Everyone Needs Energy!

The team learned energy basics throughout the year using NEED resources, taking field trips, consulting with experts, and hosting guest speakers. Efforts to educate others began with HilFest, the Balloon Festival, the Water Festival, Energy Awareness Month, and promotion of the Trash Hunger Campaign. The team hosted America Recycles Day events.

During Energy Education Week, the team taught lessons to students, brought experts into classes, created movies, hosted a magician, organized a Science & Energy Fair, and led Energy Star Pledge Drives. In the spring, team members continued teaching energy lessons, led and organized a series of energy and resource conservation field trips for 7th graders.

Team members worked to make our new school more energy efficient and lobbied political leaders telling them that EVERYONE NEEDS ENERGY!



Hilsman Middle School Science & Energy Team Sponsors: Kong Heu & Audrey Hughes

Teaching Others



Forms of Energy



<u>Goal #1</u>: Educate 500 other people about energy during the Fall & Winter. <u>Energy Content</u>:

- Learned about NEED
- Learned about energy using NEED resources: Science of Energy, Energy Carnival, Energy BINGO, & Energy Infobooks

Student Leadership:

- Wrote & made announcements
- Conducted an energy audit of our school
- Created & taught Energy Awareness
 Month Lessons
- Distributed newsletters
- Managed Energy Star booths
- Worked at an Energy Education Station & Game at Young Scientists' Day
- Organized a BioEnergy Day Field Trip for 7th Grade



Energy Games



Teaching Others



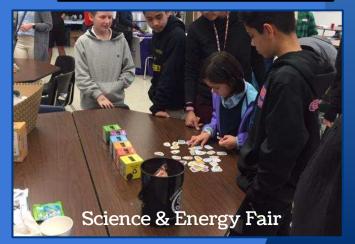
Evaluation:

- Taught 260 7th graders
- 45 team members learned
- 1,000+ adults received newsletters
- 130 children played Energy Carnival games

Water & Energy Connections



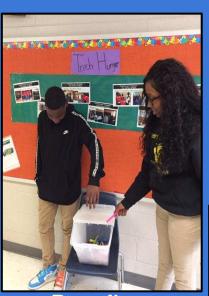




<u>Goal #2</u>: Conserve energy & resources by recycling. Energy Content:

Recycling Saves Energy

- Learned how recycling saves energy by reducing industrial energy demand & fuel for transportation needs
- Learned how composting reduces waste & saves energy
- Learned how the use of water, recycling, & energy are interconnected
- Made the recycling program at Hilsman more efficient
- Promoted the Team's Trash Hunger Campaign (items that can be recycled are collected & sold - earnings are donated to the Food Bank & UNICEF)
- Primary Resource: NEED's Science of Energy



Recycling @ Hilsman





Recycling Saves Energy & Can Make A Difference





We is a state of the food of t

We have earned over \$3,950 for UNICEF and the Food Bank!

Student Leadership:

- Recycled & shipped items for the Trash Hunger Campaign
- Made recycled ornaments for a local nursing home
- Recycled Christmas Trees
- Composted food waste
- Taught others what they learned
- Created bulletin boards
- Volunteered at the Food Bank <u>Evaluation</u>:
 - ~800 people learned that recycling saves energy
 - ~770 students learned about the Trash Hunger Campaign
 - ~770 students recycled waste: food & non-food
 - Donated \$3,950 to UNICEF & the Food Bank from recycling proceeds
 - Made 275 ornaments from recycled items
 - Recycled 85 Christmas Trees

Grow Your Own!



Making our own cold-frame veggies year-round!



<u>Goal #3</u>: Promote the consumption of local foods among Hilsman students to reduce transportation energy needs.

Energy Content:

- Read & studied NEED's Transportation Fuels
- Learned how to grow, harvest, preserve, & prepare local foods
- Student Leadership:
 - Maintained the school garden \$
 greenhouse
 Built cold-frames
 Managed the trout lab
 Cooked with local foods
 Wrote letters to school nutrition staff about serving local foods in the cafeteria
 valuation:
 - Local foods are served 3x per week

Local foods are available for more students to consume





Prepping the field!

Science & Energy Fair

<u>Goal #4</u>: Host a Science & Energy Fair at Hilsman Middle School to educate 200 other people about the conservation of energy & resources.

Energy Content:

- Learned how to read & explain Energy Star labels
- Learned about energy sources
- Learned the energy savings of LEDs & CFLs
- Learned how to create & manage Energy Carnival Games
- Read & studied NEED's Science of Energy, Energy Efficiency, Electricity, & Energy in Society

Student Leadership:

- Planned & organized the Fair
- Created stations for the fair
- Led energy games & information booths
- Collected Energy Star Pledges & gave away LEDs Evaluation:
 - 276 people attended
 - Gave away 85 LEDs



Energy Education Week

Sharing all around town!

<u>Goal #5</u>: Educate 1000 people about energy & energy conservation during Energy Education Week & the month of March.

Energy Content:

- Used NEED's Science of Energy, Coal, & Electricity to create lessons for students in grades 6-8
- Student Leadership:
 - Lobbied the mayor to declare Energy Education Week in Athens
 - Organized a series of field trips for 7th graders to the State Botanical Gardens, UGArden, Landfill, Methane Capture Site, Recycling Center, & Compost Facility
 - Hosted a Science & Energy Fair
 - Had Energy Star Booths at businesses in town



Energy Education Week

Student Leadership:

- Created & planned lessons for other students
- Taught students in other classes during the month
- Worked with community partners for a conservation Film Festival and Magic Show
- Taught adults about Energy Star and energy basics

Evaluation:

- Taught 760 students in science classrooms
- Taught 480 others at the Film Festival and Magic Show
- Shared energy information with 426 adults
- 270 7th graders took energy education field trips







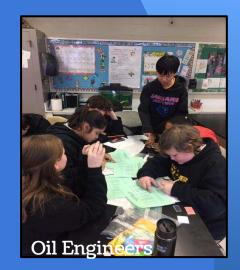
Ripple Effect Winners



Energy Education Week

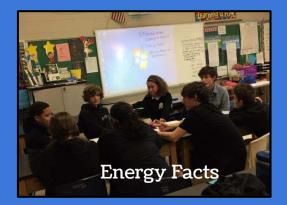


Kids Teaching Kids FUN Energy Lessons!



Energy Knockdown







Energy Efficient New School!

<u>Goal #6</u>: Influence school officials to build a more energy efficient Hilsman Middle School.

Energy Content:

 Learned energy basics, energy sources, & energy conservation information from NEED resources in print & at <u>www.need.org</u>

<u>Student Leadership</u>:

- Lobbied school board members, district officials, & the architectural team
- Served on the Building Committee and EnVision Athens Committee

<u>Note</u>: Hilsman was the most energy inefficient school in the district in the years prior to the new school building. <u>Evaluation</u>:

A new energy, efficient Hilsman will open in September of 2019!

Designing our new school









Energy Star Info & Pledges

<u>Goal #7</u>: Collect 500 Energy Star Pledges & energy conservation information with 2,000 people.

Energy Content:

• Learned energy basics, energy sources, & energy conservation information from NEED resources in print & at <u>www.need.org</u>

Student Leadership:

- Led game & information stations at HilFest, the Balloon Festival, Earth Day Festival, ACC Water Festival, Green Life Expo, Young Scientists' Day, Spring Fling, Ripple Effect Festival, GreenFest
- Lobbied representatives and the mayor about Energy Education
- Participated in the EnVision Athens Committee meeting

Evaluation:

- Shared information with 3,700 people
- Collected 1,577 Energy Star Pledges



Hilsman Science & Energy Team

Hilsman Science & Energy Team is a youth service club that educates the school and community about energy conservation through reducing energy use, recycling, and reusing materials. Hilsman is a middle school in Athens, Georgia.

» Upload an event to display on this page

Science & Energy Team Energy Star Pledge Link

Cumulative Participation Highlights*

Goal for the Year:	435.840 lbs of ahas
Current Total:	11,733,897 lbs of ghgs
Percent to Goal:	2692%

If you have questions about setting or changing your goal, please email changetheworld@energystar.gov.

Cumulative Savings Breakdown*

Greenhouse Gas Emissions:	11,733,897 lbs
Pledge Actions:	3,963
Dollars:	\$943,090
kWh:	6,400,936
BTUs:	11,047,067,297

Sharing Energy Information Everywhere!





@ the Balloon Festival











Goal #8: Increase our energy content Compost Facility

knowledge.

Energy Content:

- Learned from NEED resources during the school year at team meetings, & in science classes
- Learned about energy from experts \bullet visiting our school, on field trips, & virtual interviews
- Learned from Energy Star, NASA, EIA Energy Kids, National Geographic, & **UNICEF** resources

Student Leadership:

- Invited guest speakers
- Organized field trips
- Extended our learning with self-selected projects

Evaluation:

- Average score on the Energy Poll before instruction = 36.4
- Average score on the Energy Poll after instruction = 95.7

Compost Facility



Green Life Expo





Recycling Cen

Everyone Needs Energy!

Hilsman Science & Energy Team members are dedicated to making sure that people know that everyone needs energy and all of the ways energy can be created, plus ways to conserve. Energy education is important so that local and global energy and resource needs can be met now and in the future!





