U.S. DEPARTMENT OF
ENERGY

Office of
ENERGY EFFICIENCY & RENEWABLE ENERGY

Onsite Energy Program:

Technical Assistance to Adopt Clean Energy

The U.S. Department of Energy's (DOE) Onsite Energy Technical Assistance Partnerships (TAPs) help industrial and other large energy users transition to clean energy, lower costs, reduce emissions, and contribute to a clean energy economy.

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 clean 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 resilience, 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 the evolving needs in the industrial sector, the U.S. Department of Energy's Industrial Efficiency and Decarbonization Office is initiating a broader Technical Assistance Partnership (TAP) program, based on the successful model of the existing Combined Heat and Power TAPs, with the goal of providing similar services for a broader set of technologies through a new Onsite Energy Program. *Photo from Getty Images*

DOE's Onsite Energy Program

DOE's Onsite Energy Program provides technical assistance, conducts market analysis to identify clean 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 clean 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 become more energy efficient, reduce emissions, and plan for future energy needs. Other programs include Better Plants, Better Climate Challenge, Energy Management Programs, and the Industrial 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 clean energy objectives. Key services include:

- **End-User Engagement:** Partner with organizations representing end users to advance onsite energy as a cost-effective way to transition to a clean energy economy.
- **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 by converting 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 Renewable Energy Laboratory, Oak Ridge National Laboratory, and Pacific Northwest National Laboratory) with subject matter expertise in onsite energy deployment.

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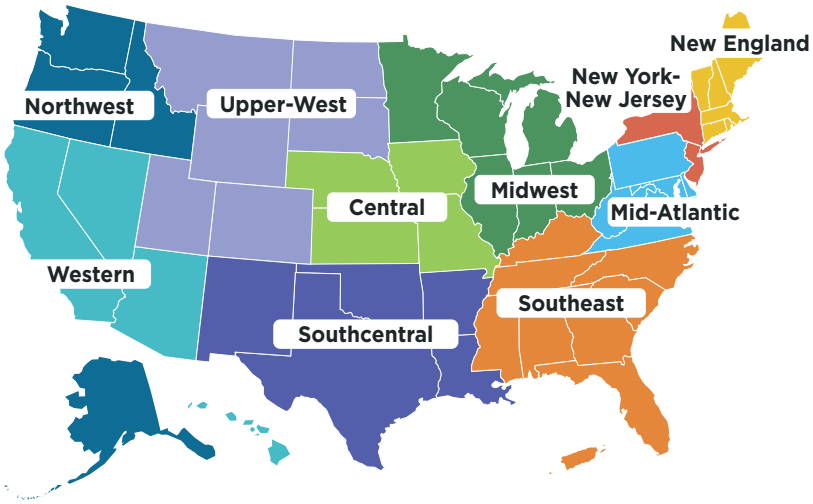

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The Onsite Energy Program leverages a regional network of Technical Assistance Partnerships to help industrial facilities and other large energy users increase the adoption of onsite clean energy technologies. *Illustration from the U.S. Department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

Who Benefits From This Program?

This program supports the U.S. industrial sector and other large energy users to add onsite clean 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 clean energy technologies.

These activities include developing regional resources, sharing best practices, and building partnerships that drive decarbonization 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. ■

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For more information, visit:
energy.gov/eere/iedo/onsite-energy-program

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