



RESEARCH, DEVELOPMENT & DEMONSTRATION LOOKING TOWARD THE FUTURE

PUBLIC RESEARCH & DEVELOPMENT IS VITAL

California leads the nation in reducing greenhouse gas emissions and is working to ensure that 33 percent of the state's electricity is generated from renewable resources. To keep pace with ever-growing energy demands, ensure economic growth and achieve an energy smart future it is vital for Californians to invest in public energy research, development, and demonstration (RD&D) efforts. Through RD&D our state is creating advanced energy markets and helping bring new energy efficient products and technologies on line.

PIER FUNDING OPPORTUNITIES

PIER funds are awarded through competitive solicitations and interagency agreements to implement the research projects. To receive information on these solicitations sign up for the List Serve at: www.energy.ca.gov/research/

Big Ideas, Small Investments

Not all research is carried out in large corporations or university setting – individuals can have a slice of the PIER investment funds through the Energy Innovations Small Grant (EISG) Program. The EISG provides small businesses, non-profits, individuals and academic institutions up to \$95,000 for hardware projects and \$50,000 for modeling projects that show the practical side of new, innovative energy concepts. For more information about the EISG Program go to: www.energy.ca.gov/research/innovations/

RD&D'S PROVEN BENEFITS TO CALIFORNIANS

- California's Building and Appliance Efficiency Standards have incorporated the results of PIER projects and saved Californians more than \$1 billion.
- PIER studies provided the underlying scientific evidence that significantly contributed to the passage of AB 32, the California Global Warming Solutions Act of 2006.
- Advanced power grid monitoring software, which has increased system reliability and prevented cascading blackouts, resulted from PIER funded projects. California avoided more than \$300 million in production losses due to outages.
- A listing of research reports can be found at: www.energy.ca.gov/research/reports_pubs.html

HOW MUCH FUNDING IS AVAILABLE?

The Energy Commission leverages an \$86.5 million PIER annual budget to maximize research benefits to Californians. The ratepayer-funded PIER program supports pioneering RD&D in these six areas:

- Energy efficiency and demand response
- Renewable energy technologies
- Advanced electric generation
- Advanced grid technology, transmission and distribution
- Energy-related environmental research and climate science
- Advanced transportation technologies

WHAT IS THE ENERGY COMMISSION'S PUBLIC INTEREST ENERGY RESEARCH PROGRAM?

The Public Interest Energy Research (PIER) program is the state's premier energy RD&D program, advancing science and technology in the fields of energy efficiency, renewable energy, advanced electricity technologies, energy-related environmental protection, and transmission and distribution, and transportation technologies. To accomplish this, PIER enlists businesses, utilities, energy companies, public advocacy groups, and world-class scientists at California's universities and national laboratories. In the last decade PIER has invested more than \$600 million to bring to market energy technologies that provide environmental and economic benefits to Californian's ratepayers.





CALIFORNIA

AN ENERGY NATION

Today nearly 38 million people - one in eight Americans - live in the Golden State. Keeping California moving requires a significant amount of energy – electricity to power homes, business and industry; natural gas for generating electricity, heating homes and powering industrial processes; and petroleum for transportation. Californians spend nearly \$100 billion each year on energy – a serious cost to everyone. Although California receives more of its electricity from renewable resources like wind, solar and geothermal than any other state, more than 80 percent of energy consumed in California comes from two sources – petroleum and natural gas. This fossil fuel dependence, combined with California's steady population growth and increased energy demand, has the potential to jeopardize the state's economy and environmental well being. Research, development and demonstration (RD&D) are the foundation of a robust economy and a cleaner, healthier environment.

MORE INFORMATION ON PIER

Check out the Webpage at www.energy.ca.gov/research/

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INVESTING IN CALIFORNIA'S CLEAN ENERGY FUTURE

CALIFORNIA ENERGY COMMISSION'S
PUBLIC INTEREST ENERGY RESEARCH PROGRAM

