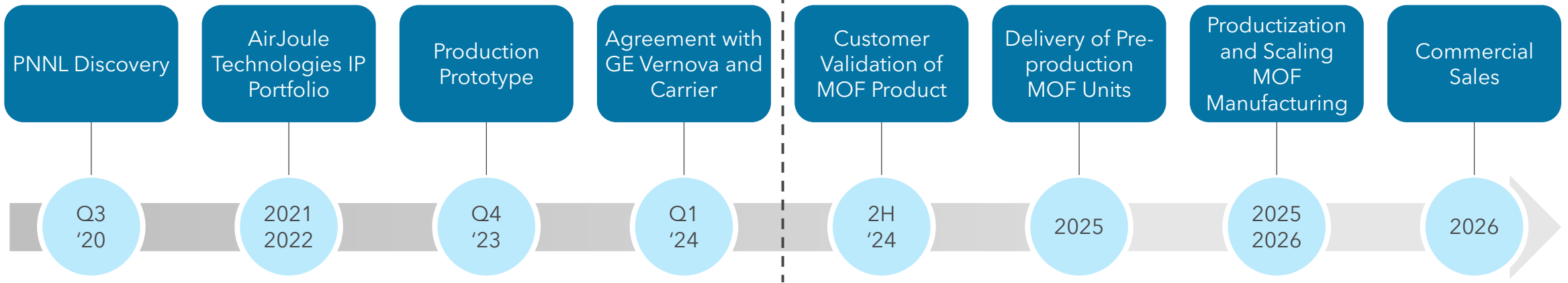
GE VERNOVA

CATL



KEY MILESTONES AND PROGRESS

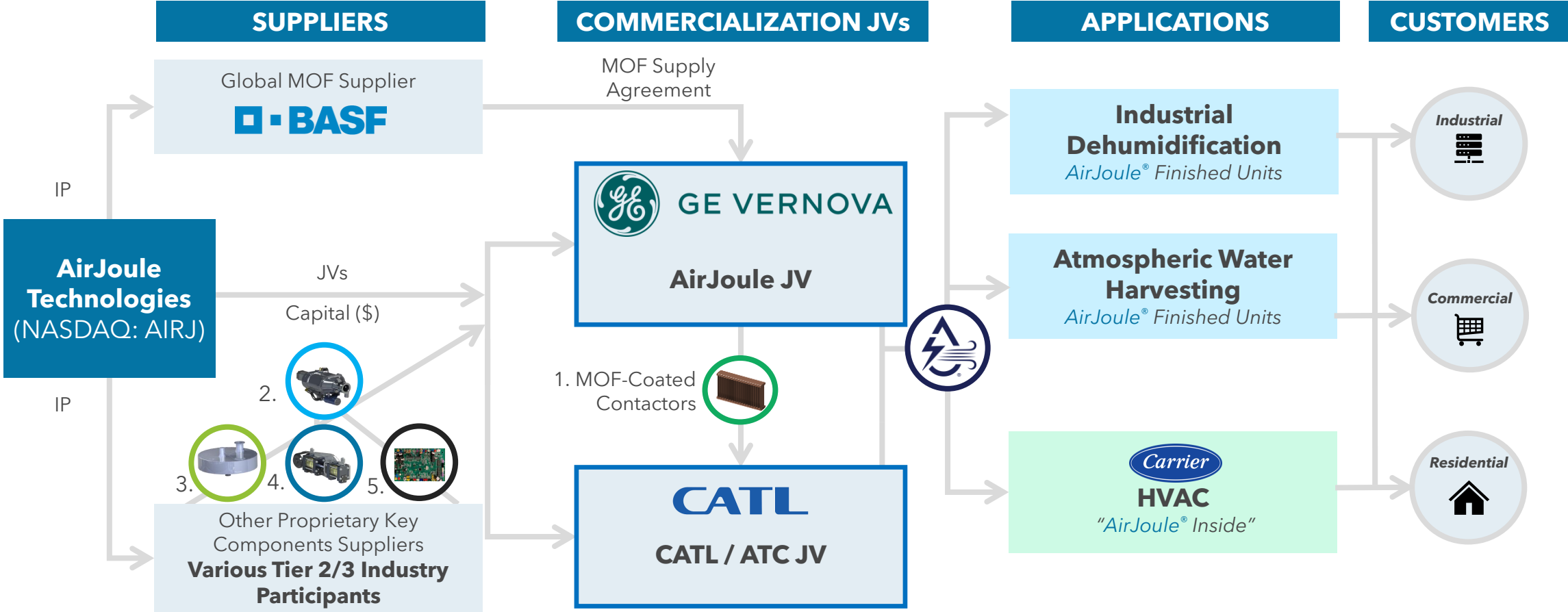
Timeline of Accomplishments to Date and Anticipated Milestones



Key Developments

- Commenced build out of initial MOF manufacturing facility in Newark, DE
- Engaging customers for hands-on demonstrations and pilot programs
- Ongoing productization and engineering efforts in coordination with Carrier and GE Vernova technical teams

AIRJOULE® GLOBAL COMMERCIALIZATION ECOSYSTEM



AirJoule Technologies' partnership network will accelerate manufacturing of materials and key components as well as provide product validation and commercialization



Proprietary Key Components: 1. MOF-Coated Contactor, 2. Vacuum Swing Compressor, 3. Vacuum Condenser, 4. Air Purge Pump, 5. Controller and Software

FINANCIAL VALUE PROPOSITION (1)(2)

CAPITAL EFFICIENT BUSINESS MODEL WITH VARIOUS SOURCES OF REVENUE FOCUSES ON HIGHEST-VALUE COMPONENTS

Illustrative High Volume Production Line Economics

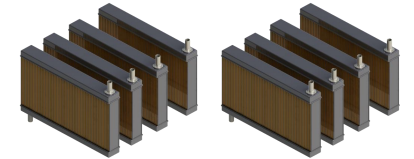
Coated Contactor Production Line Economics - 50 / 50 Joint Venture (est.)

Production Line Total CapEx	~\$25 million		
Contactors per Line per Year	~1,000,000 units		
# of Production Lines	1 Production Line	3 Production Lines	6 Production Lines
Joint Venture Annualized EBITDA	~\$100 million	~\$300 million	~\$600 million
MT Share of EBITDA per Line	~\$50 million	~\$150 million	~\$300 million

Sources of Revenue

Primary Revenue Generator

MOF-Coated Contactors



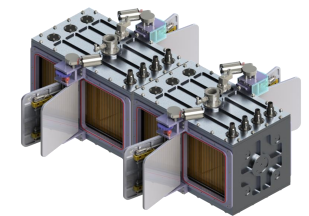
Secondary Revenue Generators

Other Key Components: Vacuum Swing Compressor, Vacuum Condenser, Air Purge Pump, Controller, and Software



System Revenue Generator

AirJoule® System Module: Adds Chambers, Doors, and Other Components to Complete Fully Functional Unit





Appendix A.

Technology

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	<ul style="list-style-type: none"> ▪ 10/1/2021 ▪ 9/30/2022 	<ul style="list-style-type: none"> ▪ 2023/056400Pct/ US22/77316 	<ul style="list-style-type: none"> ▪ AirJoule Technologies LLC
Latent Energy And Water Harvesting System	<ul style="list-style-type: none"> ▪ 10/1/2021 ▪ 9/30/2022 	<ul style="list-style-type: none"> ▪ Taiwan 111137211 	<ul style="list-style-type: none"> ▪ AirJoule Technologies LLC
Latent Energy Harvesting	<ul style="list-style-type: none"> ▪ 10/1/2021 ▪ 12/8/22/2022 	<ul style="list-style-type: none"> ▪ Pct/US22/8134 	<ul style="list-style-type: none"> ▪ AirJoule Technologies LLC
Latent Energy Harvesting	<ul style="list-style-type: none"> ▪ 10/1/2021 ▪ 12/8/22/2022 	<ul style="list-style-type: none"> ▪ Taiwan 111147076 	<ul style="list-style-type: none"> ▪ AirJoule Technologies LLC
Water Recovery System Including Integrated Contactor with Thermally-Enhanced Recovery System and Method for Fluid Capture using a Cross-Linked Binder	<ul style="list-style-type: none"> ▪ 2/5/2021 	<ul style="list-style-type: none"> ▪ US11739506 	<ul style="list-style-type: none"> ▪ GE Infrastructure Technology LLC
Artificial Intelligence-Guided Molecular Screening for Coordination Framework Compounds	<ul style="list-style-type: none"> ▪ 9/14/2022 	<ul style="list-style-type: none"> ▪ US17/932,158 	<ul style="list-style-type: none"> ▪ GE Infrastructure Technology LLC
	<ul style="list-style-type: none"> ▪ 3/3/2023 	<ul style="list-style-type: none"> ▪ US63/488,307 	<ul style="list-style-type: none"> ▪ GE Infrastructure Technology LLC

AIRJOULE® COMPARATIVE ANALYSIS

AIRJOULE® PROVIDES TRANSFORMATIONAL MOISTURE REMOVAL EFFICIENCY FOR ATMOSPHERIC WATER HARVESTING, DEHUMIDIFICATION, AND HVAC, AS COMPARED TO OTHER TECHNOLOGIES, OLD AND NEW

	Existing Atmospheric Water Generation	Existing State-of-the-Art Dehumidification	Conventional HVAC Technology	AirJoule®	The AirJoule Advantage
Selected Industry Participants					
Technology	Vapor compression refrigerant systems / hybrid desiccant ⁽²⁾	Desiccant-based systems	Vapor compression refrigerant systems	Advanced sorbents with energy-efficient pressure swing system	Transformational Technology
Applications	Atmospheric water generation	Moisture control Water recapture	Moisture control	Atmospheric water generation Moisture control Water recapture	Comprehensive
External Heat (Power)	Requires significant external heat			No external heat	Minimizes energy requirements
Refrigerants	Utilizes refrigerants ⁽²⁾	No refrigerants	Utilizes refrigerants	No refrigerants	No refrigerants
Efficiency - WH/L (Watt-hours/Liter)	315 - 450 WH/L ⁽²⁾	> 1,300 WH/L	350 - 450 WH/L	Expected at < 200 WH/L ⁽³⁾	Most efficient
Total Cost of Ownership (\$ / L)⁽¹⁾	\$0.06 - \$0.20	>\$0.15	n/a	Expected at < \$0.03	Lowest cost

With its expected efficiency, AirJoule®'s transformational technology will be the world's most efficient and lowest cost solution for converting atmospheric moisture to water.

Source: Publicly available information from company filings, company websites, and press releases

1. Assumes \$100 / MWh power cost and includes purchase price
2. Management believes most atmospheric water generation technologies use vapor compression refrigerant systems. However, SOURCE Global (<https://www.source.co/>) is a solar-powered system and does not utilize refrigerants, but with limited water output

3. Based on internal calculations of expected performance





Appendix B.

Total Addressable Market

HVAC GROWTH AND ELECTRICITY DEMAND

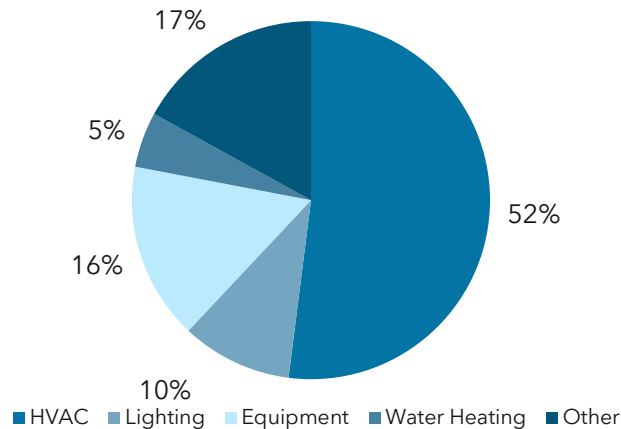
HVAC REPRESENTS A SIGNIFICANT DRIVER OF ELECTRICITY DEMAND GROWTH AS GLOBAL TEMPERATURES CONTINUE TO RISE AT AN ACCELERATED RATE

Key Trends in Electricity Demand from HVAC

HVAC accounts for about 10% electricity demand worldwide⁽¹⁾

- HVAC represents about 52% of electricity consumption in commercial buildings⁽²⁾

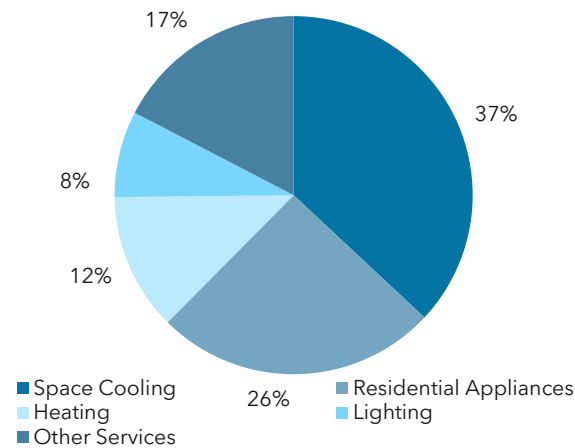
Energy Consumption Breakdown in Commercial Buildings in the U.S.⁽²⁾



HVAC will be a key driver of electricity demand growth globally

- Cooling alone is expected to drive 37% of electricity demand growth globally until 2050⁽³⁾

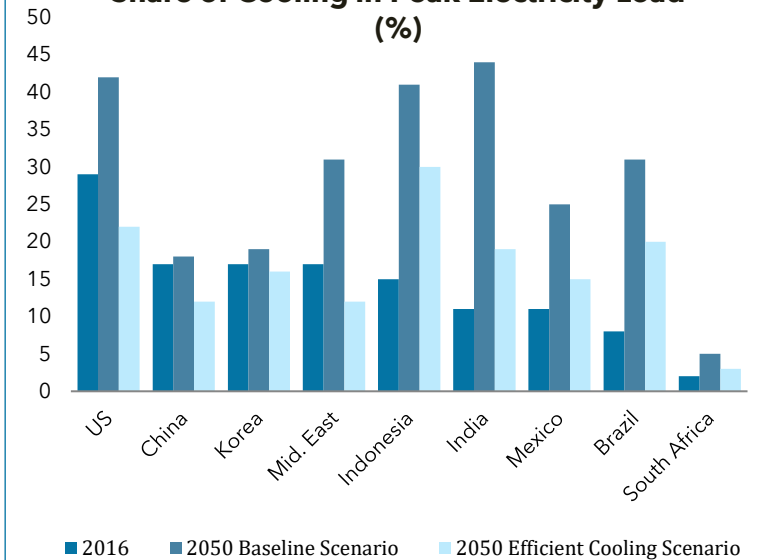
Global Electricity Demand Growth from 2018-2050 by Category⁽³⁾



HVAC will drive peak electricity demand, particularly in hot countries

- In India, the share of electricity demand from cooling in system peak load is expected to increase from 10% in 2016 to 44% in 2050⁽¹⁾

Share of Cooling in Peak Electricity Load (%)



HVAC TOTAL ADDRESSABLE MARKET ("TAM")

THE HVAC MARKET IS EXPECTED TO GROW SIGNIFICANTLY, IN LINE WITH RISING DEMAND FOR COST-EFFECTIVE AND ENERGY-EFFICIENT TECHNOLOGIES

Commentary

Global market projected to grow at a 5.27% CAGR from 2023-2032⁽¹⁾

- Market growth is driven by the rising need for space cooling and heating applications in the commercial and industrial sectors
- Favorable government initiatives and tax rebates on energy-saving products are also contributing to demand for new technology

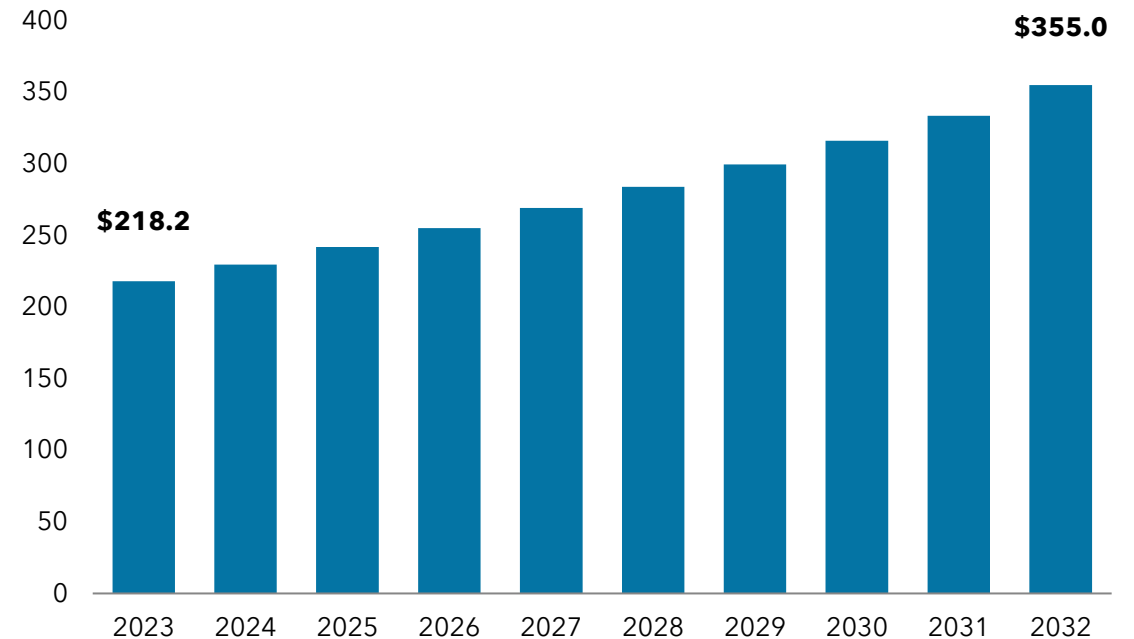
Heavy demand from commercial industry

- Commercial applications in large offices, manufacturing plants, warehouses, data centers, etc. require extensive HVAC systems to regulate temperature
- More than 40% of the 2023 HVAC market share was allocated to commercial properties⁽²⁾

Geographical trends, preferences, and siting drive demand imbalance

- Factors such as climate, economic development, and regulatory policies impact adoption / implementation of HVAC systems
- In developed regions like North America and Europe, there is strong demand for energy-efficient systems with high ratings

Global Annual Market Size (\$Bn)⁽¹⁾



HVAC total addressable market is approximately \$355 billion⁽¹⁾

1. The Brainy Insights - HVAC System Market Size. Source: <https://www.thebrainyinsights.com/report/hvac-system-market-12572>
2. Prescient & Strategic Intelligence - HVAC Market Size & Share Analysis. Source: <https://www.psmarketresearch.com/market-analysis/hvac-market>

ATMOSPHERIC WATER GENERATION ("AWG) TAM

THE AWG MARKET IS EXPECTED TO EXPERIENCE MASSIVE GROWTH; THE GLOBAL MARKET FOR WATER WILL RISE AS WATER SCARCITY PRESSURES MOUNT IN TANDEM WITH A GROWING POPULATION

Commentary

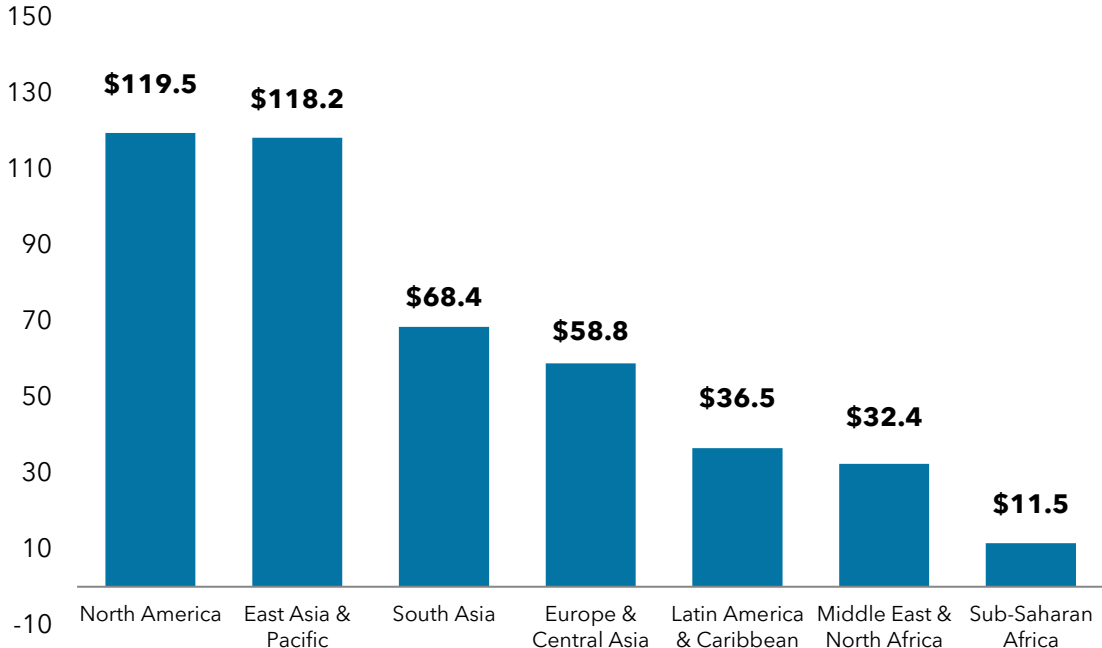
Water scarcity drives need for AWG

- Less than 1% of water on earth is usable for residential, commercial, agricultural, and industrial purposes
- Water demand has grown by 40% in the past 40 years, yet water supply has halved since 1970⁽¹⁾
- As water scarcity worsens, \$70T of global GDP (31%) could be exposed to high water stress by 2050, up from \$15T (24%) in 2010⁽¹⁾
- Market size is untested as the market has not yet fully felt the impact of water scarcity. However, the scale of the market is in the hundreds of billions of dollars

Increasing demand from data centers

- In the US, data centers consume ~660Bn liters of water each year, making this market one of the largest consumers of water⁽¹⁾
- Water usage to cool power systems in data centers has grown significantly in recent years, as the amount, and size, of the facilities have dramatically increased

Annual Cost Until 2030 to Address Water Scarcity (\$Bn)⁽¹⁾



Atmospheric Water Generation TAM is approximately \$100 billion⁽²⁾

1. Bank of America - Global Water Scarcity: H2O No! Source: <https://institute.bankofamerica.com/content/dam/bank-of-america-institute/sustainability/global-water-scarcity.pdf>
2. Illustrative. Based on management estimates

WATER USE IN DATA CENTERS IS GROWING

DEPLOYMENT OF AIRJOULE® IN DATA CENTERS CAN REDUCE STRESS ON MUNICIPAL WATER SYSTEMS

Data Center Water Usage

Data centers use large quantities of water for their cooling systems, including cooling towers, chillers, pumps, pipes, heat exchangers, condensers, and computer room air handler units

- Water, while critically important to data center operations, is only a small component of operating expense (~1%)
- Data centers source most of their water from municipal water systems

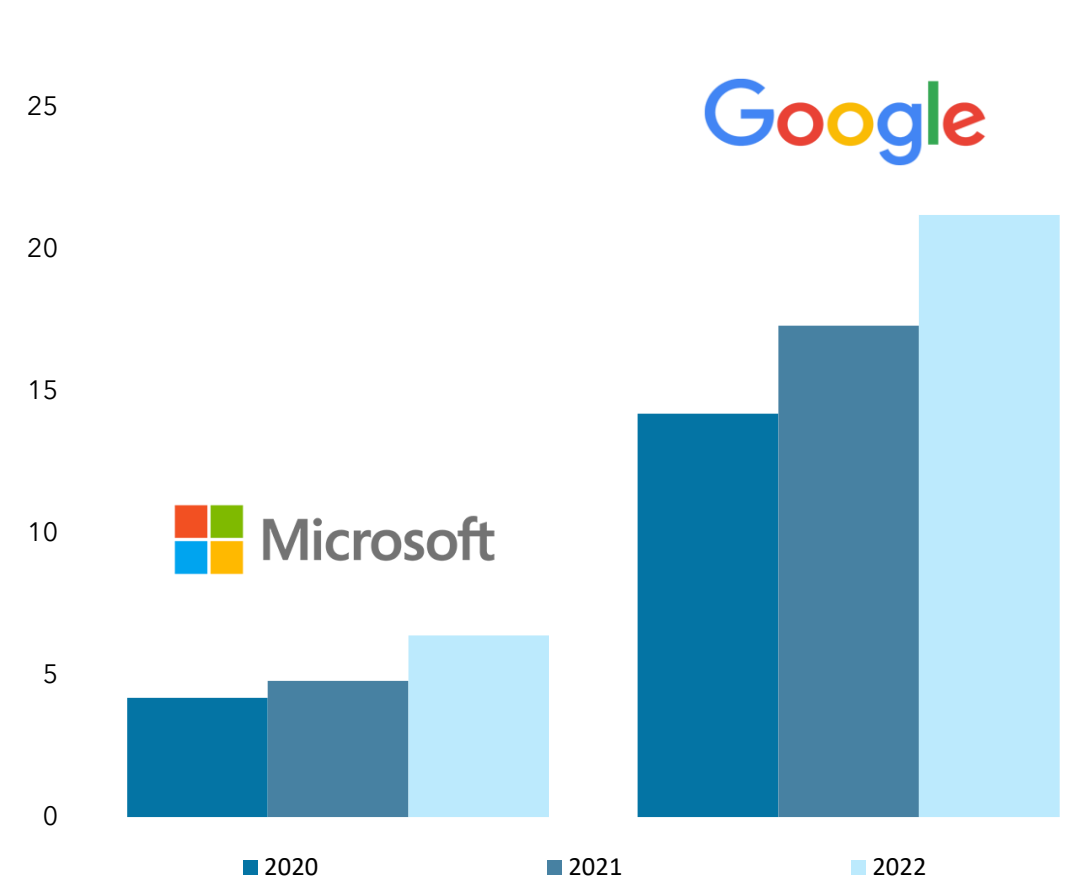
Data center water usage already causes stress on water sources

- About 20% of data centers in the US already rely on watersheds that are under moderate to high stress from drought and other factors⁽¹⁾
- The average data center uses 200k gallons of water/day, roughly equivalent to water use in 100k homes⁽²⁾

Largest cloud / data center companies have announced commitments to be water positive by 2030

- Microsoft's data center strategy targets reducing water intensity by 40% by 2030, replenishing more water than they use and breaking the relationship between AI growth and consumption⁽³⁾
- Google has a water replenishment target of 120% of water they consume across their offices and data centers by 2030⁽⁴⁾
- Amazon Web Services aims to achieve water positivity by 2030⁽⁵⁾

Large Tech Water Consumption (million m³/yr)⁽³⁾⁽⁴⁾



1. NPR - Data centers, backbone of the digital economy, face water scarcity and climate risk. Source: <https://www.npr.org/2022/08/30/1119938708/data-centers-backbone-of-the-digital-economy-face-water-scarcity-and-climate-ris>

2. Lenovo - The world's AI generators: rethinking water usage in data centers to build a more sustainable future. Source: <https://news.lenovo.com/data-centers-worlds-ai-generators-water-usage/#:~:text=NPR%20reports%20the%20average%20data,generated%20by%20the%20IT%20equipment>

3. Microsoft - 2024 Environmental Sustainability Report. Source: <https://www.microsoft.com/en-us/corporate-responsibility/sustainability/report>

4. Google - 2023 Environmental Report. Source: <https://www.gstatic.com/gumdrop/sustainability/google-2023-environmental-report.pdf>

5. Amazon - 2022 Sustainability Report. Source: <https://sustainability.aboutamazon.com/2022-sustainability-report.pdf>

HVAC & WATER REGULATORY TAILWINDS

AIRJOULE TECHNOLOGIES IS WELL-POSITIONED TO BENEFIT FROM ACCELERATED PHASE-OUT OF REFRIGERANTS, INCREASING RESTRICTIONS ON WATER USAGE, AND TAX CREDITS FOR ENERGY EFFICIENCY

Phase-Out of Refrigerants for HVAC

EPA's AIM Act set to curtail refrigerant emissions in the US⁽¹⁾

- Legislation mandates a phasedown of global warming potential hydrofluorocarbon refrigerants, common components in refrigeration and air conditioning
- The AIM Act provides authority to the EPA to facilitate the transition to next-generation technologies

Clean Air Act amendments continue to phase out hydrochlorofluorocarbons ("HCFC"s)⁽²⁾

- All virgin HCFC refrigerants are scheduled to be phased out by 2030
- The Clean Air Act, and its various amendments, aim to promote responsible use practices in the air conditioning and refrigeration industry

New York has proposed ambitious rule banning HCFCs with a 20-year Global Warming Potential of greater than 10⁽¹⁾

- Rule would apply for equipment with more than 50lbs of refrigerant
- Rule would come into effect in January 2025

Restrictions on Water Usage

Significant drain on local reservoirs has led to pushback on data center development

- In 2019, Google agreed to limit its use of groundwater in South Carolina after a two-year battle with local groups raising concerns that aquifers were depleted⁽³⁾

In Chile, data center permits have been revoked over water usage

- An environmental court in Santiago, Chile, has partially reversed Google's permit to build a \$200MM data center in the city of Cerrillos
- Google was told by the court to "incorporate the consideration of climate change's effects in the evaluation of the water component, taking into account a possible modification of the cooling system of the servers associated with the project"⁽⁴⁾

Energy Efficiency Tax Credits

Energy-efficient commercial buildings deduction (Section 179D)

- Applicable to interior lighting systems, heating, cooling, ventilation, and hot water systems. Must be installed as part of a plan designed to reduce the total annual energy and power costs
- HVAC systems must cut costs by 15%, and are eligible for a \$0.63/ft² tax deduction

Energy-efficient home improvement credit (Section 25C)

- A consumer tax credit for 30% of energy-efficiency related improvement expenditures for residential homes. Energy-efficient building property includes electric water & air heat pumps, central A/C units, and water heaters

1. ACHR News - New York's Proposed HFC Rules Face Heat from Critics. Source: <https://www.achrnews.com/articles/154389-new-yorks-proposed-hfc-rules-face-heat-from-critics>
2. Hudson Technologies - 10-K SEC Filing. Source: <https://app.quotemedia.com/data/downloadFiling?webmasterId=101533&ref=318161611&type=PDF&cdn=24176e65e735238bed8ee463676d35b6&formType=10-K&dateFiled=2024-03-14&cik=0000925528>
3. NPR - Data centers, backbone of the digital economy, face water scarcity and climate risk. Source: <https://www.npr.org/2022/08/30/1119938708/data-centers-backbone-of-the-digital-economy-face-water-scarcity-and-climate-ris>
4. Data Center Dynamics - Chile partially reverses Google data center permit over water use concerns. Source: [https://www.datacenterdynamics.com/en/news/chile-partially-reverses-google-data-center-permit-over-water-use-concerns/#:~:text=With%20Uruguay%20also%20facing%20an%20extreme%20drought%2C,liters%20\(2%20million%20gallons\)%20of%20potable%20water](https://www.datacenterdynamics.com/en/news/chile-partially-reverses-google-data-center-permit-over-water-use-concerns/#:~:text=With%20Uruguay%20also%20facing%20an%20extreme%20drought%2C,liters%20(2%20million%20gallons)%20of%20potable%20water)
5. DOE - 179D Commercial Buildings Energy-Efficiency Tax Deduction. Source: <https://www.energy.gov/eere/buildings/179d-commercial-buildings-energy-efficiency-tax-deduction>



Appendix C.

Board of Directors

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 & 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*