

# HOME COOLING TIPS

This summer, instead of blasting the air conditioner (and blowing your electricity bills through the roof), you can take simple actions that will help you beat the heat.

- Set a programmable thermostat—it could help save you up to 10% a year on heating and cooling costs. Avoid setting your thermostat at a colder setting than normal when you turn on your air conditioner. Air conditioners work at full capacity when they are running, turning the thermostat down will not cool your house any faster, and could result in excessive cooling and unnecessary expense.
- Use a fan. Ceiling fans will allow you to raise the thermostat setting about 4°F without impacting your comfort. Remember to turn ceiling fans off when you leave the room. Fans create a wind chill effect to cool people, not rooms.
- Insulate your attic and walls, and seal cracks and openings to prevent warm air from leaking into your home.
- Don't heat your home with appliances. On hot days, consider using an outdoor grill instead of your oven.
- Avoid placing lamps or TV sets near your room air-conditioning thermostat. The thermostat senses heat from these appliances, which can cause the air conditioner to run longer than necessary.

Visit [Energy.gov](http://Energy.gov) for the [Energy Saver 101: Everything You Need to Know About Home Cooling](#).



## The results are in!!

More than 6,500 buildings and 125 teams competed nationally. Here's how DMPS stacks up:

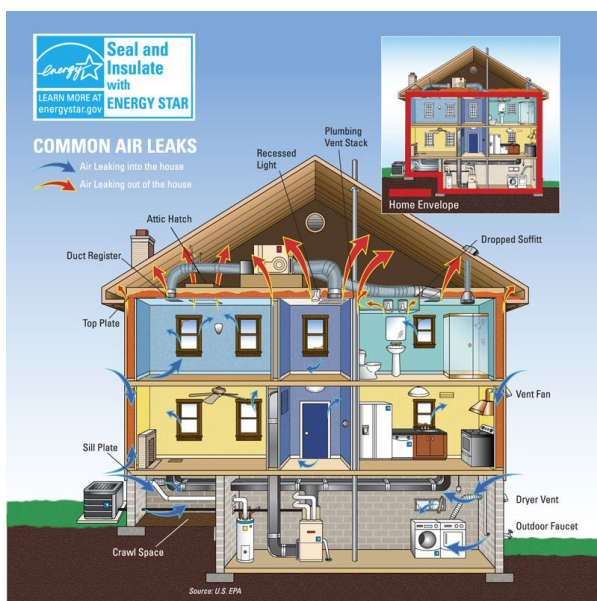
DMPS High Schools is the #5 Water Saver in the team competition.

Operations Center is the #6 Water Saver and Greenwood is the #10 Water Saver for individual buildings.

Seven buildings were recognized with over 20% savings in either water or energy.

- Energy—Stowe and Van Meter
- Water—Edmunds, Findley, Greenwood, Lincoln RAILS, Operations Center, and Van Meter.

**Thank you for all your hard work during the competition!**



# BUILDING ENVELOPE

Air that leaks through your home's envelope – the outer walls, windows, doors, and other openings – wastes a lot of energy and increases your utility costs. A well-sealed envelope, coupled with the right amount of insulation, can make a real difference on your utility bills.

Most homes in the United States don't have enough insulation and have significant air leaks. In fact, if you added up all the leaks, holes and gaps in a typical home's envelope, it would be the equivalent of having a window open every day of the year!

For more information and energy saving improvements visit ENERGY STAR by clicking [here](#).

# From the Desk of IESA Student:



## Jocelynn Luangdetmalay

Earth Day is April 22<sup>nd</sup> every year and is celebrated to show the concern over the environment. For Earth Day IESA holds a little display where we display information of what we learned from the class. We show things that deal with Earth Day itself and about topics and projects we worked on à upcycling, reusing, recycling, and about sustainability of resources. Earth Day's purpose is to show how sustaining resources is important to how we will be able to live in the future. The importance of sustainability and maintaining a healthy lifestyle ties back to how the waste we have contributes to how healthy the environment is.

Upcycling was a big project that we had during the year. In class we learned that upcycling helps reduce the amount of waste that we have. It is a way to reuse items and make them not wasteful. In order to upcycle the things that we have we have to have a creative mind and think of new ways to use the items that we are about to throw away. This is a significant step towards regenerative design culture where the end products are cleaner, healthier, and usually have a better value than the material inputs. This reduces the consumption of new raw materials when creating new products. Not needing to use new resources creates a healthier environment for us because we won't disrupt the natural environment more than we have already.

## Alexander Ramos-Terrazas

Renewable energy is energy that is collected from resources which are naturally replenished on a human time-scale, such as sunlight, wind, rain, tides, waves, and geothermal heat. Renewable energy is very important because at some point we will run out of nonrenewable energy and renewable will be the replace met. Nonrenewable energy does not renew itself at a sufficient rate for sustainable.

They have been slowly going from nonrenewable energy to renewable energy. In Iowa the mid-American energy company is trying to have 85 percent of renewable energy by 2030. That is big for Iowa because it would help the environment greatly. The project wind XI is putting Iowa on track to be the first state in the nation to make 40 percent renewable energy. Also Iowa is the first state to cross 30 percent.

Renewable energy helps environment in any way, shape or form. In Iowa when they are done with the project of trying to have 85 percent of renewable energy. The environment well change a lot the air will be cleaner because we won't be burning coal as much. The water will be cleaner.

## Christian Thongvanh

There are many different kinds of energy sources. Different energy sources affect the environment in adverse ways, so it's important we explore all our options. Some of our different energy sources are gasoline, coal, hydroelectric and nuclear. These all affect our environment in different ways, for example when you burn coal to get energy, you destroy part of the ozone, so we need to cut down on that.

One more ecofriendly energy source is hydroelectric energy. Since the energy is from already running water, there are less environmental impacts. However there are still impacts. When build a hydroelectric dam you destroy certain species habitats. It's important we don't rely on one energy source because then we tax the environment one way extremely harshly. For this reason balancing our energy sources is extremely important.

## Thea Frangos

We took a fieldtrip to the Mall of America to learn that the bodies in the mall are what generate the heat. There is also big windows that let light in and help heat come in and stay in. There is a/c but no heating in the mall. So they are trying to be more energy efficient and draw people into the mall. The mall has been green for over 23 years now. Everyone was really surprised at how the heat worked with bodies instead of an actual heating system.

## Tyren Teav

There are many ways to recycle many different types of materials. A way to recycle is upcycling. Upcycling is the method of using old items that would be usually thrown away but instead used for another purpose. For example a soup can could be used as a pencil holder after it is cleaned out. The ways to upcycling are endless as the materials to upcycle are never ending. The typical way of recycling is putting paper and plastic in the recycling bin.

The other main way to help sustain the environment is to reduce and reuse. This is not exactly recycling but falls under the improvement of the environment. The ways to reduce is to use only what is necessary. A simple way to reduce the use of plastic you use is to purchase a plastic reusable bottle. That would reduce the waste of plastic. An easy way to reuse is to reuse plastic containers that had food in it as packaging or to hold more food. Recycling is easy to do and there are many simple ways to do it.

## ENERGY REPORT CARD

## SITE ENERGY USAGE REPORT

There was an 14% decrease in the total number of degree days during the comparison timeframe. Degree days provide a way to evaluate the amount of fuel required to heat or cool a building by comparing average daily temperatures to a standard temperature of 65°.

April 1, 2015 to March 31, 2016

Percentage change compared to same time period of previous year.

Site	Total Energy (mBtu)	kBtu/SqFt	% Change	ENERGY STAR Score	Site	Total Energy (mBtu)	kBtu/SqFt	% Change	ENERGY STAR Score
Smouse	3,450	64.1	-41.52%	56	Greenwood	1,605	26	-9.59%	97
Samuelson	1,523	26	-30.14%	98	Operations	3,148	32.3	-9.26%	77
Brody	5,032	51.3	-26.71%	94	Lincoln	21,644	69.2	-8.96%	84
Van Meter	4,136	72.2	-25.85%	73	Findley	1,340	30.8	-8.60%	95
Lincoln RAILS	4,661	43.8	-23.30%	70	Riverwoods	3,406	53.4	-8.14%	92
Walker St	1,662	39.1	-22.75%	64	Goodrell	2,918	26.4	-7.43%	97
Moulton	6,047	49.7	-21.60%	95	McKinley	2,431	48.6	-7.03%	89
Studebaker	1,365	30.1	-20.56%	96	Mitchell	1,135	35.8	-5.85%	72
McCombs	2,835	32.1	-19.66%	98	South Union	2,028	29.6	-5.46%	97
Hillis	1,597	27.7	-18.12%	98	Woodlawn	1,121	24.1	-5.38%	N/A
Cattell	1,843	38.5	-17.75%	99	Walnut St	8,080	69.4	-5.22%	26
Hubbell	2,292	43	-17.26%	94	Windsor	1,510	25	-4.94%	97
Prospect	4,641	88.3	-15.65%	46	Brubaker	2,374	30.3	-3.46%	96
Merrill	4,102	43.6	-15.07%	99	Madison	1,549	36.8	-2.68%	97
Central Campus	23,976	52.5	-14.95%	91	North	10,888	43.6	-2.18%	92
Garton	2,640	40.2	-14.94%	77	Oak Park	1,982	33.3	-0.74%	94
Roosevelt	15,040	62.6	-14.60%	80	Perkins	1,573	25.3	-0.74%	98
Weeks	4,385	39	-13.93%	96	Hanawalt	1,524	35.2	-0.71%	92
Hiatt	3,083	28.1	-13.66%	94	Wright	1,144	37.7	-0.69%	86
Central Academy	4,134	47.8	-13.15%	59	Howe	1,343	34.9	0.25%	85
Harding	4,018	32.1	-12.98%	97	Cowles	1,874	43.8	1.82%	70
East	22,232	64.6	-12.49%	88	Callanan	5,149	44.4	2.63%	90
CNC	11,679	207.9	-12.46%	N/A	Edmunds	1,571	20.6	7.69%	99
Hoyt	5,242	52.1	-12.18%	96	Welcome Center*	857	85.9	10.93%	N/A
Hoover/Meredith**	16,031	53.6	-12.10%	92	Morris	2,066	29.2	15.79%	95
Monroe	3,427	46.3	-11.78%	92	Stowe	2,013	35.3	16.50%	90
Lovejoy	1,407	35.9	-11.76%	90	Jackson	1,761	38.6	25.93%	91
Jefferson	1,378	30.1	-11.66%	88	King	1,617	29.8	31.74%	94
Phillips	1,840	43.9	-11.62%	91	McKee	1,061	24.5	39.98%	61
Carver	2,000	21.9	-10.73%	97	2323 Grand***	2,758	51.8	N/A	98
Pleasant Hill	930	22.5	-10.46%	99	Taylor***	1,466	32.4	N/A	87
Willard	2,322	39.2	-10.08%	94	Mann****	N/A	N/A	N/A	N/A
Capitol View	2,760	36.4	-9.99%	98	Moore****	N/A	N/A	N/A	N/A
Park Ave	1,860	28.7	-9.83%	98					

Only buildings with a score of 75 or higher are eligible for ENERGY STAR Certification

Green = Decrease in energy use

Yellow = Maintained usage within 10%

Red = Increase in energy use

\* Welcome Center has a large increase due to the addition of the walk-in freezer.

\*\* Hoover/Meredith buildings are combined due to combined meters.

\*\*\* No comparison data for 2323 Grand or Taylor

\*\*\*\* No data available for Mann or Moore due to renovations.

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