

A proven track record and a promising future outlook

Since the 1960s, when a Connecticut manufacturer led the development of fuel cells for NASA's space missions, Connecticut-based expertise has powered the nation's green-energy innovations. Today, it continues in that tradition. Beyond fuel cells, Connecticut companies are designing, building and installing energy-efficient materials like solar technology. Why Connecticut? Because this state is home to a dynamic blend of vision and expertise, of scientific explorers and advanced manufacturers, of those who say "why not" and those who determine "how to."

Creators of innovation and jobs

Not only are Connecticut's fuel cell leaders continuing to patent innovations, they remain at the forefront of putting those patents into practice. In fact, the U.S. Department of Energy named Connecticut a Top 5 state for fuel cell development—with at least 600 fuel cell and hydrogen supply chain companies based here. And these companies generate over \$600 million in revenue and investment.

Connecticut ranks third in total fuel cell patents in the U.S.



for science and engineering doctorates in the workforce¹

#7 in U.S. for investment in workforce development²

- ¹ National Science Foundation, 2018; Bureau of Labor Statistics, 2017;
- ² Milken Institute, State Technology and Science Index, 2018

High-level talent...at all levels

Green energy businesses are particularly dependent on a highly educated, highly skilled workforce: just what Connecticut has in abundance. In fact, Connecticut has the eighth-highest concentration of science and engineering doctorates in the nation. Just as important, it also has a concentration of high-tech workers who are capable of filling a wide array of jobs in this highly specialized sector, including system designers, manufacturers and engineers.

The nation's first "Green Bank"

Connecticut is leading the "Green Bank" movement in setting public policy—and leveraging private investments—in support of clean energy.

The Connecticut Green Bank and its private investment partners have deployed over \$1.6 billion in capital for clean energy projects across the state. Research shows that every \$1 of public funds invested by the Green Bank helped to generate an additional \$6.50 in private investments—mobilizing more capital for significant green energy initiatives.



Connecticut founded the nation's first state-sponsored green bank.

Powerful public/private partnerships

It will take innovative entrepreneurs, investors and policy makers working together to truly realize the potential of clean energy sources. Fortunately, that's already the state of the state in Connecticut. Its Comprehensive Energy Strategy is mobilizing public and private partnerships and enhancing the sustainability of clean energy initiatives.

In fact, the U.S. Clean Tech Leadership Index shows Connecticut is in the top 10 for overall clean tech leadership, clean tech policies, financial capital, and human and intellectual capital.

For every \$1 invested by the state government in clean energy...



...the private sector invests another \$6.50.

Source: CT Green Bank, 2019

The Connecticut Department of Energy and Environmental Protection has also forged an innovative partnership with the University of Connecticut and Fraunhofer USA, the American subsidiary of Europe's largest applied R&D organization. The Fraunhofer Center for Energy Innovation, just one of seven such research centers in the country, is focusing its efforts specifically on membrane technology for energy efficiency and production.

The nation's second largest installed fuel cell capacity

Connecticut's leaders aren't just strategizing how to scale up clean energy production. They're building the plants. In fact, one of the largest fuel cell power projects in North America is now operational in Bridgeport, Connecticut.

Connecticut has over 106 MW of existing and approved fuel cell capacity in the state and multiple hydrogen fueling stations, with more on the way. This paves the way for the development of microgrids with advanced controller technology, lithium ion battery storage using innovative materials, and technologies for zero emission vehicles.

Source: U.S. Department of Energy, 2017

We invite you to join Connecticut's quest for making clean energy more viable in every way!