

# Wisconsin K-12 Energy Education Program (KEEP)

## Professional Development Workshop Descriptions

The Wisconsin K-12 Energy Education Program (KEEP), through the Wisconsin Center for Environmental Education, provides a variety of professional development workshops to enhance the integration of energy education into existing curricula. Each workshop utilizes standards-based activities to advance place-based resources to engage learners. We can tailor our offerings to meet the needs of your District and will include collaboration and curriculum planning time. All workshop participants will receive ready-to-use hands-on lessons and other supporting resources.

Teachers will receive a Certificate of Completion from the Wisconsin Center for Environmental Education. All workshops support schools in their Green & Healthy Schools Wisconsin initiatives. Substitute reimbursements available up to \$125 may be available. Visit our PD calendar to find a scheduled workshop: [KEEPprogram.org](http://KEEPprogram.org) or contact us at [KEEP@uwsp.edu](mailto:KEEP@uwsp.edu) or 715-346-4770 to schedule a district-specific workshop.

### **Increasing Student Engagement and Literacy Skills through Energy**

Infuse relevant information and various teaching methods into content area while increasing student engagement and energy literacy. This workshop will provide engaging, cross-curricular activities that meet ELA standards with a hands-on STEM approach focused on energy concepts. Activities provided will fit with the workshop model and include gathering and analyzing data, exploring feature articles, comparing and contrasting readings, and exposure to current events and text sets. The workshop will include time for collaboration and lesson planning, and a variety of ready-to-use activities will be supplied so teachers can integrate relevant lessons right away.

### **Energize Your Curriculum with Renewable Energy**

Renewable energy is exciting! Does it work in Wisconsin? Get your students excited about renewable energy and the implications it has for our environment and economy, while exploring potential careers in the energy industry. This workshop provides hands-on activities and classroom-based applications for teachers to help analyze energy information and create strategies and techniques to enhance STEM in their classrooms. Use the engineering design process while building a solar cooker, wind and water turbines. Develop phenomena for your NGSS lessons. Workshop participants will receive the KEEP Doable Renewables: Renewable Energy Education Activity Guide. Recommended for teachers of grades 5-12, adaptable to PK-4 audiences.

### **Utilizing the School Building as a Teaching Tool: Investigations in Energy Efficiency**

Empower students and staff to be part of the energy solution through relevant experimentation using cutting-edge technology. This workshop utilizes the school building as a teaching tool to explore energy efficiency concepts and evaluate energy use through hands-on discovery and advice from energy professionals. Participants develop energy-savings action plans that meet demand for project- and STEM-based learning and link to future career options. The workshop will include time for collaboration and lesson planning, and a variety of ready-to-use activities will be supplied so teachers can integrate relevant lessons right away. Recommended for teachers of grades 5-12 and schools undergoing energy management services.

### **Place-based Learning: Engaging Students in Sustainability**

Learn how to use your building and surrounding community as an extension of your classroom. Explore STEM activities and hands-on tools that will engage students in the process of collecting energy data and developing ways to be more sustainable. An emphasis will be on unique features at your specific site to make learning relevant. Activities include measuring shadow lengths to determine sun's height and location throughout the day and seasons; exploring the wind on-site to determine if the direction and speed of wind changes due to obstructions; taking temperatures of different surfaces around your site to determine how these surfaces effect energy consumption in the building; and utilizing maps to identify features that can be utilized for teaching and increasing sustainability. Recommended for teachers of grades K-6, adaptable for 7-12.



Wisconsin K-12 Energy Education Program (KEEP)  
College of Natural Resources  
University of Wisconsin-Stevens Point

# Wisconsin K-12 Energy Education Program (KEEP) School-to-Home Energy Education

---

Power up your students' learning with KEEP! Let us help make energy lesson planning easy with a line-up of programs and resources sponsored by your school's electric utility company.

## Classroom Visits and Curriculum

### Investigations for Students in Energy Efficiency (I-SEE)

Through technology already in students' schools and homes, I-SEE helps ignite curiosity and interest of tomorrow's analysts, scientists, and engineers. Leveraging their own real-life energy consumption data through experimentation, students build knowledge, skills and confidence to reason through modern challenges and make a real difference, right now. This 4-6 week program includes STEMhero's online energy tracking dashboard, in-class Student Energy Audit Training (SEAT) workshop, and take-home energy audit lending kit.

**Grades: 6-8**

### Student Energy Audit Training (SEAT)

Turn your school into an energy efficiency "laboratory." STEM role models will facilitate this in-school field trip with the help of your school facility staff. Use hands-on activities to show students they have the power to influence energy use at their schools and homes. This workshop is offered in half- and full-day formats.

**Grades: 6-8**

### Watt's Up Unit

Dive into three lesson unit that helps students discover personal energy consumption. Lesson one and three are taught by you. Lesson three is facilitated by KEEP, your Utility, or other local energy experts. Lesson one explores energy use in the classroom and at home. Lesson two investigates how energy is measured through hands-on investigation using watt meters and how to calculate energy costs. The final lesson introduces students to energy conservation and efficiency and energy action plan development.

**Grades: 6-8**

## Hands-On Lending Resources

Discover over twenty educational trunks and kits for all grade levels available to loan to Wisconsin educators through the Wisconsin Center for Environmental Education Resources Library. Trunks and kits include a Pedal Power stationary bike, sun oven, hand-crank generator, and more!

## Partner Programs

Empower students to act locally through 4-6 week online sustainability curricula from our partners. The Cool Choices game engages students and staff to adopt sustainable practices. STEMhero's energy tracking dashboard connects students to their personal energy use through exploration and data collection.

---

For more information, visit [KEEPprogram.org](http://KEEPprogram.org) or contact KEEP at 715-346-2425 or [Melissa.Alexander@uwsp.edu](mailto:Melissa.Alexander@uwsp.edu) or your local Energy Services Representative, Mike Gentry at 608-825-1764 or [mgentry@wppienergy.org](mailto:mgentry@wppienergy.org).



Wisconsin K-12 Energy Education Program (KEEP)  
College of Natural Resources  
**University of Wisconsin - Stevens Point**