

Three horizontal lines in green, orange, and blue are positioned above the text.

# WELCOME 2024-2025 PROGRAM

Three horizontal lines in green, orange, and blue are positioned below the text.

# ESP Program

**Energizing Student Potential** is a collaborative educational initiative designed to **empower students to explore opportunities in STEM fields** and help them discover their own path to innovation through a variety of classroom subjects.

ESP is designed to help educators bring energy into the school and to **provide all the tools and resources necessary** for students and educators to learn together, explore energy together, and teach their local communities about energy while learning about energy careers as well.



# The ESP Program is designed for you to...

- Incorporate the program's energy-focused curriculum and related activities with your students between now and June 2025.
- *Optional* - Work with students to complete an **Energy Innovation Challenge**.
- *Optional* - Host an **Energy Fair** at your school for the local community. Schools will be provided an Energy Fair Kit and small grant.
- *Optional* - Work with NEED to plan for an **Educational Energy Audit** experience for a select team of students. Schools will receive an energy management kit for participating!



## The Curriculum and Hands-on Kits

NEED curriculum and kits for the program will be showcased throughout the workshop.

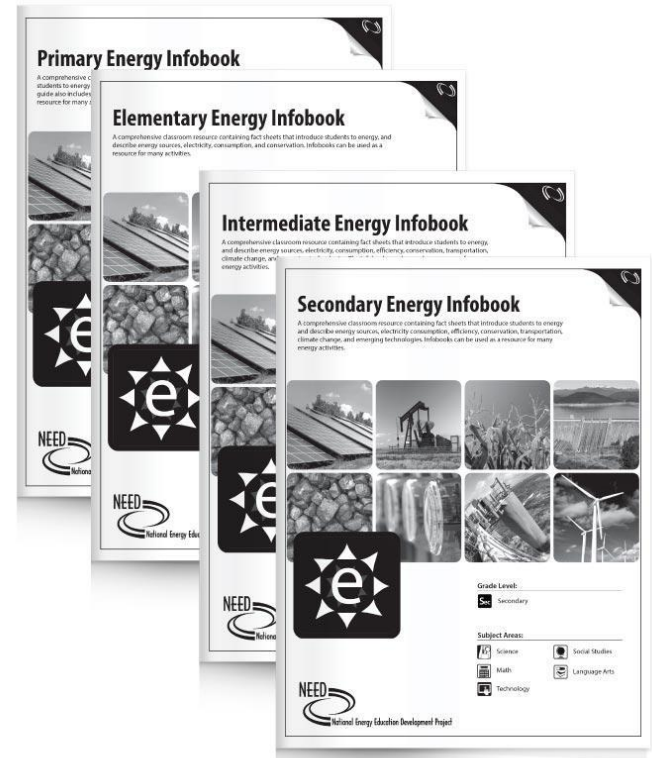
## Standards Correlations and Support

All NEED curriculum supports and is correlated to relevant national standards and state standards. For correlations, visit [www.need.org/curriculumcorrelations](http://www.need.org/curriculumcorrelations).

## Curriculum Guides

NEED has hundreds of teacher and student guides for teaching the science of energy, sources of energy, electricity and transportation, and efficiency and conservation.

All educators participating in the program will receive a class-set of NEED's *Energy Infobooks* at their selected appropriate grade level. These student readers serve as the text for a comprehensive energy education program.



All NEED curriculum is available for free PDF download or as an e-publication.

# What will you receive?

- Hands-on Teacher Training Workshops with breakfast, lunch, stipends and/or sub reimbursement.
- Teacher selected energy kits
- Energy Fair kit, if hosting an Energy Fair.
- Opportunity for students to participate in an Educational Energy Audit with a Certified Energy Manager and receive an Energy Management kit.
- Opportunity to apply for a mini-grant up to \$400 for additional STEM classroom resources.



# Teacher Selected Energy Kits

You may select two energy kits!

Each kit is available at the primary, elementary, intermediate, and secondary level.

- Science of Energy
- Solar
- Wind
- Hydropower
- Oil & Natural Gas
- Climate Science

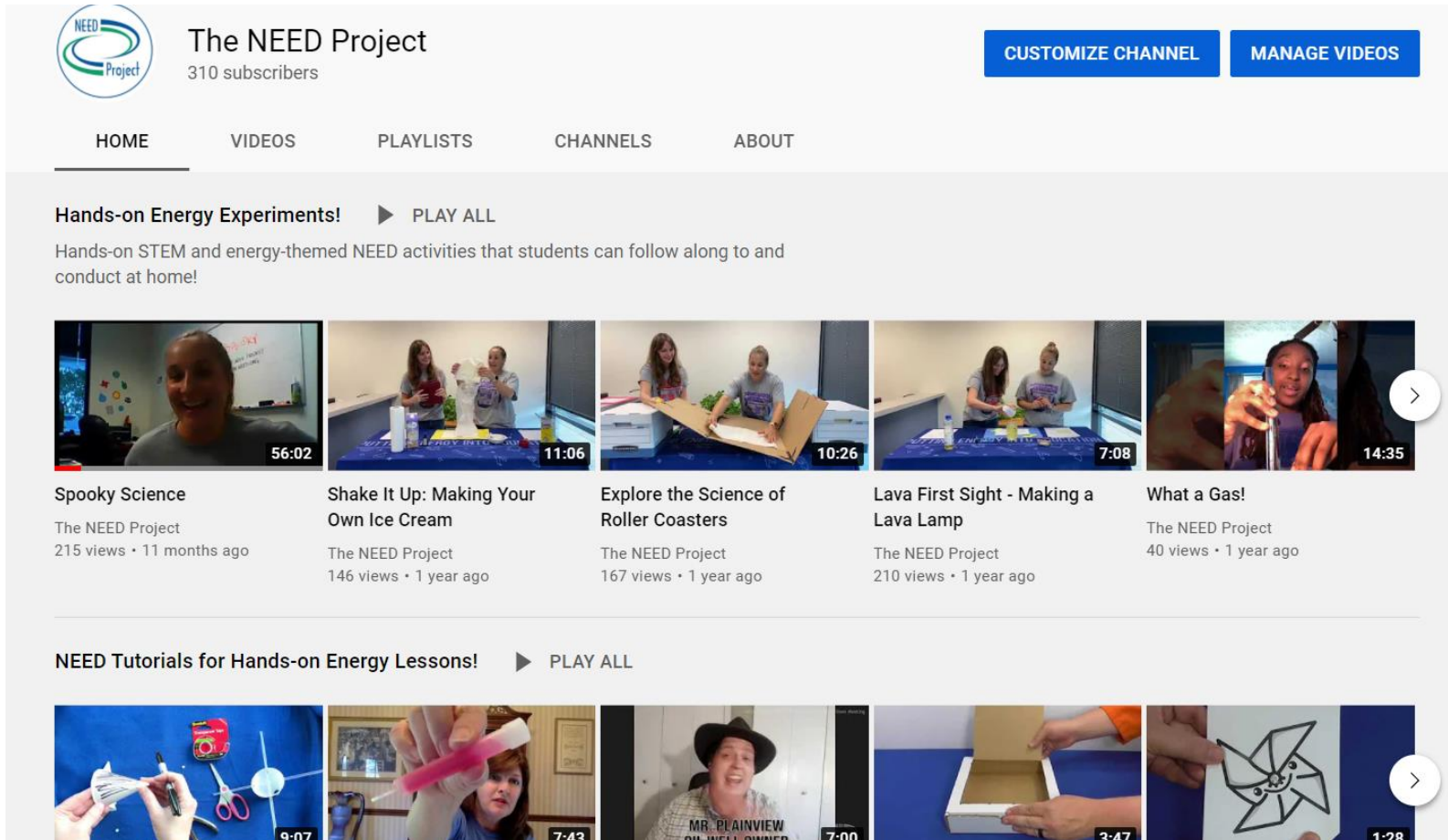
*You will receive the Kit Order Form at the workshop trainings.*

## **Additional Kit Opportunity**

A grade-level Energy Management kit is available to schools who participate in an Educational Energy Audit!

# Hands-on Video Resources

NEED YouTube Channel: [www.youtube.com/user/NEEDProject](http://www.youtube.com/user/NEEDProject)



The NEED Project  
310 subscribers

CUSTOMIZE CHANNEL MANAGE VIDEOS

HOME VIDEOS PLAYLISTS CHANNELS ABOUT

**Hands-on Energy Experiments!** ▶ PLAY ALL  
Hands-on STEM and energy-themed NEED activities that students can follow along to and conduct at home!

Video Title	Duration	Views	Time Ago
Spooky Science	56:02	215 views	11 months ago
Shake It Up: Making Your Own Ice Cream	11:06	146 views	1 year ago
Explore the Science of Roller Coasters	10:26	167 views	1 year ago
Lava First Sight - Making a Lava Lamp	7:08	210 views	1 year ago
What a Gas!	14:35	40 views	1 year ago

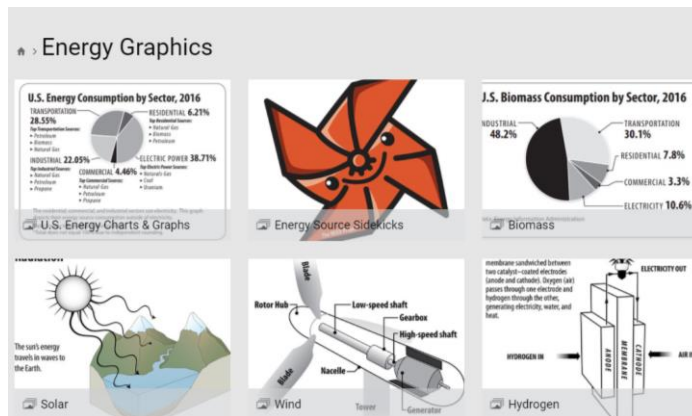
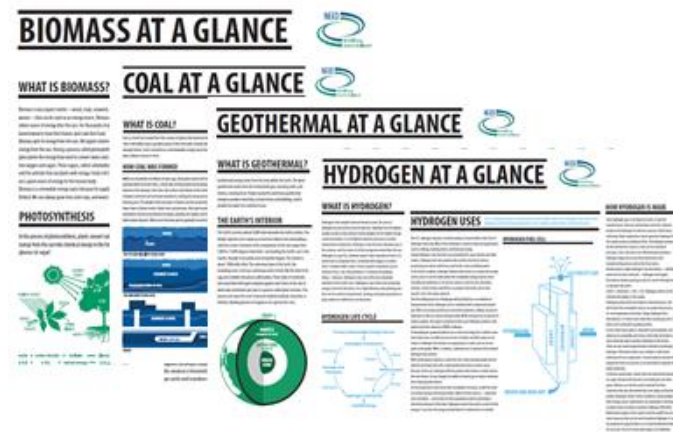
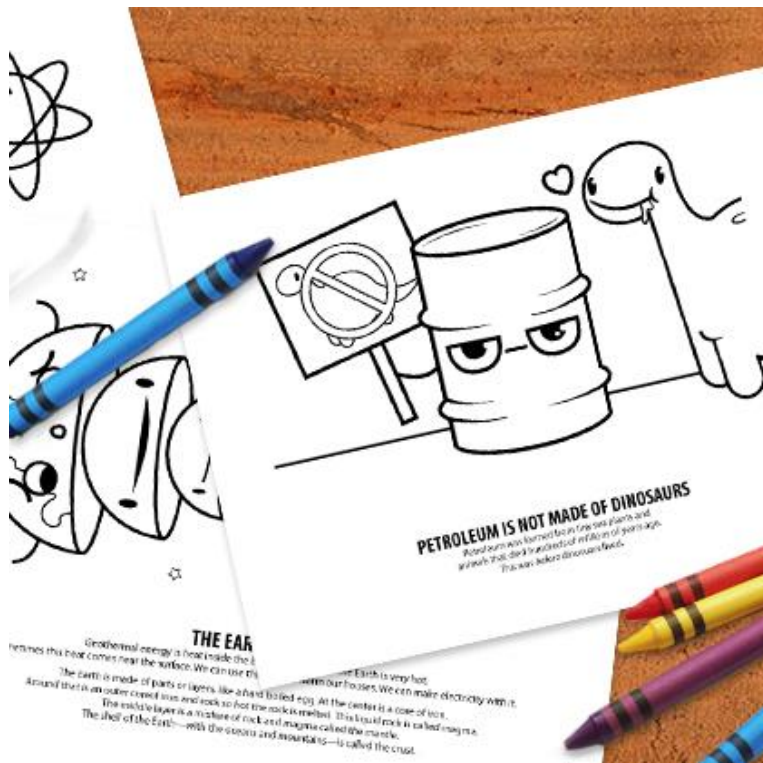
**NEED Tutorials for Hands-on Energy Lessons!** ▶ PLAY ALL

Video Title	Duration	Views	Time Ago
Spooky Science	9:07		
Shake It Up: Making Your Own Ice Cream	7:43		
Explore the Science of Roller Coasters	7:00		
Lava First Sight - Making a Lava Lamp	3:47		
What a Gas!	1:28		

# Awesome Extras

PowerPoints · Coloring Pages · Energy Graphics · & more!

[www.need.org/awesomeextras](http://www.need.org/awesomeextras)





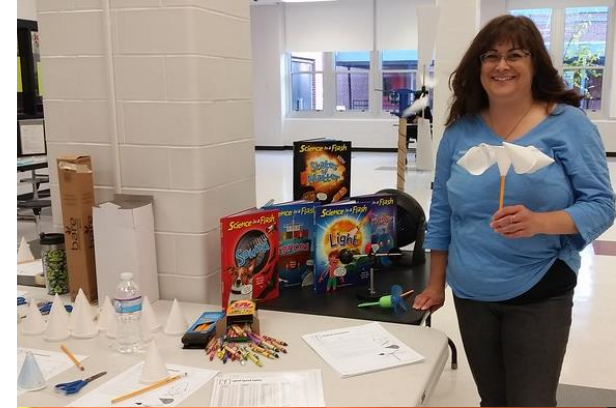
# Energy Fair - *Optional*

Work with students, faculty, parents, and community members to plan and implement an **energy-focused STEM project** in your school/community.

Receive an Energy Fair kit and \$200 Amazon e-gift card to help assist in hosting your Energy Fair. The grant may be used for prizes, snacks, additional materials, etc.

Link to sign up:

<https://www.surveymonkey.com/r/ESPfair2425>



# Energy Fair Kit – What’s Inside?

- Six Games from **NEED’s Energy Carnival**
- **Energy House** – Lessons for a small group of students to build and demonstrate an energy efficient home. A student (and teacher) favorite!
- **Energy LinkedIn Designs** – Students will create LinkedIn pages for themselves using career information from all partners in order to learn more about natural gas, electric power, refining, petroleum, nuclear, renewables and more.
- **Energy Safety** – Students will create exhibits safety information from all partners to learn more about safety in electric power, natural gas and the workplace.
- **Energy Conservation Contract** – Students will complete this activity with their family and will create an exhibit for the Energy Fair to have attendees complete the contract as well.
- **Energy Information Exhibits**– Students will create informational exhibits for attendees to tour. Topics will include:
  - Energy Efficiency and Conservation
  - Nuclear Energy
  - Petroleum
  - Natural Gas
  - Transportation Fuels
  - Electricity
  - Heating and Cooling
  - Hot Water Heating
  - Lighting
  - Wind
  - Solar
  - Plug Loads
- **Bumper Stumpers** – A NEED game to unscramble energy “vanity plates”

[PDF of Energy Fair Kit Supply List](#)

# Mini-Grant Application - *Optional*

An opportunity to request up to \$400 in additional classroom grant funds for field trips, supplies, or other resources specific to engaging students in the ESP Program.

Note: This grant may not be used to purchase snacks or prizes.

Link to apply: <https://www.surveymonkey.com/r/ESPgrant2425>

- Include in your request
  - Total amount requested(up to \$400)
  - Budget: List items you would like to purchase including costs
  - Who you would like the check made out to
    - School/District
    - Other school organization such as PTO
    - Have NEED purchase materials, you provide links to items requesting
    - Option to receive an Amazon eGift card to be emailed to you (must provide receipts of purchases)

# Educational Energy Audit

## *Optional*

- A Certified Energy Manager takes a small group of students around the school building while learning about energy efficiency and conservation and utilizing energy audit tools such as a light meter, hygrometer, IR thermometer, and Kill A Watt® meter.
- Participating schools will receive an energy efficiency and conservation kit!

Link to sign up interest in participating in an Energy Audit:

<https://www.surveymonkey.com/r/ESPaudit2425>

\*Keep in mind your school calendar to not schedule on a day that school is not in session, state testing, etc.



# ESP Innovation Challenge - *Optional*

## The Task

Build upon the energy and climate lessons you may have already explored OR introduce climate science to your students.

Students will work together as a team to create a digital project and short pitch to discuss how your community could begin to combat climate change. The digital presentation or video should be no more than 3 minutes.

Students can present their “pitches” to judges and their peers in a virtual “Think Tank” and take part in some hands-on energy fun.

*More details available Spring 2025 on this opportunity!*

# What we need from you...

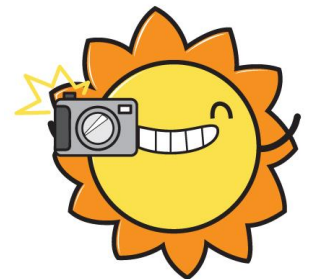
- ✓ Teach energy in your classroom, club, or afterschool program.
- ✓ Attend a workshop training, invite co-teachers and colleagues who may be interested in the ESP Program.
- ✓ Share photos of your students engaged in the lessons, Energy Fair photos, Educational Energy Audit photos, etc. Use **#energizingSTEM** on social media platforms and email [info@need.org](mailto:info@need.org) so we may share with ESP sponsors.
- ✓ Evaluations – please complete a workshop evaluation after each training and an end of program year teacher and student evaluation.

## Stay in touch!

Share with us any questions or concerns you have about the program.

We're here to assist and support you and your students!

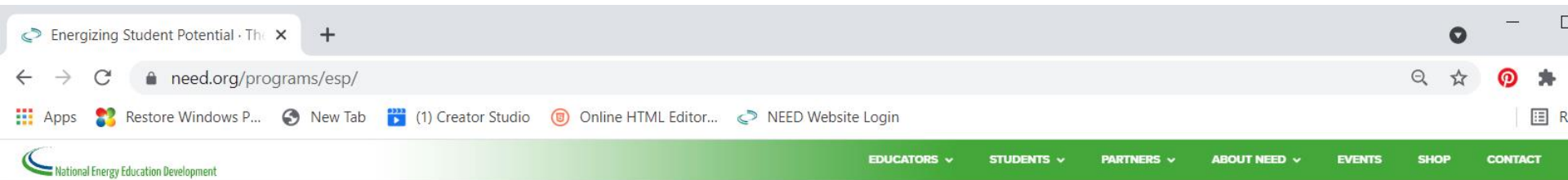
Email [info@need.org](mailto:info@need.org) with any questions.



# Where is the ESP Program Information?

[www.need.org/esp](http://www.need.org/esp)

← *Bookmark this page!*







## NEED's Energizing Student Potential (ESP) Program

Energizing Student Potential is a program designed to infuse energy into the STEM classroom. The program is available to schools in Illinois, Indiana, Maryland and the District of Columbia. ESP is sponsored by: The Exelon Foundation, ComEd, Pepco, Nicor Gas, Peoples and North Shore Gas, BGE, and BP.

Energizing Student Potential is a collaborative educational initiative designed to empower students to explore opportunities in STEM fields and help them discover their own path to innovation through a variety of classroom subjects. ESP is designed to help educators bring energy into the school and to provide all the tools and resources necessary for students and educators to learn together, explore energy together, and teach their local communities about energy. Teacher Training Workshops on a variety of energy topics – including the Science of Energy, Forms and Transformations, Energy Sources, Electricity, Transportation, Climate Science, Energy Efficiency and Energy Careers.




Select your community for more information:

<p><b>ESP Illinois</b></p> 	<p><b>ESP DC, Prince George's County (MD), Montgomery County (MD)</b></p> 	<p><b>ESP BGE</b></p> 	<p><b>ESP Generation</b></p> 
--	---	---	--

# We're Social!

Use **#energizingSTEM** when you post to social media

The screenshot shows the Facebook interface for the 'Energizing Student Potential: Educators Group'. The page header includes the Facebook logo, the group name, a search bar, and navigation links for 'Home' and 'Create'. The main content area features a large blue banner with the 'ESP energizing student potential' logo and several circular images of students engaged in STEM activities. Below the banner are options to 'Join', 'Notify', 'Share', and 'More'. The left sidebar contains navigation links for 'About', 'Discussion', 'Chats', 'Members', 'Events', 'Videos', 'Photos', 'Group Insights', and 'Moderate Group'. The right sidebar shows the group's profile, including the name 'The NEED Project', 3,300 likes, a 'Shop Now' button, and a list of 115 members. The bottom of the page has a 'SUGGESTED MEMBERS' section.

-  @NEEDProject
-  @theneedproject
-  @NEED\_Project



# ESP Program Sponsors

