



# Energy is Essential: Everyday and in Emergencies



On August 27 of 2019 Hilsman students moved into a brand-new energy efficient school building! 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 in August, the Athens Water Festival in September, Energy Awareness Month in October, and America Recycles Day events in November. Hilsman students transitioned to distance learning in mid-March due to the COVID-19 pandemic. Energy Education Month started in person and went digital. The team continued to educate by sending energy lessons to students and teachers designed by team members and experts all spring long. Throughout the year the team promoted energy education, conserving resources, Energy Star, and the Trash Hunger Campaign. More people learned that Energy is Essential: Everyday and in Emergencies!

Hilsman Middle School • Science & Energy Team • Sponsors: Ani Fischer & Audrey Hughes

# Teaching Others



Forms of Energy

Goal #1: Educate 500 other people about energy during the Fall & Winter.

## Energy Content:

- \*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
- \*Organized a BioEnergy Day Field Trip for 7th Grade



Energy Experiments & Games





# Teaching Others



## Evaluation:

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



## Energy & Water Connections



# Recycling Saves Energy

Goal #2: Conserve energy & resources by recycling.

## Energy Content:

- 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 Tour



Recycled Can Ornaments



Recycling Christmas Trees



# Recycling Saves Energy & Can Make A Difference



Composting Saves Energy!



We have earned  
over \$4,500 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

## Evaluation:

- ~820 people learned that recycling saves energy
- ~760 students learned about the Trash Hunger Campaign
- ~760 students recycled waste: food & non-food
- Donated \$4,500 to UNICEF & the Food Bank from recycling proceeds
- Made 310 ornaments from recycled items
- Recycled 87 Christmas Trees

# Grow & Cook Your Own!



Goal #3: Promote the consumption of local foods and cooking at home among Hilsman students to reduce transportation energy demand.

## Energy Content:

- Read & studied NEED's Transportation Fuels
- Learned how to grow, harvest, & prepare local foods

## Student Leadership:

- Maintained the school garden & greenhouse
- Cooked with local foods
- Wrote letters to school nutrition staff about serving local foods in the cafeteria

## Evaluation:

- Local foods are served 3x per week
- Local foods are available for more to consume



# Science & Energy Fair

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

## Energy Content:

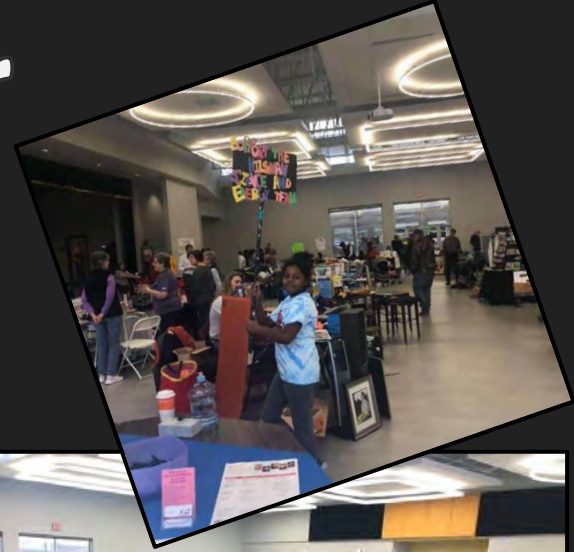
- Learned how to read & explain Energy Star labels
- Learned about energy sources
- Learned the energy savings of LEDs & CFLs
- Learned how to create & manage Energy Carnival Games
- Read & studied NEED's Science of Energy, Energy Efficiency, Electricity, & Energy in Society

## Student Leadership:

- Planned & organized the Fair
- Created stations for the fair
- Led energy games & information booths
- Collected Energy Star Pledges & gave away LEDs

## Evaluation:

- 383 people attended
- Gave away 102 LEDs





# Energy Education Week

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

## Energy Content:

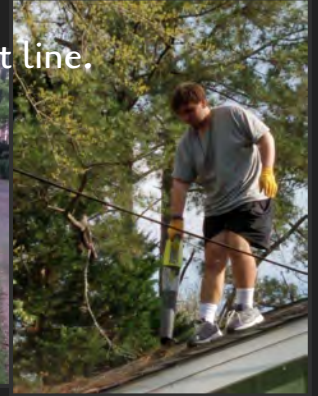
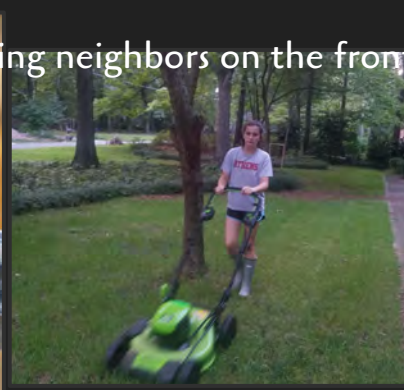
- Used NEED's Science of Energy, Coal, & Electricity to create lessons for students in grades 6-8

## 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 (all cancelled due to COVID-19)
- Shared energy education lessons with 60 teachers and 670 students
- Helped neighbors and Essential Workers
- Shared Energy Education Week lessons on the Town Hall webpage



Helping neighbors on the front line.



## Energy Education Week Proclamation!

### **ENERGY EDUCATION WEEK MARCH 22-28, 2020**

**WHEREAS**, the Hilsman Middle School Science and Energy Team has as their mission to educate the town and community about conservation, recycling, environmental issues, and the protection of endangered species; and

**WHEREAS**, the team has determined in their long-range goals to encourage the community to conduct home energy audits that will instruct in reducing energy use through energy conservation.

**NOW, THEREFORE**, I, Kelly Girtz, Mayor of the Unified Government of Athens-Clarke County, Georgia do hereby proclaim the week of March 22-28, 2020 as **ENERGY EDUCATION WEEK** in Athens-Clarke County, Georgia and encourage all citizens in this community to join me in supporting the team's efforts and goals in any way possible.

**IN WITNESS WHEREOF**, I have hereunto set my hand and caused the seal of Athens-Clarke County to be affixed this 22<sup>nd</sup> day of March 2020.

Kelly Girtz  
Mayor Kelly Girtz  
Unified Government of Athens-Clarke County



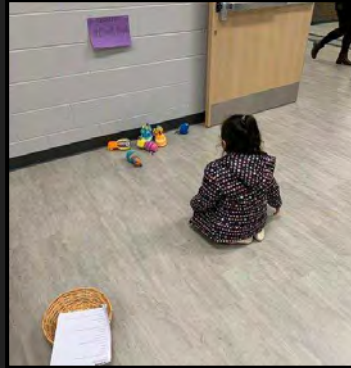
# Energy Education Month

## Student Leadership:

- \*Created & planned lessons for other students
- \*Sent lessons to other students during the month
- \*Added energy conservation flyers to student lunch bags for community meal deliveries via school bus
- \*Worked with community partners for a conservation Film Festival
- \*Shared information with adults about Energy Star and energy basics

## Evaluation:

- \*Shared information with 2,766 adults
- \*Provided information energy conservation information for 3,500 families via the food bus
- \*Taught 760 students in science classrooms
- \*Taught others remotely with student created films



# Energy Education Month

Kids Teaching Kids  
FUN Energy Lessons:  
at School and at Home!





# Energy Efficient New School!

Goal #6: 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 [www.need.org](http://www.need.org)

Student Leadership:

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

Note: Hilsman used to be the most energy inefficient school in the district in the years prior to the new school building.

Evaluation:

A new energy, efficient Hilsman opened on August 27, 2019!



Planning & designing our new school.



**Our New School!**





# Energy Star Info & Pledges

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

## Energy Content:

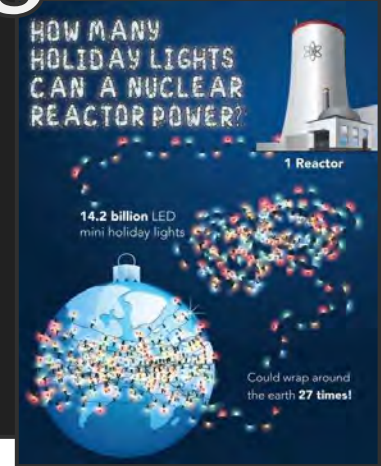
- Learned energy basics, energy sources, & energy conservation information from NEED resources in print & at [www.need.org](http://www.need.org)

## Student Leadership:

- Led game & information stations at HilFest, ACC Water Festival, Green Life Expo, Young Scientists' Day, Science & Energy Fair
- Lobbied representatives and the mayor about Energy Education

## Evaluation:

- Shared information with 2,766 people
- Collected 507 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 ghgs
Current Total:	13,093,212 lbs of ghgs
Percent to Goal:	3004%

### Questions about your Goal?

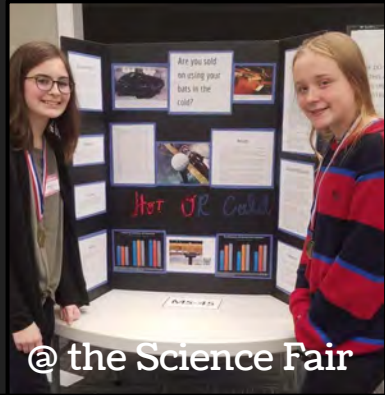
If you have questions about setting or changing your goal, please email [changetheworld@energystar.gov](mailto:changetheworld@energystar.gov).

### Cumulative Savings Breakdown\*

Greenhouse Gas Emissions:	13,093,212 lbs
Pledge Actions:	4,470
Dollars:	\$1,049,804
kWh:	7,131,810
BTUs:	12,270,735,462



# Sharing Energy Information Everywhere!



@ the Science Fair



@ the Water Festival



From the Food Delivery Bus



@ the Green Life Expo



In the neighborhood!



@ Hilsman Middle



# Learning About Energy

Goal #8: Increase our energy content knowledge.

## Energy Content:

- Learned from NEED resources during the school year at team meetings, & in science classes
- Learned about energy from experts 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 = 32.8
- Average score on the Energy Poll after instruction = 92.4





# Energy is Essential: Everyday and in Emergencies

Hilsman Science & Energy Team members are honored to teach and help people know that energy is essential, both everyday and in emergencies. The team learned and shared all of the ways energy can be created, plus ways to conserve. Energy education is important so that local and global energy resource needs can be met everyday, and especially during pandemic emergencies. Energy is essential for everyone!

