

June 5, 2017

Michael Brune, Executive Director Sierra Club 2101 Webster Street, Suite 1300 Oakland, CA 94612

Trip Van Noppen, President Earthjustice 50 California Street, Suite 500 San Francisco, CA 94111 Stephen Brobeck, Executive Director Consumer Federation of America 1620 I Street, NW, Suite 200 Washington, DC 20006

Rhea Suh, President Natural Resources Defense Council 40 West 20th Street, 11th Floor New York, NY 10011

Dear Mr. Brune, Mr. Brobeck, Mr. Noppen, and Ms. Suh:

Thank you for your leadership on energy efficiency programs and for your tireless efforts to protect the environment. Your organizations have made a significant impact on public policy, but we believe you have missed a great opportunity to create lasting change that protects consumers.

The Air Conditioning Contractors of America (ACCA) is the national trade association representing more than 60,000 heating, ventilation, air conditioning, and refrigeration (HVACR) professionals in every state. For more than fifty years, ACCA has developed numerous HVACR industry standards – recognized by the American National Standards Institute (ANSI) – that are widely accepted industry practices. Many ACCA standards are included in national, state, and local building codes.

Our organization has played a leadership role in energy efficiency issues for decades and have worked on these issues with the Department of Energy (DOE) since its creation in 1977. ACCA also has an excellent relationship with the Environmental Protection Agency (EPA) and numerous associations representing state and local governments.

ACCA, like your organizations, supports better indoor air quality and investing in energy efficiency. However, unlike other organizations who champion energy efficiency, ACCA has long recognized that increased energy efficiency is not as simple as creating new standards or exchanging older HVACR systems for the newest and most efficient units. HVACR systems are not "plug-and-play" appliances like a refrigerator or dishwasher, and the focus on lab-tested efficiencies for HVACR equipment must be addressed.

For energy efficiency investments to work, the focus and mindset must change from the misguided labtested efficiency to realized, or installed, efficiency of HVACR equipment. These mechanical systems are very complex and require skilled technicians to properly size equipment, ensure the ducts are designed to deliver precise airflow, and to provide adequate refrigerant charges. If these basic elements are not followed, then indoor air quality is jeopardized, the intended performance gains are not realized, and a significant amount of energy is wasted – even by highly efficient ENERGY STAR products. In fact, the National Institute of Standards and Technology (NIST) released a study in 2014 that examined the energy penalties in unitary HVAC units¹. NIST found that an HVAC system could use up to 40 percent more energy than it should due to duct leakage, equipment oversizing, or inadequate refrigerant charges – the basic elements required to ensure a quality installation. The EPA believes that half of U.S. homes suffer from poor installation practices².

To be clear, because of the singular focus on increasing the efficiency of HVACR equipment and ignoring the installation of said equipment, most homes are less efficient than they should be. Unfortunately, homeowners have spent significantly more on these more efficient products, but are getting little return on their investments.

This issue has been recognized by the EPA and National Association of State Energy Officials (NASEO). The EPA maintains an ENERGY STAR quality installation assurance program and NASEO's Board of Directors recently passed a resolution highlighting the importance of quality HVAC installation practices. NASEO's resolution states that even "cutting-edge heating, ventilation, and air conditioning technologies, if improperly installed, may fail to realize important benefits for homeowners."

As an association that supports *realized* energy efficiency programs, ACCA developed the nationallyrecognized quality installation standard for residential and commercial HVACR systems. If followed, the **ANSI / ACCA 5 QI Standard** (*HVAC Quality Installation Specification*) – the minimum design and installation requirements for residential and commercial HVAC applications – will address the efficiency problems caused by improper installations of HVAC systems.

Perhaps your organizations' efforts and intentions may be best served by promoting QI practices that are supported by the HVACR industry. The 11-member HVACR Industry Alliance, made up of engineers, manufacturers, contractors, and distributors, all support properly installing HVACR equipment – which will provide lasting benefits to consumers.

I know your organizations are serious about promoting energy efficiency and helping consumers realize the benefits of their investments in highly efficient HVACR products. To that end, I encourage your organizations to help advocate for quality installation practices of HVACR systems.

I would welcome the opportunity to address these issues with you in person. It would be an honor to work with you and your organizations on this initiative.

You can reach me by phone at 703-824-8862 or contact my assistant, Rosemary Graeme at rosemary.graeme@acca.org.

Sincerely,

Have T. Stalbricht

Paul T. Stalknecht President and CEO Air Conditioning Contractors of America

¹ <u>http://www.nist.gov/el/building_environment/hvac-110714.cfm</u>

² <u>https://www.energystar.gov/index.cfm?c=hvac_install.hvac_install_index</u>