

JOIN THE *EPIC* FIGHT TO PROTECT THE CLIMATE

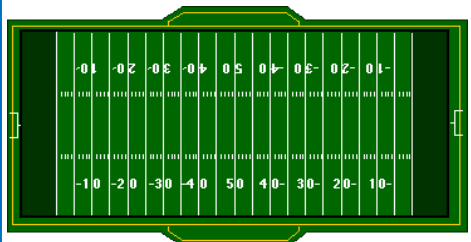


Team ENERGY STAR is a way to get the whole family involved in saving energy. Characters from the new movie EPIC help kids learn about the importance of saving energy while having fun. Visit www.energystar.gov to join the team.

OFFICIAL COMPETITOR



DMPS has 62 facilities taking part in the EPA's 2013 Battle of the Buildings. Follow along as we climb to the winner's circle next April at www.energystar.gov/BattleOfTheBuildings. The total square footage of competitors is more than 520 million square feet, which is equivalent to 9,175 football fields.



SAVE ENERGY THIS FALL

TAKE ADVANTAGE OF HEAT FROM THE SUN

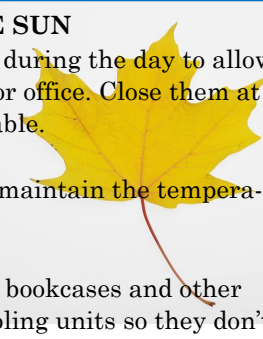
- Open blinds on your south-facing windows during the day to allow sunlight to naturally heat your classroom or office. Close them at night to help keep your classroom comfortable.

KEEP DOORS CLOSED

- Close your classroom or office door to help maintain the temperature.

CLEAR CLUTTER AROUND AIR VENTS

- Don't block the airflow around vents. Keep bookcases and other bulky items away from the heating and cooling units so they don't block or absorb the warm air coming into the room.



ENERGY STAR TIP: CHANGE A LIGHT



ENERGY STAR certified LED bulbs last up to 25 times longer than incandescent bulbs—saving up to \$135 in energy bills and reducing our collective carbon footprint by billions of pounds if everyone tried one. Light emitting diodes, or LEDs, are small light sources that are illuminated by the movement of electrons through a semiconductor material.

KITCHEN TIPS FOR AN ENERGY-WISE THANKSGIVING

OVEN TIP: Turn on the oven light to check cooking status through the window. Opening the oven door lowers the temperature inside by as much as 25 degrees, which increases cooking time and wastes energy.



STOVETOP TIP: Match the size of the pan to the heating element. More heat will get to the pan and less will be lost to surrounding air.

REFRIGERATOR TIP: Leaving the door open for a longer period of time while taking out needed items is more efficient than opening and closing it several times.

DISHWASHER TIP: By filling the wash and rinse basins instead of letting the water run, you'll use half as much water as a dishwasher.

Source: Consumer Energy Center



From projects to field trips, IESA teaches students the importance of energy conservation

Kyle Erickson, Hoover

One of the major topics we have covered recently in IESA is weather. The weather is an enormous part of keeping the environment healthy because different weather patterns can create different environments, each with different needs and ways to be taken care of. The weather also plays an important part in the survival of plant life; we must figure out how much water a plant needs in a week and measure rainfall to see if it is getting all the water it needs.

The first weather-related project we did had to do with reading and

interpreting the weather station monitor in the back of our classroom. We figured out the humidity, direction of



the wind, barometric pressure, amount of precipitation, temperature, and the speed of wind. We then put that information into a weather station model so that any meteorologist could understand it.

The next project had to do with researching radiant energy, rain, snow, or acid rain.

Our third project was to research how the ozone layer affected weather and the impact it would have if it wasn't there. The final weather-related project we did was research the National Oceanic and Atmospheric Administration. We selected eight major links from

Ezra Schley, Roosevelt High School



Born in Burlington, Iowa, Aldo Leopold is an Iowan and American icon. Leopold was a scientist, professor and author. One of his works includes *A Sand County Almanac* published in

1949 is often touted as the bible of environmental studies. Accepted into Yale University, he studied forestry. Leopold worked in Arizona and New Mexico for

“A thing is right when it tends to preserve the integrity, stability, and beauty of the biotic community. It is wrong when it tends to be otherwise,” (262).

the Forest Service. While here he developed his first management plan for the Grand Canyon. At the University of Wisconsin-Madison, he taught game management.

Created in 2007, the Aldo Leopold Wilderness in New Mexico has pioneered the reintroduction of the critically endangered Mexican Wolf. Hopefully more and more Iowans will follow Leopold's path and attempt to preserve the rare and wild places that are not too far away.

Jasmine Luangdetmalay

For the past couple weeks, the first-year IESA students, including myself, have been discussing many new things in class. We have been introduced to many types of energy and energy sources—wind, solar, biofuel, nuclear, etc. We did a lab to find which wind turbine blade was the most efficient on a small scale wind generator. It was interesting to see which blade would turn in different types of settings of wind power and direction and the pitch of the blade was set.

We also studied hydro-electric power dams, like the Hoover dam and how it was constructed to how they use the river flow to create electricity to use.

This week we have been working on biofuels and natural gas. It's interesting how humans found out how to speed up the process to make biofuels, because it takes hundreds of years to make natural gas.

We also learned the environmental effects this makes on to the world. How

it destroys homes and pollutes the ecosystem.

A lot has been going on in IESA, but we are still learning since it's our first year.





**By Jenna Cline
Lincoln High School**

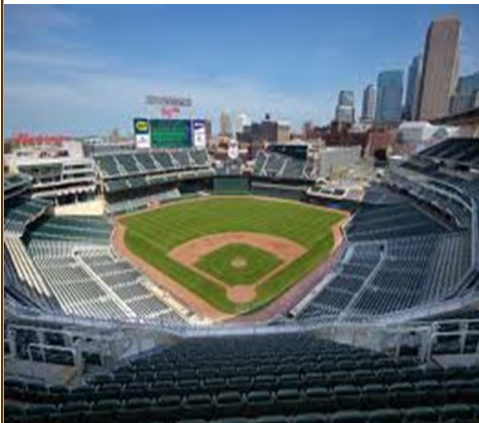
During the month of October, IESA attended many places in the blistering cold state of Minnesota.

One of our many adventures was attending the Mall of America. We all sat through a presentation and learned a lot of cool new things. For example, did you know that seven Yankee Field Stadiums can fit inside of just this one mall?

After spending the night at the Holiday Inn Express, we had a new day full of more adventures. First, we took a tour at Target Field Stadium, home of the Twins baseball team. The Twins' stadium is the greenest baseball stadium in America. It received the highest LEED rating of all the baseball fields out there.

After a few hours spent at Target Field Stadium, we took a ride over to the Como Zoo. They have a very large green house, which houses many of the animals put away due to the cold weather, and a small but interesting rainforest area. They had the same animals you'd find at any ordinary zoo, but their greenhouse is authentic.

The IESA trip only lasted two days, but there was so much information and things to do it felt like a week. It was a trip definitely worth taking.



**Daniel Polson
Lincoln High**

Target Field is one of the greenest stadiums in all of the sports. They have drainage pipes under the field and the water is purified from the pipes to clean the stadium. They also use the steam from the garbage plant next door to power their generators. Roofs designed to reflect light and their use of public transportation earns the stadium LEED credits.




We took a tour of the field and saw pretty much everything in the stadium. Target Field does the most they can to help make the world a better and cleaner place.

LEAVES OF ENERGY
YEAR-TO-DATE SITE ENERGY USAGE REPORT
JULY 1, 2013—OCTOBER 31, 2013

Percentage change as compared to same time period from previous year

Site	Total Energy (MBtu)	% Chg	Site	Total Energy (MBtu)	% Chg
Casady	13	-95.50%	Moore (Scavo)	205	-8.20%
Hoyt	198	-85.70%	Welcome Center	82	-7.40%
Aviation Lab	80	-36.00%	Callanan	1,069	-6.90%
Lincoln Football Field	75	-33.20%	Company Totals:	61,506	-6.60%
Brody	966	-29.90%	Walnut Street	2,450	-6.00%
Cowles	284	-29.90%	Studebaker	216	-5.70%
Pleasant Hill	279	-28.30%	Windsor	341	-5.30%
Moulton	1,145	-27.00%	Perkins	410	-5.20%
Kurtz	831	-24.80%	Morris	472	-4.60%
Woodlawn	226	-24.30%	Mitchell	284	-4.10%
Findley	397	-23.10%	Wright	291	-3.70%
Prospect	1,057	-22.50%	Merrill	880	-3.30%
River Woods	772	-21.00%	Jefferson	435	-1.80%
Kurtz Athletic Fields	6	-20.90%	Central Academy	992	-0.80%
Weeks	1,104	-16.70%	Garton	591	-0.80%
Hoover/ Meredith	2,489	-16.30%	Phillips	431	-0.40%
McCombs	836	-15.40%	Jackson	364	-0.10%
Cattell	371	-15.40%	South Union	546	0.40%
Mann (closed)	174	-13.90%	Operations Center	457	0.60%
Howe	292	-13.20%	Hanawalt	403	0.70%
Brubaker	657	-13.00%	Samuelson	381	1.10%
Roosevelt	3,300	-12.20%	Harding	804	2.00%
McCombs Greenhouse	96	-11.60%	Hillis	361	2.10%
McKinley	551	-11.30%	Central Campus	6,101	3.10%
Hoover/Meredith Athletic Fields	96	-11.20%	Willard	524	3.80%
Park Avenue	524	-9.80%	McKee	151	4.10%
Capitol View	635	-9.70%	Carver	685	4.30%
Hubbell	457	-9.60%	Van Meter	1,192	4.70%
North Athletic Fields	162	-9.10%	Monroe	783	6.90%
Lincoln	4,642	-9.00%	Oak Park	576	7.50%
Lovejoy	332	-8.70%	Madison	511	7.80%
			Central Nutrition Center	3,529	7.90%
			North	2,485	9.00%
			King	336	9.60%
			Goodrell	805	9.90%
			Smouse	933	11.70%
			Walker Street	432	15.90%
			East	4,664	16.80%
			Stowe	433	23.80%
			East Athletic Fields	137	29.40%
			Greenwood	649	33.30%
			Hiatt	655	38.20%

KEY

-  Increase in energy use
-  Maintaining energy use
-  Decrease in energy use

Visit www.dmschools.org for more details of the district's energy mission and building performance. **Tell us about it!** Do you want to share your ideas for saving energy or helping our environment? Or want to let us know about your projects? E-mail Michelle.Chalkey@dmschools.org