Daily Energy Topics:

DAY ONE: Renewables: energy generated from natural resources such as sunlight, wind, rain, tides, biomass & geothermal heat, which are naturally replenished. In 2006, about 18% of global final energy consumption came from renewables. We will address a number of passive energy systems in detail and show examples.

DAY TWO: Fuel Cells: an electromechanical conversion device. It produces electricity from fuel (on the anode side) and an oxidant (on the cathode side), which react in the presence of an electrolyte. The reactants flow into the cell, the reaction products flow out, while the electrolyte remains within it. Fuel cells can operate virtually continuously.

DAY THREE: Efficiency: is using less energy to provide the same level of energy service. An example would be insulating a home to use less heating and cooling energy to achieve the same temperature. Another example would be installing fluorescent lights and skylights instead of incandescent lights to attain the same level of illumination. Efficient energy use is achieved primarily by means of a more efficient technology or process rather than by changes in individual. Additionally, appropriate Energy Auditing and Measurement & Verification strategies will also be explained and exhibited.

Daily Energy Topics:

DAY FOUR: Energy Production: is the ongoing effort to provide sufficient primary energy sources and secondary energy forms to fulfill civilization's needs. It involves both installation of established technologies and research and development to create new energy-related technologies. Major considerations in energy planning include resource depletion, supply production peaks, security of supply, cost, impact on air pollution and water pollution, and whether or not the source is renewable.

DAY FIVE: Energy in the Classroom:

Aggie Energizers!

To contact C.E.R.T.-
Dr. Harmohindar Singh, Director
North Carolina A&T State University
1601 East Market Street
McNair Hall, Room 437
Greensboro, NC 27411

6th thru 12th Grade Energy Educators Workshop

A week with C.E.R.T. on the NC A&T SU Campus

$300 Stipend To Each Attendee

3.0 CEUs Available

C.E.R.T.
State Energy Office
ENERGY
www.energync.net 1-800-662-7131
N.C. Department of Administration "Ensuring a sustainble energy future"

June 22th—June 26th

Elementary School Teachers

The objective of the workshop is to establish ongoing partnerships between regional education professionals and NC A&T SU.

All workshop participants will receive a $200.00 stipend to offset costs associated with attending the C.E.R.T. workshop at NC A&T SU.

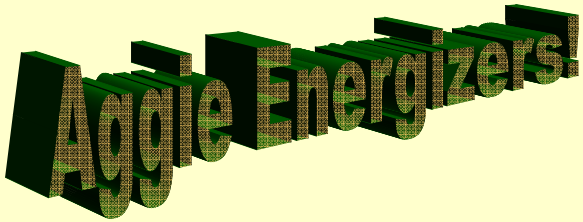
This effort, in concert with the NC State Energy Office, is designed to either enhance existing or initiate new strategies for teaching young people about their roles in this important and exciting period in history. The **Energy and Environmental Efficiencies (3e's)** curricula, offered by NC A&T SU, is geared to teachers and educators of middle and high schools who wish to incorporate more and better energy related topics to their classrooms. It is vitally important that students of all ages understand how to create a sustainable future not only for themselves but be able to articulate how they will be part of local, statewide, national and global communities as well.

Attending this series of workshops will equip educators with the knowledge base, including current events related to energy and the environment, needed to successfully transfer this information to their students.

Middle School Teachers

The vision of the workshop is to forecast the importance of energy and the environment as topics that continue to grow in importance as the global population faces energy challenges and opportunities. Today's students must learn to apply energy technologies to use energy more efficiently, to lessen or eliminate environmental impacts of energy use, and to find new ways to use our energy sources more wisely and more economically. It is a dynamic industry, one that welcomes tomorrow's construction foremen, architects, scientists, engineers, divers, ship builders, public policy experts, analysts, economists, financiers, welders, nuclear physicists, truck drivers, environmental scientists, seismic experts, farmers, geologists, electricians, chemists, and others. It is often said that if you are in business in the United States, you are in the energy business.

Space will be limited for this event and you are encouraged to register early.



High School Teachers

The mission of the workshop is to supply educators with engaging curriculum materials, exciting professional development, assessment and evaluation tools, and quality support.

3.0 Continuing Education Units will be given to participants attending all 5 sessions, or, 0.6 CEU's per day.

C.E.R.T.'s long-term partnership with the **North Carolina State Energy Office** has propelled **NC A&T SU** to the forefront of sponsored programs such as this. For the past 8 summers students have taken part in the annual **Energy Engineers Start-Up Program** offered to area students. We will be sharing with you many of the tools and teaching aids used to educate these students about energy use, the environment and efficiencies related to procuring a sustainable future. We hope you will attend.

For further conference information, or, to register via email please contact our program coordinators:
Dr. Valerie Vickers, vickersv@gcsnc.com
Ms. Venetia Fisher, frseng@ncat.edu
Phone: 336.256.2406
Fax: 336.256.0469
Web: cert.ncat.edu/