

# Our Story

**E**nergy problems first highlighted by the 1973-74 gasoline and fuel shortages spawned considerable research efforts on the topic of energy conservation. Throughout the 1970s, over 300 energy consumption studies were conducted. Leaders from prominent energy businesses and organizations in the U.S. recognized the importance of energy and its contribution to our economy, national security, quality of life and the environment. This influential group joined together to form the National Energy Foundation (NEF) and launch an innovative initiative to educate the public about energy and conservation.



Energy is an important part of the American way of life and has remained so despite the many changes in political, economic and social landscapes.

In order to fulfill our mission of promoting and cultivating energy

literacy, NEF is dedicated to providing consistent, quality energy education. NEF employs the approach of educating rather than advocating to maintain authority and integrity in the fields of education and energy use.

The commitment NEF made to education early on has allowed the foundation to work with a large variety of sponsors, departments of education, government organizations, teachers, students and thousands of program participants. NEF continues to tailor its message and methods of educating in order to remain on the cutting edge of energy related issues and effectively reach audiences of all ages.

# Energy Awareness and Natural Resources

## Energy IQ Student Camp

**N**EF's first ever Energy IQ Student Camp was a two-day energy experience for junior and high school students during the summer. Held at the end of June, the student camp provided opportunities for 31 Idaho students to understand more about energy.

The students explored energy issues specific to the Idaho Falls area, careers in energy and efficiency practices with energy and water. They took part in hands-on training and received educational materials to help them understand complex energy concepts. Science experiments taught students about important topics including forms of energy, renewable and nonrenewable resources, circuits and motors.

Community leaders, Idaho Falls Mayor Rebecca Casper and Jackie Flowers of Idaho Falls Power, spoke to students about energy in their state and served as career role models. Students went on field trips to explore local energy production and research facilities including the Idaho Falls Power hydroelectric facilities and Idaho National Laboratory. They also interacted with specialists in energy fields, such as engineers from Bechtel Marine Propulsion, to learn of career opportunities and experience the science of energy.

Student camps are a great way for students to learn more about energy and to put the energy story into real-life context. Understanding specifics of their local energy is critical for these students to become



positive contributors to our energy future. NEF is pleased to have participated with the multiple partners to bring this exciting initiative to Idaho students.

The Energy IQ Student Camp immersed participants in the world of energy and the students had a blast!

# Energy Management

**Innovation**, the high school focused member of the **THINK! ENERGY** lineup, significantly reduces energy use for an up and coming audience. There are three primary reasons NEF has identified high school students as a perfect group for **Innovation** – they are plugged in the majority of the time, they are quick to adopt new technology and they are the next generation of rate-paying energy users. **Innovation** unites real world energy experience with the energy literacy education to provide a complete understanding of energy from natural resources to wise use.

High school students stand to benefit greatly from energy efficiency and the National Energy Foundation (NEF) has worked hard to maximize that benefit by designing the program around a high school lifestyle. **Innovation** puts a lot of emphasis on plug load. In the typical high school student's room, there are a lot of plugs in the wall including everything from computers to lava lamps. After NEF delivers the fundamentals of energy efficiency through an exciting mix of math, science and social sciences, students take home their own *Innovation Kit*. The kit has an array of energy-efficient products, including a smart power strip to help automatically reduce plug load.



Smart power strips are still new to much of the general public and high school students make great ambassadors for introducing new technology. After NEF arrives and presents, students are fully trained and they in turn get to be the teachers at home. The power strip each student takes home will provide five outlets of automatic power management, minimizing waste. Saving energy works best when it is a team effort at home. Students appreciate the efficiency of speakers, a monitor, stereo and game systems automatically turning on, all because they pushed the power button on their computer.

Parents love to see students doing their part to reduce energy bills.

Through generous sponsorships in multiple states, NEF has had the opportunity to help thousands of future rate-paying utility customers start their energy journey off on the right foot. The timing for **Innovation** could not be better. Before students enter the workforce or go off to college or trade school, they learn what they need to know to ensure that they are prepared to be proactive with their total energy use.

# Materials Development

## Alternative Fuels Poster

**N**EF's new *Alternative Fuels Poster* was developed to get teachers and students to think about transportation in a new way. The poster was initially designed to support the Alternative Fuels Teacher Workshops, but has found its way into thousands of additional classrooms.



Alternative fuels are energy sources made primarily from resources other than petroleum. Expanding the use of alternative fuels can help individuals save money and also contribute to cleaner, healthier air. The development and use of these alternatives (electricity, natural gas, hydrogen, propane and biofuels like ethanol and biodiesel) will help diversify the transportation system, lower emissions and enhance energy security.

On the front of the poster, students can search for key concepts about energy and different fuels as they take a cartoon tour around the United States. NEF's in-house graphic artist, Cory Heslop, used his talents to create and design the elements that make informed transportation decisions come to life.

This curriculum piece is an important component of sharing the energy story with students and their families via an amazing network of teachers. Six of the eight panels on the back of the poster represent different alternative fuel options. The other two panels are activities that put students' new knowledge into action. One of the activities, Find the Fuel, helps students plan a trip across the United States while choosing the best energy source to use.

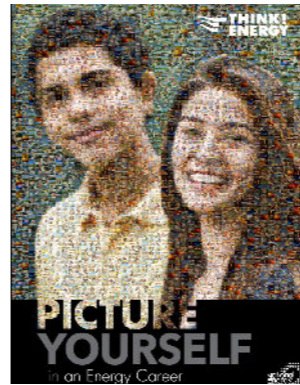
With the help of this poster, teachers are able to provide a comprehensive understanding of alternative fuel transportation on an upper elementary to high school level. The *Alternative Fuels Poster* highlights science, technology, engineering and mathematics (STEM) concepts while inspiring students to make a difference in the way they approach energy and transportation.

# Materials Distribution

## The NEF Academy of Natural Gas Education Career Poster

**M**aterials distribution is one of the keys to achieving the NEF mission and the Academy of Natural Gas Education is one of the best ways for NEF to reach teachers and students with education materials that enhance energy literacy. Every year, thousands of materials packets are sent to schools free of charge thanks to several generous sponsors. This is a great and simple way for teachers, students and their families to learn more about energy.

Each year the NEF team evaluates the content of teacher packets to determine the best strategy for continuous improvement. The *Picture Yourself in an Energy Career Poster* is an exciting addition to the lineup of NEF posters and is also a powerful addition to the Academy of Natural Gas Education. The poster gives students a glimpse into their potential future working in the rapidly growing world of energy. In the last year, 745 posters were delivered to schools across the country to school counselors and teachers through the Academy of Natural Gas Education alone.



Counselors and teachers use this poster as a tool to help students become aware of careers in the energy industry. As students follow the logical flow of the poster, they see that a desirable job in the energy field is within reach. A resume writing activity on the back of the poster provides a road map for helping to make that job a reality. Other panels cover specifics of different energy jobs and the education level necessary to obtain those jobs.

Additional links and resources from many reputable organizations are also available to help students along the way. The *Picture Yourself in an Energy Career Poster* was expertly reviewed by the Center for Energy Workforce Development and the Salt Lake Division of Workforce Services, two organizations that share NEF's passion for career building.

Offering up-to-date curriculum is an important way NEF ensures the energy story is shared and supports educators.



# Consultation

## NEF and Board Membership

**K**ey members of the National Energy Foundation serve on various boards. NEF President Elissa Richards is a member of the Utah Geological Survey (UGS) Board of Directors, a division of Utah's Department of Natural Resources. Gary Swan, Vice President of Development, has been elected to serve as a representative on the Board of the National Energy and Utility Affordability Coalition (NEUAC).

NEF is committed to helping people understand what energy is, where it comes from and what the costs are. Collaboration with organizations like UGS and NEUAC allows for energy topics to continue to be discussed, taught and shared. UGS has an energy and minerals program which provides an understanding of what natural resources are and why they are important to our energy needs. NEUAC helps households understand their energy bills, how to reduce them and ways they can afford the energy they need.

NEF welcomes opportunities to share expertise with other leading organizations. By drawing from different organizational focuses and strengths, all teams involved are able to discover new ways to promote energy literacy and reach energy goals. NEF looks forward to another year of successful consultation and collaboration.

# Student Competitions

## Utah Debate

Since 1991, NEF has sponsored and conducted the Utah Debate program, which inspires students in grades four through nine to develop a deep understanding of issues related to Utah's energy and water use and environment. This program helps students find and use evidence, form arguments, persuade and inform. Through participation and debate, students acquire critical thinking, research and effective communication skills



by putting together informed affirmative and negative cases.

This year, approximately 700 students, parents and teachers began their study by participating in an educational conference where the year's resolution

topics on air quality and transportation were introduced. Study culminated in the spring with regional and state debate meets. These meets enabled students to communicate complex aspects of Utah's air quality to produce solutions for the future. Trophies and plaques were awarded to top winners earning first through third place. Medals were awarded and speaker awards were won by students who earned first through seventh place.

NEF competitions offer an opportunity for students to share their knowledge of the energy story as they apply it to real-world energy issues. Participating in Utah Debate, students demonstrate thoughtful preparation and presentation of energy topics to their peers, families, teachers and judges. Approaching energy on an intellectual level at a young age helps students know the incredible difference they can make in our energy future.

# New Visual Brand Identity

The National Energy Foundation maintains commitment and vision with current trends as they evolve. This year, NEF refined its logo with a new design and color scheme, as it has several times over the course of its 39-year history. The "burst" element of the logo is a detail that has represented NEF since 1991. The style and design of this "burst" has transitioned from one logo to the next, preserving its traditional and iconic representation of the movement of energy in a molecular way. NEF's new colors (turquoise and burgundy) are throwbacks to the colors that were used in the mid-90s with a modern twist.

The updated look became the cornerstone for other visual NEF elements including the conference display, annual report and the biannual newsletter, *InterNef*.

Taking significant steps into the digital age, NEF connects with educators, partners and sponsors with an unprecedented level of accessibility. NEF online resources are always available to anyone with Internet access. This constant connectivity is a way for NEF to share the energy story worldwide.



cultivating energy literacy

As the look of NEF evolves, the what and why of NEF's mission stay the same: cultivating and promoting energy literacy and recognition of the importance and contribution of natural resources and energy to our economy, national security, the environment and our quality of life. How this mission is achieved is an element that will continue to transform as society, education and industry trends shift. Digital annual reports and continual technological updates are only the beginning of what NEF is dedicated to doing in reaching a wider audience that values NEF as the guardian of the US energy story.