

Onsite Energy Program: Technical Assistance to Adopt Onsite Energy

The U.S. Department of Energy's (DOE) Onsite Energy Technical Assistance Partnerships (TAPs) help American industrial and other large energy users lower costs, install onsite energy technologies, and increase reliability, security and energy independence.

What Is Onsite Energy?

Onsite energy refers to electric and thermal energy generation and storage technologies that are physically located at an industrial facility or other large energy users, and provide onsite energy services directly to their site.

Onsite energy encompasses a broad range of technologies that are suitable to serve large energy loads, including battery storage, combined heat and power, district energy, fuel cells, geothermal, industrial heat pumps, renewable fuels, solar photovoltaics, solar thermal, thermal storage, wind power, and others.

Onsite energy allows facilities to improve their reliability, operate with more flexibility, and reduce operating costs. When facilities increase their onsite energy, they reduce their dependence on energy utilities and are better able to manage outages and other reliability issues. With onsite energy, facilities can also decide to generate or purchase energy when it is most economical to do so.



To meet evolving needs in the industrial sector, the U.S. Department of Energy initiated a broader Technical Assistance Partnership (TAP) program, based on the successful model of the Combined Heat and Power TAPs, with the goal of providing similar services for a broader set of technologies through the Onsite Energy Program. *Photo from Adobe Stock*

DOE's Onsite Energy Program

DOE's Onsite Energy Program provides technical assistance, conducts market analysis to identify onsite energy opportunities in the industrial sector, evaluates current tools for assessing onsite energy technologies, develops technical reports and fact sheets detailing relevant onsite energy technologies, and supports publicly available analysis tools to evaluate the economics and feasibility of deploying onsite energy technologies. The results of these efforts will highlight strategies and pathways to accelerate integration of onsite energy technologies through analysis, education, and outreach.

The Onsite Energy Program is part of a broad portfolio of technical assistance programs at DOE that are designed to help industrial facilities plan for future energy needs. Other programs include Better Plants, Energy Management Programs, and the Industrial Training and Assessment Centers.

What Assistance Do the Onsite Energy TAPs Provide?

DOE's 10 regional Onsite Energy TAPs provide technical assistance to end users and other stakeholders about technology options for achieving onsite energy objectives. Key services include:

- **End-User Engagement:** Partner with organizations representing end users to advance onsite energy as a cost-effective solution for meeting facility objectives and needs.

- **Technical Assistance:** Screen sites for opportunities to implement onsite energy technologies and provide advanced services to maximize economic impact and reduce risk from initial screening to installation to operation and maintenance.
- **Stakeholder Engagement:** Engage with strategic stakeholders, including utilities and policymakers, to identify and reduce barriers to onsite energy through fact-based, unbiased education.

The Onsite Energy TAPs expand upon DOE's successful Combined Heat and Power (CHP) TAPs, which helped transform the U.S. industrial market for CHP, waste heat to power, and district energy technologies for nearly two decades. The Onsite Energy TAPs include a wider range of onsite energy technologies and focus on technology integration as a key economic driver for end users.

The 10 regional Technical Assistance Partnerships (TAPs) cover all 50 states, Guam, Puerto Rico, and the U.S. Virgin Islands. This regional model ensures that end users receive guidance and support that reflect local considerations and are rooted in clear understanding of relevant utility program and state energy office goals, policies, and offerings.

The TAPs are also supported by a trio of DOE national laboratories (the National Laboratory of the Rockies, Oak Ridge National Laboratory, and Pacific Northwest National Laboratory) with subject matter expertise in onsite energy deployment.

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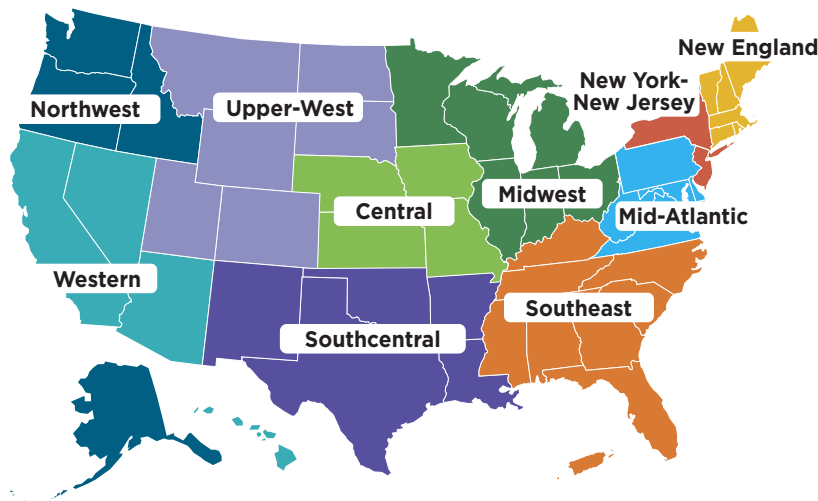
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The Onsite Energy Program leverages a regional network of Technical Assistance Partnerships to help industrial facilities and other large energy users increase the adoption of onsite energy technologies. *Illustration from the U.S. Department of Energy*

Who Benefits From This Program?

This program supports the U.S. industrial sector and other large energy users to add onsite energy technologies to their facilities. Large energy users can include campuses, hospitals, and other sites with significant energy loads year-round.

The Onsite Energy TAPs also conduct education and outreach and engage with policymakers, utilities, and other key stakeholders to identify pathways that could accelerate the integration of onsite energy technologies.

These activities include developing regional resources, sharing best practices, and building partnerships that increase the use of onsite energy solutions across the U.S. industrial sector.

Want to Get Involved?

Each Onsite Energy TAP represents a U.S. region encompassing multiple states and serves as the primary technical, market, and policy point of contact for end users and other state and local stakeholders.

Additionally, as part of DOE's Industrial Assessment Center Implementation Grant Program, small and medium-sized manufacturers may receive grants of up to \$300,000 to implement recommendations made by the Onsite Energy TAPs.

For more information, reach out to the TAP director for your region, located in the figure above. ■

U.S. DEPARTMENT of ENERGY

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