

## **Sustainable Energy Education and Training (SEET) Project**

### **Summary**

In April of 2006, the National Science Foundation awarded a grant to the Advanced Technology Environmental Education Center (ATEEC) and partners to provide professional development training for high school and community college instructors. The primary goal of this project is to build the capacity of energy and environmental technicians to meet the challenges of sustainable energy in the 21<sup>st</sup> century workplace through two ten-day intensive annual workshops at national laboratories for technology instructors at upper level high school and community college levels in the content areas of energy efficiency and energy conservation. Content experts will share knowledge about research advances in energy technology with 50 technology instructors over the two-year project period, the respective requirements for technicians, and their implications for a sustainable energy future. Instructors who participate in the annual workshops will be connected and supported by an active online network and workshop follow-up support. Sustainable energy knowledge will be further extended to additional technology instructors through events coordinated by workshop participants in their home communities. ATEEC, serving as lead partner for this project, will coordinate with three major project partners on all aspect of the project: the National Renewable Energy Laboratory (NREL), the University of Northern Iowa (UNI), and the Partnership for Environmental Technology Education (PETE).

The educational content of the SEET project will be derived from the research on emergent technologies and the future of global energy infrastructure available through NREL and UNI's Center for Energy and Environmental Education, and will be based on the experience of these institutions in providing unique research experiences to educators at the 10-14 grade level. NREL and UNI faculty will be directly involved in developing the course, assuring current and accurate content. They will be joined in this process by ATEEC, PETE, and a consultant from the Massachusetts Institute of Technology (MIT).

The SEET project will allow a broad participation of underrepresented (e.g., gender, ethnicity, disability, geographic, etc.) groups from across the country through financial assistance. The project will achieve a broader impact by giving participating instructors the tools to hold workshops for other instructors at their local institutions in sustainable energy concepts, expanding the impact of the program beyond immediate participants. All instructors participating in the program will also be invited to participate in an on-line community coordinated and maintained by ATEEC, so that instructors can support each other in the implementation of sustainable energy curriculum components. Findings from this project will be disseminated through conference workshops and publications and associated articles in educational and environmental literature. This project will provide opportunities for community college and high school instructors to gain knowledge of current research through direct interaction with energy researchers, and it will give researchers an opportunity to learn about the needs of current energy technicians and their instructors.