



Our mission is to expand the commercial impact of the Department of Energy's research and development portfolio to advance the economic, energy, and national security interests of the Nation.

Our Role

The Department of Energy (DOE) is one of the largest supporters of technology transfer in the federal government. The Office of Technology Transitions (OTT) was established in 2015 to enhance DOE's efforts in this area, nurturing the innovation ecosystem, strengthening national security and improving U.S. economic competitiveness.

OTT develops the Department's policy and vision for expanding the commercial impact of its research investments. It streamlines access to information and to DOE's national labs and facilities to foster partnerships that will move innovations from the labs into the marketplace. OTT is directed by the statutory Technology Transfer Coordinator, who serves as the principal advisor to the Secretary on all technology transfer and commercialization matters.

What is Technology Transitions?

It is the dynamic process, with numerous handoffs between scientists, innovators and entrepreneurs, one that begins with an idea and is ultimately transitioned to a technology commercialized by the private sector. Each technology follows its own unique path and requires a variety of exchanges, feedback loops, and partnerships to advance it along the development pathway. OTT engages stakeholders at each step along the way.

Possibilities through Partnerships

DOE is the government's largest funder of physical science research and development. This research results in technologies that make our nation safer, healthier, and more energy efficient. Our optimism about the possibilities through partnerships isn't speculative; it's grounded in countless success stories.



Founders of Blue Current

A collaboration with researchers from the University of North Carolina and DOE's Berkeley Lab resulted in the startup Blue Current. The company is working to improve batteries that can be used in electric vehicles. Their research has already created a non-flammable lithium ion battery prototype. They replaced the liquid electrolyte with a safer liquid-solid hybrid that avoids leaks while making the battery more conductive and more resistant to damage. Ultimately, this research is working toward developing a battery with all solid components that would perform better, last longer, and be safer.

Nanosys partnered with DOE, 3M, and LG to develop Quantum Dot Enhancement Film, an electronic display offering 50% wider color spectrum than a standard LCD at a comparable price without requiring additional power. The technology is being used in the Kindle Fire HD 7, and it is being demonstrated in new HD TVs.



Electronic display being demonstrated in new HD TVs

Using DOE's synchrotron light source technology, scientists at DOE's Brookhaven National Lab are working with Best Medical International to develop a new cancer therapy device that generates high quantities of finely-tuned particle beams to destroy tumors. This new treatment has the distinct potential to strike each layer of a cancerous tumor in a single treatment cycle without damaging the surrounding healthy tissue.



DOE has national labs from coast to coast, from Long Island to the Bay Area. (Pictured: Lawrence Berkeley National Laboratory)

Our Responsibilities

OTT engages with stakeholders, collects data on DOE's technology transitions efforts, evaluates the impacts of those efforts, and uses that information to improve technology transitions and their commercial impact. These activities inform OTT as it develops and implements Department-wide services and activities including the Energy Investor Center (EIC) and the statutorily-mandated Technology Commercialization Fund (TCF).

In 2016, OTT launched the EIC to streamline access to unique capabilities of the national laboratories that are often difficult for investors, innovators and others to find. The center is as a single point of contact for accessing technical experts, acquire the latest reports, identify promising energy projects and locate DOE-funded technologies. Its goal is to advance private, mission-oriented investments that address the gaps in the energy technology market.

Through the TCF, OTT supports innovators and entrepreneurs to develop, mature and ultimately commercialize promising energy technologies developed in the national laboratories. TCF funds are matched with funds from the private sector to accelerate the development of energy products and increase the impact of DOE R&D.

OTT Core Objectives

Accessing Capabilities and Resources: OTT enhances and fosters activities that guide interactions between DOE's National Laboratories and the private sector in collaborative research, strategic partnerships, facilities access and transferring of technologies.

Accessing Information and Connectivity: OTT engages in activities and provides information that assist the private sector in navigating the national laboratory system and identifying relevant assets, using industry input to better understand market needs, and to prioritize the types of technology transition activities requiring additional focus to achieve commercial impact.

Streamlining Policies and Procedures: OTT uses input from external stakeholders as well as the Department's management, program and legal offices to clarify and streamline relevant technology transition activities, private-sector laboratory access and engagement policies and procedures.

Data Collection, Analysis and Publications: OTT develops statutorily-mandated technology transfer-related reports annually. These reports consist of data collected from across the DOE enterprise. DOE collects more than 70 technology transfer-related data points for these reports. The information is used continually to improve the delivery of DOE's missions and to encourage technology transitions as part of laboratory planning, evaluation, and professional development.