



Nasdaq: ARQ

Q3 2025 Earnings Call

November 6, 2025

Disclaimer

This presentation contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and 21E of the Securities Exchange Act of 1934, as amended, which provides a “safe harbor” for such statements in certain circumstances. When used in this presentation, the words "anticipates," “may,” "believes," "expects," "intends," "plans," "estimates," "predicts," the negative expressions of such words, or similar expressions and any other statements that are not historical facts are intended to identify those assertions as forward- looking statements. All statements that address activities, events or developments that Arq, Inc. (“we,” “us,” “our,” “Arq” or the “Company”) intends, expects or believes may occur in the future are forward-looking statements. These forward-looking statements include, but are not limited to, statements or expectations regarding: our ability to complete and the anticipating timing of the ramp-up to full nameplate capacity at our Red River Plant; the anticipated timing of a final investment decision regarding a potential second GAC Facility at the Red River Plant and our ability to execute on such a project; the potential operational and financial benefits of using lower-moisture coal to manufacture our GAC products; the anticipated effects from fluctuations in the pricing of our AC products; expected supply, demand and growth opportunities for our AC products and services, including our GAC products; the seasonal impact on our customers and their demand for our products; our ability to fund our business over the next twelve months; our ability to access new markets for our feedstocks, GAC and other products, including renewable natural gas, asphalt, purified coal, rare earth minerals and synthetic graphite markets; future growth in the industries in which we currently operate or intend to operate, including renewable natural gas; any future plant capacity expansions or site development projects, the timing thereof and our ability to finance any such projects; the effectiveness of our technologies and products and the benefits they provide, including in potential new markets and applications; the timing of awards or extensions of, and work and related testing under, our contracts and agreements and their value; our ability to contract remaining GAC product volumes; future cash flows, profitability and other potential benefits expected from our GAC business; the future profitability and sustainability of our PAC business; the timing and amounts of or changes in future revenue, funding for our business and projects, margins, expenses, earnings, tax rates, cash flows, working capital, liquidity and other financial and accounting measures; the performance of obligations secured by our surety bonds; the amount, use and timing of future capital expenditures needed to fund our business plan and total anticipated capital expenditures for the current fiscal year; the impact of domestic and international tariffs on our business and the wider AC market; our ability to capitalize on potentially favorable market conditions; the adoption and scope of regulations to control certain chemicals in drinking water and other environmental concerns and the impact of such regulations on our customers' and our businesses, including any increase or decrease in demand and sales of our AC products resulting from such regulations; our near-term priorities and objectives and our long-term outlook regarding the growth of our business; and the impact of prices of competing power generation sources such as natural gas and renewable energy on demand for our products. These forward-looking statements involve risks and uncertainties. Actual events or results could differ materially from those discussed in the forward-looking statements as a result of various factors including, but not limited to, the timing and scope of new and pending regulations and any legal challenges to or extensions of compliance dates of them; the U.S. government’s failure to promulgate new regulations or enforce existing regulations that benefit our business; changes in laws and regulations, accounting rules, prices, economic conditions and market demand; availability, cost of and demand for alternative energy sources and other technologies and their impact on coal-fired power generation in the U.S.; technical, start up and operational difficulties; competition within the industries in which the Company operates; risks associated with our debt financing; our inability to effectively and efficiently commercialize new products, including our GAC products; disruptions at any of our facilities, including by natural disasters or extreme weather; risks related to our information technology systems, including the risk of cyberattacks on our networks; failure to protect our intellectual property from infringement or claims that we have infringed on the intellectual property of others; our inability to obtain future financing or financing on terms that are favorable to us; our inability to ramp up our operations to effectively address recent and expected growth in our business; loss of key personnel; ongoing effects of the inflation and macroeconomic uncertainty, including from the new U.S. presidential administration, increased domestic and international tariffs, lingering effects of the pandemic and armed conflicts around the world, and such uncertainty's effect on market demand and input costs; availability of materials and equipment for our business; pending litigation; factors relating to our business strategy, goals and expectations concerning the acquisition of Arq Limited; our ability to maintain relationships with customers, suppliers and others with whom the Company does business and meet supply requirements; our results of operations and business generally; risks related to diverting management's attention from our ongoing business operations; costs related to the ongoing manufacturing of our products, including our GAC products; opportunities for additional sales of our AC products and end-market diversification; the rate of coal-fired power generation in the U.S.; the timing and cost of any future capital expenditures and the resultant impact to our liquidity and cash flows; and the other risk factors described in our filings with the SEC, including those described in Item 1A. Risk Factors of our Annual Report on Form 10-K for the year ended December 31, 2024. You are cautioned not to place undue reliance on the forward-looking statements and to consult filings we have made and will make with the SEC for additional discussion concerning risks and uncertainties that may apply to our business and the ownership of our securities. In addition to causing our actual results to differ, the factors listed above may cause our intentions to change from those statements of intention set forth in this presentation. Such changes in our intentions may also cause our results to differ. We may change our intentions, at any time and without notice, based upon changes in such factors, our assumptions, or otherwise. The forward-looking statements speak only as to the date of this presentation, and we disclaim any duty to update such statements unless required by law.

Non-GAAP Financial Measures

Included in this presentation are certain financial measures that are not calculated in accordance with U.S. generally accepted accounting principles ("GAAP") designed to supplement, and not substitute, the Company's financial information presented in accordance with GAAP. The non-GAAP measures as defined by the Company may not be comparable to similar non-GAAP measures presented by other companies. The presentation of such measures, which may include adjustments to exclude unusual or non-recurring items, should not be construed as an inference that the Company’s future results or leverage will be unaffected by other unusual or non-recurring items. Please see the attached appendix for how we define these non-GAAP measures, a discussion of why we believe they are useful to investors, and certain limitations and reconciliations thereof to the most directly comparable GAAP measures.

Notable Q3 2025 & Recent Achievements

Total Revenue

\$35.1M

Reported 1% growth YoY; driven by strong pricing in foundational PAC business

Adjusted EBITDA¹

\$5.2M

6th straight quarter of positive Adj. EBITDA; included negative offsets of several million dollars from low volume, early GAC ramp

PAC Pricing Growth

+7% YoY

~15% average quarterly growth in PAC ASP since Q2 2023; strong visibility in PAC contract renewals into 2026+

PAC Turnaround

\$25M+ improvement²

\$25+ million Adjusted EBITDA improvement since Q3 2023 on a trailing twelve-month basis, driven by PAC turnaround and cost management

GAC Growth

Initial GAC Sales

Achieved initial commercial phase GAC production and sales; GAC market dynamics remain robust

Corbin

Corbin Feedstock

Exploring blending or replacing Corbin GAC feedstock; advanced alternative product developments for Corbin feedstock



(1) Adjusted EBITDA is a non-GAAP measure. Please see "Financial Detail" slides for reconciliation information. As of Q1 2025, the Company began adjusting for stock-based compensation in EBITDA calculation; 2024 figures shown have been adjusted consistently.
(2) Comparing Trailing twelve month Adjusted EBITDA for Q3 2025 to Q3 2023

Q3 2025 Financial Highlights

<i>\$ millions unless noted</i>	Q3 2025	Q3 2024
Revenue	\$35.1	\$34.8
Gross Margin	28.8%	38.6%
Net (loss) income	(\$0.7)	\$1.6
Adjusted EBITDA ⁽¹⁾	\$5.2	\$5.9
Cash & Restricted Cash	\$15.5	\$57.4



- ✓ Revenue of \$35.1 million +1% YoY
- ✓ 6th consecutive quarter of positive Adj. EBITDA
- ✓ Achieved 7% YoY growth in PAC ASP
- ✓ Gross margin and Adjusted EBITDA negatively impacted by several million dollars of costs associated with low, early-ramp GAC volumes



1) Adjusted EBITDA is a non-GAAP measure. Please see “Financial Detail” slides for reconciliation information. As of Q1 2025, the Company began adjusting for stock-based compensation in EBITDA calculation; 2024 figures shown have been adjusted consistently.

Steady Price Increases Support Sustainable PAC Business Performance

YoY Average Sales Price (ASP) % Change

Q1 2024	Q2 2024	Q3 2024	Q4 2024	Q1 2025	Q2 2025	Q3 2025
+16%	+15%	+15%	+14%	+13%	+9%	+7%

+15%

Average YoY
ASP increase¹

+7%

YoY ASP
increase in Q3

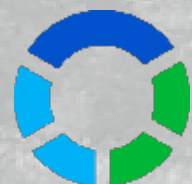
\$25M+

improvement in
Adj. EBITDA²

Outlook

- Long-term profitability and growth remains a focus
- Exploring expansion into adjacent markets with enhanced pricing and developing new products
- Driving further improvements via strategic price increases
- Pricing growth expected to continue, but pace to moderate naturally

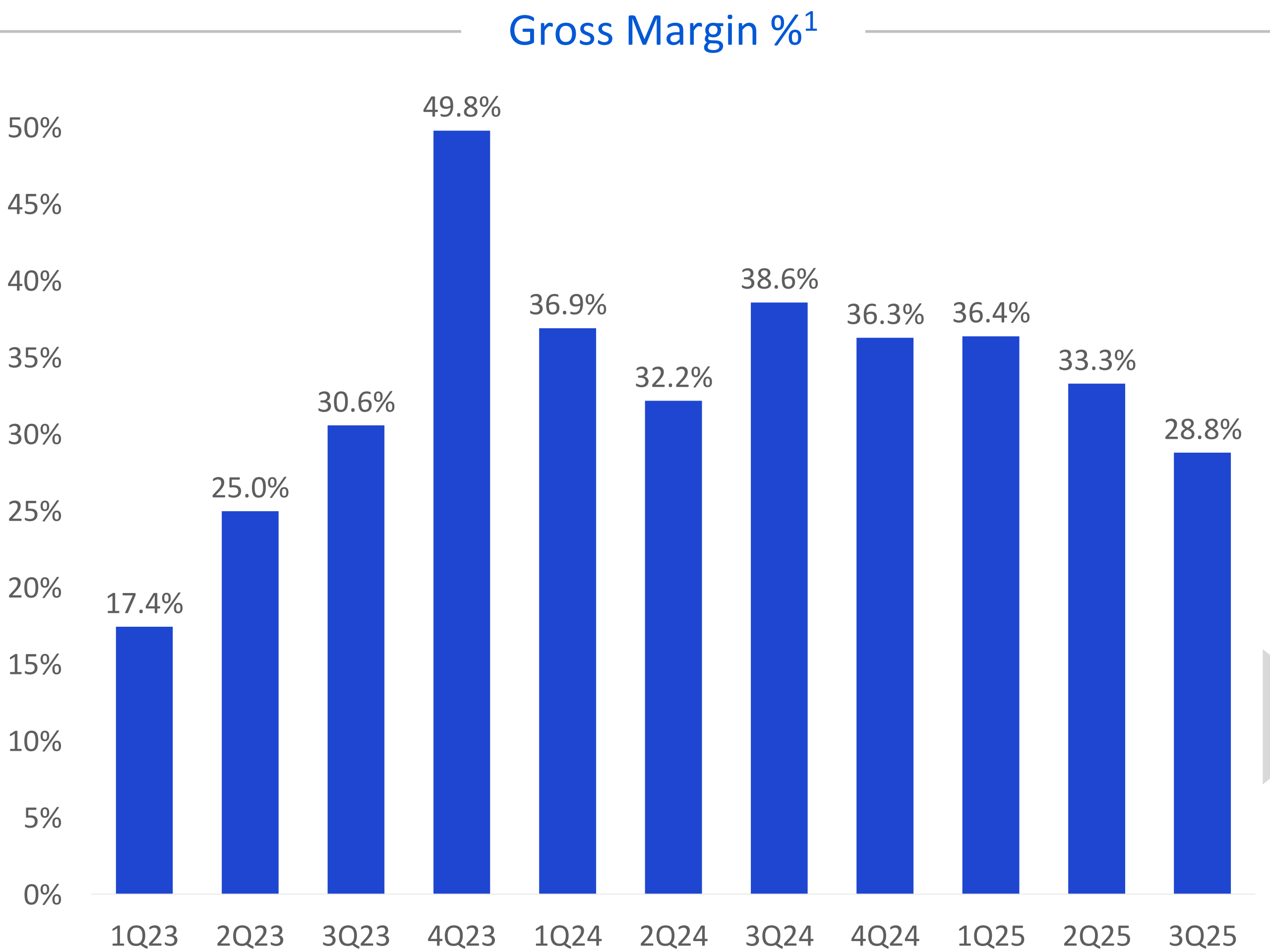
Strong visibility in PAC contract renewals extends runway and sustainability into 2026 and beyond



1) Q2 2023 through Q3 2025.
2) Since September 2023 on a trailing twelve-month basis

Attractive Gross Margin Profile

Successful turnaround of foundational PAC business, with temporary offsets associated with ongoing GAC ramp



- Another quarter of strong PAC performance
- Q3 2025 included several million dollars of non-recurring costs caused by handling and post-commissioning costs for our GAC ramp, as well as negative impacts due to inefficiencies driven by low, early-ramp volumes
- Actively optimizing PAC gross margin with room for further efficiencies



1) Q2 2023 and Q2 2024 gross margin include impact of plant turnaround maintenance costs. Q4 2023 includes impact of \$4.7 million of take-or-pay revenue.

GAC Phase I Update

- Achieved **first commercial GAC production** and sales in Q3 2025
- **Strong market validation** for GAC product - inbound spot requests at pricing above some contracted rates
- Design issues and flaws have impacted production capacity, which combined with the inherent variability of Arq wetcake, has required additional **process and methodology** changes
- Updated **nameplate capacity target to around mid-2026**; extended customer contracts impacted by updated timeline
- One potential solution is to **blend or replace Corbin GAC feedstock** with lower-moisture coal, which should reduce feedstock variability and improve production rates and operating costs
- Corbin feedstock optionality for potential uses in **high-value alternative applications**, including asphalt, purified coal, and synthetic graphite, with additional opportunity of by-products for rare earth materials.



Applying same rigor and discipline used to turnaround PAC business to solving current GAC challenges



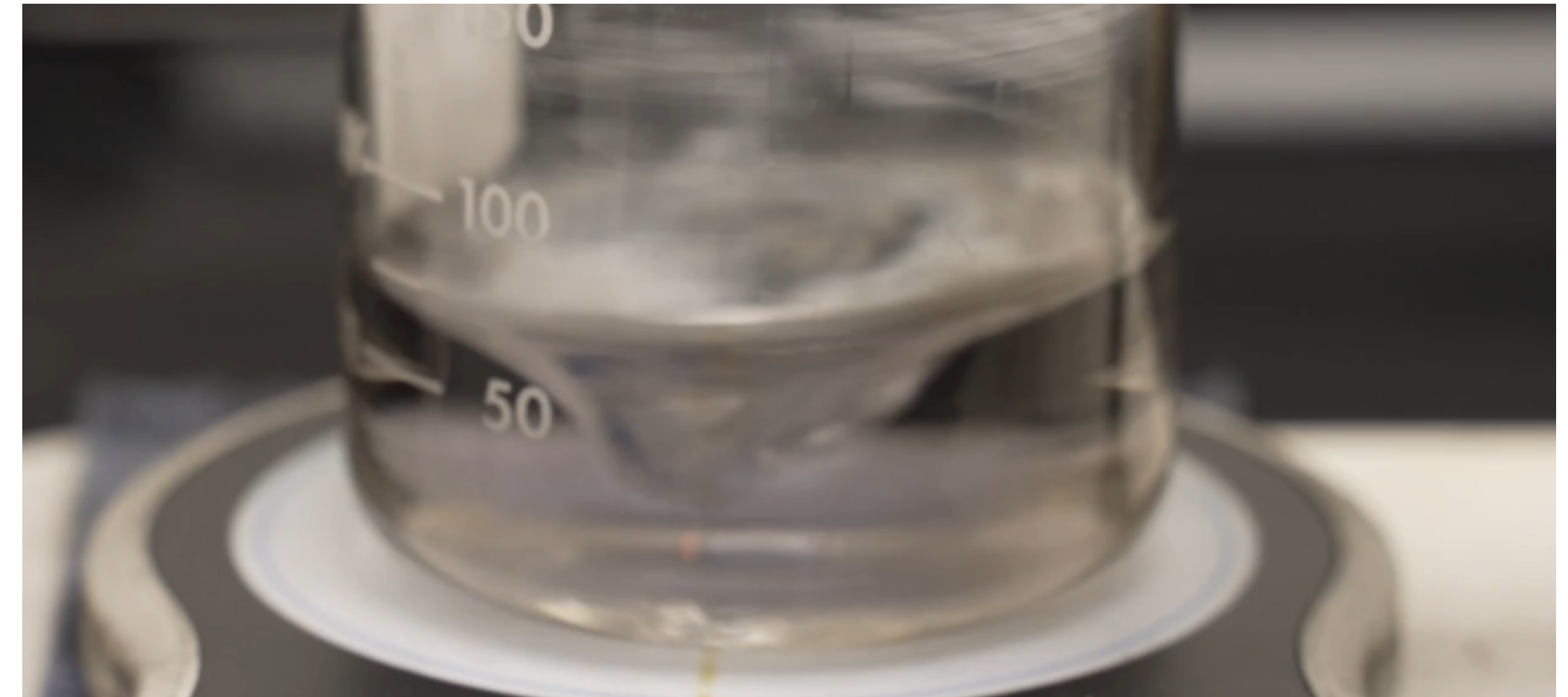
GAC Phase II and Market Dynamics

Phase II Development



- GAC fundamentals remain extremely strong
- Phase II permitting already in place; if executed, estimated construction timeline of ~12 months
- Final Investment Decision (FID) for Phase II timing now anticipated to coincide with reaching Phase I GAC nameplate capacity around mid-2026

Market Position & Outlook



- Positive RNG field testing results – anticipate attractive contracts as testing concludes
- Water market remains reliable with significant growth anticipated
- Spot pricing enquiries indicate robust demand and potential to augment overall pricing alongside contracted business

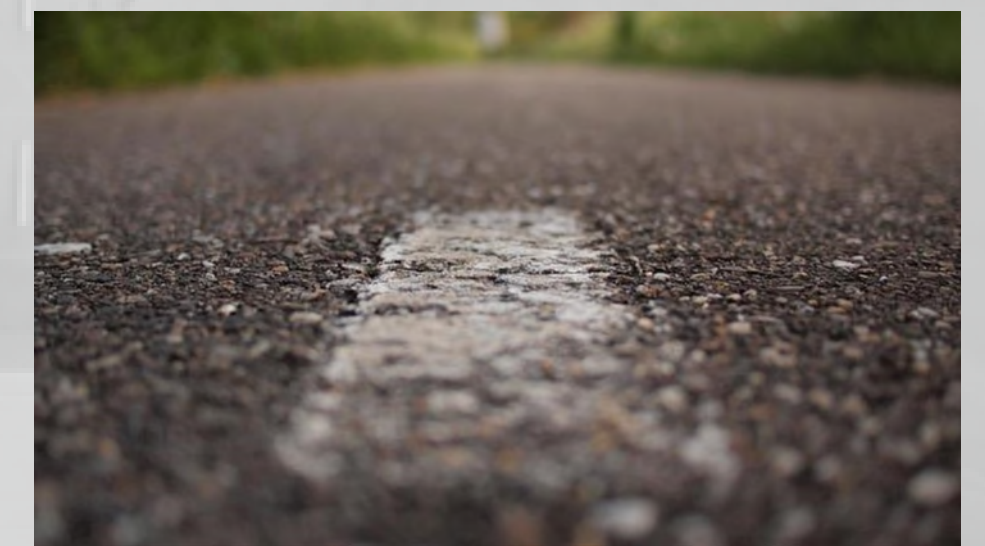


Growth Beyond Activated Carbon

Advanced alternative product developments creating multiple potential revenue streams from Corbin feedstock

Potential applications:

- **Asphalt:** Using Arq wetcake as a blending component to extend asphalt life, maintain blackness, and improve freeze-thaw durability. Testing ongoing with leading North American asphalt producer
- **Purified Coal:** Signed non-binding MOU to evaluate Arq wetcake as feedstock for agglomerated coal alternative targeting ferrosilicon and synthetic graphite markets for silicon wafer manufacturing. Partner bears all initial costs under current MOU terms¹
- **Rare Earth Materials:** Pursuing extraction from byproducts generated from Arq wetcake to support U.S.-sourced materials independent of foreign supply chains. Working with DOE to explore potential government funding. Research expected to commence in 2026
- **Synthetic Graphite:** Leveraging high purity of Arq wetcake as potential feedstock for synthetic graphite production. Currently pursuing government funding opportunities to evaluate commercial potential



1) If Arq decides to move forward with MOU arrangement.

Key Near-term Priorities & Objectives

Continue enhancing overall profitability

Continue optimization of foundational cash-generative PAC business

Continue Phase I GAC ramp-up while exploring options to enhance value

Finalize contracts for remaining Phase I GAC volumes

Continue initiatives to develop additional markets for Corbin feedstock





Financial Detail

Consolidated Balance Sheet¹

(in thousands, except share data)	As of	
	September 30, 2025	December 31, 2024
ASSETS		
Current assets:		
Cash	\$ 7,026	\$ 13,516
Receivables, net	14,364	14,876
Inventories, net	15,744	19,314
Prepaid expenses and other current assets	6,793	4,650
Total current assets	43,927	52,356
Restricted cash, long-term	8,467	8,719
Property, plant and equipment, net of accumulated depreciation of \$32,429 and \$26,619, respectively	180,724	178,564
Other long-term assets, net	44,828	44,729
Total Assets	\$ 277,946	\$ 284,368
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable and accrued expenses	\$ 13,114	\$ 21,017
Revolving credit facility	15,951	13,828
Current portion of long-term debt obligations	1,102	1,624
Other current liabilities	9,651	8,184
Total current liabilities	39,818	44,653
Long-term debt obligations, net of current portion	8,801	9,370
Other long-term liabilities	12,173	13,069
Total Liabilities	60,792	67,092
Commitments and contingencies		
Stockholders' equity:		
Preferred stock: par value of \$0.001 per share, 50,000,000 shares authorized, none issued or outstanding	—	—
Common stock: par value of \$0.001 per share, 100,000,000 shares authorized, 47,307,611 and 46,639,930 shares issued, and 42,689,465 and 42,021,784 shares outstanding at September 30, 2025 and December 31, 2024, respectively	47	47
Treasury stock, at cost: 4,618,146 and 4,618,146 shares as of September 30, 2025 and December 31, 2024, respectively	(47,692)	(47,692)
Additional paid-in capital	200,948	198,487
Retained earnings	63,851	66,434
Total Stockholders' Equity	217,154	217,276
Total Liabilities and Stockholders' Equity	\$ 277,946	\$ 284,368



(1) See complete, unaudited Condensed Consolidated Financial Statements and Notes related thereto within the Quarterly Report on Form 10-Q for the period ended September 30, 2025.

Consolidated Statements of Operations¹

(in thousands, except per share data)	Three Months Ended September 30,		Nine Months Ended September 30,	
	2025	2024	2025	2024
Revenue	\$ 35,074	\$ 34,774	\$ 90,905	\$ 81,919
Cost of revenue, exclusive of depreciation and amortization	24,965	21,339	61,363	52,279
Operating expenses:				
Selling, general and administrative	4,624	8,058	16,595	22,735
Research and development	2,566	787	6,137	3,341
Depreciation, amortization, depletion and accretion	3,758	2,716	8,424	6,090
(Gain) loss on sale of assets	—	(154)	118	(154)
Total operating expenses	10,948	11,407	31,274	32,012
Operating (loss) income	(839)	2,028	(1,732)	(2,372)
Other income (expense):				
Earnings from equity method investments	83	127	238	127
Interest expense	(587)	(806)	(1,905)	(2,426)
Other income	690	268	816	931
Total other income (expense)	186	(411)	(851)	(1,368)
(Loss) income before income taxes	(653)	1,617	(2,583)	(3,740)
Income tax expense	—	—	—	30
Net (loss) income	\$ (653)	\$ 1,617	\$ (2,583)	\$ (3,770)
(Loss) income per common share:				
Basic	\$ (0.02)	\$ 0.04	\$ (0.06)	\$ (0.11)
Diluted	\$ (0.02)	\$ 0.04	\$ (0.06)	\$ (0.11)
Weighted-average number of common shares outstanding:				
Basic	41,606	36,124	41,478	34,085
Diluted	41,606	37,442	41,478	34,085



(1) See complete, unaudited Condensed Consolidated Financial Statements and Notes related thereto within the Quarterly Report on Form 10-Q for the period ended September 30, 2025.

Consolidated Statement of Cash Flows¹

<i>(in thousands)</i>	Nine Months Ended September 30,	
	2025	2024
Cash flows from operating activities		
Net loss	\$ (2,583)	\$ (3,770)
Adjustments to reconcile net loss to net cash provided by operating activities:		
Depreciation, amortization, depletion and accretion	8,424	6,090
Stock-based compensation expense	2,523	2,185
Operating lease expense	1,797	1,518
Amortization of debt discount and debt issuance costs	266	450
Loss (gain) on sale of long-term assets, net	118	(154)
Earnings from equity method investments	(238)	(127)
Other non-cash items, net	(704)	(113)
Changes in operating assets and liabilities:		
Receivables, net	1,196	(399)
Prepaid expenses and other assets	(2,326)	1,812
Inventories, net	2,906	2,486
Other long-term assets, net	(2,367)	(1,366)
Accounts payable and accrued expenses	(8,900)	(2,611)
Other current liabilities	687	1,467
Operating lease liabilities	(435)	(1,255)
Other long-term liabilities	(336)	(945)
Net cash provided by operating activities	28	5,268



(1) See complete, unaudited Condensed Consolidated Financial Statements and Notes related thereto within the Quarterly Report on Form 10-Q for the period ended September 30, 2025.

Consolidated Statement of Cash Flows (cont.)¹

(in thousands)	Nine Months Ended September 30,	
	2025	2024
Cash flows from investing activities		
Acquisition of property, plant, equipment and intangible assets, net	\$ (7,793)	\$ (42,210)
Acquisition of mine development costs	(292)	(167)
Distributions from equity method investees in excess of cumulative earnings	238	127
Proceeds from sale of property and equipment	—	150
Net cash used in investing activities	(7,847)	(42,100)
Cash flows from financing activities		
Borrowings on revolving credit facility	96,683	—
Repayments of revolving credit facility	(94,560)	—
Principal payments on notes payable	(592)	(404)
Principal payments on finance lease obligations	(392)	(838)
Repurchase of common stock to satisfy tax withholdings	(62)	(1,109)
Net proceeds from common stock issued in public offering	—	26,659
Net proceeds from common stock issued in private placement transactions	—	14,951
Net proceeds from common stock issued to related party	—	800
Net cash provided by financing activities	1,077	40,059
(Decrease) increase in Cash and Restricted Cash	(6,742)	3,227
Cash and Restricted Cash, beginning of period	22,235	54,153
Cash and Restricted Cash, end of period	\$ 15,493	\$ 57,380
Supplemental disclosure of non-cash investing and financing activities:		
Change in accrued purchases for property and equipment	\$ 1,279	\$ 8,199
Purchase of property and equipment through note payable	\$ —	\$ 258



(1) See complete, unaudited Condensed Consolidated Financial Statements and Notes related thereto within the Quarterly Report on Form 10-Q for the period ended September 30, 2025.

Note on Non-GAAP Financial Measures

To supplement our financial information presented in accordance with U.S. Generally Accepted Accounting Principles ("U.S. GAAP"), we provide certain supplemental financial measures, including EBITDA and Adjusted EBITDA, which are measurements that are not calculated in accordance with U.S. GAAP. EBITDA is defined as earnings before interest, taxes, depreciation and amortization, and Adjusted EBITDA is defined as EBITDA reduced by non-cash gains, increased by GAC Facility pre-production feedstock, share-based compensation expense, other non-cash losses and non-recurring costs and fees. EBITDA and Adjusted EBITDA should be considered in addition to, and not as a substitute for, net income (loss) in accordance with U.S. GAAP as a measure of performance. See below for a reconciliation from net income (loss), the nearest U.S. GAAP financial measure, to EBITDA and Adjusted EBITDA.

We believe that the EBITDA and Adjusted EBITDA measures are less susceptible to variances that affect our operating performance. We include these non-GAAP measures because management uses them in the evaluation of our operating performance, and believe they help to facilitate comparison of operating results between periods. We believe the non-GAAP measures provide useful information to both management and users of the financial statements by excluding certain expenses, gains, and losses which can vary widely across different industries or among companies within the same industry and may not be indicative of core operating results and business outlook.

Additionally, we have included these measures on a trailing twelve month ("TTM") basis. We believe that TTM Adjusted EBITDA is a useful measure of our operating performance over time. Management uses TTM Adjusted EBITDA to evaluate the trajectory of the business, assess the effectiveness of ongoing initiatives, and compare results across periods on a more consistent basis. By capturing the most recent twelve months of performance, TTM Adjusted EBITDA helps to smooth seasonal or timing-related variances and provides a clearer view of underlying operating trends. We believe this measure assists both management and users of the financial statements in understanding progress toward sustained profitability and operational improvement.

EBITDA and Adjusted EBITDA:

The following table reconciles net (loss) income, our most directly comparable as-reported financial measure calculated in accordance with U.S. GAAP, to EBITDA and Adjusted EBITDA.



Net (Loss) Income Reconciliation to Adjusted EBITDA

(in thousands)	Three Months Ended September 30,		Nine Months Ended September 30,	
	2025	2024	2025	2024
Net (loss) income	\$ (653)	\$ 1,617	\$ (2,583)	\$ (3,770)
Depreciation, amortization, depletion and accretion	3,758	2,716	8,424	6,090
Amortization of Upfront Customer Consideration	127	127	381	381
Interest expense, net	586	600	1,842	1,638
Income tax expense	—	—	—	30
EBITDA	3,818	5,060	8,064	4,369
Share-based compensation ⁽¹⁾	1,053	750	2,523	2,185
GAC Facility pre-production feedstock ⁽²⁾	982	—	2,879	—
Gain on insurance proceeds ⁽³⁾	(685)	—	(685)	—
Financing costs	—	228	—	228
(Gain) loss on sale of assets	—	(154)	118	(154)
Adjusted EBITDA	\$ 5,168	\$ 5,884	\$ 12,899	\$ 6,628

⁽¹⁾ Represents non-cash stock-based compensation expenses that are included within "Cost of revenue, exclusive of depreciation and amortization" and "Selling, general and administrative" expenses in the Condensed Consolidated Statements of Operations. Previously reported Adjusted EBITDA for the three and nine months ended September 30, 2024 has been revised to include non-cash stock-based compensation expense.

⁽²⁾ Represents expenses related to feedstock utilized in pre-production testing of our GAC Facility during the three and nine months ended September 30, 2025 included within "Research and development" expense in the Condensed Consolidated Statements of Operations.

⁽³⁾ Represents non-cash gain related to an insurance claim related to equipment at our Five Forks Mine during the three and nine months ended September 30, 2025 included within "Other income" in the Condensed Consolidated Statements of Operations. We received the proceeds in October 2025.



Trailing Twelve-Month Net Loss Reconciliation to Trailing Twelve-Month Adjusted EBITDA (Adjusted EBITDA loss)

Trailing Twelve-Month Adjusted EBITDA: The following table reconciles trailing twelve month net loss, our most directly comparable as-reported financial measure calculated in accordance with U.S. GAAP, to Trailing Twelve Month EBITDA (loss) and Adjusted EBITDA (Adjusted EBITDA loss).

(in thousands)	Trailing Twelve Months Ended September 30,					
	2025		2024		2023	
Net loss	\$	(3,922)	\$	(480)	\$	(18,706)
Depreciation, amortization, depletion and accretion		10,928		9,357		8,927
Amortization of Upfront Customer Consideration		508		508		508
Interest expense, net		2,358		1,984		755
Income tax (benefit) expense		(194)		216		176
EBITDA (loss)	\$	9,678	\$	11,585	\$	(8,340)
Share-based compensation		3,053		3,023		2,336
GAC Facility pre-production feedstock		2,879		—		—
Loss on extinguishment of debt		1,422		—		—
Gain on insurance proceeds		(685)		—		—
Loss (gain) on sale of assets		336		(154)		—
Financing costs		47		228		—
Cash distributions from equity method investees		—		111		1,832
Equity earnings		—		(111)		(1,831)
Gain on change in estimate, asset retirement obligation		—		(37)		—
Gain on sale of Marshall Mine LLC		—		—		(2,695)
Adjusted EBITDA (Adjusted EBITDA loss)	\$	16,730	\$	14,645	\$	(8,698)





Appendix

Arq Company Overview

- Arq is a diversified, environmental technology company producing **activated carbon** products which reduce or reverse environmental liabilities, including PFAS or “forever chemicals”. Our products enable a **cleaner and safer planet**
- Arq has the **only fully domestic** vertically integrated supply chain, improving water and air quality, using coal waste as a feedstock to remediate other way – contributing to **America's energy independence**

General Applications of Our Products



Note: PFAS: Per- or poly-fluorinated alkyl substances (PFAS) are a group of industrial chemicals used in everyday products and are often referred to as ‘Forever Chemicals’ because of their extreme persistence in the environment

What is Activated Carbon?

- Also known as activated charcoal
- Activated carbons are largely engineered sorbent materials which purify, filter and remove pollutants from air, water and soil
- When activated, able to “adsorb” a wide range of harmful compounds from air, gas & liquids
- “Activation” process makes product more porous (e.g. think kernel of corn and popcorn kernel)

2 Major Types of Activated Carbon

**Powder Activated Carbon
(PAC)**

**Granular Activated Carbon
(GAC)**



Products & Market Applications

GAC from bituminous coal best at remediating PFAS and forever chemicals

Applications

- Potable Water
- PFAS Remediation
- Wastewater Treatment
- Biogas
- Mercury Emissions
- Pharma
- Specialty
- Automotive
- Food & Beverage
- Soil & Groundwater Remediation

Market Focus

Growth
Business

Granular
Activated
Carbon
(GAC)

**Municipal water, PFAS
remediation, soil &
groundwater remediation,
specialty gas purification**

Foundation
Business

Powder Activated
Carbon
(PAC)

**Power generation,
industrial and
municipal water**



PFAS Regulations & Impact

EPA under new Administration remains committed to reducing and removing PFAS contamination

Landscape Update

- **Apr 2024:** 2024: EPA issues rule requiring municipal drinking water meet new PFAS limits within 5 years
- **Sep 2025:** EPA retains CERCLA designations for PFOA and PFOS as hazardous substances, defending Biden-era rule in ongoing litigation
- **Q4 2025:** EPA expected to propose extending compliance deadline and narrowing drinking water regulations to PFOS and PFOA only (eliminating PFHxS, PFNA, GenX from original requirements)
- **2025-2026:** Seven additional PFAS rulemakings planned across RCRA, TSCA, CWA including expanded monitoring/reporting requirements

Arq Implications & Additional Detail

- Arq estimates regulations could boost municipal water market demand 3-5x from ~170 million lb/year
- Serves as major catalyst for Arq demand and potential supply shortages
- Regulatory focus narrowed: PFAS Maximum Contaminant Level set at 4 ppt for PFOA/PFOS only (down from 70 ppt); 4 ppt $\approx$ 4 grains of sand in Olympic pool
- Expanded industrial demand: New NPDES permit requirements and effluent guidelines targeting plastics, chemical, synthetic fiber sectors create additional GAC opportunities
- \$1B available for public water utilities; \$9B under 2021 BIL for PFAS-impacted communities; additional \$12B BIL for public water infrastructure improvements



Sources:

<https://www.epa.gov/sdwa/and-polyfluoroalkyl-substances-pfas>

<https://www.epa.gov/newsreleases/administrator-zeldin-announces-major-epa-actions-combat-pfas-contamination>

<https://www.hklaw.com/en/insights/publications/2025/10/epas-pfas-rulemaking-trajectory-key-updates>

Arq Benefiting from U.S. Tariffs

- Only domestic producer with fully integrated activated carbon supply chain - competitive advantage further amplified under tariffs
- Many competitors face headwinds due to imported feedstock dependencies
- Net beneficiary of current tariff environment - positioned to maximize operational and financial performance



Unique position with fully integrated domestic supply chain



Developing New Markets: Arq-Enabled Great Lakes Restoration Project

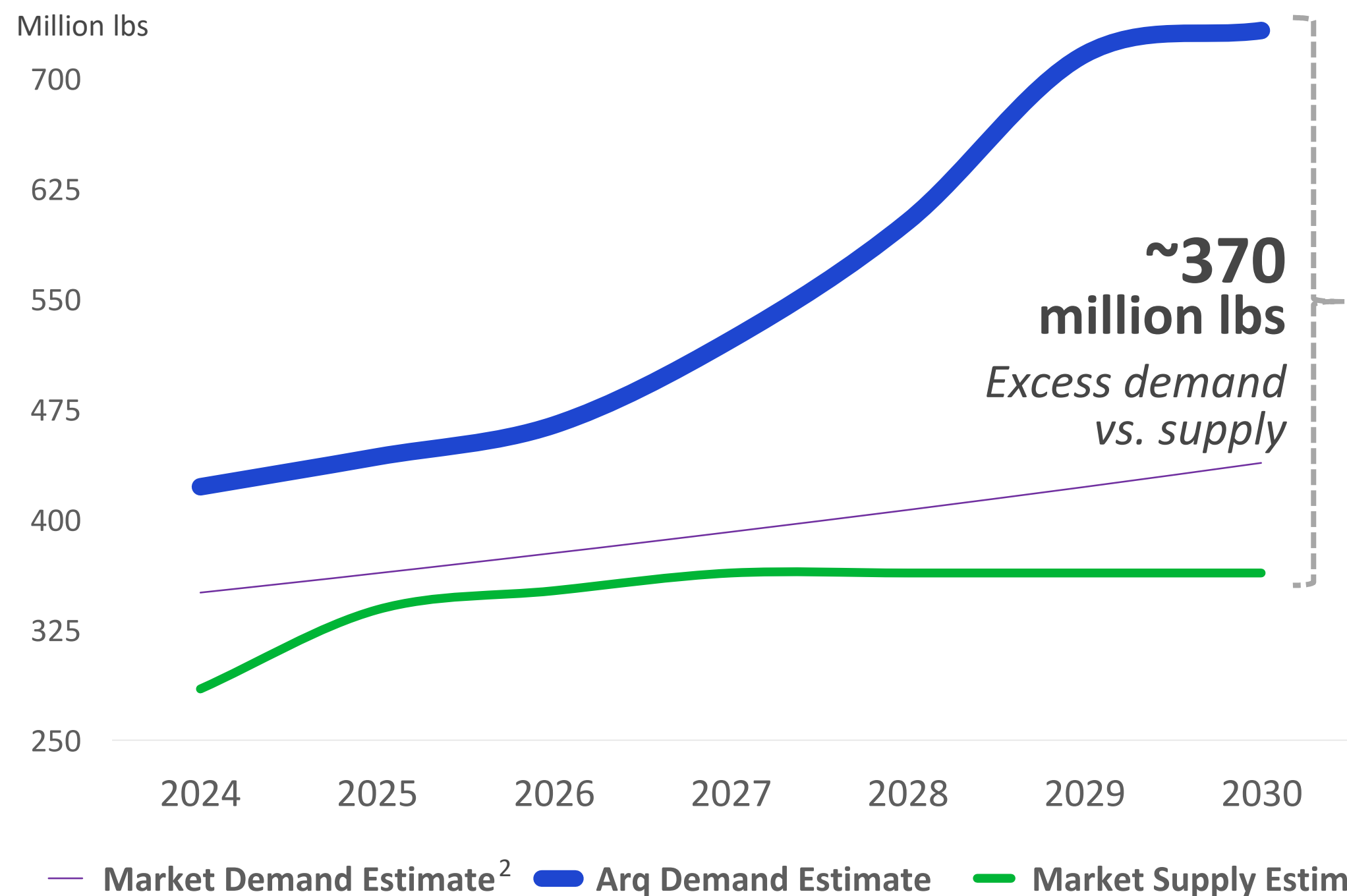
- Thomson Reservoir cleanup marks **largest activated carbon sediment remediation** in U.S. history
- **Activated carbon supplied exclusively by Arq and deployed to isolate and neutralize** toxic dioxins and furans from industrial legacy pollution
- Arq's engineered carbon plays a **critical role** in halting toxin migration through the **food chain**
- Project aims to **help delist** the St. Louis River as a **Great Lakes Area of Concern by 2030**
- Backed by the EPA and funded through the Bipartisan Infrastructure Law, ensuring **regulatory alignment** and long-term support
- Early data shows tangible ecosystem recovery, with Arq's material central to **measurable environmental impact**



Strong North American GAC Market Fundamentals

Data suggest demand outpacing supply – Arq anticipates a 3-5x increase in demand over next 5 years not accounting for potential incremental demand growth from other sectors (e.g., biogas)

- Arq expects annual GAC market to grow ~75% to >700mm lbs¹
- Would result in ~370mm lbs supply shortfall by 2030¹
- New domestic supply limited by capital, feedstock, permits



~35%

Of the ~153,000 public water systems in the U.S. estimated to require PFAS treatment facilities by 2030 (vs. 10% in 2023)³

\$2 billion

Estimated market size of U.S. drinking water PFAS treatment market by 2030 (~10x growth vs. 2023)³

~80%

Estimated market penetration rate of GAC for PFAS treatment by 2030, driven by GAC advantages vs. alternative solutions³

2-4x increase

Replacement cycle for PFAS removal equipment estimated to increase ~2x (groundwater) and 4x (surface water) vs. historic usage³

~5% per year

Estimated annual increase in GAC prices (2025-2027)³



¹ Reflects company estimates. Note: Arq estimates 10% increase on previous market data in 2024 & YoY through 2026; a 50% increase YoY in 2027 through 2029 – i.e. accelerating into final stages of compliance with new EPA regulations. Excludes any new entrants.

² Source: IHS. Note: Estimates based on 2022 data, and therefore compiled prior to latest EPA regulatory changes.

³ Goldman Sachs Research published on July 31, 2024.

GAC Usage in Water Industry

EPA confirms GAC as a Best Available Technology (“BAT”) for PFAS removal¹

- 77% of water entities still lack any PFAS treatment solution per GAO, despite many GAC systems under construction²
- Water systems must currently monitor PFAS by 2027 and remediate by 2029 if levels exceed EPA limits
- Despite demand imbalance, competitors are adding capacity cautiously to avoid over-supply
- Calgon added 55M lbs of GAC capacity in 2023 and is expanding higher-margin reactivation via Sprint Environmental acquisition
- Norit, owned by private equity, is exiting assets (e.g., sold UK reactivation assets to Kemira in 2024)



1 - <https://www.epa.gov/sciencematters/reducing-pfas-drinking-water-treatment-technologies>

2 - <https://www.gao.gov/products/gao-24-106523>

EPA Confirms GAC as a Best Available Technology for PFAS removal

Alternative technologies for PFAS removal and how they compare

PFAS Technology	Advantage	Disadvantage
Granular Activated Carbon	✓ Lowest unit cost ✓ Strong PFAS removal performance ✓ Handles varied water quality ✓ Industry benchmark technology ✓ Broad adsorption spectrum ✓ Can be reactivated ✓ Flexible with other treatments ✓ Lowest capex requirement	✗ Requires longer contact time ✗ More frequent media change-outs
Ion Exchange	✓ Smaller footprint ✓ No backwash needed	✗ Higher unit cost ✗ Majority of supply imported ✗ Needs pre-filters due to higher headloss ✗ Media disposal required ✗ Sensitive to chlorine ✗ Flow variability can affect performance
Reverse Osmosis / Nanofiltration	✓ Compact footprint	✗ High cost and energy demand ✗ Generates concentrated waste ✗ Requires pre-treatment and more chemicals

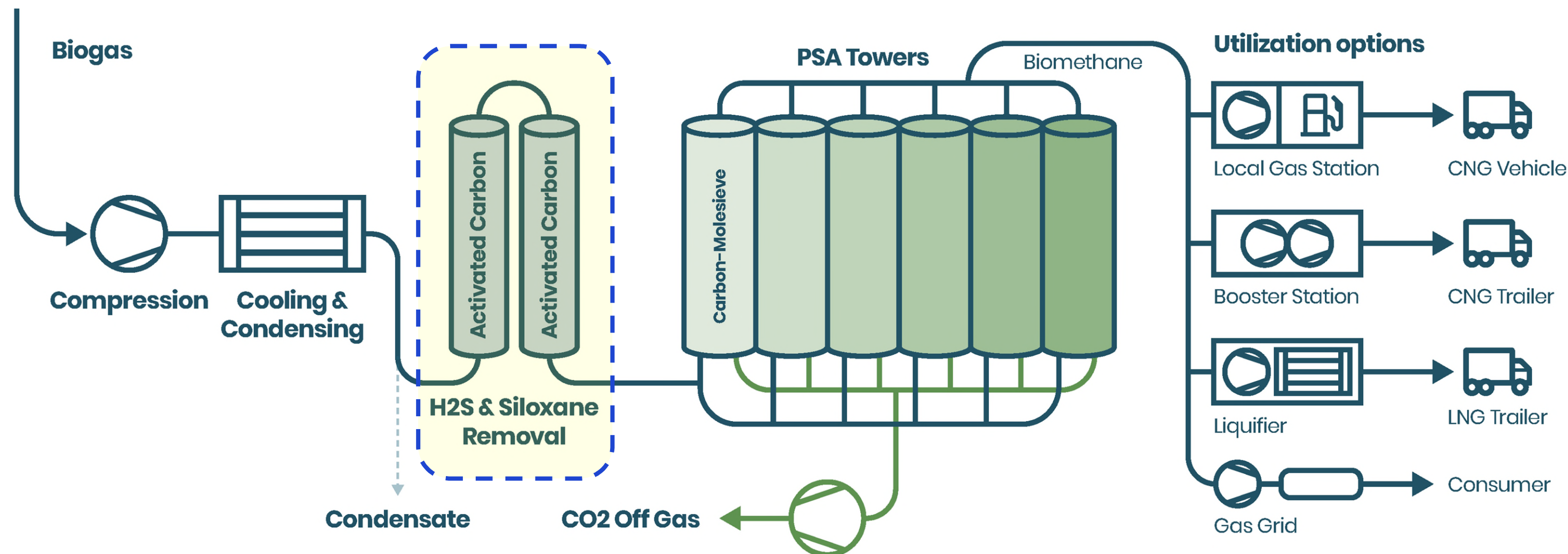
Source – Company data



1 - <https://www.epa.gov/sciencematters/reducing-pfas-drinking-water-treatment-technologies>

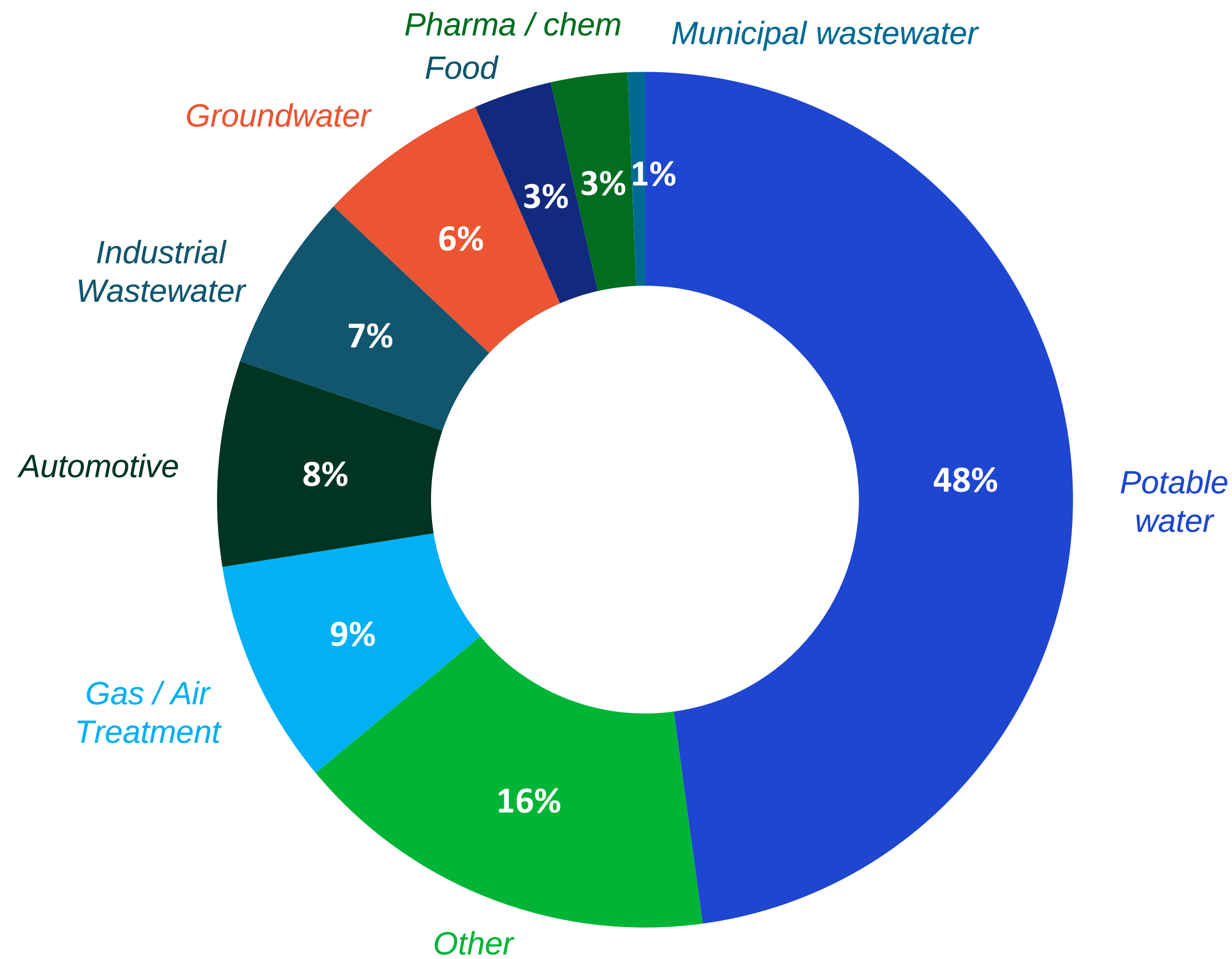
GAC Usage in Biogas & Renewable Natural Gas Industry

- Biogas is produced when organic material decomposes in anaerobic conditions. Biogas can be processed to remove impurities – such as CO₂, H₂S and Siloxane – to produce high-quality Renewable Natural Gas (RNG)
- Sources of biogas for potential RNG production include landfill wastes, animal manure, separated organic waste, and wastewater treatment sludge
- GAC's role is as part of a larger biogas treatment system for purifying RNG by removing carbon dioxide, hydrogen sulfide, nitrogen, VOC and moisture
- The RNG is passed directly through a GAC column to achieve this purification
- System typically located near or on the RNG production site
- Arq has agreed to conduct real-world testing programs at multiple RNG sites once in commercial production in 2025
- RNG applications for GAC provide two benefits to Arq: diversification of GAC revenue stream; a natural hedge against the coal-fired power focus of the PAC portfolio
- GAC pricing for RNG applications is typically more attractive than many other GAC applications



GAC Market Summary

Estimated 2025 GAC Demand by Sector ¹



- GAC demand dominated by potable water
- Smaller markets can offer higher pricing and growth
- Provides potential for meaningful diversification for Arq as well as scope for pricing enhancement
- These figures do not account for any material increase in PFAS-related or biogas-related demand
- “Other” category includes remediation, gold mining, solvent recovery, and coconut husk-derived catalysts



¹ – Source – IHS Data, Company Estimates

Activated Carbon (AC) Competitive Landscape

Arq remains only public pure-play in activated carbon



- ✓ Entering GAC market at sweet-spot: providing meaningful scale while also representing a viable alternative to larger incumbents
- ✓ Given dominance of private companies in the activated carbon market, limited public financial disclosure beyond Arq
- ✓ Arq remains the only pure-play public company in the activated carbon market

- **Attractive growth market** with concentrated pool of private competitors
- **Calgon Carbon Corporation** is the largest player in the North American activated carbon market
- **Arq** and **NORIT** have historically been positioned as #2 and #3 in the North American activated carbon market





Arq Investor Relations

Contacts:

Anthony Nathan, Arq
Marc Silverberg, ICR
investors@arq.com

8051 E. Maplewood Ave, Suite 210
Greenwood Village, CO 80111