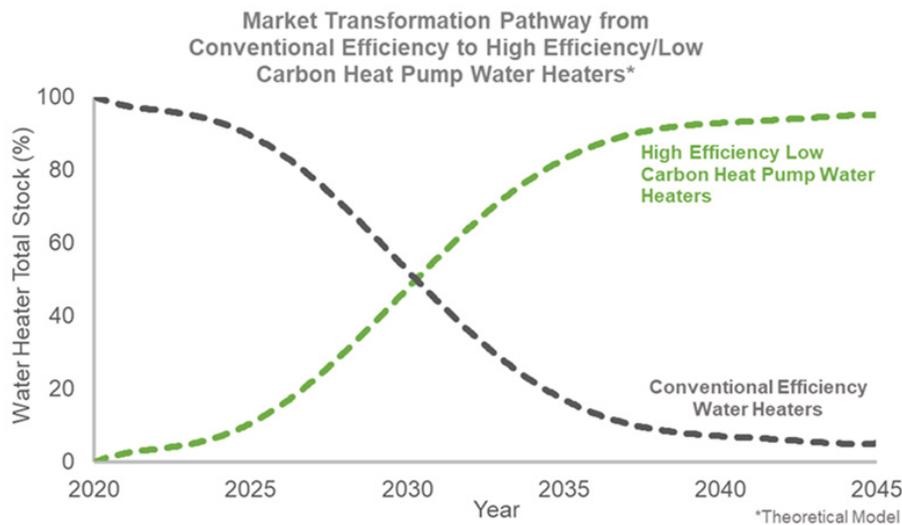


ADVANCED WATER HEATING INITIATIVE:

Bringing Heat Pump Water Heaters into the Mainstream

The Advanced Water Heating Initiative is a multi-year effort to overcome market and technology barriers and catalyze a transition to a robust heat pump water heater (HPWH) market. Increasing concern over the energy use and greenhouse gas emissions associated with heating water led to the formation of the initiative. The market transformation effort is an initiative of New Buildings Institute (NBI). By convening utilities, government agencies, manufacturers, researchers, advocates, and building industry professionals throughout California and the Northwest to create a community, share knowledge, develop strategy and work products toward this goal.*



Market transformation strategies that support increased sales and installations of advanced heat pump water heaters will help grow total stock that matches conventional water heater total stock. AWHI members set a target of 45% of the west coast water heating stock to be HPWHs by 2030.

Why Heat Pump Water Heaters?

Heat pump water heaters are the best choice for heating water because they:

- are a proven technology.
- are two-to-four times as efficient as the common approaches to providing hot water.
- can support the growing number of policies calling for decarbonization by eliminating carbon emissions at the building as well as at the generation source.
- can store hot water for later use, serving as a flexible energy storage system that can offset utility peak demands or absorb surplus renewable energy.
- provide end-customers with significant energy and cost savings.
- reduce use of fossil fuel and associated pollution.

*While the initiative is primarily focused on market transformation efforts along the West Coast, we welcome interest from other regions of the country.

Key Objectives of the AWHI

The key objectives of the Advanced Water Heating Initiative include:

PROVIDE ALIGNMENT in program design, marketing and messaging in order to coordinate efforts, which will assure manufacturers and bolster investment in the continued development of these technologies.

SUPPORT UTILITIES that are developing and implementing HPWH programs. Programs will provide strategic utility investments in the HPWH market and increased program incentives in order to catalyze overall market transformation.

BRING ALL OF THE KEY STAKEHOLDERS TOGETHER to share their experiences and learn from each other in order to accelerate market development.

Approach to Market Transformation

The AWHI steering committee and leadership is pursuing four key market strategies that will develop favorable policies, market growth, and overcoming technical barriers to the four key applications for heat pump water heaters:

1

Unitary 240V
heat pump
water heaters

2

Unitary 120V
heat pump
water heaters

3

Central heat
pump water
heaters for
multifamily
housing

4

Connectivity
and controls, for
grid-connectivity
and demand
management

Overcoming Technical Barriers

Current Barrier to HPWH adoption	Market transformation approach
Low product availability due to low supply chain awareness and confidence in sales volume	AWHI will provide engagement with manufacturers and distribution channel, develop multi-channel awareness. This will lead to increased understanding of value of HPWHs.
Resistance to installation due to technology familiarity and available support for installers	Supply chain training and education to installers will build trade confidence on the technology, leading to an increase of installation of HPWHs.
Few utility incentives programs due to insufficient sharing of data regarding system performance and grid benefits to offset utility peak demands	AWHI will support utilities that are developing and implementing HPWH programs. Programs will provide strategic utility investments in the HPWH market and increased program incentives in order to catalyze overall market transformation.
Misaligned policies due to lack of policy maker awareness about the health benefits of shifting to fossil fuel-free technologies	AWHI will act as a cohesive and coordinated market transformation entity in order to increase awareness among policy makers and the market. AWHI will work to align current and future energy codes and advocate for standard specification, test procedure and qualified products list that promotes efficiency for the US and Canada.
Low consumer and policy maker awareness about the health benefits of shifting to fossil fuel-free technologies	AWHI will increase awareness through local government outreach and consumer awareness campaigns. This will lead to regional and national players adopt to HPWHs.

Get Involved

More than 50 organizations have joined the Advanced Water Heating Initiative in order to make advanced heat pump water heaters mainstream in the marketplace in the next 10 years. If you'd like more information, please contact:

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Read More: [newbuildings.org/
resource/advanced-water-
heating-initiative/](https://newbuildings.org/resource/advanced-water-heating-initiative/)

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New Buildings Institute (NBI) is a nonprofit organization driving better energy performance in commercial buildings. We work collaboratively with industry market players—governments, utilities, energy efficiency advocates and building professionals—to promote advanced design practices, innovative technologies, public policies and programs that improve energy efficiency. We also develop and offer guidance and tools to support the design and construction of energy efficient buildings. newbuildings.org