

**DOCKETED**

<b>Docket Number:</b>	21-IEPR-06
<b>Project Title:</b>	Building Decarbonization and Energy Efficiency
<b>TN #:</b>	239838
<b>Document Title:</b>	AO Smith Comments - Workshop on Building Decarbonization & Quality Installation of Heating and Air Conditioning Equipment
<b>Description:</b>	N/A
<b>Filer:</b>	System
<b>Organization:</b>	A. O. Smith Corporation
<b>Submitter Role:</b>	Public
<b>Submission Date:</b>	9/24/2021 12:26:01 PM
<b>Docketed Date:</b>	9/24/2021

*Comment Received From: A. O. Smith Corporation*  
*Submitted On: 9/24/2021*  
*Docket Number: 21-IEPR-06*

**AO Smith Comments - Workshop on Building Decarbonization & Quality Installation of Heating and Air Conditioning Equipment**

*Additional submitted attachment is included below.*



September 24, 2021

California Energy Commission  
Dockets Office, MS-4  
1516 Ninth Street  
Sacramento, California 95814

**RE: Comments to Commissioner Workshop on Building Decarbonization - Quality Installation of Heating and Air Conditioning Equipment; Docket # 21-IEPR -06**

A. O. Smith appreciates the opportunity to submit comments to the California Energy Commission (CEC) [Workshop on Building Decarbonization Quality Installation of Heating and Air Conditioning Equipment](#) held on September 10, 2021. The workshop offered important perspectives from equipment distributors and contractors, local permitting offices and other stakeholders on steps that can be taken to improve permitting compliance rates and ensure quality installation of heating and air conditioning equipment in buildings to aid in achieving California's building decarbonization goals.

As a leading manufacturer of heat pump water heaters (HPWHs), which play a key role in building decarbonization, A. O. Smith appreciates the CEC for holding this workshop to discuss these important topics and the opportunity to provide comments as it relates to quality installations for HPWHs.

**About A. O. Smith**

A. O. Smith is a global leader applying innovative technology and energy efficient solutions to products manufactured and marketed worldwide. A. O. Smith Corporation, with global headquarters in Milwaukee, Wisconsin, applies technology and energy-efficient solutions to

products manufactured and marketed worldwide. Listed on the New York Stock Exchange (NYSE), the company is one of the world's leading manufacturers of residential and commercial water heating equipment and boilers, as well as a manufacturer of water treatment and air purification products. Along with its wholly owned subsidiary, Lochinvar LLC, A. O. Smith is the largest manufacturer and seller of residential and commercial water heating equipment, high efficiency residential and commercial boilers, and pool heaters in North America.

### **Quality Installations of HPWHs**

A. O. Smith understands that quality installation is essential to achieving the high levels of energy efficiency and performance from building equipment. We provide a range of HPWH installation and service training for contractors. This includes requiring our affiliated contractors and installers to complete training through our A. O. Smith University platform.

Currently, to install a HPWH, the California State Licensing Board (CSLB) requires a license appropriate for the job at hand. Any contractor who has a plumbing license (C-36), a general license (B), or a boiler fitting license (C-4) is adequately trained to install a HPWH. Additionally, a contractor is required to pull and close a permit to legally install a HPWH unit. Further, permits may also be required for an electric panel upgrade. Based on our experience working with these appliances, existing law and permitting regulations adequately ensure successful installations.

A. O. Smith recommends simplifying the regulations to make the installation process run more smoothly. It is critical to have streamlined processes in place for permitting, inspections and training requirements that will facilitate a smooth transition to decarbonizing the built environment.

### **Addressing the Shortage of Experienced HPWH Installers**

Given the state's climate goal to reach carbon neutrality by 2045, this would require an exponential ramp up of the use of the HPWHs in new and existing buildings. There is currently a shortage in California of plumbing contractors who have HPWH experience because the majority of water heating systems in California are gas-fired. The current pool of trained contractors and installers is limited which keeps the HPWH market from growing a consistent and stable workforce. As such, we recommend that CSLB, CEC and local agencies work together to explore barriers to the market, including licensing requirements which can help to address the HPWH contractor shortage that many manufacturers see taking place currently.

### **Implementing Streamlined Process for Permitting and Inspections**

Inspections on installations are important because it ensures that work was performed to specifications and the appliance will work efficiently. Nevertheless, in-person inspections can

further delay installations. A. O. Smith is encouraged that the City of San Jose has implemented an online permitting and inspection program for HVAC with heat pump technology which includes training for inspectors on heat pump technology installations so that they have the knowledge of what to look for in a quality heat pump installation.

While many local governments have passed ordinances to require new construction to be all electric, there is no specific state or local mandate to replace gas water heaters with HPWHs in the current building stock. Customers still have the option to choose a gas water heater and will do so if the conversion installation process is slow, expensive, or complicated. A water heater is a critical piece of home (and public health) infrastructure and residents expect replacement within hours, not days, or weeks, or months. Californians need a streamlined, easy-to-use process to assist homeowners and property owners in embracing this high efficiency technology. An online permitting process and remote inspections through virtual verification through pre and post pictures of installations are a step in the right direction.

### **Conclusion**

We understand that California's transition to electrifying the built environment will require a delicate balancing act between transforming a new market, growing a skilled workforce with the requisite education and training as well as ensuring quality installations. In order to meet or fast track our electrification goals, it is imperative to streamline processes for installations across the state.

A. O. Smith thanks the CEC for the opportunity to provide comments. We look forward to continuing the dialogue with the Commission on these important topics.

Respectfully submitted,



Joshua C. Greene, Esq.  
Corporate Vice President – Government and Industry Affairs  
A. O. Smith Corporation  
[jcgreene@aosmith.com](mailto:jcgreene@aosmith.com)