

# Grant Administration

## State Energy Program Funded Projects

The U.S. Department of Energy's State Energy Program (SEP) provides funding and technical assistance to states, territories and the District of Columbia to enhance energy security, advance state-led energy initiatives, and maximize the benefits of decreasing energy waste. The SEP emphasizes the state's role as the decision maker and administrator for program activities within the state that are tailored to their unique resources, delivery capacity, and energy goals. The Kentucky Energy and Environment Cabinet Office of Energy Policy awarded federal grants to the following organizations to address Building for Resilience, Energy Education, and Energy Efficiency and Affordability in Kentucky.

### ***Bluegrass Greensource Energy Education Project***

Bluegrass Greensource (BGS), an environmental non-profit organization, is providing energy-related education programs under the Energy Education Initiative for families and pre-school students in central Kentucky. The BGS Energy Education Project offers opportunities for residents to learn how to have a more comfortable, healthier, more energy-efficient home. Throughout the 2021-2022 program year, 250 households may participate in one of ten educational workshops and receive resources including a free, energy efficiency kit. These workshops target low income and disadvantaged communities, including those families where English is a second language. Expanded community-focused outreach and marketing efforts offers more ways to access web-based energy-efficiency resources, locate workshops, educational videos, and home energy projects. Following last year's successful launch of the Preschool Energy Curriculum for the Central Kentucky, an additional 30 preschool classrooms will have access to this innovative, hands-on curriculum for young learners. BGS will partner with community organizations to host six Family Energy Education events to engage residents in hands-on activities about basic energy concepts and how to reduce energy use and home energy costs. To learn more and to register for one of the state energy program workshops visit: <https://bggreensource.org/home-energy-workshops/>

### ***University of Kentucky Center for Applied Energy Research Electric Vehicle STEM Education***

The University of Kentucky (UK) Center for Applied Energy Research (CAER), in partnership with GreenpowerUSA and the Kentucky Energy and Environment Cabinet have created a new program to advance STEM (science, technology, engineering, and math) education in Kentucky's schools. The program officially called *STEM Education through Electric Vehicles* has a shorthand name, "GEN EV" – for Generation Electric Vehicles. GEN EV offers Kentucky's next generation of students an opportunity to design, construct, and competitively race a one-person electric vehicle. Currently, there are 19 elementary schools participating in the program, and planning is underway to expand the program next school year to students in the middle and high school grades. All of the participating schools received teacher training on the curriculum for the program and the construction and operation of the built vehicle. Grant funding provides schools a stipend to assist in the attendance of the training session and the operation of the curriculum. Schools also receive the GreenpowerUSA program kit which includes curriculum materials, the vehicle base, and associated parts. Throughout the current academic year, students develop their team program and assemble their vehicles in preparation of a competitive race targeted for spring 2022. The GEV EV program is funded in part through Kentucky's State Energy Program. To learn more, watch [https://youtu.be/d\\_8Xi\\_tHJSA](https://youtu.be/d_8Xi_tHJSA) or visit <https://caer.uky.edu/outreach/>

### ***National Energy Education Development Energy Education Project***

The Kentucky National Energy Education Development (NEED) Project is the state affiliate of the national nonprofit education association. NEED promotes a realistic understanding of energy so that students and teachers can make educated decisions. Understanding the importance of providing access to resources and education, NEED developed a new Integrated Energy Education Project for the 2021-2022 school year. The program provides a two-part approach to energy education and expands access to resources to teachers, students, families and communities. NEED adopted program delivery to a virtual platform this school year, enabling teachers from all regions across the state to attend professional development training. In 2022, NEED launched a pilot project, a Project-Based-Learning (PBL) initiative, to engage students, teachers, family resource coordinators, in high-energy burden communities in eastern Kentucky. The pilot project utilizes NEED curriculum and resources for students to complete a hands-on energy project while exploring the science of energy, and how efficiency and conservation measures positively influences the home environment. The project culminates with a Family Energy/Science Night community event organized by students, teachers and family resource coordinators as a means to share student projects, experiential learning experiences and energy knowledge. The event also brings together education, resources, and collaboration among community organizations and agencies to help families reduce their energy burden. Visit the NEED Website to learn more.

<https://www.need.org/>

### ***Kentucky Habitat for Humanity Energy Efficiency Housing Project***

The OEP and Kentucky Habitat for Humanity partnership is part of a broader initiative to bring resilience and energy efficiency into Habitat built homes. Kentucky also recognizes many families face a high share of energy burden (the percentage of household income spent on energy bills) and there is a great need for affordable housing that is stable, healthy and sustainable. Building on last year's successful appliance rebate program, the Ky.HFH Energy Efficiency Housing Project expands opportunities for Habitat's low-income families to lower monthly utility costs through energy efficiency measures including ENERGY STAR appliance and mechanical upgrades for homes that are newly constructed and/or requiring critical home repairs. The project is available to all 35 Habitat affiliates located in 51 Kentucky counties. <https://kyhabitat.org/>

### ***Housing Development Alliance Energy Efficient Housing Project***

Understanding how energy efficiency contributes to home affordability and providing on-the-job training to residents in southeastern Kentucky are the goals of this project. Through the State Energy Program grant funds, OEP supports HDA's program by offering expanded training opportunities for on-the-job trainees and HDA trainers in the proper installation of building insulation to meet RESNET (Residential Energy Services Network) Grade 1 standards and to meet ENERGY STAR standards. Funding also supports costs associated with 15 home ENERGY STAR inspections and certification, and additional costs associated with required heat pump upgrades in six homes. <https://hdahome.org/>

### ***Mountain Association Energy Audits Project***

Energy audits are the first step to reduce utility bills, thus freeing up money better spent on fulfilling an organization's mission. With support of Kentucky's State Energy Program funds, energy experts from the Mountain Association provide no-cost energy audits for addiction recovery centers, non-profits, and small businesses located in eastern Kentucky. The project also supports the Mountain Association's New Energy Entrepreneurs program to bring increased energy jobs and awareness to region. The energy audits identify immediate, no cost or low-cost changes that will achieve immediate energy savings, and explain how much to invest to maximize energy efficiency savings. To learn more about the Mountain Association, visit <https://mtassociation.org/>

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### ***Kentucky Rural Water Finance Corporation - Energy Resilience for Water-Wastewater Facilities***

The 2021 ice storm highlighted the need for energy resilience in Kentucky's public water and wastewater systems. Drinking water outages closely follow the loss of power, which quickly complicates emergency response efforts as critical customers such as health care facilities are affected. The inability to connect to auxiliary power extends the water outage, creates more bottled water demand, and increases the likelihood of evacuating critical facilities. Through support of Kentucky's State Energy Program, the KRWFC seeks to minimize water outages and enhance energy resilience through the installation of manual generator switchgear, ensuring auxiliary power is ready when needed. To learn more about the Kentucky rural Water Finance Corporation visit, <https://www.krwa.org/interim-loan-program>

### ***Kentucky Center for Education and Workforce Statistics (KYSTATS) - Commonwealth Energy Affordability Study***

Energy affordability is a complex issue involving many factors and consideration across society. Kentucky and many other states are facing a growing number of energy consumers with financial challenges, an issue that has become more urgent with the economic hardships created by COVID-19. While Kentucky has relatively low energy prices, it does have areas with high, energy burdens that can threaten a household's ability to pay for energy, and force tough choices between paying energy bills and buying food, medicine, or other essentials. With funding provided through Kentucky's State Energy Program the Commonwealth Energy Affordability Study will explore the relationship between energy burden and a number of social, economic, and environmental factors across Kentucky. The final output will be an interactive and printable reference document that is fact-based and moves toward educating decision makers on energy burden in Kentucky. Contact [Ashley.Runyon@ky.gov](mailto:Ashley.Runyon@ky.gov) Office of Energy Policy for details about the study.