EnergyWhiz

EnergyWhiz (EW), created by the Florida Solar Energy Center (FSEC)—an energy research center of the University of Central Florida—in 1999, is a forum for students to demonstrate their science, technology, engineering, arts and mathematics (STEAM) capabilities through energy-focused, Project Based Learning.

When: May 4, 2019
Where: FSEC Energy Research Center/University of Central Florida
1679 Clearlake Road
Cocoa, Florida 32922-5703
(321) 638-1018
www.fsec.ucf.edu/go/energywhiz

Getting Started
Teaching and learning about energy, technology and the environment through any of the EnergyWhiz activities is fun, effective and unforgettable. Each project-based activity builds student confidence and STEAM knowledge. EnergyWhiz and EnergyWhiz Expos are where students showcase their projects, receive feedback from energy experts and demonstrate important workforce skills.

EnergyWhiz Expos
Expos are regional events of various size and scope held prior to the statewide EnergyWhiz held in May.

For Expo dates and locations, visit:
http://www.fsec.ucf.edu/go/expo

“The future is in good hands if these kids are examples of tomorrow’s scientists, teachers and citizens.”
Dr. Peter B., EnergyWhiz Judge

Here are some ways to get involved:

1) Watch the EnergyWhiz video: https://vimeo.com/fsec/ew
2) Visit the EnergyWhiz webpage: http://www.fsec.ucf.edu/go/energywhiz
3) Attend an EnergyWhiz event as an observer or volunteer http://www.fsec.ucf.edu/go/ewvolunteer
4) Participate in an EnergyWhiz Expo http://www.fsec.ucf.edu/go/expo
5) Participate in an FSEC Workshop: http://www.fsec.ucf.edu/go/professionaldevelopment
6) Explore FSEC science lessons at: http://www.fsec.ucf.edu/go/k-12
7) Check out the EnergyWhiz.com website for student activities
8) Sponsor an event or make a donation: http://www.fsec.ucf.edu/go/ewsponsor

Contact the FSEC Education Department for more ideas:
susan@fsec.ucf.edu or penny@fsec.ucf.edu
Energy Innovations (6th – 12th Grades)
Students work together to design and market a full-scale photovoltaic solar-electric powered device that has real-world applicability. The projects are given design awards based on the creativity, construction, message and marketing of the product.
www.energywhiz.com/go/energyinnovations

Solar Energy Cookoff (4th – 12th Grades)
This two-part Cookoff combines knowledge and abilities used in engineering and construction, as well as culinary arts. Teams of students apply problem-solving skills to design and build solar thermal devices that are used to cook their tasty creations.
www.energywhiz.com/go/solarcookoff

Critter Comfort Cottage (4th – 12th Grades)
Using green building design and construction techniques, students are challenged to create the most cost-effective, comfortable “home” for a critter. Teams also create marketing strategies that describe the features of their comfort cottage.
www.energywhiz.com/go/c3

Energy Transfer Machine (4th – 12th Grades)
Teams transform materials into Rube Goldberg-type machines that perform a specified task and then submit a video of their success.
www.energywhiz.com/go/etm

Junior Solar Sprint (4th – 8th Grades)
Students use science skills, creative thinking, and teamwork to design and build high-performance photovoltaic (solar electric) cars. Each team produces a model-sized car that is judged on technology, craftsmanship, innovation and appearance. Cars also race on a 20-meter track in a head-to-head competition.
www.energywhiz.com/go/jss

Electrathon (High School – Adult)
The Electrathon is a competition involving custom, participant-designed and built, electric vehicles. Powered by an electric motor and batteries, these go-cart-type vehicles must be skillfully designed and driven to maximize distance traveled within a given time limit.

For more information about the Electrathon and how you can be involved, visit: Electrathonoftampabay.org

For More Information
www.fsec.ucf.edu/go/energywhiz
or see a video about the events at https://vimeo.com/fsec/ew