

# Working with NREL

By partnering with companies and organizations, the U.S. Department of Energy's National Renewable Energy Laboratory accelerates the movement of renewable energy and energy-efficient solutions into practical application.

The National Renewable Energy Laboratory (NREL) is the only U.S. federal laboratory dedicated to developing renewable energy and energy efficiency technologies and practices, advancing related science and engineering, and transferring knowledge and innovations to address the nation's energy and environmental goals. Backed by 35 years of achievement, NREL leads the way in helping meet the growing demand for clean energy.

A critical part of the laboratory's mission is the transfer of NREL-developed technologies to renewable energy markets. NREL's technology transfer capabilities support laboratory scientists and engineers in the successful and practical application of their expertise and the technologies they develop.

In short, our Technology Transfer Office paired with our Innovation and Entrepreneurship Center bridge the gap between basic and applied scientific research and technology development at the laboratory and in the cleantech marketplace. We work closely with industry, entrepreneurs, investors, and cleantech stakeholders to advance NREL's mission—transforming our nation's energy future.

We believe in the power of innovation and partnership to address energy challenges. Our innovation culture creates a "can-do," entrepreneurial attitude throughout NREL—a key part of our success in working with partners and moving technologies to market.

At NREL, we work with businesses large and small through research partnerships, the licensing of NREL technologies, support for cleantech stakeholders, and fostering the clean energy economy. This brochure provides an overview to help you navigate how NREL may be helpful in your cleantech business endeavors.

#### Welcome to NREL. We're open for business.



# We'll work with you to explore your innovation needs and the best partnership path with the laboratory.

## NREL's Innovation and Entrepreneurship Center

NREL's Innovation and Entrepreneurship Center leads the laboratory's innovation at the intersection of the public and private sectors relating to entrepreneurship, new ventures, and growth capital. The Innovation and Entrepreneurship Center's goals include the following:

- Creating an innovative and entrepreneurial environment that is a seamless part of the fabric of NREL
- Promoting NREL as a key catalyst for economic development by accelerating and improving the yield of regional clean energy innovations
- Fostering broad-based investor relationships for clean energy entrepreneurs
- Enhancing NREL's small business program.

## Colorado Center for Renewable Energy Economic Development

Through its role in the Colorado Center for Renewable Energy Economic Development (CREED), NREL catalyzes clean energy and energy efficiency innovation and entrepreneurship in Colorado. The Energy Fellows Institute, which is run by the Colorado Cleantech Industry Association out of CREED, is a targeted program to educate experienced technology entrepreneurs and executives about advanced energy

about advanced energy and promote new ventures that ultimately create jobs and grow the energy sector.

CREED also hosts training including the Tech Trends sessions featuring well-known experts in cleantech. The CREED Entrepreneur Financing Series focuses on helping entrepreneurs gain access to capital, while the group's incubator, the Rocky Mountain Innosphere, holds quarterly classes

NREL's unique market-relevant approach bridges scientific discovery and market adoption. Together, we make the science real in the marketplace and in the world.



providing advice on raising startup capital. In addition, CREED hosts an annual one-on-one speed networking event, connecting entrepreneurs with active cleantech investors.

To help cleantech startup companies move emerging technologies out of the laboratory and into early commercial or near-commercial development, CREED stakeholders also have access to office space within the CREED building as well as NREL's research and analysis facilities. www.creed.org

#### NREL's Industry Growth Forum

NREL's Industry Growth Forum is the nation's premier event for emerging clean energy and energy efficiency technology startups to gain exposure to and feedback from venture capitalists, corporate investors, government agencies, and strategic partners. The Forum features presentations from more than 30 emerging clean energy companies, provocative panels led by thought leaders, facilitated one-on-one meetings, and technology accelerator workshops. It is the perfect venue for growing companies to prepare, refine, and present their business to a wide range of stakeholders. Collectively, companies who have presented at the Forum since 2003 have raised more than \$5 billion in growth financing.

www.industrygrowthforum.org

## NREL's Commercialization Assistance Program

The NREL Commercialization Assistance Program helps emerging companies overcome technical barriers to commercializing clean energy technology. The program specifically helps renewable energy and energy efficiency companies by providing up to 40 hours of technical assistance or information to help small businesses with specific technology problems or needs. Examples of assistance include short-term access to technical expertise and facilities such as:

- Test and measurement of systems or components
- Analytical testing of materials
- Insights on existing or emerging technologies
- Assistance in addressing technological performance
- Market analysis
- Addressing general technology problems. www.nrel.gov/technologytransfer/ncap.html



## **Technology Partnership Agreements**

There are a variety of ways to partner with NREL using Technology Partnership Agreements. For developing commercially viable products, industry and organizations may partner with NREL to use our state-of-the-art laboratories as well as testing and partnering facilities. Collaborative research projects may involve a variety of Technology Partnership Agreements. 

www.nrel.gov/research\_facilities/user\_facilities.html

www.nrel.gov/technologytransfer/tech\_partnership\_agreements.html

## Moving Technologies to the Marketplace

## The Energy Innovation Portal

The Energy Innovation Portal is designed to be a central hub for investors, entrepreneurs, and businesses to access energy efficiency and renewable energy innovations. The Portal provides the ability to rapidly filter and identify licensable technologies that have been developed by U.S. Department of Energy (DOE) laboratories and partner institutions.

The primary focus of the Portal website is on technologies in the energy efficiency and renewable energy market space. The site highlights more than 950 licensable technologies through marketing summaries. These summaries break down the market opportunity of each technology by featuring a user-friendly description, explanation of the benefits, and applications for the technology. The marketing summaries also provide a link directly to the licensing representative for each technology, further simplifying access to these leading-edge innovations. The Portal also contains more than 18,000 issued U.S. Patents and published U.S. Patent Applications created with DOE funding. These patents span the entire spectrum of DOE research, from

nuclear energy to fossil

www.techportal.eere.

energy.gov

energy to biotechnology.

Collectively, companies who have presented at NREL's Industry Growth Forum since 2003 have raised more than \$5 billion in growth financing.



### **Technology Licensing**

NREL provides businesses, large and small, with opportunities to commercialize NREL-developed technologies and products under the protection of either nonexclusive or exclusive rights. The majority of NREL's licenses are royalty-bearing, nonexclusive, and contain annual performance milestones; however, NREL may grant an exclusive license when such a license is the best mechanism for maximizing a technology's market impact. www.nrel.gov/technologytransfer/licensing\_agreements.html

## Other Ways to Work with NREL

#### **Business Opportunities**

NREL utilizes the expertise of many professionals from outside

the laboratory via

NREL has partnered with hundreds of entities including the federal government, small and large businesses, international organizations, educational institutes, and non-profits.

subcontracts (mostly competitively bid through a request for proposal). Subcontracting options include research and development, technical support, construction, information technology,

and facilities management. Our commitment to small business through a comprehensive and mature outreach program that combines proven techniques with the latest technology and best business practices is central to NREL's mission. www.nrel.gov/about/working\_with.html

#### **Small Business**

As a DOE national laboratory, NREL works closely with industry, academia, government, and diverse outside businesses to foster collaborative ventures. Central to NREL's mission is our commitment to small business through an award-winning, comprehensive, and established outreach program that extends far beyond our purchasing and subcontracting dollars.

Mentor Protégé: Our Mentor Protégé Program is a DOE initiative to encourage and assist small businesses in an effort to enhance their subcontract performance capabilities for NREL, DOE, and other federal agencies. NREL strives to foster long-term business relationships and provide guidance to small business.

**Subcontracting:** We work with NREL's Contracts and Business Services Office to provide opportunities for your small business to benefit from the laboratory's resources. We focus on technology commercialization and deployment that



includes engaging new small technologybased companies to conduct researchrelated work for NREL.

#### **Purchasing Equipment and Services:**

Our operations use materials from every corner of the marketplace, and our laboratories require equipment and supplies ranging from beakers to anemometers. We purchase laboratory supplies and office furnishings and supplies in addition to technical consulting, temporary staffing, and construction services.

## Deployment and Project Assistance

NREL uses its expertise and facilities to provide technical assistance in applying renewable energy and energy efficiency technologies to a variety of public and private organizations, including international and developing countries, federal agencies, and U.S. state and local communities. Our modeling, analysis, and planning capabilities cover all aspects of the project development spectrum—technology, market, policy, financing, and environmental concerns—and allow NREL and its partners to develop integrated, economically viable approaches to technology deployment.

NREL does not grant or provide funds for third-party project development. www.nrel.gov/tech\_deployment/tech\_ assistance.html

## Funding Options: U.S. Department of Energy Grants, Contracts, and Procurement

Much of the work of DOE's Office of Science is supported through grants and contractual vehicles. This work is processed through the Office of Science Grants and Contracts Division. See the following links for more information.

- Grants and contracts: *science.energy.gov/grants/*
- DOE procurement: www.energy.gov/management/officemanagement/employee-services/ procurement-services
- All federal grants: www.grants.gov/
- Small Business Innovation Research Program: www.sbir.gov

#### National Renewable Energy Laboratory

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NREL is a national laboratory of the U.S. Department of Energy Office of Energy Efficiency and Renewable Energy Operated by the Alliance for Sustainable Energy, LLC

NREL/BR-7A10-60986 • May 2014

The following NREL images were used in this publication: 17741, 17809, 16898, 18525, 18229

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