

2011 Summer Energy Education Workshops



The *eesmarts* and Learning for Clean Energy Innovation

programs welcome Connecticut educators to attend summer workshops on energy, energy efficiency and clean, renewable energy sources. Our professional development workshops, led by the Project to Increase Mastery of Mathematics and Science-Wesleyan University, review both content and pedagogy regarding energy-related scientific and mathematical concepts. Educators will receive training for inquiry-based, hands-on activities that can be utilized in the classroom environment.



Photos by Steve Blazo Photography

Upcoming Workshops:

June 27, 28 & 29

- Grades PreK-2 Workshop
- Grades 3-5 Workshop

Stepping Stones Museum for Children, Norwalk

June 30

- Grades 3-5 Climate Change Workshop

Stepping Stones Museum for Children, Norwalk

July 5, 6 & 7

- Grades PreK-2 Workshop
- Grades 6-9 Workshop

Wesleyan University, Middletown

July 11

- Grades 6-9 Climate Change Workshop

Wesleyan University, Middletown

July 12, 13 & 14

- Grades 3-5 Workshop

Wesleyan University, Middletown

July 12, 13, 14 & 15

- Grades 6-12 Topical Wind & Solar Workshop

Wesleyan University, Middletown

July 18, 19, 20 & 21

- Grades 6-12 Wind & Solar Workshop

Stepping Stones Museum for Children, Norwalk

Benefits include:

- Earn 0.6 CEUs (per day).
- Receive a \$100 stipend (per day).
- Receive free program lessons and materials for your classroom. All lessons are fully aligned with Connecticut Science and Mathematics Framework standards.
- Learn inquiry methods.
- Gain knowledge, confidence and skills for teaching your students about energy and energy conservation.
- Receive a free year-long pass to one of these museums:
 - > *Stepping Stones Museum for Children (Norwalk),*
 - > *Discovery Museum (Bridgeport), or*
 - > *Connecticut Science Center (Hartford).*

Workshops funded by:



CONNECTICUT
CLEAN ENERGY FUND

Powered by the Project to Increase
Mastery of Mathematics and Science





Workshop activities will integrate *eesmarts* and Learning for Clean Energy Innovation lessons, mathematics, science and language arts in connection with specific Connecticut Science and Mathematics Framework standards. Workshops will also focus on process skills and inquiry learning.

All workshops will cover inquiry pedagogy and information on community resources regarding energy.

PreK-2 Workshop

- Energy & energy transformations
- Bottle shake inquiry
- Energy from the sun
- Close the fridge & ice cube activity
- Weather watch & thermometer reading
- House building materials
- Insulated mittens & fashion show

Grades 3-5 Workshop

- Electricity background
- Go with the flow-embedded task
- Follow the sun & measuring solar angles
- Reduce, reuse & recycle
- Series & parallel circuits
- Building a circuit board
- Where's the circuit?
- Electromagnetism inquiry

Grades 3-5 & 6-9 Climate Change Workshop

- Weather/climate: what's the difference?
- Carbon cycle game
- Earth puzzles
- Graphing temperatures
- Ice cores & tree rings
- Weather patterns

Grades 6-9 Workshop

- Energy transformation (food, fuel & fire)
- ENERGY STAR® calculation & paybacks
- Consumer investigation
- Measuring electrical usage
- Environment is around U

Grades 6-12 Wind & Solar Workshops

Solar Energy Generation

- Geometry of solar radiation
- Measuring solar angle
- Orientation of solar devices
- Albedo effect of solar radiation
- Convection heating
- Solar houses & solar cookers
- Photovoltaics in use in Connecticut-Resources

Wind Energy Generation

- Hurricane winds
- Convection current box
- Measuring wind speed
- Wind & windmill generation
- Blade design
- Generator/motor comparison
- Seasonal & geographic effects on wind power
- Wind generation in Connecticut-Resources

Visit www.eesmarts.com or www.wesleyan.edu/pimms to register.

eesmarts is an energy efficiency and clean, renewable learning initiative supported by the Energy Efficiency Fund and administered by The Connecticut Light and Power Company and The United Illuminating Company. The vision of *eesmarts* is to facilitate students' understanding of the science, mathematics and technology related to clean, renewable energy and electricity in order to create an energy-efficient ethic among all school-age students in Connecticut.

Learning for Clean Energy Innovation (LCEI) is a program funded by the Clean Energy Fund. The LCEI program's main goal is to provide educators with professional development sessions on renewable energy education aligned with Connecticut's science framework concerning "alternative energy sources." (9th Grade Strand I – Energy Transformations).

2011 Summer Energy Education Workshops Registration Form

A \$30 refundable reservation fee is required for these workshops. The fee will be refunded when you receive your stipend, approximately three weeks after the conclusion of the workshop. The fee is non-refundable with cancellation less than two weeks prior to the workshop or for incomplete participation in the workshop. For registration questions, please contact Lorraine at PIMMS (860) 685-6454.

There are a limited number of seats available for each workshop. Applications will be considered in the order in which completed application packets are received (this includes receipt of check deposit). Phone reservations will not be considered.

Please check the workshop(s) you would like to attend: All workshops will be conducted from 8:30 a.m. to 3:30 p.m.

Please note that educators can only attend one workshop at a time.

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Please complete all of the below fields (please print):

Name: _____

Home Address _____

District, School Name & Address _____

Home Phone No. _____ School Phone No. _____

E-mail Address _____

Grade levels you teach _____ Are you a U.S. citizen? _____ or _____ Permanent resident? _____

Are you eligible for CEUs? _____

You must complete a W-9 Form and submit it with your application to be eligible to receive a stipend and/or CEUs. Please mail this form, your W-9 and the registration fee of \$30 payable to PIMMS to:

**PIMMS-Wesleyan University
210 Cross St.
Middletown, CT 06459.**

Retain a copy of this registration form for your records. You are not registered for the course until we have received your completed registration form, your W-9, and your \$30 check.

