

2009 Innovations Awards Program APPLICATION

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ID # (assigned by CSG): 09-S-40WV

Please provide the following information, adding space as necessary:

State: West Virginia

Assign Program Category (applicant): Natural Resources: Energy (Use list at end of application)

1. **Program Name:** Saving Energy in West Virginia Schools
2. **Administering Agency:** West Virginia Division of Energy
3. **Contact Person (Name and Title):** John F. "Jeff" Herholdt Jr., director
4. **Address:** Capitol Complex, 1900 Kanawha Blvd. E., Building 6, Room 645, Charleston, WV 25305

5. **Telephone Number:** (304) 558-2234 or (800) 982-3386

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7. **E-mail Address:** jherholdt@energywv.org

8. **Web site Address:** www.energywv.org

9. **Please provide a two-sentence description of the program.**

The Saving Energy in West Virginia Schools Program, operated by the West Virginia Division of Energy (WVDOE) in cooperation with West Virginia University (WVU) and West Virginia University Institute of Technology (WVUIT) assists West Virginia county school systems in assessing and addressing energy issues in their facilities. It does so through the U.S. EPA ENERGY STAR[®] Portfolio Manager program to benchmark energy use, utilizing senior engineering student teams to identify energy-saving measures in selected buildings.

10. **How long has this program been operational (month and year)? Note: the program must be between 9 months and 5 years old on March 2, 2009 to be considered.**

The program began in October 2007.

11. **Why was the program created? What problem[s] or issue[s] was it designed to address?**

Rising energy costs have severely impacted the financial resources of West Virginia county school systems to maintain educational services. The program was created to assist counties in reducing their energy costs. The Centers benchmark schools using the ENERGY STAR[®] Portfolio Manager program for a diagnostic evaluation of each county school's energy use and efficiency. The Centers also provide the school system free walk-through energy audits of up to two schools identified as large energy users. The resulting report provides the superintendent and staff a tool to prioritize the most cost-effective measures and technologies needed to reduce energy use in their facilities.

12. **Describe the specific activities and operations of the program in chronological order.**

Each Center serves specific state counties. The West Virginia Department of Education assists in promoting the program to county school systems who then request the program through the WVDOE. In the program's Stage 1, the specified Center and WVDOE meet with the superintendent and staff of the county school system to discuss program objectives and data requirements.

The Center collects data and inputs it into Portfolio Manager. The Center provides a presentation and report to the superintendent on the findings of the benchmarking process. These findings include the Portfolio Manager rankings for each facility and any discrepancy in the energy use of the buildings in the time frame studied.

After the presentation, the superintendent reviews the report and selects no more than two schools to receive an energy analysis by the Center student teams.

In Stage 2 of the program, the team conducts an on-site review of the facility. Areas addressed may include an analysis of the HVAC, building envelope, controls or lighting. A final report detailing the team's findings is provided to the superintendent.

After the program ends, it is hoped that the county will continue the Portfolio Manager program to monitor energy use in its operations. Participation in the ENERGY STAR Program is also recommended as a way to further foster energy awareness and continued focus on energy costs and efficiency.

13. Why is the program a new and creative approach or method?

First, the program provides county school systems the capability to monitor and evaluate the energy efficiency of their operations through the utilization of state university professors and students, allowing for more effective and efficient resource allocation through reduced operational costs. Second, the program provides senior engineering students instruction on facility energy efficiency technologies and applications, giving them real-world engineering experience.

14. What were the program's start-up costs? (Provide details about specific purchases for this program, staffing needs and other financial expenditures, as well as existing materials, technology and staff already in place.)

First year grant funding of \$50,000 provided the start-up costs necessary for staffing, equipment and travel. Staffing costs included faculty at each institution to serve as director. Equipment costs include evaluation tools and software to conduct the audit program. Travel costs include funds for meetings at the county location and audit visits.

15. What are the program's annual operational costs?

\$80,000 (\$40,000 for each Center)

16. How is the program funded?

The program is funded through U.S. Department of Energy Oil Overcharge Funds.

17. Did this program require the passage of legislation, executive order or regulations? If YES, please indicate the citation number.

No legislation was required.

18. What equipment, technology and software are used to operate and administer this program?

The program utilizes the ENERGY STAR Portfolio Manager® analysis tool for the benchmarking phase of the program. The student teams use WVU and WVUIT owned equipment (light meters, furnace testing devices) to conduct the audit portion of the program at the selected schools.

19. To the best of your knowledge, did this program originate in your state? If YES, please indicate the innovator's name, present address, telephone number and e-mail address.

Yes. Contacts include:

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20. Are you aware of similar programs in other states? If YES, which ones and how does this program differ?

No.

21. Has the program been fully implemented? If NO, what actions remain to be taken?

Yes.

22. Briefly evaluate (pro and con) the program's effectiveness in addressing the defined problem[s] or issue[s]. Provide tangible examples.

The program has been implemented in seven counties. To date, in addition to energy analysis services, the program has assisted one county in identifying and receiving ENERGY STAR® building award recognition for six of the 11 schools in the county. This has, in turn, increased the county's desire to continue benchmarking and energy efficiency activities to get remaining schools certified. The county's success has encouraged other school systems to participate in the program to reduce energy costs and receive recognition for their energy reduction efforts.

The program provides state-of-the-art analysis of building energy use but often there is a lack of available resources to implement recommendations.

23. How has the program grown and/or changed since its inception?

The basic approach has not changed since inception. The program has a goal of adding two additional counties a year.

24. What limitations or obstacles might other states expect to encounter if they attempt to adopt this program?

A host of budgetary challenges faces county school systems, including energy costs. The program's efforts focus on assisting counties to manage energy costs and justifying energy project funding.

2009 Innovations Awards Program Program Categories and Subcategories

Use these as guidelines to determine the appropriate Program Category for your state's submission and list that program category on page one of this application. Choose only one.

Infrastructure and Economic Development

- Business/Commerce
- Economic Development
- Transportation

Government Operations

- Administration
- Elections
- Public Information
- Revenue

Health & Human Services

- Aging
- Children & Families
- Health Services
- Housing
- Human Services

Human Resources/Education

- Education
- Labor
- Management
- Personnel
- Training and Development
- Workforce Development

Natural Resources

- Agriculture
- Energy
- Environment
- Environmental Protection
- Natural Resources
- Parks & Recreation
- Water Resources

Public Safety/Corrections

- Corrections
- Courts
- Criminal Justice
- Drugs
- Emergency Management
- Public Safety

Save in .doc or rtf. Return completed application electronically to innovations@csg.org or mail to:

CSG Innovations Awards 2009
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This application is also available at www.csg.org, in the Programs section.

Deadline: March 2, 2009