



Lloyd Memorial High School

Energy Conservation Project 2025-2026

Keeping it Green During Our Re-model!

Melissa Stolz

In our first year spent in our building (and trailer classrooms) under remodeling, we focused on being a community who cares for and appreciates the planet in the midst of seeing major changes to our campus. We revamped our agricultural practices to focus on container gardening in our feeder elementary schools, partnered with the middle school for a school-wide family STEM Outreach to families, provided energy information and gifts for staff and families for Earth Week, and monitored energy use in our building for initial data prior to the opening of the new facilities in 2027, We held a district-wide initiative to collect metal cans and other items in order to recycle for money to install a water bottle filling station for younger students in our community to use. We implemented a Blue Jeans recycling program and spent time in our

Our 5 Goals

1. Reduce the amount of energy used at Lloyd during construction and demonstrate energy conservation following the opening of the school in the coming year.
2. Partner with middle school students to educate others about conserving energy and resources.
3. Reduce energy waste when producing raw materials by promoting recycling.
4. Increase energy awareness and conservation practices in our community.
5. Provide energy/resource conservation mentoring to elementary schools.



1. Reduce the amount of energy used at Lloyd during construction and demonstrate energy conservation following the opening of the school in the coming year.

Activity: Prior to construction, we continued to improve energy conservation of heated/cool air by putting insulated film on the inside of the windows of the oldest part of our building which would not be demolished.

Energy Content & Resources: District Energy Manager visited and shared information, consulted with our administrators and district facilities managers prior to our shutdown, NEED Energy Info books, Duke Energy kit ideas for potential solutions

[Click here for our Energy Loss Post Survey](#)



Leadership:

the construction, students were placed into groups to inventory, interview, and research solutions for individual teacher classrooms, then placed in teams to clean windows and install the film..

Student

Prior to

Evaluation:

We found a significant amount of thermal energy transfer because of old windows in classrooms, which has now been reduced. Teachers felt this loss of energy impacted student learning capability and are seeing positive impact. Staff and students report positive feedback regarding changes as a result of our recommendations.

1. Reduce the amount of energy used at Lloyd during construction and demonstrate energy conservation following the opening of the school in the coming year.

[Click here for Faculty Energy Survey!](#)

Activities: Energy Superstars Patrol Contest was promoted, and monitored.

- Energy Superstars Pancake Breakfast was planned for faculty who have demonstrated shut-down practices regularly
- We created a checklist for staff members for the entire district to direct them into how to properly shutdown their classrooms for long breaks in order to conserve energy and distributed them just before long breaks.
- We created announcements for students and staff to provide them with Energy Saving tips at the beginning of the day during Earth Week.

Energy Content and Resources: We got our chart from Saving Energy at home and school teacher guide and online energy inventories

Student Leadership: Completed monthly after school patrols to provide feedback and track compliance in all rooms. Read announcements, provided breakfast and thank you notes in mailboxes to the Superstar teachers

Evaluation: We will continue monitoring light usage around the building. Teachers are continuing shutting their classrooms down completely at 90% compliance. We will survey teachers again at the end of the year, Last year's similar efforts indicated increased awareness and positive feedback.

Classroom Checklist Before Leaving for Breaks

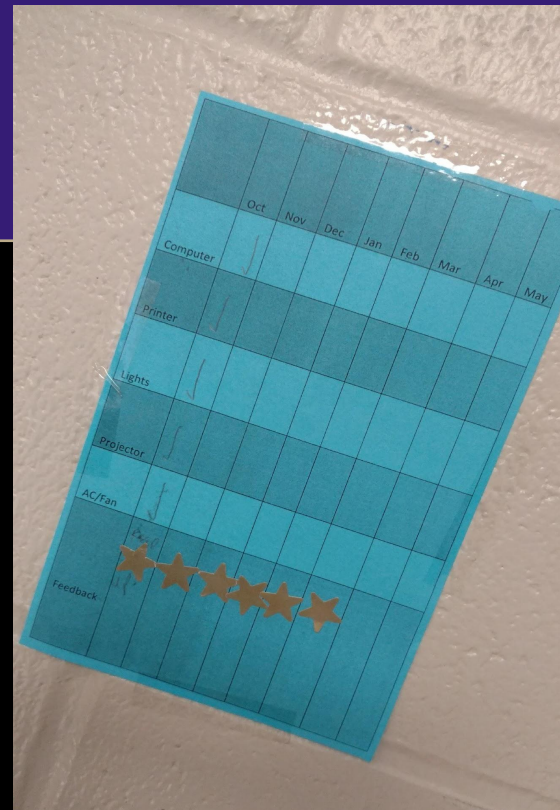
Brought to you by your friendly, neighborhood Lloyd Enviro-Conservation Team students

- Unplug all small appliances of a personal nature - diffusers, warmers, lamps, chargers, pencil sharpeners, glade plug-ins, radios. (And take home any "no-no" appliances per district directive such as microwaves, mini-fridges, & coffee makers).
- If able, click off powerstrips or unplug all computers, monitors, printers, computer carts, walkie talkie chargers, document cameras, tv, and projectors - this avoids a sneaky phantom load that continues sucking energy!
- Make sure all windows are closed/locked and message Mrs. Stolz if there are significant drafts. **Close blinds and shades.**
- Ensure all lights are turned off - classroom, lab, under counters, in closets
- Be sure to turn off and unplug any fans and heaters
- ~~If your recycling bin hasn't been collected for washing (at Christmas & Summer Break), please send to Room 11~~

Friendly reminder to take home any class pets and plants over the break, too!



Be a Jugg, Just Unplug!!!



Goal 2 - Partner with middle school energy club to educate others about conserving energy and natural resources

Activities:

- We shared information related to water quality and resource management for the reduction of energy use by water treatment facilities. We did this by partnering with our middle school to participate in a school-wide family STEM Night and a neighborhood storm drain walk.

Energy Content and Resources: NEED Energy Carnival Curriculum & Science of Energy

Student Leadership: We gathered supplies, created the games, ran the demonstrations and taught the younger kids about energy conservation and usage. We also cheered them on and encouraged them! We also went into the neighborhood and marked storm drains and cleaned up trash.

Evaluation: We had families complete a survey when leaving for the evening in order to assess their learning and overall experience from the evening.



Goal 3 - Reduce energy use when producing raw materials by promoting recycling.

Activity

- Continued the classroom recycling program for non-paper recycling with weekly collection of plastics, metals, glasses, and cardboard.
- Held a district-wide collection of metal cans and other materials for recycling at the local center
- Highlighted Earth Week and Energy Conservation through a weeklong celebration schoolwide
- Organized and conducted a Blue Jeans, Go Green Drive for denim recycling through Cotton and Zappos.

Energy content and Resources: <https://www.epa.gov/learn-issues/learn-about-waste>,
<http://homeguides.sfgate.com/much-energy-recycling-save-79720.html>,
<https://bluejeansgogreen.org/>

Student Leadership: We collected the recyclables weekly, calculated how much was being saved by not going into a landfill, then determined how much energy was saved by not having to produce that plastic, aluminum, and glass. Promoted and educated recycling practices for the community by working to gather materials for recycling center. Promoted the upcycling of denim and collection for the Blue Jeans, Go Green drive.

Evaluation: We have collected 3 extra large bags a week for 10 weeks, which means we saved approximately 720 kWh of energy from being used to produce the raw materials from scratch! And we collected 52 pairs of old jeans!



Donate your old jeans to an organization that goes around the world making it possible for people to have insulation in their homes

Requirements

- NO stains
- Must be washed and clean
- NO big holes
- Jean jackets are allowed

Donate Here!



Cotton's Blue Jeans Go Green™ program helps to close the loop on cotton sustainability by diverting denim waste from landfills and helping in building efforts across the U.S.

Join us in celebrating all week long!

MONDAY 4/20 - Nature Scavenger Hunt Kick Off

TUESDAY 4/21 - Mental Health in the Great Outdoors House Lesson

WEDNESDAY 4/22 - Show Your Environmental Colors Spirit Day & Campus Beautification Walk

THURSDAY 4/23 - Recycled Fashion Contest

FRIDAY 4/24 - Seeds & Hydroponics GiveAway, Contest Winners Announced



Brought to you by the 2026 Lloyd Enviro-Conservation Team **"Be a Jugg, just unplug!"**



Goal 4 - Increase energy awareness in the community

Activity: Prior to construction beginning, we revamped our pollinator garden and common space for all classes we had previously designed to incorporate energy use and conservation through wind sculptures, wind turbine charging stations, and solar powered fountains. The Enviro-Conservation Team cleared the space of all plants and equipment prior to construction where we had hosted the space for classes to come in and use it as a place to relax while drawing, reading, and learning.

Energy content and Resources: Northern Kentucky University and Disney Youth Service Grant for materials for the garden, Forestry Agency for trees planted

Student Leadership: We created the garden, planted the seeds, weeded, harvested, and shared the crops. Built a picnic table for the learning space. Built a square foot raised garden bed for vegetables and a composting bin.

Evaluation: We have created great partnerships with organizations and with our neighbors so that they can look to us for help with conservation practices regarding things like energy! We have hosted more than 40 classes for use in our garden space including for art, reading, English, and science classes. We look forward to moving this outdoor learning space to a new place after construction ends!



Goal 4 - Increase energy awareness in the community

Activity: We created four separate lessons to share with two elementary schools in our district and take home to families with a final event to take home container gardens the kids built together.

Energy content and Resources: Project Learning Tree, KUPEE Environmental Education Grant for materials, composting grant materials

Student Leadership: We researched the information we wanted to include in each of the four lessons: 1.composting, 2. energy in garden ecosystem, 3. pollination, and 4. designing container gardens to conserve energy and resources. . For data, we gave the kids pre and post quizzes about the information. We shared info with families through materials we created.

Evaluation: kids are surveyed before and after and show knowledge increased while also sharing the pictures they took with their families of what is growing in their container gardens. !



Goal 5 - Provide mentoring in the elementary schools

Activity: We planned, prepared, and spent a day visiting our four district elementary schools to teach the 4th graders about energy transformations using demonstrations and hands on activities in our Energy Tour of Elementary Schools.

Energy content and Resources: NEED Science of Energy curriculum,

Student Leadership: We prepared to each take a group for the Energy Tour of Schools to present the booths of energy transformation and provide demonstrations.

Evaluation: The fourth grade teachers assessed their students before and after our Tour of Schools. 95% reported that they learned a lot about energy and energy conservation!

