



Connected Buildings Challenge



PARTNER FACT SHEET

The fact: Connected-building devices such as smart appliances, safety and security systems, and smart temperature and lighting controls are projected to grow their market share significantly to reach \$490 billion in 2019.

The problem: Some “gadgets” lack a fundamental connection with mainstream consumer benefits, such as energy/cost savings or improved indoor life quality. Many engineering solutions lack an intuitive user interface. In addition, truly connected smart buildings should not only benefit their immediate occupants but also the larger community as a whole by helping strengthen a resilient and reliable grid.

The solution: The Connected Buildings Challenge aims to accelerate the growth of the smart, connected buildings by investigating the consumer needs and market drivers, creating innovative solutions, testing and demonstrating technologies and success, and assisting in launching new business with leveraged private funds.

Pacific Northwest National Laboratory (PNNL) announces a series of innovation challenges to promote the acceleration of smart, connected buildings. We are seeking industry and academia partners to help us shape the challenges, enhance the impacts, and advance the developed solutions.

Partners will team up with us to organize the challenges, enlarge the connected building network, provide testbeds and demonstrations, and assist in seeking opportunities to support successful solutions.

Partners can also include their products or services in the Challenge and use the provided platform to showcase or enhance their own innovations. Partners who wish to do this are expected to provide participating teams with their products or services and corresponding technical support during the challenges.

Join our network and be a leading force in the connected building movement!

ABOUT THE CHALLENGE

The first challenge kicked off with a webinar in early April. The selected teams work at their own locations during the challenge period. The final demo for the first challenge will be on August 3, 2016 in Seattle. The second challenge will be announced in July 2016.

VOLTTRON™ will be used as the center software platform for development during the challenge. VOLTTRON™ is an open-source software tool that efficiently manages energy use among interconnected appliances and devices, such as heating, ventilation and air conditioning (HVAC) systems, lighting, electric vehicles, and others. More information on VOLTTRON™ can be found at:

<http://bgintegration.pnnl.gov/volttron.asp>.

HOW TO JOIN

For more information contact us at CBChallenge@pnnl.gov or visit

<http://bgintegration.pnnl.gov/connectedbuildings.asp>.