

ENERGY REPORT CARD

March 2017

Daylight Saving Time Saves Energy

Article from MidAmerican Energy



This could be a fact or a fable, depending on which study you read.

Daylight saving time (DST) is the practice of advancing clocks one hour in the spring and moving them back to standard time in the autumn. How is changing the clock supposed to save energy? The idea behind moving the clock forward one hour is to provide us with an extra hour of daylight in the evening, giving us the opportunity to spend more time outdoors. By doing so, we use less energy for lighting, watching television, or operating appliances.

DST and energy savings: what the research says

Although DST has been in use for decades as a way to conserve energy, its effectiveness has been difficult to prove. Early research focused mostly on lighting and found some energy savings was achieved, but later studies incorporating wider energy-use patterns produced mixed results.

A report by the U.S. Department of Transportation found that DST reduced electricity use by 1 percent, but had no impact on home heating. A European study on the impact of DST found lighting energy use decreased by 1 percent, while heating demand increased 9 percent. A recent report by the National Bureau of Economic Research found that while lighting energy decreased, the savings were offset by increases in heating and cooling demand; increasing overall home energy use by 1 percent.

Has the 2007 extension of DST had any effect on energy use? Once again, the reports are mixed. A 2007 California Energy Commission study concluded that extending DST had little or no effect on energy consumption. In 2008, however, the U.S. Department of Energy reported that total energy use decreased 0.5 percent per each day of extended DST.

The lack of solid evidence supporting DST as an energy-saving measure may be due to inconsistencies in study methods and lifestyle changes since it began. Lighting is much more efficient, and overall energy-use patterns are much more complex. It is likely the growing use of computers and electronics has reduced the energy-saving impact of changing our clocks.

In recent years, there has been debate over whether to end DST or even extend it year-round. Future research will be helpful in weighing its cost and benefits and comparing it with other energy conservation methods.

Bring ENERGY STAR to the Classroom!

In an effort to promote energy efficiency within the District, the DMPS Energy Team wants to help teachers discuss this valuable message in the classroom. A member of the DMPS Energy Team would like to visit interested schools and classes. From light bulb efficiency to heating and cooling, discussions are intended to educate students on the efforts the District is making and how they, too, can make an impact. To schedule a visit, please contact Sarah Holland at extension 7860.

ENVIRONMENTAL CELEBRATION DAYS

Earth Day is right around the corner! To help get in the spirit, here are a few environmental days to celebrate in March.

- International Day of Forests—March 21
- World Water Day—March 22
- <u>World Meteorological Day</u>—March 23
- Earth Hour—March 25

Check out other "Green Holidays" to celebrate throughout the year by clicking <u>here</u>.

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SITE ENERGY USAGE REPORT

February 1, 2017 to January 31, 2017

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
Lincoln RAILS	4,425	41.6	-25.80%	93	Hanawalt	1,526	35.3	0.24%	95
Walker St	1,408	38.8	-23.80%	86	Carver	2,075	22.7	0.60%	99
Lincoln	17,158	54.9	-23.28%	92	Roosevelt	15,679	51.1	0.62%	94
2323 Grand	2,723	54.7	-19.26%	99	Brody	5,427	55	0.86%	95
Welcome Center	744	119.9	-18.51%	9	Greenwood	1,655	26.7	1.21%	97
Garton	2,339	35.6	-16.98%	87	Lovejoy	1,480	37.8	1.27%	96
Samuelson	1,490	25.4	-14.95%	99	River Woods	3,533	54.5	1.45%	95
McKinley	2,217	44.4	-12.56%	93	McCombs	3,079	34.9	1.86%	99
Mitchell	1,041	32.9	-12.08%	89	North	11,240	45	2.31%	93
Hoover/Meredith	15,083	50.4	-10.71%	97	Central Academy	4,325	50	2.33%	60
Moulton	5,738	47.2	-10.21%	94	Park Avenue	1,992	30.7	2.92%	97
Smouse	3,023	56.2	-9.29%	90	Jackson	1,725	37.9	3.18%	95
Merrill	3,978	42.2	-8.24%	99	Perkins	1,633	25.1	3.36%	99
Hubbell	2,275	46	-8.05%	94	Harding	4,328	34.5	3.47%	97
Studebaker	1,358	29.9	-7.97%	100	Cattell	1,947	40.5	3.70%	99
Hoyt	5,114	50.8	-6.25%	97	Oak Park	2,096	35.2	3.86%	95
Willard	2,296	38.7	-5.82%	96	Jefferson	1,474	32.2	5.03%	95
Capitol View	2,768	36.5	-5.78%	99	Goodrell	3,129	28.3	5.46%	97
CNC	11,363	202.2	-5.50%	N/A	East	24,094	70	5.48%	89
South Union	1,981	28.9	-5.16%	98	Edmunds	1,644	21.5	5.71%	100
Hiatt	3,228	29.4	-4.67%	98	Stowe	1,979	34.7	5.94%	93
Phillips	1,910	45.5	-4.28%	93	Brubaker	2,533	32.4	6.10%	96
Callanan	4,839	41.7	-3.96%	92	Walnut St	8,491	72.9	6.64%	18
Taylor	1,454	32.1	-3.63%	94	King	1,600	29.5	9.07%	98
Woodlawn	1,123	24.1	-3.60%	N/A	Windsor	1,643	27.2	9.09%	98
Prospect	4,092	77.8	-3.30%	N/A	Hillis	1,723	29.9	10.24%	97
Operations	3,211	33	-3.18%	79	Cowles	2,070	47.1	12.70%	81
Howe	1,314	41.6	-3.17%	90	Wright	1,310	43.2	13.24%	87
Central Campus	24,528	53.7	-2.42%	92	МсКее	1,123	25.9	16.36%	85
Monroe	3,514	47.5	-1.95%	94	Findley	1,735	39.8	25.49%	97
Pleasant Hill	965	23.4	-1.54%	100	Morris	2,300	32.5	25.74%	95
Weeks	4,548	40.5	-1.45%	95	Moore*	1,688	32.6	N/A	95
Van Meter	4,312	74.4	-0.38%	74	2100 Fleur**	N/A	N/A	N/A	N/A
Madison	1,577	37.5	-0.14%	96	Mann***	N/A	N/A	N/A	N/A

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

* No comparison data for Moore.
** Less than a year of data for 2100 Fleur, no metrics available.
***No data available for Mann due to renovations.

Green = Decrease in energy use

Yellow = Maintained usage within 10%

Red = Increase in energy use

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