

Commercialization and Innovation

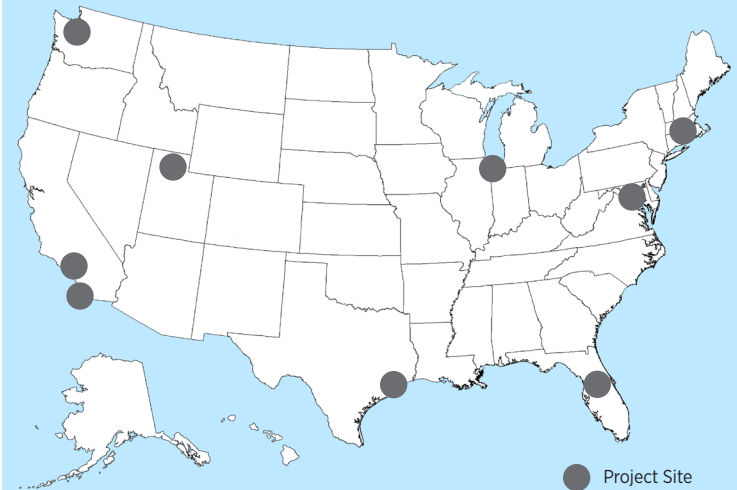
The Commercialization and Innovation Program in the U.S. Department of Energy's (DOE's) Office of Energy Efficiency and Renewable Energy (EERE) works to maximize the number of transformative energy innovations that are brought to market. The program increases technology commercialization by bridging the gap between invention and marketplace success and helping technology entrepreneurs overcome widespread barriers to success.

The Commercialization and Innovation Program's initiatives broaden the clean energy ecosystem by supporting local innovator success and sponsoring efforts to link innovators to needed capital and expertise. These national initiatives are part of Startup America—the Obama Administration's campaign to inspire and promote entrepreneurship—and support regional partnerships that draw upon a wide range of public, corporate, university, non-profit, and philanthropic stakeholders to help create jobs, boost American competitiveness, and strengthen our economy.

The Program's Ecosystem Initiative encourages and supports nationwide clean energy innovation. Under this unifying purpose, each of the program's grants is targeted toward the resolution of a demonstrated gap in the energy technology-to-commercialization process. The Innovation Ecosystem grant works to accelerate the transition of innovative energy efficiency and renewable energy concepts from university laboratories to the market. The i6 Green Challenge grant encourages entrepreneur collaboration and provides early stage testing and validation support for ground-breaking energy technologies and ideas. The National Clean Energy Business Plan Competition grant supports the training of energy-focused entrepreneurs and the evolution of student ideas into commercial enterprises. This synergistic grant portfolio maximizes the delivery on program goals.

Innovation Ecosystem Development Initiative

To accelerate high-growth entrepreneurship and job creation by moving energy efficient and renewable energy technologies from university laboratories to the market, DOE awarded \$5.25 million split among five business incubators over three years. Led by nonprofits or universities, this initiative unites the strengths of American research institutions with expertise in finance, government, and economic development communities. The partnerships nurture and mentor clean energy entrepreneurs in areas including protecting intellectual property, engaging businesses and venture capitalists, and promoting innovation and commercialization across university schools and departments. The award recipients are:



The Program's initiatives are distributed regionally throughout the United States to establish local networks of entrepreneurs, mentors, and investors dedicated to commercializing energy technologies (details below).

Source: National Renewable Energy Laboratory

- **Clean Energy Trust (Chicago, Illinois)**, a clean energy accelerator whose mission is further development of Midwest clean energy businesses by connecting entrepreneurs, researchers, and early stage-companies with the expertise and capital needed to become sustainable;
- **Fraunhofer Center for Sustainable Energy Systems (Cambridge, Massachusetts)** provides funded research, development services, and experienced entrepreneurs to early-stage cleantech companies that are transitioning from the lab to the market;
- **University of California, San Diego (San Diego, California)** hosts an annual Regional Energy Innovation Challenge and leads a partnership to expand the number of clean energy start-ups or technology licenses in the greater Southern California region;
- **University of Central Florida (Orlando, Florida)** is home to a business plan competition called Megawatt Ventures, and connects promising research in energy efficiency with experienced entrepreneurs and resources; and
- **University of Utah (Salt Lake City, Utah)** assists in transferring university-developed clean energy technologies to industry and start-up companies through its Energy Commercialization Center, and provides resources such as mentoring, proof-of-concept validation, prototype guidance, and access to services at the University of Utah's Technology Commercialization Office.

U.S. Department of Energy's National Clean Energy Business Plan Competition

DOE's National Clean Energy Business Plan Competition builds regional networks of student-focused business creation contests across the country, with six regional organizations receiving a total of \$2 million over three years—including \$100,000 each in annual prize money for the first-place teams. The regional competitions share common objectives that include creating a new generation of entrepreneurs to address the nation's energy challenges. The regional winners compete each year for the Grand Prize in a final nationwide Competition. The six regional contests are:

- **California Institute of Technology's First Look West** (*Western Region*), a consortium of public and private partners in Southern California and as far away as Alaska and the Pacific territories of Guam and American Samoa;
- **Clean Energy Trust's Clean Energy Student Challenge** (*Eastern Midwest Region*) fosters partnerships between student entrepreneurs and researchers, venture capitalists, and industry leaders to connect teams with game-changing technologies, expert mentors, and start-up capital;
- **Massachusetts Institute of Technology's MIT Clean Energy Prize** (*Northeast Region*) combines unique competition incentives with a strong entrepreneurial ecosystem to develop regional interest and best practices, and facilitate student participation;
- **Rice University's Rice Business Plan Competition - DOE Clean Energy Prize** (*Western Southwest Region*) drives commercialization of clean energy technologies at regional universities and federal research labs, while accepting applications from around the nation;
- **University of Colorado's CU Cleantech New Venture Challenge** (*Western Midwest Region*), a partnership among stakeholders in renewable energy and entrepreneurship aimed at further distinguishing Colorado and its surrounding region as a leading center for energy commercialization, student engagement, and cleantech business ecosystem development; and
- **University of Maryland's Atlantic Coast Conference Clean Energy Challenge** (*Southeast Region*), where Atlantic Coast Conference schools host competitions that are open to applicants from across the region, and match entrepreneurial students with energy innovations from academics and researchers.

i6 Green Challenge at the U.S. Department of Energy

The i6 Green Challenge is a public-private partnership that the Economic Development Administration (EDA) at the U.S. Department of Commerce leads, and includes DOE, the U.S. Department of Agriculture, the U.S. Environmental Protection Agency, the National Science Foundation, and the U.S. Patent and Trademark Office. The i6 Green Challenge funds Proof of Concept Centers—each a nexus between economic development and environmental quality—in pursuit of a vibrant, innovative clean energy economy. DOE's two-year awards total approximately \$750,000 to three Centers that emphasize either energy efficiency or the deployment of renewable energy:

- **Cleantech Innovations New England** (*Philadelphia Region*), a six-state network of university researchers, innovators, public sector leaders, corporations, venture capitalists, and other stakeholders collaborating to provide promising cleantech ventures with funding, business assistance, technical resources, and testing infrastructure;
- **Florida Cleantech Acceleration Network** (*FL CAN*) (*Florida Region*) accelerates the commercialization of research from Florida's universities by connecting inventions with entrepreneurs, granting access to an extensive network of laboratories and test centers, validating market opportunities, placing experienced early-stage executives as mentors, and providing seed funding and introductions to the investment community to support continued growth; and
- **Innovate Washington** (*Seattle Region*), a new center that leverages substantial investments by the state of Washington in a unique distributed test bed to facilitate the deployment of solutions at the intersection between information technology and energy efficiency.

In addition, Commercialization and Innovation also participates in these general initiatives:

- **DOE's Small Business and Clean Energy Alliance Partnership**—Supports a national organization of non-profit business incubators that focus on clean energy and entrepreneurial mentoring and advance technology commercialization; and
- **Energy Innovation Portal**—Provides a direct connection to more than 600 licensable technologies developed by DOE laboratories and partner institutions including the Naval Research Laboratory and NASA.