ORNL Supports Stronger, Cleaner, More Affordable Energy Services

The mission of the US Department of Energy (DOE) Weatherization and Intergovernmental Program Office (WIPO) is to strategically coordinate with government leaders to accelerate the adoption of energy efficiency and renewable energy technologies and best practices. Oak Ridge National Laboratory (ORNL) supports WIPO by conducting evaluations of the Weatherization Assistance Program (WAP), the State Energy Program (SEP) and the Energy Efficiency and Conservation Block Grant (EECBG) Program—helping the nation realize a stronger economy; a cleaner environment; and safer, more affordable energy services. ORNL deploys an interdisciplinary team to assist with the diverse aspects of WIPO operations and to support the following:

Weatherization Assistance Program

- **WAP Audits:** The Weatherization Assistant is a family of energy audit programs that identify the best home retrofit measures and is designed to help agencies implement the DOE WAP. ORNL has developed and provides technical support for two existing programs: the National Energy Audit Tool (NEAT) for site-built single-family homes and the Manufactured Home Energy Audit (MHEA) for mobile homes. ORNL will roll out two new programs during the year ahead: the Multifamily Tool for Energy Audits (MulTEA) and a health and safety audit program.
- **WAP Policy:** ORNL provides critical statistics and impact information to WIPO decision makers, which helps explain WIPO's purposes and achievements, particularly the Low-Income Weatherization Assistance Program and SEP, to interested parties. Information includes background data and statistics, energy market and market impact overviews, and energy savings and bill impacts.
- **WAP Evaluations:** When the American Recovery and Reinvestment Act of 2009 (ARRA) was passed, funding for the weatherization assistance program increased from $225M per year to $5B over three years. DOE then tasked ORNL with evaluating the program. It was decided to evaluate WAP as it was administered before the ARRA period, the retrospective period, focusing on program year (PY) 2008, and during the ARRA period, focusing on PY 2010. These multi-million-dollar evaluations assess program impacts and management and the required massive data collection.

State Energy Program National Evaluation

ORNL has assisted SEP with metrics development and evaluation research since the early 2000s. This work includes developing enumeration indicators to classify the broad program areas in which the states conduct energy activities using SEP funds, performing two preliminary evaluations to quantify the outcomes achieved by SEP nationwide, and managing a multiyear in-depth outcome evaluation of SEP using primary data on actual SEP activities and their measured accomplishments.

Energy Efficiency and Conservation Block Grant Program: ORNL evaluates the EECBG Program. Funded by ARRA, the program provided $2.7B in grants for deploying energy efficiency and renewable energy technologies to 2,350 cities, counties, states, territories, and Indian tribes. The evaluation documents the program's principal achievements, including energy and cost savings, reduction in carbon emissions, and job creation.

Key Accomplishments

- ORNL is developing a 21st century residential energy audit suite under ARRA—covering all building types, as well as health and safety issues—for use by the program's network of local agencies. The audit suite also includes NEAT and MHEA, software used by approximately half of the 900 antipoverty agencies nationwide.
- ORNL manages the largest-ever independent evaluations of WIPO deployment programs, including WAP, SEP, and EECBG.
- ORNL's large-scale technical assistance to DOE Office of Energy Efficiency and Renewable Energy projects reaches more than 3,000 state and local grantees.

Contact

Mark Ternes
Program Manager
Oak Ridge National Laboratory
865-574-0749
ternesmp@ornl.gov
weatherization.ornl.gov

Julia Kelley
Group Leader
Residential and Commercial Energy Efficiency
Oak Ridge National Laboratory
(865) 574-1013
kelleyjs@ornl.gov