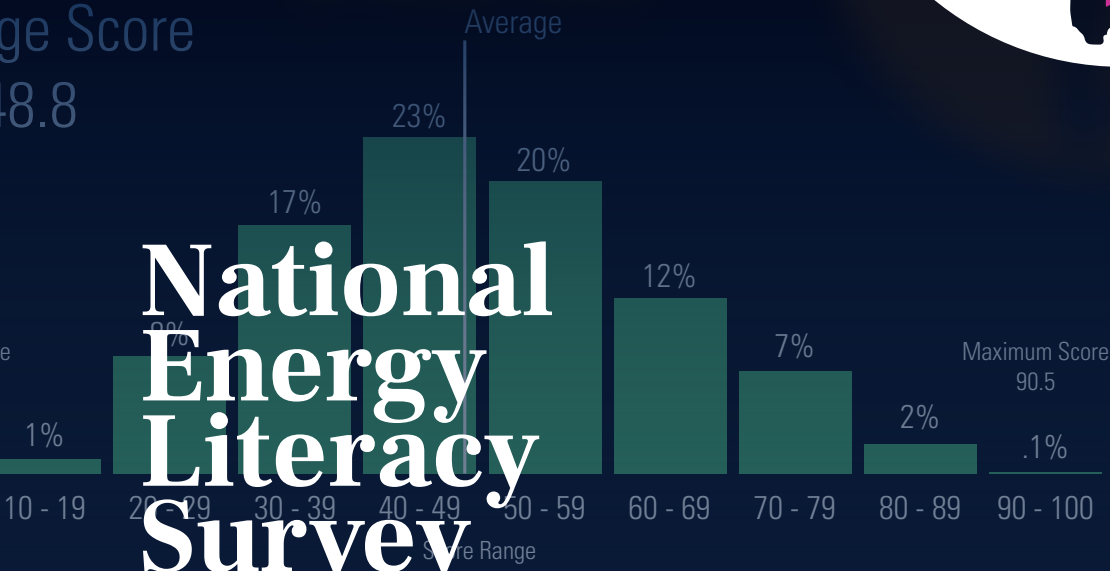


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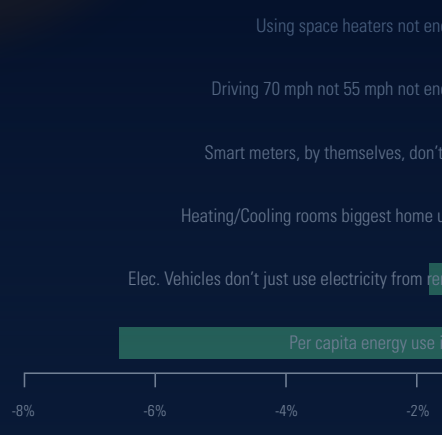
National Energy Literacy Survey



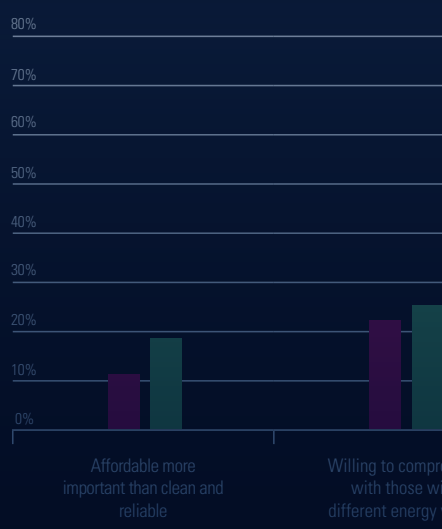
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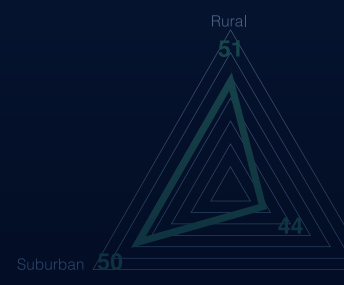
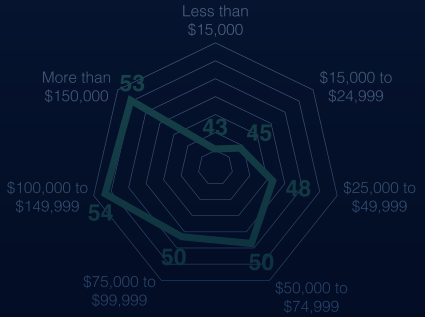
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3 Key Takeaways - page 2
 Geography
 Income
 What to Do with the Data - pages 3-4



Executive Summary

During the 2016-17 school year, the National Energy Foundation (NEF) launched an unprecedented national initiative called the National Energy Literacy Survey. In partnership with Cicero Social Impact, a prominent market research firm, we surveyed 2,005 high school seniors across the country to measure their knowledge, attitudes and behaviors related to energy.

Energy literacy, as defined by the U.S. Department of Energy, is “an understanding of the nature and role of energy in the world and daily lives accompanied by the ability to apply this understanding to answer questions and solve problems.” Energy literacy extends beyond simple scientific knowledge. It includes both a clear understanding of energy systems and an ability and willingness to use that knowledge.

NEF targeted high school seniors for this national survey because of their pivotal age. Students are transitioning into young adulthood and taking on greater responsibility for energy consumption and voting choices. Students are also at the end of their K-12 experience. What have they learned, and what kind of attitudes and behaviors have they developed?

What do these young and eager citizens think about energy issues? What have they been taught about consumption? How will they balance the economic and environmental impacts of energy production and use?

As energy topics and conversations drive the opinions of today, the voters and decision-makers of the future will have a say in the national energy policies of tomorrow.

The following pages will provide a taste of the answers to these questions. But the most relative insight of all is this: Although students have a basic understanding of energy efficiency, many gaps and misconceptions about energy still exist. **There is still much work to do.**

A National Snapshot of High School Seniors



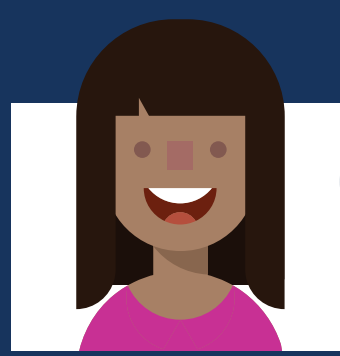
- What have they learned, and what kind of attitudes and behaviors have they developed?
- What do these young and eager citizens think about energy issues?
- What have they been taught about consumption?
- How will they balance the economic and environmental impacts of energy production and use?



National Energy Literacy

Takeaways

- Energy literacy, to a great extent, is not being taught in schools.
- There are specific gaps in energy knowledge that can be addressed through education.
- The majority of students are receptive to learning more and doing more as it relates to energy.



Smart Coasters

High Knowledge • Low Engagement

Engage & Make It Matter

Share the energy story to elicit emotional engagement, then provide meaningful ways for these students to share their own energy story and knowledge.

Agents of Change

High Knowledge • High Engagement

Empower & Let Them Lead

Ask students to organize school energy clubs & events, discuss school and community energy policies and participate in community outreach.

Diamonds in the Rough

Low Knowledge • High Engagement

Ease in & Guide the Way

Ask students to participate in school energy groups, projects and events in roles that provide personal development; gaining knowledge and confidence.

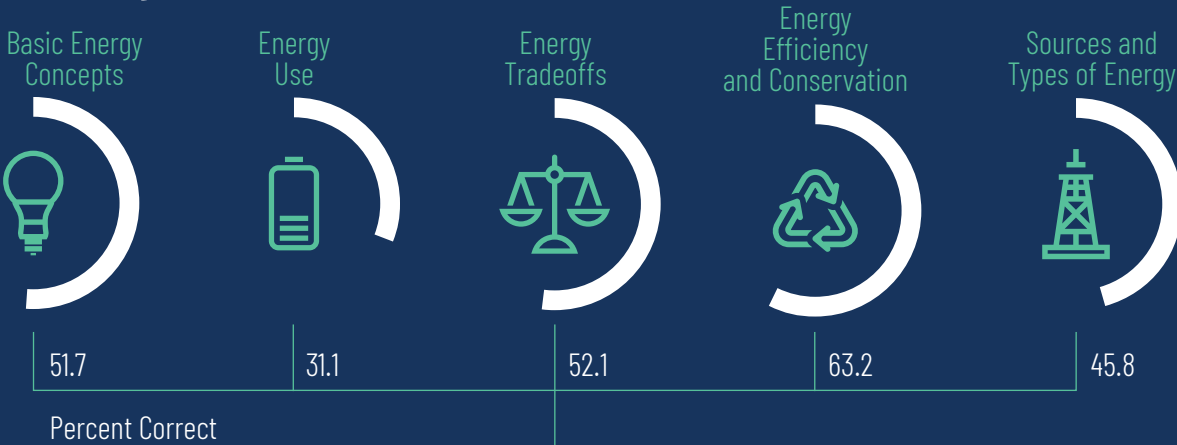
Indifferent Onlookers

Low Knowledge • Low Engagement

Enlighten & Connect to Reality

Meet these students where they are by discovering their immediate life priorities and interests, then connect the energy story to their personal situation.

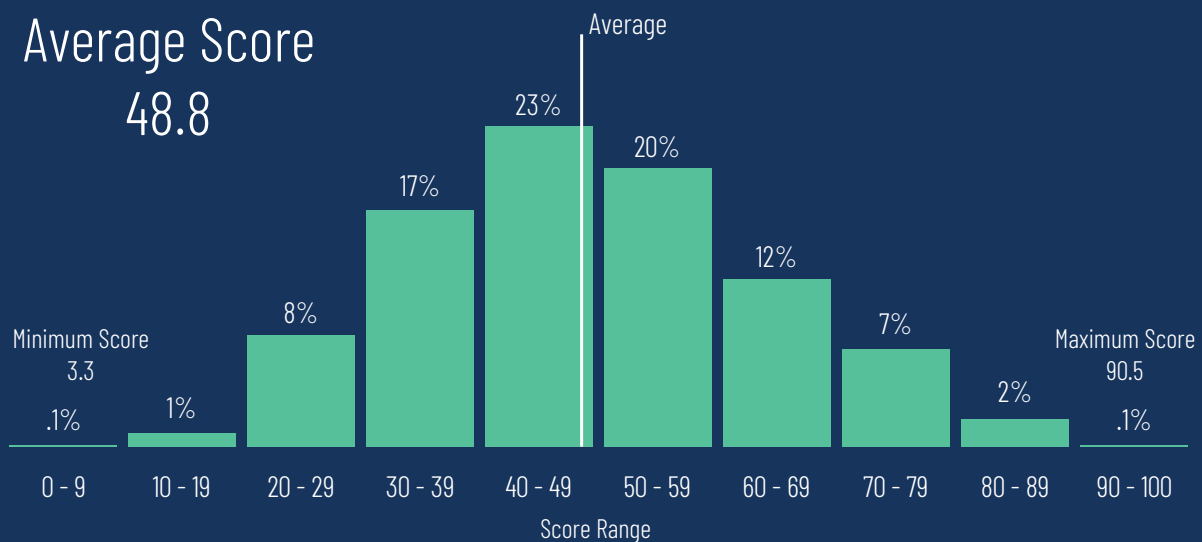
Average Scores



48.8

Student Personas

Psychographic profiles based on knowledge score and 22 attitudinal statements



Share the Energy Story

Use our National Energy Literacy Survey and NEF's educational program resources to tell the complete energy story.

Educate School-to-Home

Sponsor an NEF classroom program, where students are informed about every day energy use and instructed on installing energy-efficient technologies at home.

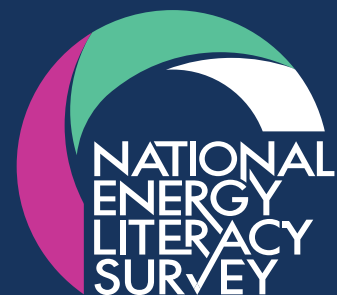
Invest in the Community

Host energy forums or other experience-based programs and presentations for members of the community through or by incorporating students as influencers, organizers and volunteers.

Create Real Change

Institute energy education programs and events targeted toward high school seniors and recent graduates.

Reach Young Energy Consumers



National Energy Literacy Survey Resources

We present.

Our team has presented the survey results to various energy organizations throughout 2017-18. To schedule a presentation in the future please reach out to gary@nef1.org.

We share.

Visit nef1.org/survey to download survey result resources such as the official white paper, power point presentation, video and poster. The survey sample questionnaire is also available.

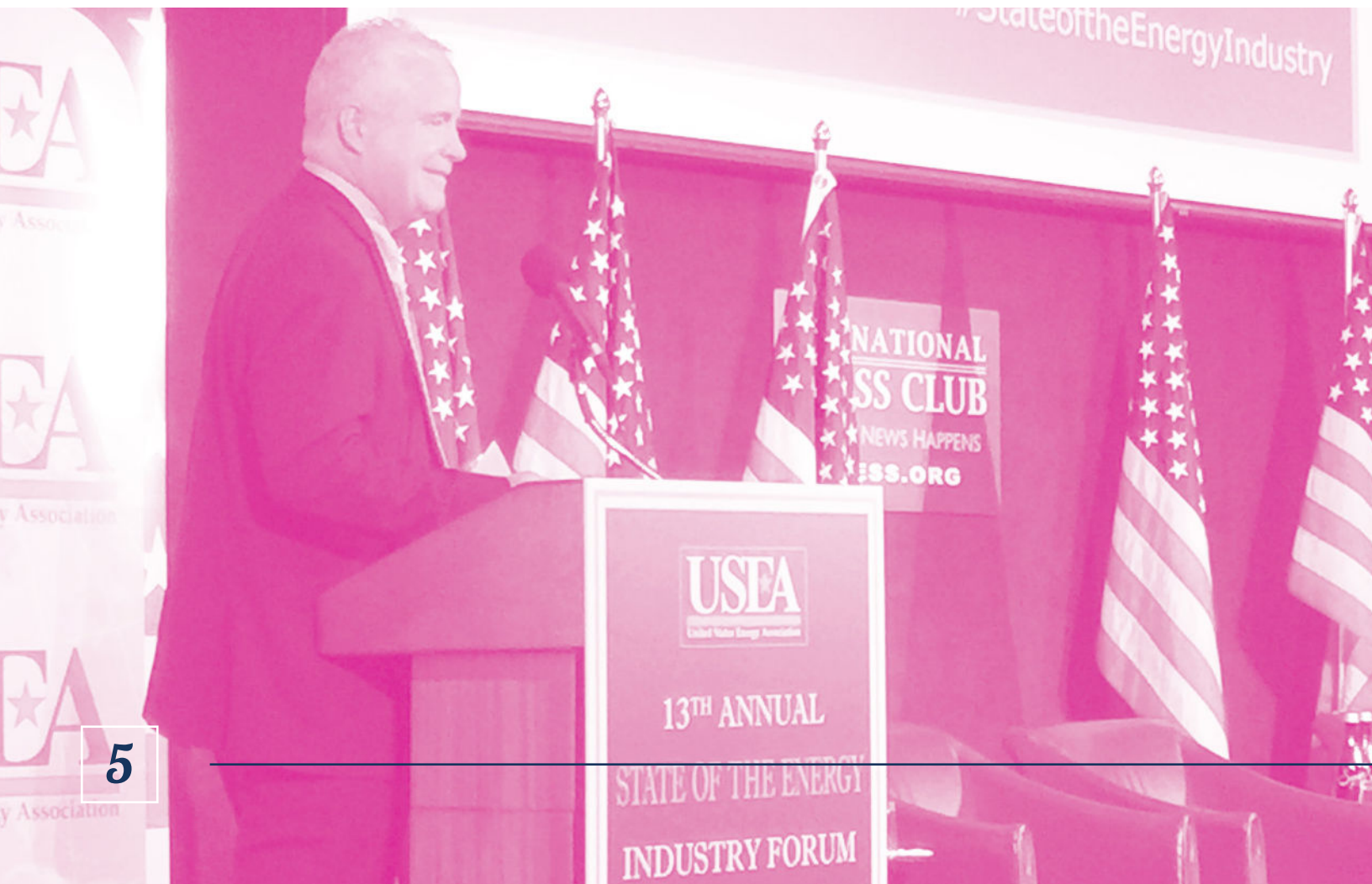
We connect.

Follow us on social media to learn the latest updates about the survey results and our work with energy literacy.



Our high school student data blog series will begin in May 2018, showcasing 10 data point results from the National Energy Literacy Survey.

NEF Blog: nef1.org/blog | **Facebook:** National Energy Foundation | **Twitter:** @NEFEnergy
Instagram: @nationalenergyfoundation | **LinkedIn:** National Energy Foundation (US)





Think! Energy (T!E) is an energy education philosophy – Think! Talk! and Take Action! Bridging the knowledge and attitude gaps we found in the National Energy Literacy Survey data is essential to the NEF mission; cultivating and promoting an energy literate society. T!E programs get students to critically engage with energy and confront the knowledge and attitude gaps, head on.

Think! About Energy

Students that experience T!E understand the big picture, from energy resources to efficient end use.



Critical thinking about energy leads to informed decisions. What can a student do to maximize energy outcomes while minimizing negative environmental

impacts? Students who Think! know the answers and act accordingly. It is all about connecting the dots and making the energy-aware choice.

Talk! About Energy Impact

Energy is a topic that evokes strong opinions and attitudes. T!E encourages students to be



passionate about energy. Whatever their assumptions, we want students to actively participate in the conversation. Students are the key to inspiring their friends and

families; plus energy topics are exciting, even when controversial. These programs communicate the impact energy has on students and encourages them to develop a unique take based on their own circumstances.

Take Action! About Energy Use

The outcome of highly informed and passionate students is savvy energy use. Energy comes at a



cost and T!E students know it. Simply lighting a room requires an amazing energy journey from the sun to the earth to usable electricity. Based on their

knowledge and attitudes, we want students and their families to be active participants in energy choices. We strive for students to act consciously with energy.

When students know how to Think! Talk! and Take Action!, the outcome is extraordinary. Whether it is primary grade students making human circuits or high school students mastering their understanding of the energy grid, our curriculum fills knowledge gaps. It engages students and motivates behavior in hopes to cultivate an energy literate society. Our Bright Kids, Take Action! and Innovation programs reach all ages on the K-12 spectrum.



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InterNEF provides insights from the energy industry, education community and the National Energy Foundation.

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President's Message

by Elissa Richards

What do students know about electric generation? Do they know how nuclear reactors work? These are the kinds of questions asked at NEF as we create experiences and curriculum for students across the country.

So, it was natural that we took the next step, developing a national survey on energy literacy. Results of this pioneer survey paint a picture of our nation's high school seniors' knowledge, attitudes and behaviors on energy.

A promising discovery from the survey is that nearly one third of the students are engaged and want to know and do more about energy. The survey also provides us with knowledge on how to target students' learning towards specific identified gaps.

NEF's instructional development team is weaving concepts and activities into curriculum that address poorly understood concepts in basic energy knowledge. Once that foundation of basics is built, a student's ability to understand complex energy issues can be utilized for more critical discussion and thinking. Implications and tradeoffs with energy development, transmission and distribution are more likely to be considered. Then, a more realistic view of the energy landscape frames students' attitudes and opinions, leading to more informed and efficient behaviors.

NEF continues to share the data and information from the survey with energy organizations that can make a difference. We have identified specific energy topics from the survey that need focus in community outreach and education programs.

The benchmark has been established and a call to action broadcasted. We must invest in and build energy literacy. Students want to be knowledgeable about energy. Students want to know where energy comes from and how it is both created and distributed. When students know how energy powers their lifestyle, they have the beginnings of the energy story.