







Dan Menniti, ICAC President

LETTER FROM THE PRESIDENT

As we can all attest, the clean air industry has experienced an exceptionally busy year. ICAC's voice continued to carry in Washington D.C. and beyond, as both domestic and global stakeholders aim to achieve decarbonization.

Throughout our entire 60+ year history, ICAC has consistently offered unbiased technical expertise to numerous interested parties, the Environmental Protection Agency (EPA), the Department of Energy (DOE), the private sector and other

stakeholders seeking unbiased technology input. With significant developments in government policy and the marketplace, our focus remained constant – reaching out, staying relevant, and redefining goals.

Through public comments, collaborative meetings, and the development and dissemination of position papers, we continued to ensure that the technology voice of the air pollution control industry resonated in every facet of the energy transition related to air quality.

Our new position papers focused attention on the importance of air quality technologies to the future environmental challenges of industry.

- Recommendations for Rapidly Establishing a Thriving Hydrogen Ecosystem in the United States showcased the knowledge of and role that ICAC members have in developing the hydrogen economy.
- Criteria Pollutant Control in Decarbonization educated stakeholders by calling out how traditional pollutant control is still needed in many decarbonizing technologies, something that many stakeholders may not fully understand.

I am enthusiastic that we will continue to build on this momentum by addressing more topics in the year ahead.

We also elevated ICAC's internal and external profile by launching our new website with refreshed branding and content. The new site streamlines access to essential tools for our members, and the updated look attracts new members while enhancing navigation for those industry and government stakeholders seeking ICAC's technology positions and expertise.

Finally, we redefined our goals and identified our focus areas for the coming year. As ICAC members continue to evolve to meet emission challenges, we see new opportunities for ICAC to contribute to addressing key issues:

- The widespread issue of PFAS and its related air emissions
- Educating both federal and state policymakers on the importance and need for short and medium-term technology development
- Providing our technology input on grid stabilization challenges and long-term decarbonization efforts.

Reaching out, staying relevant, and redefining focus all speak to the strengths of this association. ICAC provides reliable, credible information that stakeholders have relied upon on for decades.

Thank you to every ICAC member who has contributed their time and knowledge to our organization this year and I look forward to executing our plan in the coming year.

Dan Menniti, ICAC President



INTERNAL ACTIVITIES

Technical Divisions and Working Groups

ICAC has four technical divisions: the Domestic Conventional Pollutants Division, the Emissions Measurement Division, the International Markets Division, and the Low Carbon Solutions Division, formerly known as the Carbon Emissions Management Division.

With the slew of new and modified regulations, clean energy legislation, and program implementation activities this year, our technical divisions were actively working together to respond to public solicitations and engage in regulatory activity. ICAC's technical divisions released two large work products to provide technical information to policymakers and other stakeholders on the energy transition.



Recommendations for Rapidly Establishing a Thriving Hydrogen Ecosystem in the United States: In October 2023, ICAC released a report debunking misconceptions about hydrogen production pathways and highlighting the role H2 solutions can play in reaching emissions reduction

goals. The report showcased ICAC member's expertise and current involvement with hydrogen projects worldwide. Our members provided recommendations to DOE on pathways to a clean hydrogen portfolio. They discussed the report with various organizations with a shared interest in establishing a robust U.S. hydrogen economy.

Criteria Pollutant Control in Decarbonization: In June, ICAC released another report discussing the essential role that traditional criteria pollutant control will play in the energy transition. As experts on air pollution management, ICAC members explored the application of various control technologies to decarbonization projects, including a case study focused on the primary emissions associated with hydrogen combus-



tion and the aftertreatment control options available to manage those emissions.

In addition to our hydrogen workgroup activities this year, ICAC's PFAS workgroup will educate policymakers to identify knowledge gaps in the PFAS management challenge. Additionally, as policymakers around the globe continue to set climate goals, ICAC will seek to highlight how near- and medium-term solutions, such as low-GHG hydrogen and CCUS, will help achieve long-term climate goals. We see value in helping policymakers understand what is technically achievable now and where further development and support are needed.

We are excited to continue building on the work these members are doing on these topics in the coming year.

New Communications Platforms

A key way ICAC engages with members is through our **digital communications**. Beginning in late 2023, ICAC restructured our email correspondence—the previous *Clean Air Connection* newsletter, which, while robust, could get lost in clogged email inboxes. Check out our new email communications for focused news alerts and information about member engagement opportunities.

ICAC Direct: The *ICAC Direct* identifies new and upcoming **engagement opportunities**, ranging from ICAC internal member meet-



ings, Cleantech Connect sessions, solicitations for public comments, or other opportunities. The *ICAC Direct* also will provide breaking news relevant to members.

ICYMI: There are countless news sources to digest daily, which can be overwhelming, so ICAC offers the *ICYMI*, an end-of-month wrap-up of the most critical news stories impacting our industry.



New ICAC Website

This year's other major change is a bit more obvious: the new ICAC website! ICAC members are forward thinkers, and it was time that our web presence reflects the industry's innovation and expanding areas of interest. We encourage members to register on our site for access to the members-only information and check out and re-acquaint yourself with the new features of this ICAC resource.

EXTERNAL ENGAGEMENT

ICAC Public Comments

As we've been doing since the association's inception over 60 years ago, we continue to provide critical information to the Environmental Protection Agency and the Department of Energy. ICAC's insights provide policymakers with information on what is technologically achievable, suggestions on successful, technology-neutral policy and regulation development, and other support needed to advance clean air technologies.

- June 2023: Mercury Air Toxics Standards (EPA)
- August 2023: <u>Greenhouse Gas Power</u> <u>Plant Rule</u> (EPA)
- December 2023: <u>Initial Regulatory Flexibility Analysis for New Source Performance Standards for GHG Emissions from New, Modified, and Reconstructed Fossil Fuel-Fired Electric Generating Units (EPA)</u>
- March 2024: <u>Proposed Amendments to</u> <u>Large Municipal Waste Combustor Emis-</u> <u>sion Standards</u> (EPA)
- May 2024: <u>Reducing GHG Emissions</u> from <u>Existing Gas Turbines at power</u> <u>plants</u> (EPA)
- June 2024: Request for Information on Industrial Decarbonization (DOE)

EXTERNAL COLLABORATION

Cleantech Connect

For the past couple of years, ICAC has been hosting Cleantech Connect sessions, which are informal discussions where we bring in experts in our industry to share their perspectives and knowledge and learn from ICAC members' expertise. Through these virtual events, members can increase their industry awareness, connect with one another, and expand their networks. We held four Cleantech Connects over the past year.



- August 2023: Tianyi Sun, a climate scientist at the Environmental Defense Fund (EDF), presented on the EDF's **Hydrogen Emissions Measurement Study**, identifying gaps in knowledge and areas where ICAC member technology is critical to obtain key data.
- October 2023: Cassie Lopina, Senior Director from AJW Inc., spoke to members on Regulatory Hurdles in Air Permitting and How Addressing Environmental Justice (EJ) can Provide Opportunities for Technology Providers.
- January 2024: We continued the robust conversation that started in the October CTC with Cassie. We heard from Pippin Mader, an engineer at the California Air Resources Board, who discussed the significant need for information on available and emerging clean air technologies for California's technology clearinghouse.
- April 2024: ICAC members got exclusive early access to Evergreen Action's latest report, "Accelerating the Clean Air Act's Innovation Engine: Opportunities to Reform Air Permitting Programs to Scale Up Clean Technology" and discussed it with its author. One of the report's recommendations was for EPA to look to trade associations with expertise representing technology manufacturers, specifically ICAC, for an annual report on the state of technology. This led to additional engagement with the EPA about how ICAC can fill that role.

EPA Roundtables

This year, EPA and ICAC continued our series of EPA Roundtables, where EPA staff and ICAC members trade off presenting and sharing technical information. ICAC led a Roundtable on methane control technology options, and EPA led a session on environmental justice and project permitting.

In the coming year, ICAC will continue to meet with the EPA and will expand these roundtable sessions with other areas in the federal government as the administration continues with its "whole of government" approach to meeting environmental challenges. ICAC is planning and scheduling meetings with DOE, the Department of Commerce, and other agencies and groups for the coming year.

ICAC's voice is critical to ensuring that best practices, viable technology, and agency lingering questions can all be achieved and answered. If you have suggestions about what your company would like to present to a government agency, please get in touch with ICAC staff.

ETTAC

This year, ICAC staff served on the Environmental Technologies and Trade Advisory Committee (ETTAC), a federally established committee of government and industry representatives who advise the federal government on enhancing the competitiveness of U.S. environmental technology providers in global markets. ICAC Executive Director Clare Schulzki served as the Chair. ETTAC's recommendations to the Administration included further development of carbon management incentives, validation services for environmental technologies, expansion of export credit lending terms for climate projects, and efforts to understand and manage PFAS.

Year in Review

Institute of Clean Air Companies



ICAC Membership Tools & Resources

- Who We Are
- Regulatory Tracker
- ICAC LinkedIn

ICAC Executive Committee

PRESIDENT
Daniel Menniti
Mississippi Lime

VICE PRESIDENT
Greg Filippelli
Lhoist North America

TREASURER & SECRETARY
Grant Grothen
Burns & McDonnell

2023-2024 ICAC MEMBERS

Arq	BISON ENGINEERING, INC.	BURNS MSDONNELL
CAPTIS AIRE	DURAG	JM Johnson Matthey Inspiring science, enhancing life
Supplemental Lines	MLC.	MITSUBISHI POWER
Origen	Thermo Fisher SCIENTIFIC	umicore
	GORE	

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ICAC TECHNICAL DIVISIONS





