

Whirlpool, Kohler focus on water use at the ReNEWW House



The next phase for the ReNEWW House is to add net-zero water use in addition to net-zero energy use.

Whirlpool Corporation and Kohler Co. are researching ways to achieve net-zero water at the ReNEWW House, a retrofitted research home located near Purdue University campus.

According to recent projections from the Energy Information Agency and USA Today, by 2025 Americans will see their water bills double and potentially triple in major metro areas. This threat to the wallets of homeowners across the country is adding to speculation that pressure to the U.S. infrastructure, already desperate for solutions to a water shortage in California, is headed toward a significant issue in water access.

Through their products, Whirlpool Corporation, a major home appliance manufacturer, and Kohler Co., a leader in the manufacture of kitchen and bath products, make up nearly all of the indoor water usage in the residential home.

"With 860 million appliances in the United States alone, Whirlpool Corporation has reduced energy and water consumption in our products to deliver efficient home appliances. It's time to look at how we can leverage our appliances to optimize and transform the total home system to try to achieve net-zero water impact," said Ron Voglewede, global sustainability director at Whirlpool Corporation and member of the Alliance for Water Efficiency's Board of Directors.

"We recognize that to further extend the benefits of water-efficient fixtures and faucets while maintaining optimum performance, we need to look at home water consumption holistically," said Rob Zimmerman, sustainability senior channel manager at Kohler. "We hope that by combining our engineering resources with those of Whirlpool's to understand the technical challenges of creating a 'net zero water' house, we can develop new insights for designing home plumbing, water storage and treatment systems that further reduce water use and better protect our water supplies."

The ReNEWW House -- for Retrofitted Net-Zero Energy, Water and Waste -- is a multi-year research project in which Whirlpool Corporation is working with Purdue University and other industry partners to retrofit a 1920s vintage home into a net-zero energy, water and zero-waste-to-landfill structure.

The home was built in 1928 and has about 3,000 sq. ft. of conditioned space, three bedrooms and two full bathrooms. It is two stories tall and has a full basement - which has been converted into a living laboratory.