

Advanced Manufacturing Office Technical Partnerships

The Advanced Manufacturing Office (AMO) is the only technology development office within the U.S. Government that is dedicated to improving the energy and material efficiency, productivity, and competitiveness of manufacturers across the industrial sector.

Technical Partnerships

The Technical Partnerships subprogram provides critical support to the adoption of advanced energy efficiency technologies and practices. The subprogram supports public-private partnerships and provides field validation to advance the adoption of cost-effective combined heat and power (CHP) technologies; provides resources to assist manufacturers in reducing their energy intensity; promotes the adoption of energy management programs, provides targeted energy efficiency, productivity, and waste/water use reduction practices to small- and medium-sized manufacturers.

Better Plants Program

The Better Plants program partners with manufacturers and water utilities to improve energy efficiency and competitiveness in the industrial sector, saving money in the process. Better Plants partners voluntarily set a specific goal, typically to reduce energy intensity (improve productivity) by 25% over a 10-year period across all their U.S. operations. Better Plants supports all partners with technical support and national recognition.



Youseff Elkassis, lead student of the San Diego State University Industrial Assessment Center (IAC) taking measurements on an assessment in 2016.

Photo Courtesy San Diego State University IAC.

More than 200 organizations have joined *Better Plants*, representing 12% of the U.S. manufacturing energy footprint and workers at thousands of industrial facilities across all 50 states.

50001 Ready

The 50001 Ready program provides a structured means to managing energy by recognizing facilities and organizations that self-attest to meeting the requirements of ISO 50001, the global standard for energy management at industrial, commercial and institutional facilities. The 50001 Ready program does not require any external audits or certifications, and is a self-paced, no-cost way for organizations to build a culture of structured energy improvement that leads to deeper and sustained savings. In late 2017, AMO launched the 50001 Ready Navigator, which provides a step-by-step toolkit to help facilities institute ISO 50001 in their facilities.

Superior Energy Performance 50001®

The Superior Energy Performance 50001® (SEP 50001) certification program provides recognition to facilities that have certified to ISO 50001, an energy management system standard, and are third-party verified to demonstrate their energy performance improvement. SEP 50001 also provides technical resources, including guidance, tools, and protocols, to support facilities in attaining ISO 50001 certification. Verified data from ISO 50001 partners have shown an average of 4.5% per year

energy performance improvement in both commercial and manufacturing facilities.

Combined Heat and Power

Combined Heat and Power (CHP) offers the opportunity to improve energy resiliency, mitigating the impacts of an emergency by keeping critical facilities running without any interruption in electric or thermal service, as well as saving money by generating power and heat onsite. AMO's CHP Technical Assistance Program provides facilities and stakeholders with resources necessary to identify CHP technical opportunities and provides technical support for installation of CHP systems in industrial, commercial, institutional, and other applications.

Industrial Assessment Centers

The Industrial Assessment Center (IAC) program provides small- and medium-sized manufacturers with no-cost energy assessments from local engineering universities while also training the next generation of energy engineers. AMO partners with 35 engineering schools across the United States to offer smaller manufacturers and utilities on-site energy and productivity assessments to identify actionable opportunities to save money and increase resiliency, while also preparing the next generation of manufacturing professionals. To date, more than 18,000 IAC assessments have resulted in close to \$7.2 billion in identified energy savings and productivity improvements.



Industrial Assessment Centers 2017 - 2021. Photo Courtesy Department of Energy.

Technologist in Residence

The Technologist in Residence (TIR) Program pairs senior technical staff from national laboratories and manufacturing companies to work together towards long-term strategic collaborative partnerships and impactful manufacturing solutions. The vision of the TIR Program is to catalyze strong national laboratory-industry relationships that result in significant growth in high-impact research and development.

Build4Scale

The DOE's Build4Scale™ training helps energy hardware innovators avoid the common pitfalls of product design by teaching them manufacturing design fundamentals in the early stages of

prototype development, and provides them with the information they need to work with manufacturers on first production runs.

Energy System Tools

AMO provides software tools, and online training to support each tool, to help facilities optimize energy use of critical equipment such as steam and boiler systems, process heating (furnaces), compressed air, motors, pumps and fans, and overall energy management.

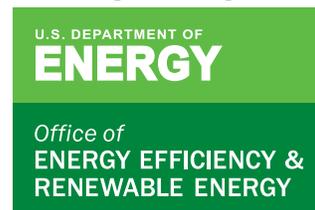
Additional Resources

Tap into the successful state practices for industrial energy efficiency measures and implementation of CHP, technical publications, state resources, partner case studies, and energy analysis.

For additional information, please contact

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