CT Energy Education Resources

CT Energy Education is funded by the Connecticut Energy Efficiency Fund to provide a free web-based resource for Connecticut Educators. All educators are welcome to use these lessons. The ewebsite includes lessons, units and resources to teach about the Fundamentals of Energy, Energy Efficiency, Climate Change, Green Schools and Green Jobs. The lessons target the Connecticut 9th Grade Science Frameworks, but also address other levels and topics. Check out all the lessons there at **www.ctenergyeducation.com** on the Master Lesson List at**http://www.ctenergyeducation.com/lesson_list.htm**

Contact **Laurel Kohl** at the **Institute for Sustainable Energy** at Eastern Connecticut State University about this resource.

Some of her favorites include:

- Ecological Footprint **http://www.ctenergyeducation.com/lesson.htm?id=fqe4v3ol**

  This interdisciplinary lesson works well with grades 4-16 and also in community conversations. The lesson has many extensions, including a game, "A World of Seven Billion", Ecological Footprint Facts, and much mor

- Carbon Cycle Game **http://www.ctenergyeducation.com/lesson.htm?id=muefmifp**

  This fast-paced game helps students in middle grades through college visualize carbon sinks and transport between sinks both pre-Industrial Revolution, and in the age of Fossil Fuels use.

- Energy in the 9.3 Standard **http://www.ctenergyeducation.com/lesson.htm?id=fys633bq**

  This comprehensive unit explores fossil fuels, alternative fuels, how electricity is made, and the social/environmental issues related to energy use. The unit is a Leveled Curriculum with power points, worksheets, reading and writing assignments, and many other assignments to help students explore and master this topic.

- Exploring Green Jobs **http://www.ctenergyeducation.com/lesson.htm?id=4zdcm0fs**

  Using an online Meyers-Briggs Type Indictor tool, and the free O*Net resources, this lesson helps students explore which jobs might best suit their interests, including information about green jobs.

- Conducting a Classroom Energy Audit **http://www.ctenergyeducation.com/lesson.htm?id=freu4vvm**

  This brand new lesson guides students and their teachers through assessing the energy used in the classroom and the school.

New lessons from CT Energy Education!

- **Nuclear Resources**

(Nuclear Energy and its Challenges) This document includes links to CT Energy Education nuclear related lessons; The Half-Life of Twizzlers and M&Ms; a National Archive lesson using a 1950's nuclear fallout brochure; resources from the Connecticut Academy of Science and Engineering; and more.

- **Connecticut and Climate Change Presentation**

- **Connecticut Energy Issues Presentation**
- **Greenhouse Effect Inquiry Lab**

(Carbon Dioxide Effects on Temperature) This inquiry lab is best conducted after student complete the included reading, answer the questions and then experiment with baking soda and vinegar to create CO2 . The teacher packet includes a standard "cookbook" lab for your comparison, and an inquiry lab exploring the same questions.

- **Energy Misconceptions Resources**
- **Rube Goldberg Challenge**

(Energy Transformations) This lesson is best used after the class has experienced the**Cat-traption** lesson and seen some of the fantastic video clips of Rube Goldberg machines online. The lesson is designed as group work with a quick share-out at the end of the project.

- **CFL-LED Cost Benefit Analysis**

The Cost Benefit Analysis allows students to calculate electrical usage in household lighting and create a cost-benefit analysis for electricity and air emission savings by replacement of incandescent light bulbs with compact fluorescent or LED light bulbs.