



Sandia National Laboratories and eight other companies and research organizations will collaborate to advance a distributed power system that can produce cleaner, more efficient electricity. Pictured above, scientists investigate a turbine and compressor at a Sandia National Laboratories test facility.

Photo credit: Randy Montoya, Sandia National Laboratories

The Clean Energy Manufacturing Initiative (CEMI) is a U.S. Department of Energy (DOE)-wide commitment to innovation and breaking down market barriers in order to enhance U.S. manufacturing competitiveness while advancing the nation's energy goals.

As part of its mission, CEMI builds partnerships around strategic priorities to increase U.S. clean energy manufacturing competitiveness. This requires an “all-hands-on-deck” approach that involves the nation's private and public sectors, universities, think tanks, and labor leaders working together.

DOE currently supports partnership efforts across the country through a range of pilots, initiatives, institutes, and facilities to build and enhance the impact of stakeholder collaboration on the nation's clean energy manufacturing future.

PUBLIC-PRIVATE INITIATIVES

Technologist in Residence

CEMI's Technologist in Residence (TIR) pilot is designed to catalyze strong national laboratory-industry relationships

that will lead to high-impact, collaborative research and development. By developing mechanisms to help interested companies more easily connect and form relationships with DOE's national labs, TIR will enhance the commercial impact of DOE's national labs. www.energy.gov/eere/cemi/technologist-residence-pilot

Cyclotron Road

The Cyclotron Road program provides resources for entrepreneurial researchers to advance breakthrough energy materials and manufacturing technologies as they mature from science to market. Cyclotron Road provides its innovators with targeted support through Lawrence Berkeley National Laboratory's facilities and the expertise found within DOE, and connects them to an aligned network of industry advisors and partners—driving leading-edge energy technologies toward commercial production. www.cyclotronroad.org

Small Business Vouchers

The National Laboratory Impact Initiative's Small Business Voucher Pilot connects clean energy innovators across the country with top-notch scientists, engineers, and world-class facilities. By increasing small businesses' access to lab capabilities and broadening labs' awareness of small business needs, the pilot is helping fulfill the technical assistance gaps that many clean tech small businesses face. www.energy.gov/eere/lab-impact

PARTNERSHIP OPPORTUNITIES AT INSTITUTES AND FACILITIES

Manufacturing Demonstration Facility

DOE's Manufacturing Demonstration Facility (MDF) is a collaborative manufacturing community established at Oak Ridge National Laboratory that helps industry adopt new manufacturing technologies by reducing technical risk, lowering production costs, and creating new products.

Under the MDF Technology Collaborations Program, industry can leverage world-leading capabilities and expertise in short-term collaborative projects on the path to commercial implementation of advanced manufacturing and materials technologies. www.ornl.gov/user-facilities/mdf

Critical Materials Institute

DOE's Critical Materials Institute (CMI) is a public-private partnership at Ames Laboratory that focuses on technologies that make better use of critical materials used in modern clean energy technologies. The CMI team identifies innovative technology solutions that will help avoid a supply shortage that would threaten our clean energy industry and security interests. www.cmi.ameslab.gov

High Performance Computing Innovation Center

DOE's High Performance Innovation Center (HPCIC) at Lawrence Livermore National Laboratory facilitates national



Partnerships accelerate America's advanced manufacturing industry, bringing new technologies to market.

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lab-industry collaboration, applying high-performance computing to product design, development, manufacturing, data management, and operation of complex energy and communication systems. Through HPCIC's multi-partner collaboration model, industry is able to tap lab capabilities and expertise. www.sandia.gov/lvoc

National Network for Manufacturing Innovation

National Network for Manufacturing Innovation (NNMI) is an interagency effort to create a competitive and sustainable research-to-manufacturing infrastructure for U.S. industry and academia to solve industry-relevant problems. Stakeholders are organized around institutes that invest in manufacturing technologies with broad applications.

Institute activities include research and demonstration projects that reduce the cost and risk of commercializing new technologies or that solve industrial problems, education and training, and development of innovative practices for supply chain integration. DOE currently serves as the federal partner for the following NNMI:

PowerAmerica

Led by North Carolina State University, PowerAmerica works to make wide bandgap semiconductor technologies cost competitive with the silicon-based power electronics that are currently used. If successful, this technology could improve efficiency in the next generation of power electronics while also reducing cost and system size. www.poweramericainstitute.com

Institute for Advanced Composites Manufacturing Innovation

Led by the University of Tennessee, Institute for Advanced Composites Manufacturing Innovation (IACMI) works to develop new low-cost, high-speed, and efficient manufacturing and recycling process technologies that will promote widespread use of advanced fiber-reinforced polymer composites. These advanced materials have the potential to transform products ranging from wind turbines to automobiles. www.iacmi.org



Critical Materials Institute
AN ENERGY INNOVATION HUB



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