

Goal: To quadruple the energy knowledge of all high school graduates by the year 2020.

What is an *Energy 2020 School*? It is a secondary school that...

- efficiently enhances energy education for students without requiring a lot of staff time and resources;
- utilizes energy enriched instructional materials that focus on education standards for all subject areas;
- builds and strengthens the leadership skills of student leaders from science classes, clubs, and student organizations;
- involves local energy experts in classroom instruction;
- conducts an **energy theme** *day/days/week of activities* that are eagerly anticipated each year by the greater school community;
- invites neighboring schools to send a delegation of students and teachers to attend their *Great American Energy Debate* (TGAED) program.

How is an *Energy 2020 School Program* Organized?

With the permission of the school administration, an *Energy 2020 School Program Committee* is formed. It is made up of one or several teachers and a group of hard working student leaders. The project requires one or several teachers to coordinate and to provide the institutional memory for planning and coordinating program in future year's. The easiest way is to consult a current school club or organization list of advisors.

School science or environmental clubs may find that this is a great project to conduct and make it their big event for the year. Or, the *Energy 2020* program could be undertaken and responsibilities shared by several student groups or classes. A single grade level or the grade level with the strongest energy component in science could be responsible candidates.

Many organizations already have **energy** competitions and activities in place for state and national awards. For example, the *Future Educators Association of America* is introducing their first energy education competition in fall 2011, in conjunction with *NFEE*. Others clubs such as *Family Career Community Leaders of America*, and *SkillsUSA* also currently focus activities and competition in the areas of energy.

An instructional program *How to conduct an Energy 2020 School Program* with on-line videos is available to guide the school's *Energy 2020* leaders every step of the way, thus keeping the planning and implementation tasks to a minimum. Instructional Videos are also available for use during **planning meetings**.

Are Program Expenses Provided?

After approval by your principal of a preliminary program plan and budget, an *Energy 2020 School* program is eligible to receive a check up to \$350 for use in conducting the program. The school plan can be either a stock program plan or one with simple modifications. It is easy to develop and submit. Funds will only be provided for substitute teacher pay, mileage @ \$0.50/mile, hardware, supplies, food, and printing.

How are *Energy 2020 School Programs* Showcased?

A section of the *Energy 2020 School Program Guide* provides information and suggestions for showcasing TGAED activities. Sample news releases, media plans, letters of invitation, and program day materials for guests and visiting school delegations are provided in the *Guide*.

What are the Activities of an *Energy 2020 School Program*?

The activities are the major work portion of the program. The design of the activities and the on-line video instructional segments provide students with most of what they need to conduct a quality program presentation.

Since many of the presentations will require teams of two to eight students to conduct, different school groups could assume responsibility for one or two activities. Or, science teachers may divide a class into cooperative learning groups, each assigned a presentation. There are the four presentation activity formats students can utilize. A summary of each follows:

The National Student Energy Survey

The members of the math club or 3–5 students interested in policy and politics would make a great group to plan, conduct, and evaluate their school's participation in the **National Student Energy Survey**. The *School NSES Guide* and on-line survey make the activity one that has a high impact, while requiring a moderate amount of coordinating time.

Meet the Expert is a very easy activity to undertake and will reap great rewards. Simply put, you invite a *local expert* to speak to the students. Invited experts will have been provided in advance with a script of questions. Experts might include auto dealers, heating and cooling engineer, building contractors, senior citizen, or a politician.

A script for the *Host PowerPoint* presentation is also provided with this activity. This will help the very busy individual to focus his/her thoughts and streamline preparation time. A single student (teacher) reads the script and is the host the day the experts comes to class. Very easy.

The Let's Talk Energy Show

Student TV show hosts appear to interview live experts via satellite (*pre-recorded, download from the NFee website*) to examine current energy issues such as the pros and cons of wind power or nuclear energy, or climate change. Teacher can play the role of the host if the *Show* is being used for a single class as a lesson. All shows follow a provided script.

A student producer oversees all aspects of the show assisted by a [Let's Talk Energy Show Production Guide](#). Since the shows are scripted, hosts do not have to be a science or math superstar, a drama student or a student interested in broadcasting are also good candidates.

Energy Enriched Lessons

Learn the elements of newspaper headlines and leads in English class while reading about the Smart Grid. Or in math, learn how to calculate the effects of compounding while reading about energy growth in the past and future. In science it's *Energy 101* or *Thermal Energy Applications*, and in social studies it's *Energy Conservation - Carrot or Stick* or *The Energy Focus Group*. The lessons are developed utilizing the *Common Core State Standards*. What makes the lessons unique is that they are developed with extra detail so students can teach them as well as teachers.