



Connected Buildings Challenge



PARTICIPANT FACT SHEET

WHO? Pacific Northwest National Laboratory (PNNL) announces a series of innovation challenges to accelerate the development of connected buildings. We are seeking industry entities, individuals, and currently enrolled or recently graduated students to participate in the challenges.

WHERE? The selected teams work at their own locations during the challenge period. The final demo for the first challenge is hosted by the Smart Buildings Center in the Pacific Tower, a real-life testbed located in Seattle, WA.

WHAT? Selected teams will compete while integrating smart buildings sensors/devices with the open-source software VOLTTRON™—creating innovative solutions that connect consumers to cutting edge building control technologies.

WHY? The building sector consumes approximately 40 percent of U.S. total primary energy and people spend as much as 90 percent of their time indoors. Innovative connected building technologies play an essential role in saving energy, developing a more intelligent, reliable utility network, and creating a more comfortable, healthy, and resilient built environment.

WHEN? The first challenge kicked off with a webinar in early April. The final demo for the first challenge will be on August 3, 2016. The second challenge will be announced in July 2016.



HOW?

PNNL and its partners will provide the selected teams with state-of-the-art connected control devices and gadgets, as well as technical support. PNNL will also provide the overarching integration software platform VOLTTRON™, hardware, and free training. YOUR TEAM will provide an “Internet of Things” and energy service-related solution to a targeted challenge, the specification of which can be defined by your team. You can also choose to bring your own device (i.e. BYOD) to integrate with the VOLTTRON™ platform.

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 other connected equipment.

More information on VOLTTRON™ can be found at <http://bgintegration.pnnl.gov/volttron.asp>.

GET INVOLVED!

1. Form your team
2. Define your ‘Connected Buildings’ project
3. Submit your pitch online
4. Create an innovative solution and demonstrate it to DOE and leading industry entities
5. See your project go live in real buildings
6. Sustain your success with assistance from DOE and other interested parties

REGISTRATION AND INFORMATION

Find out more and register at <http://bgintegration.pnnl.gov/connectedbuildings.asp>.

QUESTIONS?

Contact us at CBChallenge@pnnl.gov.



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