

ICAC MEMBER SPOTLIGHT

Highlighting ICAC member technologies, markets, and mission



Advanced Emissions Solutions, Inc.
Advancing **Cleaner** Energy

ADVANCED EMISSIONS SOLUTIONS

ICAC is comprised of member companies from every corner of the air pollution control industry. Our new Member Spotlight series features various ICAC members and their technologies. In this issue, we are turning the spotlight on Advanced Emissions Solutions (ADES), a leader in **activated and non-activated carbon markets**.

WHO THEY ARE

Rooted in a reliable, tried, and true approach to contaminant capture and pollution mitigation through the deployment of activated carbon technologies, Advanced Emissions Solutions was formed in the early 2000s in anticipation of the implementation of EPA's Mercury Air Toxic Standards (MATS) regulations. Since the implementation of MATS, ADES has grown and is now serving a variety of end markets including industrials, soil and groundwater remediation and municipal water. ADES is headquartered in Denver, Colorado, with manufacturing facilities in Kentucky and Louisiana.

WHAT THEY DO

Advanced Emission Solutions focuses on improving the quality of life and environment through its unique **containment and capture solutions**. ADES houses industry experts versed in the fundamentals of activated carbon, allowing the production of high-quality activated carbons that can adapt and evolve with emerging challenges. In collaboration with its customers and their emission targets and environmental regulations, ADES provides highly engineered products that can address a wide host of applications.

AES Core Markets

- **ADA Carbon Solutions Mercury Capture:** Coal-fired power utilities and other large industrial users such as waste-to-energy and cement plants
- **CarbPure Technologies Municipal Potable Water Treatment:** Large, medium, and small water utilities
- **FluxSorb Technologies Soil and Ground Water Remediation:** Architectural and design engineers (AEs), site owners, and universities

MORE ABOUT AES'S PRODUCTS AND SERVICES

- ADES specializes in addressing pollutants/contaminants such as mercury, dioxin, and furans; taste and odor compounds such as MIB and Geosmin; atrazine; natural organic matter; petroleum hydrocarbons; chlorinated solvents; per- and polyfluoroalkyl substances (PFAS); coal combustion residual inorganics; heavy metals; and other emerging contaminants.

FAST FACTS

- Serving since the early 2000s
- Headquarters in Denver, Colorado
- Focus on **purification** of land, air and water through **containment and capture solutions** around **activated carbons**
- Active in ICAC's **Methane** and **PFAS Workgroups**

ICAC's ADES Participation



Domestic Conventional Pollutants Division



International Markets Division



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- ADES's PowerPAC and FastPAC series carbons are high-performance products that maximize in-flight capture of flue gas mercury under the most challenging operating conditions, ensuring no mercury disperses into the environment to cause air or water contamination.
- ADES pursues municipal potable water treatment markets with its CarbPure Technologies subsidiary and new and emerging remediation markets via its FluxSorb Technologies subsidiary.

A Year of Success

In 2022, Advanced Emissions Solutions successfully expanded its business and reached new milestones in the activated and non-activated carbon markets. ADES acquired Arq Limited, a UK-based technology company producing high-quality bituminous raw materials. ADES plans to leverage this asset to pursue further the emerging and growing North American granular activated carbon (GAC) markets and other adjacent, non-activated carbon markets, such as carbon black and asphalt additives.

THE FUTURE

In the near term, ADES expects increased demand for powdered activated carbon (PAC) within its core markets. In the longer term, ADES plans to focus on pivoting and transitioning into the growing granular activated carbon (GAC) market to address PFAS/PFOS treatment.

ADES also expects to expand its new line of remediation-based products, which include PAC/GAC and colloidal carbon products (CCP), and sees significant growth opportunities in the demand for Arq Powder™. To leverage its new acquisition of Arq Limited, ADES will expand its operational capabilities with ~\$95M of Capex between its Corbin, KY, and Coushatta, LA facilities over the next 18 months.

THE FUTURE

ADES is committed to being a leader in driving technical innovation and the commercialization of new products for high-value growth markets.

To learn more about ADES' products and to see the latest news and events, visit ada-cs.com.

Connect with Advanced Emissions Solutions

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