

## DOE Solid-State Lighting Portfolio

# Gateway Demonstrations Showcase LED Product Performance

The U.S. Department of Energy (DOE) Solid-State Lighting (SSL) Technology Demonstration Gateway Program features high performance SSL products for general illumination in a variety of commercial and residential applications. Results provide real-world experience and data on product performance and cost effectiveness, and connect DOE technology procurement efforts with large-volume purchasers. Performance measures include energy consumption, light output, color consistency, and installation/interface/control issues.

## How to Participate

The first “Invitation to Participate” was issued in March 2007. A second invitation followed in November 2007, and remains open through May 2008. DOE seeks to assemble demonstration teams that match host sites with appropriate products and partners. DOE Gateway demonstrations are open to all participants, subject to certain eligibility parameters. Demonstration teams typically include a product manufacturer, a host site, and an energy efficiency organization or local utility where applicable.

- **Manufacturers** provide products for demonstration and may assist in site selection and installation.
- **Host sites** provide locations for demonstrations, assistance with installation and evaluation/measurement, and a willingness to participate in demonstration-related activities such as tours and webcasts.
- **Energy efficiency organizations and utilities** provide contacts with potential host site organizations and assist with related outreach and promotional activities.

Potential participants are encouraged to submit expressions of interest using the application forms available at: [www.netl.doe.gov/ssl/techdemos.htm](http://www.netl.doe.gov/ssl/techdemos.htm). Team members are not restricted to a single team or a particular project. A large hosting organization might demonstrate products from more than one manufacturer or a single manufacturer might participate with multiple products designed for different applications and locations.



*Demonstration in Oakland, California, with Beta LED streetlights (foreground) and HPS streetlights (background).*  
Photo: Beta LED.



**U.S. Department of Energy  
Energy Efficiency and Renewable Energy**

Bringing you a prosperous future where energy is clean, abundant, reliable, and affordable

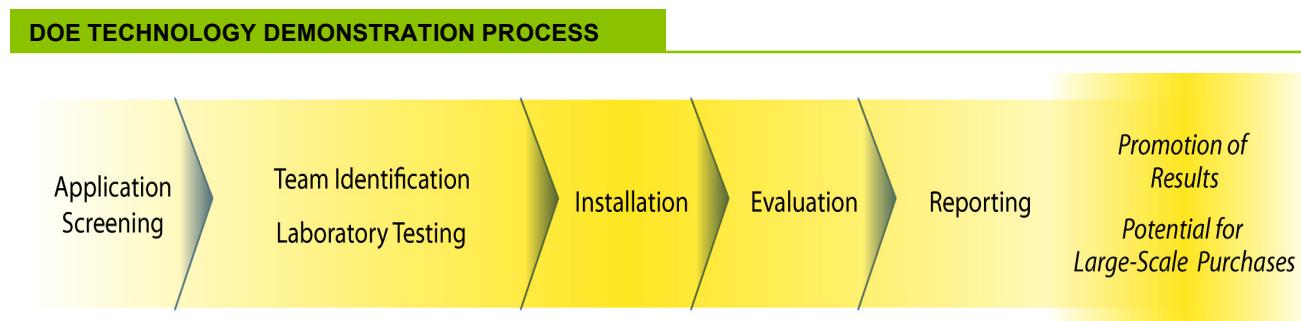
## Sharing Results

Results from DOE Gateway demonstrations enable participants to evaluate and refine their lighting requirements before making large-scale purchasing decisions. Demonstration project results are shared through the DOE SSL website, workshops, webcasts, and other demonstration-related activities.

DOE is also interested in working with team members, host site organizations, and other entities to form “user groups” to share information among users with similar needs. Participants in these user groups can join or initiate procurement efforts for high efficiency applications using information gained from demonstration projects, which can result in large scale purchases and/or promotion of featured products. More information on the formation of user groups will be posted on the DOE SSL website in early 2008.

## Other Ways to Participate

For parties conducting their own demonstrations and interested in widely sharing results, or for demonstrations already under way and wanting to access available resources, DOE is developing a Demonstration Checklist. Demonstrations meeting the Checklist requirements and/or developed using the Checklist may be able to access DOE support on a case-by-case basis. Successful demonstrations developed through this approach will be promoted via the DOE SSL website, events, and other appropriate venues and means. The Demonstration Checklist will be posted on the DOE SSL website in early 2008.



- **Initial Screening:** Applications received are screened; prospective products and host sites deemed eligible are informed of their eligibility or requested to provide additional information.
- **Participant Team Identification:** Host sites and other team members are identified to carry out the actual demonstration of products.
- **Laboratory Testing:** Concurrent with team identification, testing of sample products is conducted to establish or verify important measures of performance.
- **Installation:** Products are installed with appropriate pre- and post-measurements; demonstration steps are carried out, including any publicity and education events.
- **Evaluation:** DOE's Pacific Northwest National Laboratory evaluates the results, including energy and cost savings and related economic analyses, as well as qualitative occupant and user responses to the installed LED light source.
- **Results Reporting:** Results of successful demonstrations are widely publicized; results from long-term testing are released as they become available. While no sales of demonstrated products are assured, DOE expects large-scale product purchases or promotions by demonstration team members will also occur at this stage for products that have performed to buyers' satisfaction.

---

### For More Information

Web: [www.netl.doe.gov/ssl/techdemos.htm](http://www.netl.doe.gov/ssl/techdemos.htm)

Email: [techdemos@pnl.gov](mailto:techdemos@pnl.gov)

January 2008