



Become a Labs21 Partner

What Is the Laboratories for the 21st Century Partnership Program?

THE LABORATORIES FOR THE 21ST CENTURY (Labs21) Partnership Program encourages the development of sustainable, high-performance, and low-energy laboratories. Developed by the U.S. Environmental Protection Agency (EPA) and the U.S. Department of Energy (DOE), this voluntary program is open to all public and private sector organizations in the United States interested in improving their laboratories' energy- and water-efficiency, encouraging the use of renewable energy sources, and promoting environmental stewardship. By setting goals to reduce energy and water use in defined projects, Labs21 Partners demonstrate the potential for improved laboratory design, construction, and management worldwide.

The goal of Labs21 is to create environmental showcase laboratories that take a "whole-building" approach to laboratory design. This goal involves focusing on all of a laboratory's energy systems and wastes rather than on specific building components. As Labs21 Partners are demonstrating, this holistic approach can result in significantly higher efficiencies and cost savings, as well as reduced emissions and improved health and safety conditions.

What Are the Benefits of Becoming a Labs21 Partner?

Labs21 Partners enjoy a long list of benefits, including:

- National recognition through Labs21 events, awards, and promotional materials.
- Opportunities for technical assistance from nationally recognized experts.
- Access to tools and resources to enhance project design and help establish performance goals.

- Opportunities to network and share project results with peers from around the globe.
- Lower laboratory utility and operating costs through improved design strategies, equipment, and facility management.
- Reduced health and safety risks through system upgrades and improved operations.
- Reduced pollution and greenhouse gas emissions.

How Are Labs21 Partners Achieving Success?

Labs21 Partners are at the forefront of sustainable laboratory design, setting the standard for laboratories in the 21st century. Here are just a few examples:

- Totalling 377,000 square feet, **Sandia National Laboratories'** state-of-the-art Microsystems and Engineering Sciences Applications Complex in Albuquerque, New Mexico, will be 30 percent less energy intensive than similar buildings at Sandia, and will reclaim and recycle its process water. Construction began in mid-2003, and the first phase—the most energy intensive of the three buildings—is scheduled for completion in early 2005.



Aerial depiction of Sandia National Laboratories' new research complex in Albuquerque, New Mexico.



www.epa.gov/labs21century

- To achieve a number of aggressive energy efficiency goals for its new Science and Engineering Building, the **University of California-Merced** is using efficient lighting, solar control through shading and high-performance glazing, low pressure-drop air systems, variable air volume fume hood systems, and other measures.



Rendering of the University of California-Merced's Science and Engineering Building.

- Through commissioning and retro-commissioning, **Raytheon Integrated Defense Systems and Network Centric Systems** is identifying strategies to reduce energy consumption and increase overall environmental performance at its Satellite Communications Building and other facilities.
- To improve energy efficiency at its 300,000 square-foot Levine Science Research Center, **Duke University** is measuring the impact of various exhaust hood management practices and strategies on energy utilization. The university is also applying a "whole building" design to other laboratories on campus.

How Can I Become a Labs21 Partner?

All public and private sector laboratories in the United States are invited to join the program as Partners. To become a Partner, you agree to set voluntary energy- and water-efficiency goals for a specific laboratory and to measure and report your results. The specific criteria for joining include:

- Identifying a central point of contact.
- Identifying a specific laboratory site (new construction or retrofit) as your Labs21 project, and setting measurable energy and environmental performance goals for this facility.
- Agreeing to benchmark the energy and environmental performance of your facility and share these results with the larger Labs21 community.
- Reporting your project results to EPA annually.

If you're willing to adopt the principles of sustainable design and management, but do not yet have a specific laboratory project, you may join the program as a Labs21 Prospect.

If you are interested in becoming a Partner or Prospect, or would simply like to learn more about the program, visit the Labs21 Partnership Web site at www.epa.gov/labs21century/partnership.



Duke University's Levine Science Research Center in Durham, North Carolina.