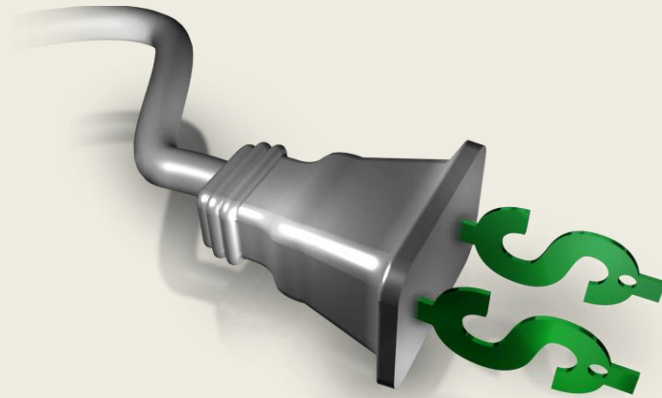


Energy Accounting & Education



Energy Manager

John Daily School District of Holmen

Mike Freybler School District of La Crosse

Topics (Electricity)

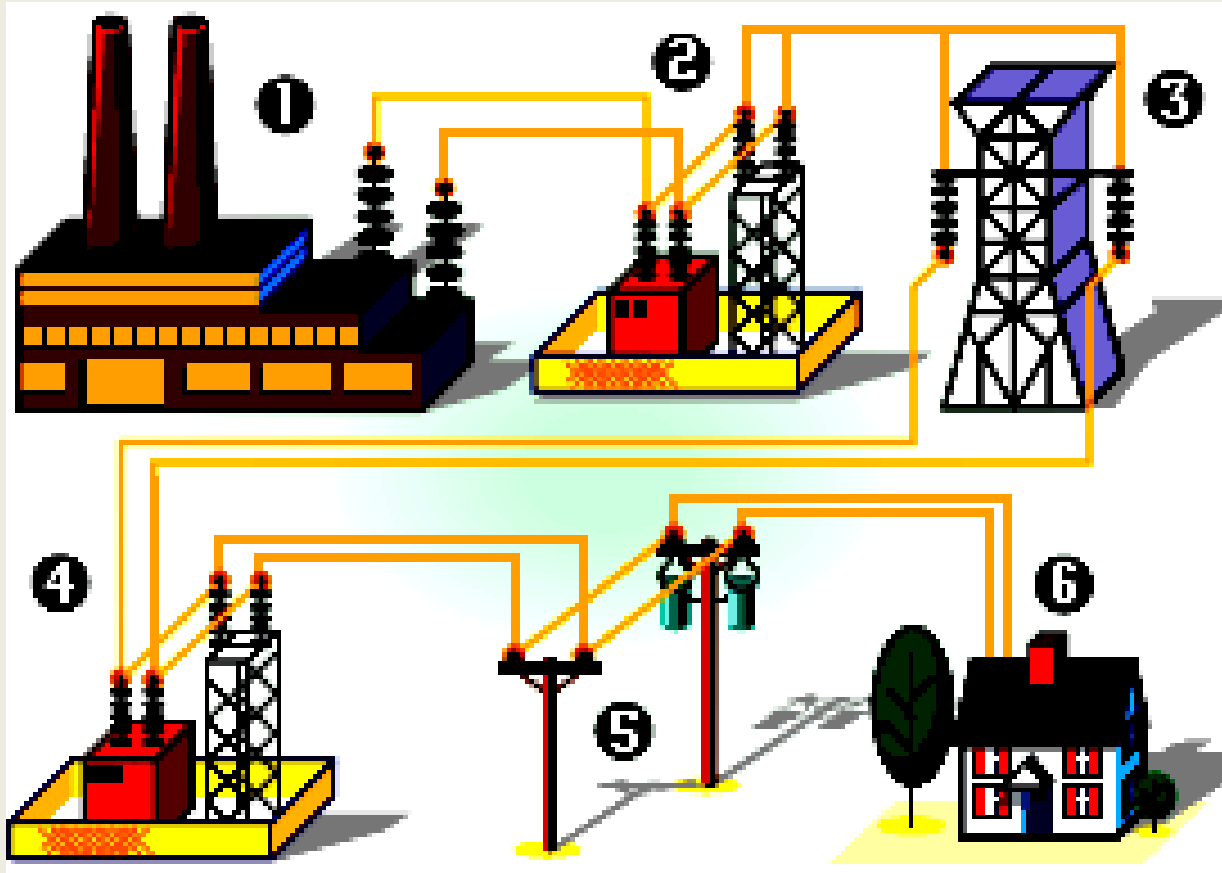
- **Creating electricity**
- **Defining degree days**
- **Customer charges**
- **Types of rates**
- **Energy usage**
- **Demand charges**
- **Taking control of your electric bill**

Creating Electricity

- Electric generators have large quantities of copper wire spinning around inside very large magnets at very high speeds to create electric current.
- [How Electricity is Created](#)

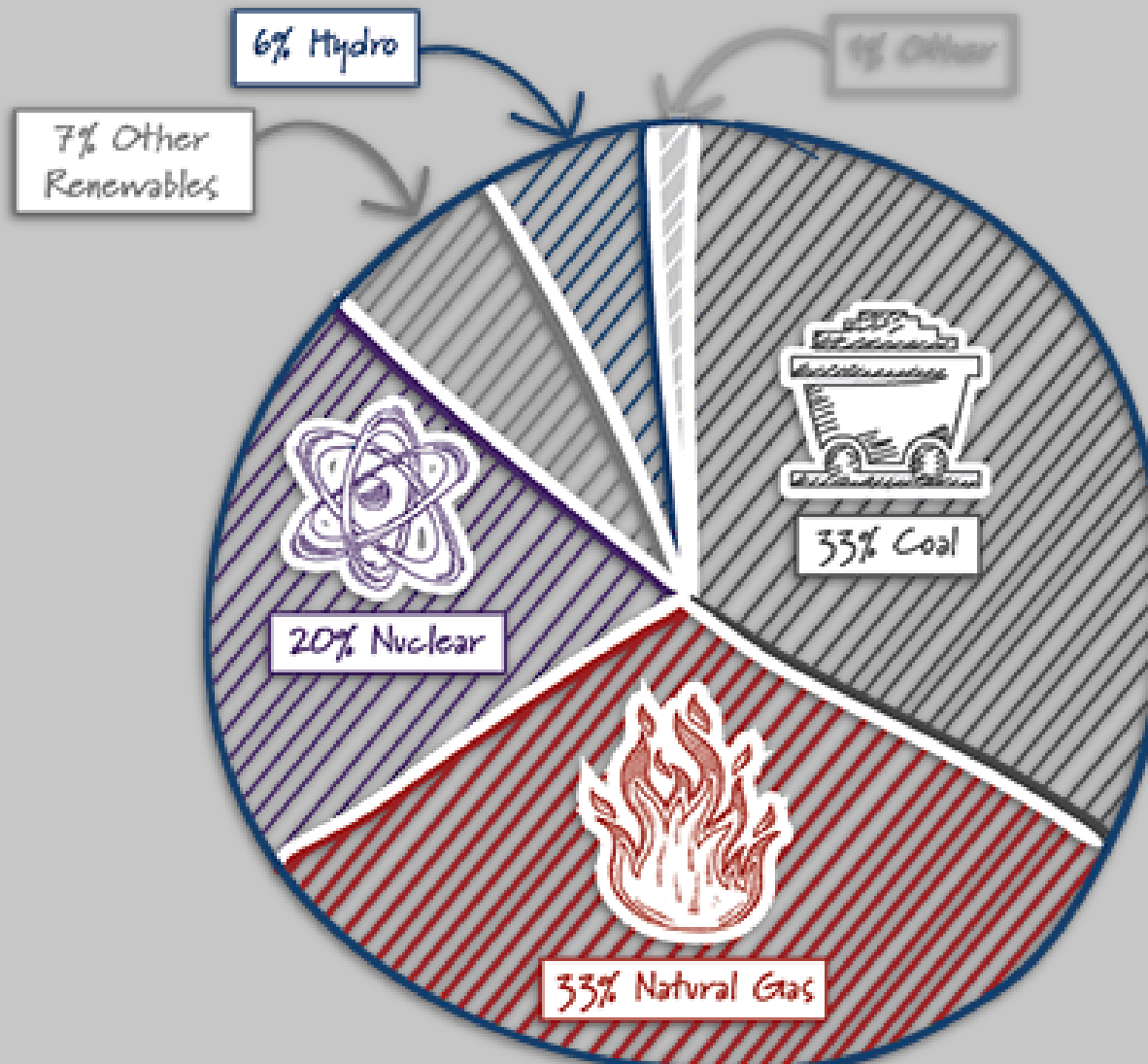


Generation, Transmission and Distribution



Provided by Edison Electric Institute

Total Electricity Generation by Source (2016)



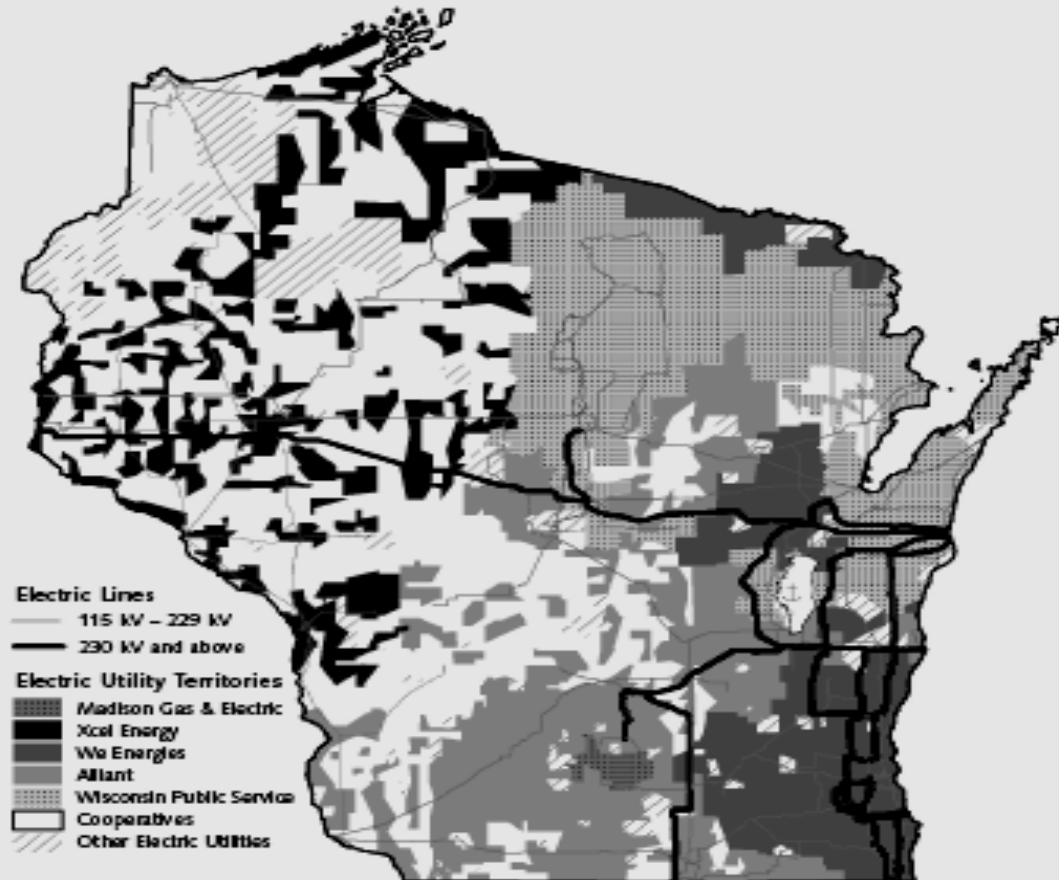
Renewable Energy

- **Electricity produced by sources that can be replaced naturally and do not involve burning fossil fuels or use of nuclear energy**
- **Considered less harmful to the environment because it results in less air pollution, emissions, and waste compared to electricity produced from traditional sources**
- **Includes solar, wind, geothermal, and biomass**



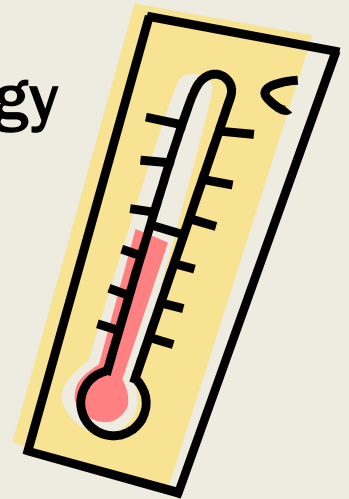
Major Electric Lines and Service Areas

Major Electric Lines and Service Territory Areas



Degree Days

- **Degree Day** - indicates how far a day's average temperature departed from 65° F
- **Heating Degree Day** – measures heating energy demand; indicates how far the average temperature fell below 65° F (cooler weather = more heating demand)
- **Cooling Degree Day** – measures cooling energy demand; indicates how far the temperature averaged above 65° F
- Smaller values = less fuel demand



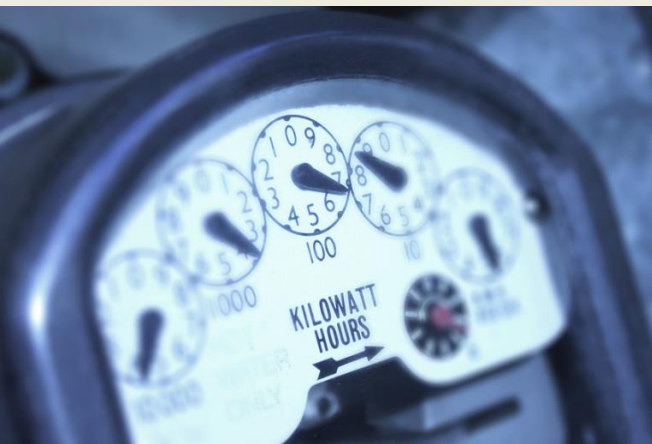
Customer Charges

- Recurring charges for administrative activities for maintaining a customer account (also referred to as *service charges*)
- Includes billing, metering, and meter reading



What's a Kilowatt?

- **Kilowatt (kW)** - One kilowatt equals 1,000 watts (10 bulbs @ 100 watts each)
- **Kilowatt-hour (kWh)** - Basic unit of electric energy = one kilowatt of power supplied to or taken from an electric circuit steadily for one hour
 - One kilowatt-hour equals 1,000 watt-hours



Time of Use Rate

- Rates that vary by the time of day that the electricity is used
- Higher rates are charged during hours of peak system usage
- Lower energy costs by shifting use to “off-peak” hours when electricity costs less
- Consult with your local utility representative
 - May require a special meter



On-Peak vs. Off-Peak Rates

- **On-Peak Rate:** Period between 9:00 a.m. and 9:00 p.m., Monday through Friday, when most energy is used
 - Excludes weekends and holidays
- **Off-Peak Rate:** Includes all hours not included in the on-peak period



Power Factor

- The ratio of real power (kW) to apparent power (kVA) at any given time in an electrical circuit
- Goal of electric utilities: power factor of **1** (unity power factor)
 - If less than one, utility has to supply more current to the user = more line losses
 - Must have larger capacity equipment in place
- Facilities are charged a penalty if their power factor is much different from **1**

Sample Bill

| | |
|--------------------------------------------------------------|--------------------|
| Current Charges | \$4,452.57 |
| Electric Billing Period: 11/014/16 to 12/17/16 | |
| 1036 Heating Degree Days, 0 Cooling Degree Days | Meter# 11628123 |
| Actual Reading on 12/17 | 24,179 |
| Actual Reading on 11/14 | 23,731 |
| Difference | 448 |
| Meter multiplier | X 80 |
| Usage in 30 Days (kWh) | 35,840 |
| Total On-Peak Consumption 9 a.m. to 9 p.m., Monday-Friday | 17,120KWh |
| Total Off-Peak Consumption | 18720KWh |
| Facility Power Factor | 97.58% |
| | |
| | |

Sample Bill: Demand Charges

| | |
|------------------------------------------------------|-------------------|
| Current Charges | \$4,452.57 |
| Electric Charges Period: 11/14/16 to 12/17/16 | |
| Customer Demand Charge: 197.0 kW @ \$1.750 | \$ 344.75 |
| On-Peak Demand Charge: 170.0 kW @ \$10.250 | \$ 1,742.50 |
| Facilities Charge | \$ 180.00 |
| Non-taxable Customer Charge (3%) | \$129.69 |
| Off-Peak Energy Charge: 18,720 kWh @ \$0.048460 | \$ 907.17 |
| On-Peak Energy Charge: 17,120 kWh @ \$0.074180 | \$ 1,269.96 |
| Saver Switch Load Control (Credit) | \$121.50 |



| MAILING ADDRESS | ACCOUNT NUMBER | DUE DATE | |
|---------------------------------------------------------------------|------------------|----------------|-------------|
| SCHOOL DISTRICT OF HOLMEN 1019 MCHUGH RD HOLMEN WI 54636-9296 | 52-4594119-3 | 01/20/2017 | |
| | STATEMENT NUMBER | STATEMENT DATE | AMOUNT DUE |
| | 529372970 | 12/29/2016 | \$53,765.17 |

SERVICE ADDRESS: HOLMEN MIDDLE SCHOOL NORTH
502 N MAIN ST HOLMEN, WI 54636-9313

NEXT READ DATE: 01/20/17

ELECTRICITY SERVICE DETAILS

PREMISES NUMBER: 302437232
INVOICE NUMBER: 0652867409

| METER READING INFORMATION | | | | |
|----------------------------------|-----------------|-------------------------------------------|----------------|--------------|
| METER 11628123 - Multiplier x 80 | | Read Dates: 11/14/16 - 12/17/16 (33 Days) | | |
| DESCRIPTION | CURRENT READING | PREVIOUS READING | MEASURED USAGE | BILLED USAGE |
| Total Energy | 24179 Actual | 23731 Actual | 448 | 35840 kWh |
| On Pk Energy | 12484 Actual | 12270 Actual | 214 | 17120 kWh |
| Off Pk Energy | 11695 Actual | 11461 Actual | 234 | 18720 kWh |
| Reactive Energy | 3819 Actual | 3771 Actual | 48 | 3840 kVArh |
| Demand | Actual | | | 170.4 kW |
| Billable Demand | | | | 197 kW |
| On Pk Demand | Actual | | | 170.4 kW |
| Billable On Pk Demand | | | | 170 kW |
| Off Pk Demand | Actual | | | 165.6 kW |
| Billable Off Pk Demand | | | | 166 kW |
| Power Factor On Pk Demand | 97.58% | | | |

1146 Heating Degree Days

ELECTRICITY CHARGES

RATE: Large TOD Service

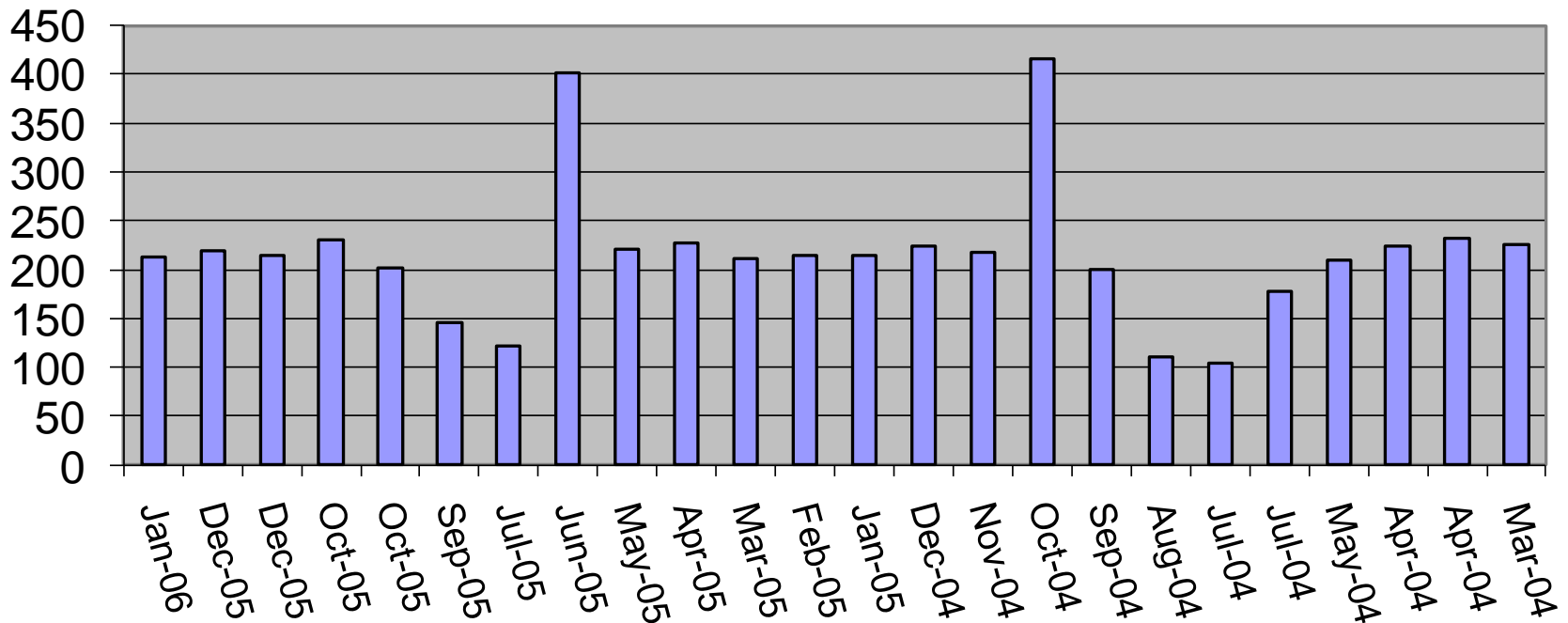
| DESCRIPTION | USAGE UNITS | RATE | CHARGE |
|-------------------------|-------------|-------------|-------------------|
| Customer Charge | | | \$180.00 |
| On-Peak Energy ChWinter | 17120 kWh | \$0.074180 | \$1,269.96 |
| Off-Peak Energy CWinter | 18720 kWh | \$0.048460 | \$907.17 |
| Customer Demand | 197 kW | \$1.750000 | \$344.75 |
| On-Peak Demand ChWinte | 170 kW | \$10.250000 | \$1,742.50 |
| Com SS Load Control | | | - \$121.50 CR |
| Subtotal | | | \$4,322.88 |
| WI Low Income Assist | | 3.00% | \$129.69 |
| Total | | | \$4,452.57 |



Billing Demand

System Demand (KW)

■ System Demand (KW)

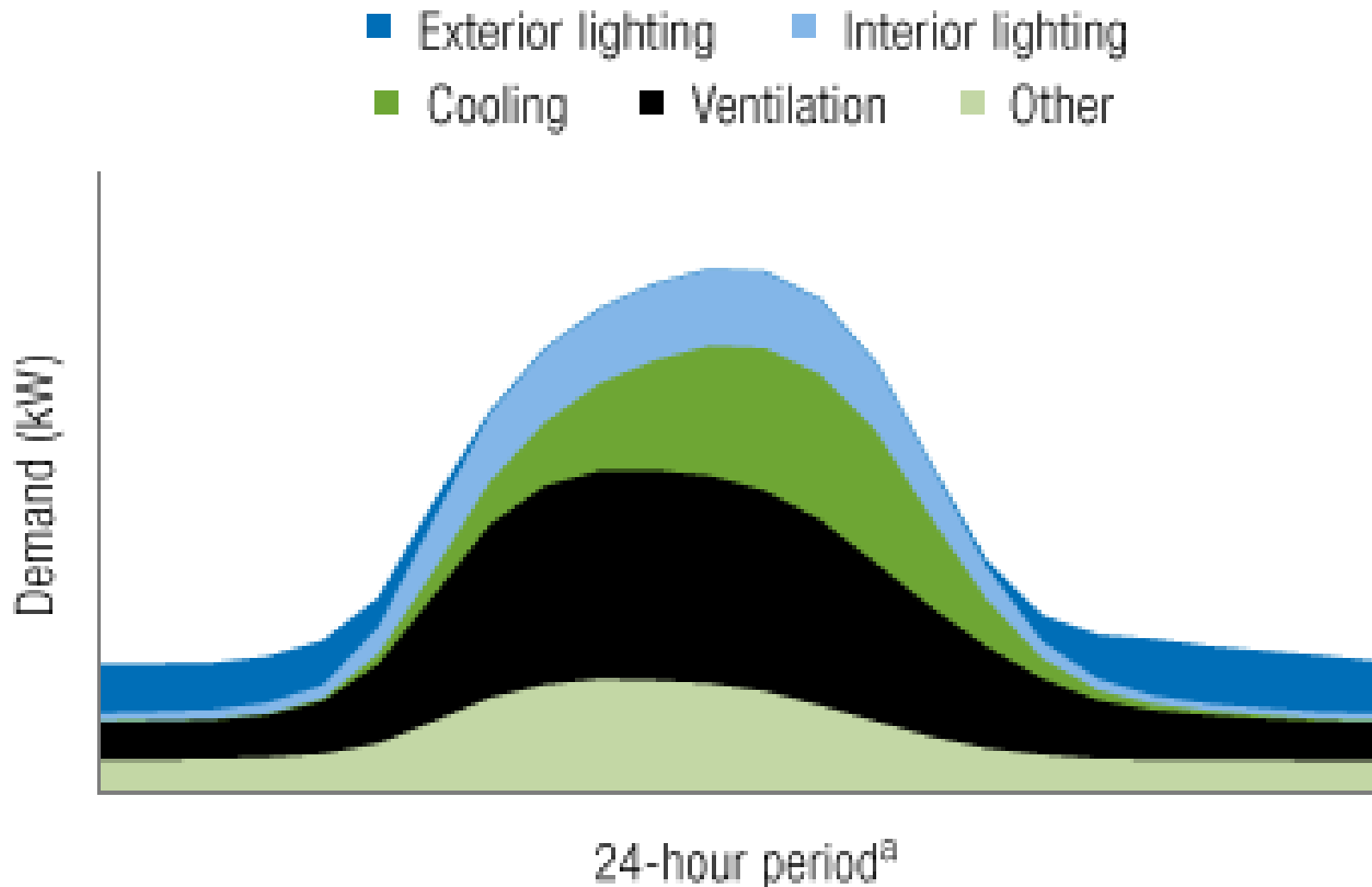


Taking Control of Your Electric Bills

Follow best practices with these systems:

- **Lighting**
- **HVAC**
 - **Air conditioning/chillers**
 - **Air handling equipment/ventilation**
 - **Controls**
 - **VFD**
- **Domestic hot water/booster heaters**
- **Demand limiting controls**
- **Producing Your Own Energy**

Electrical Energy Use in Schools



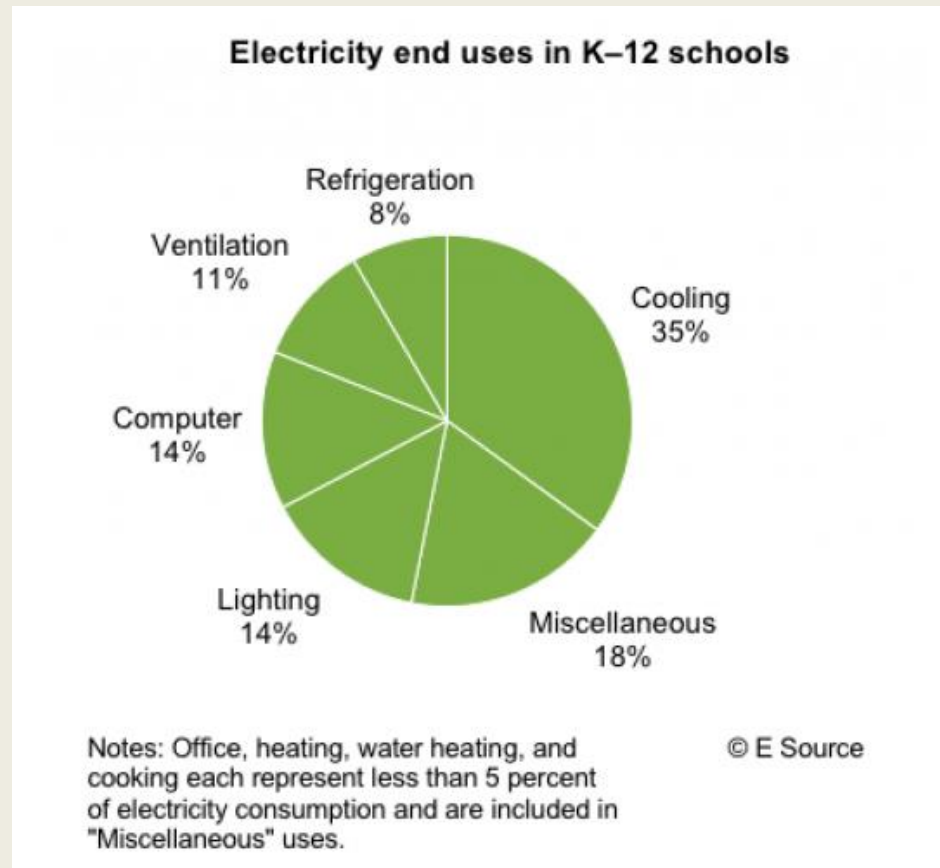
Notes: kW = kilowatt.

^a 24-hour period = midnight to midnight

© E Source; data from ITRON

Energy Use in Schools

- In school facilities, space heating, cooling and lighting accounts for about 70% of school energy use.



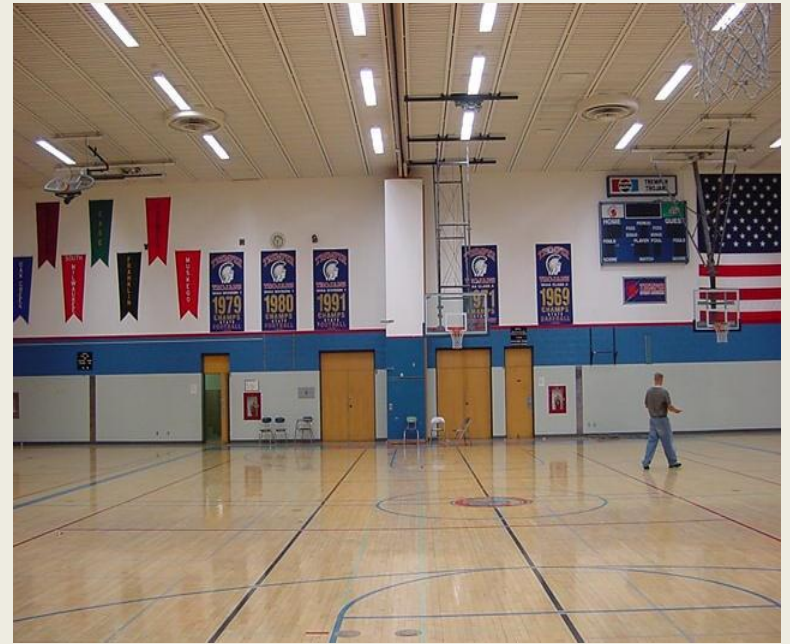
Lighting

- **Lighting is the easiest place to save energy and expect a quick payback**
 - De-lamp where possible
 - Use reduced-wattage lamps: **25-watt** and **28-watt T8** technology
 - **L.E.D. Technology**
 - **Complete lighting retrofits**

LED Lighting



Results of Lighting Upgrade



HVAC

High efficiency upgrades/replacements

- **Air conditioning**
 - DX units, Rooftop, Chillers
- **Air handling equipment**
 - VFD Drives on fan motors
 - Demand Controlled Ventilation
- **Controls**
 - DDC conversion, occupancy driven
 - Scheduling
 - Scheduling
 - Scheduling



Chiller Options



Air-Handling Units



Saving Energy with Domestic Hot Water



- Install a high-efficiency hot water heater
- Schedule pumping with occupancy
- Booster Heaters- consider natural gas or chemical wash to reduce electrical demand.

Demand Limiting Controls

- **Use a more sophisticated approach to lock out stages of cooling equipment to control peak demand.**
- **Use a peak demand strategy to monitor and control facility (smart building).**



Financial Incentives

- **Energy Rebates**
- **Utility Provider**
- **Focus on Energy**
- **Grants**



focus on energy

Partnering with Wisconsin utilities

Energy Accounting & Education

Natural Gas



Energy Manager

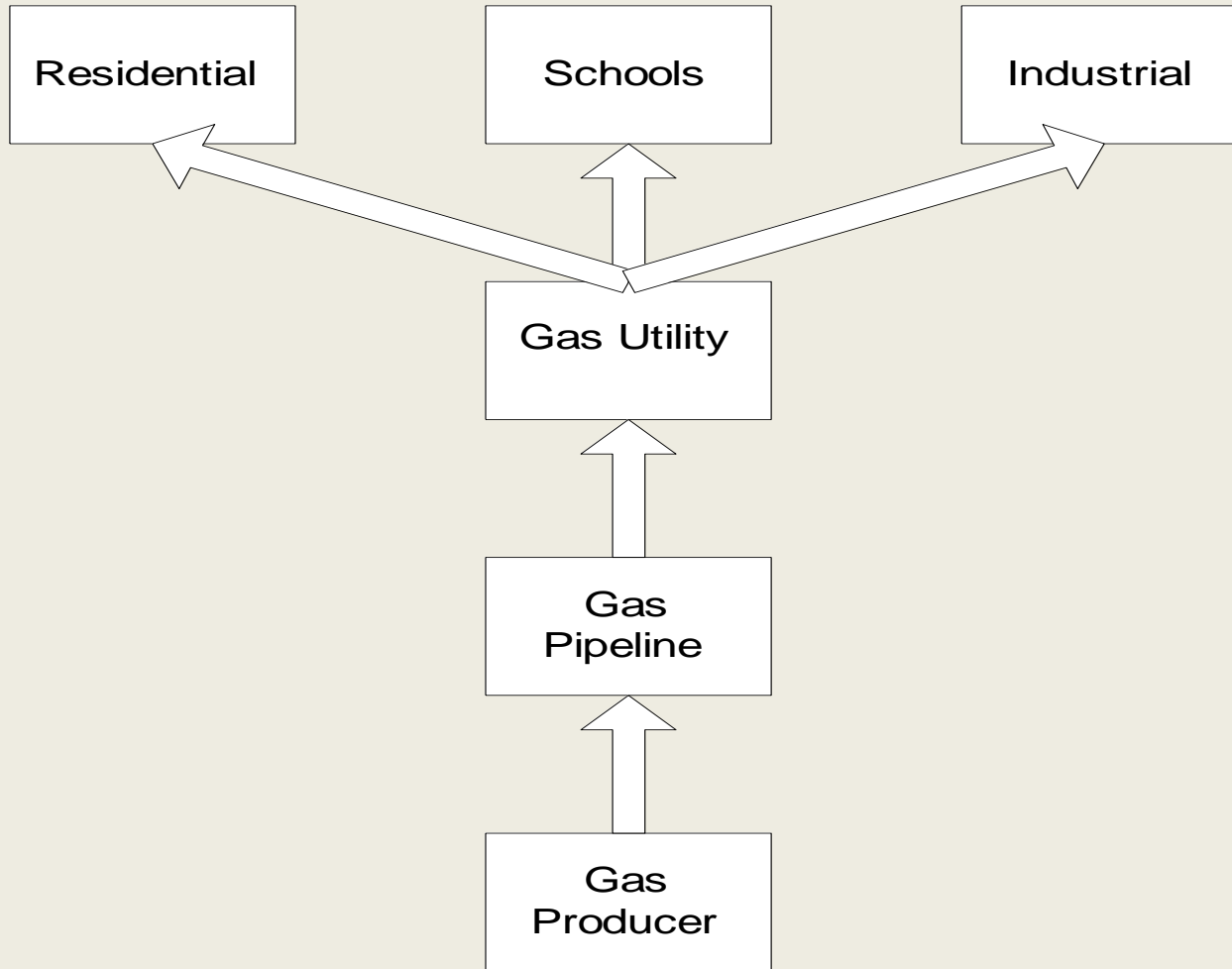
John Daily School District of Holmen

Mike Freybler School District of La Crosse

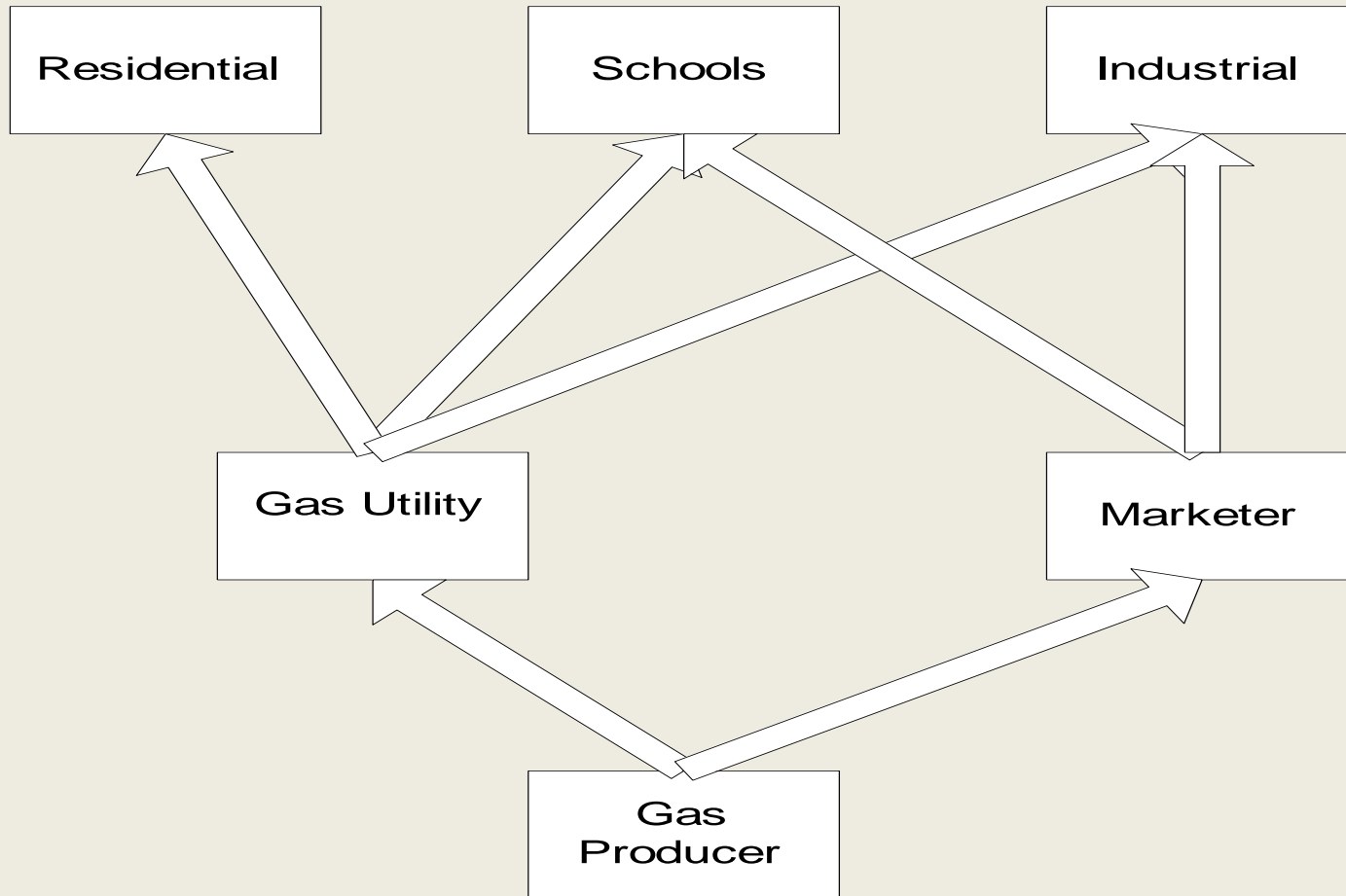
Topics (Natural Gas)

- **Effects of deregulation**
- **Sources of natural gas**
- **Transportation of natural gas**
- **Major gas supply lines**
- **Comparing fuel prices**
- **Understanding your gas bill**
- **How to reduce your gas bill**
- **Measure Yourself**

Before Deregulation



After Deregulation



Natural Gas Transportation

System Supply Customer

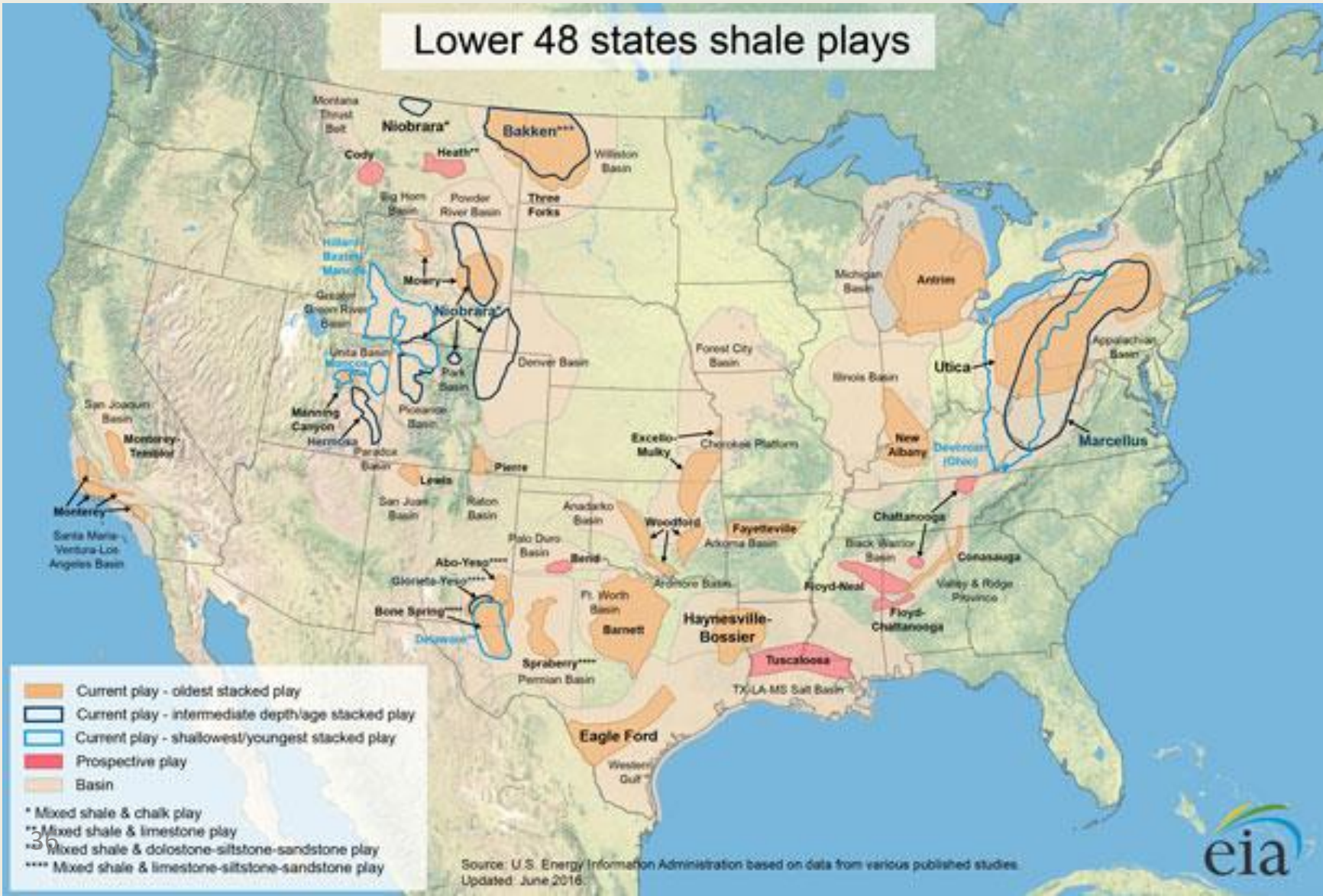
- Purchased by utility
- Transported by utility
- Distributed by utility
- Maintained by utility
- Billed by utility

Transportation Customer

- Purchased by marketer
- Transported by marketer
- Distributed by utility
- Maintained by utility
- Billed by both

Sources of U.S. Natural Gas

Lower 48 states shale plays

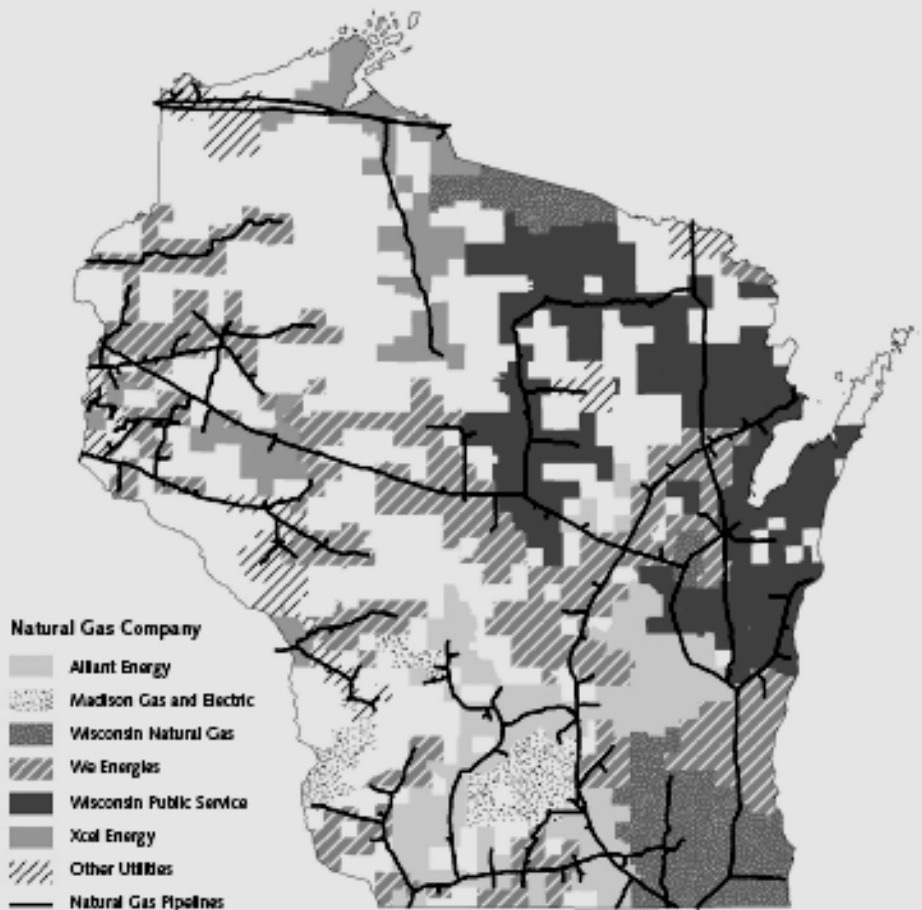


Natural Gas Pipelines



Major Gas Lines and Service Territories

Wisconsin Natural Gas Company Territories & Major Pipelines



Factors Contributing to Gas Cost

- Actual purchase price of gas
- Gas transportation costs
- PSC regulates utilities, not marketer
- Market fluctuations
- Price-locking
- Combination of weather and market determine the savings/costs in any given year
- Commodity price/transportation price



Comparing Fuel Costs

Btu's per unit

| | | |
|----------------------|----------|-----------------------------|
| #2 Fuel Oil | = | 139,000 btu's/gallon |
| Propane | = | 91,600 btu's/gallon |
| Kilowatt Hour | = | 3,412 btu's |
| Therm | = | 100,000 btu's |

Fuel Conversion Example

- If using fuel oil, multiplier would be 1.39 (From previous slide)

If the price of natural gas is \$.8364 per therm, should you consider burning propane?

Formula: Multiplier x cost of natural gas = equivalent cost

Use multiplier from table = .916

- $.916 \times \$0.8364 = \0.766 per gallon

Burn propane if it costs less than \$.77 per gallon.



| DAILY AVERAGES | Last Year | This Year |
|----------------|-----------|-----------|
| Temperature | 39° F | 36° F |
| Gas Therms | 41.5 | 187.1 |
| Gas Cost | \$21.69 | \$90.88 |

| MAILING ADDRESS | ACCOUNT NUMBER | DUE DATE | |
|---------------------------------------------------------------------|------------------|----------------|-------------|
| SCHOOL DISTRICT OF HOLMEN 1019 MCHUGH RD HOLMEN WI 54636-9296 | 52-4594119-3 | 01/20/2017 | |
| | STATEMENT NUMBER | STATEMENT DATE | AMOUNT DUE |
| | 529372970 | 12/29/2016 | \$53,765.17 |

SERVICE ADDRESS: HOLMEN HIGH SCHOOL
1000 MCHUGH RD HOLMEN, WI 54636-9524

NEXT READ DATE: 01/16/17

NATURAL GAS SERVICE DETAILS

PREMISES NUMBER: 302283981
INVOICE NUMBER: 0329587998

METER READING INFORMATION

| METER 924206 | Read Dates: 11/09/16 - 12/13/16 (34 Days) | | |
|--------------|-------------------------------------------|------------------|---------|
| DESCRIPTION | CURRENT READING | PREVIOUS READING | USAGE |
| Total Energy | 69576 Actual | 68972 Actual | 604 mcf |

997 Heating Degree Days

NATURAL GAS ADJUSTMENTS

| DESCRIPTION | VALUE UNITS | CONVERSION | VALUE UNITS |
|-------------------------|-------------|------------|-------------|
| Meter Multiplier | 604 mcf | x 10 | 6040 ccf |
| Heat Content Adjustment | 6040 ccf | x 1.053300 | 6362 therms |

NATURAL GAS CHARGES

RATE: Int Svc Mnthly Sys Sup

| DESCRIPTION | USAGE UNITS | RATE | CHARGE |
|---------------------|-------------|------------|-------------------|
| Customer Charge | | | \$100.00 |
| Distribution Charge | 6362 therms | \$0.110000 | \$699.82 |
| Gas Supply Charge | 6362 therms | \$0.359984 | \$2,290.22 |
| Total | | | \$3,090.04 |

Premises Total

\$3,090.04

001034 3/12



Taking Control of Your Gas Bills

Best Practices Using Gas

- **HVAC:**
 - Boilers and furnaces
 - Controls, scheduling and outside air
 - Hot water delivery and pumping
- Domestic hot water
- Cooking equipment



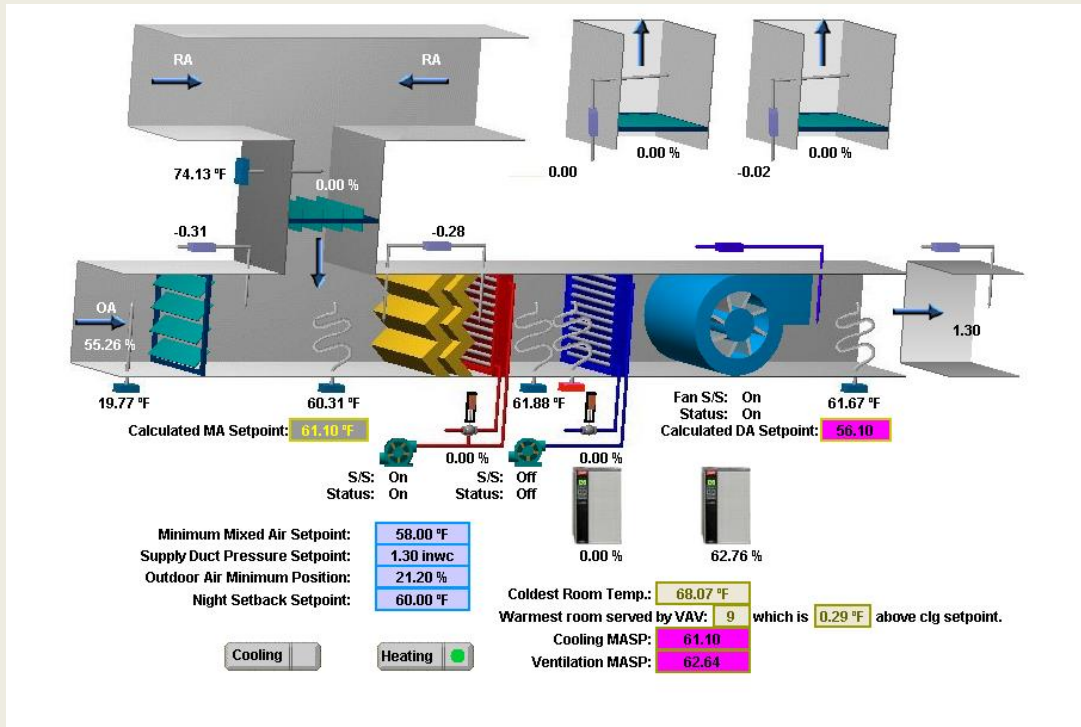
HVAC

- **High-efficiency heating system upgrades:**
 - Condensing technology
 - Steam to hot water conversion
 - Energy management system
 - Outdoor air reset



Saving Energy with Control Systems

- Pneumatic to DDC conversion
- Schedule occupancy correctly (tighten up)
- Reduce outside air in large air spaces



Energy Efficient Kitchen Equipment

- Consider high-efficiency appliances when upgrading
- Information and incentives available at www.focusonenergy.com



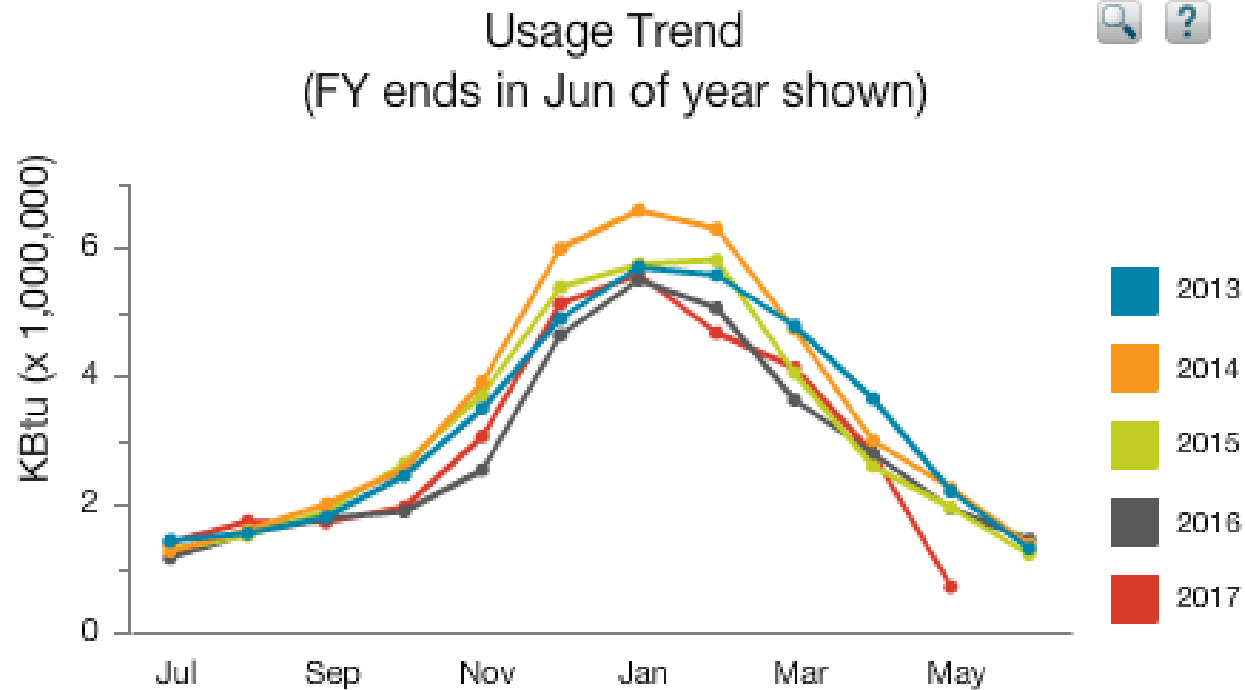
Measure Yourself

- **Track Energy use**
- **Look For and Implement Savings**
- **Compare Your Buildings**
- **Measure Against Others**
- **Share Results**

Tracking Energy Use

Usage Trend

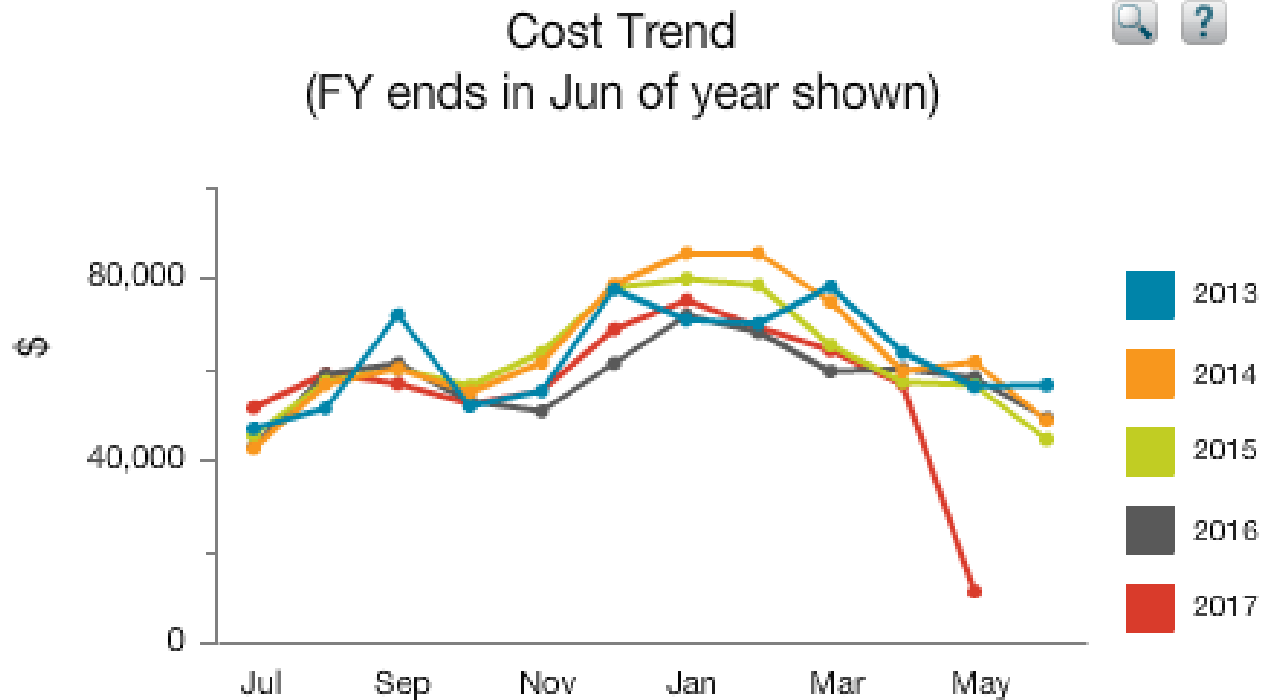
Data from: All Buildings



Tracking Energy Cost

Cost Trend

Data from: All Buildings



Building Savings



School District of Holmen

Sorted by BATCC Cost

Cost Avoidance Summary By Building CAP - 01B1

| Place | BATCC Cost | Actual Cost | Cost Avoidance | Cost Avoidance % |
|-----------------------------------------|--------------------|------------------|------------------|------------------|
| [HHS_1] Holmen High School | \$299,534 | \$217,881 | \$81,653 | 27.3 |
| [HMS_1] Holmen Middle School | \$216,135 | \$142,831 | \$73,304 | 33.9 |
| [VES_1] Viking Elementary | \$179,091 | \$93,659 | \$85,432 | 47.7 |
| [SLS_1] Sand Lake School | \$104,586 | \$75,015 | \$29,571 | 28.3 |
| [EES_1] Evergreen Elementary | \$90,442 | \$58,970 | \$31,472 | 34.8 |
| [PVE_1] Prarie View Elementary | \$69,765 | \$63,428 | \$6,338 | 9.1 |
| [OGFLC_1] Oak Grove Family Learning Ctr | \$21,582 | \$10,409 | \$11,172 | 51.8 |
| [DO] District Office | \$20,510 | \$11,142 | \$9,368 | 45.7 |
| [EMPFLD] Empire Stadium | \$13,938 | \$4,911 | \$9,027 | 64.8 |
| [TRANS] Transportation | \$12,282 | \$11,798 | \$483 | 3.9 |
| [MAINT] Maintenance | \$3,862 | \$2,056 | \$1,807 | 46.8 |
| [TMT0] TMT Office | \$2,937 | \$2,919 | \$18 | 0.6 |
| [TSHR] Transport Shared | \$2,902 | \$2,454 | \$448 | 15.4 |
| Totals: | \$1,037,567 | \$697,473 | \$340,094 | 32.8 |

Energy Star Portfolio

ABOUT ENERGY STAR

PARTNER RESOURCES



The simple choice for energy efficiency.

ENERGY EFFICIENT
products

ENERGY SAVINGS
at home

ENERGY EFFICIENT
new homes

ENERGY STRATEGIES FOR
buildings & plants

Home » Buildings & Plants » Owners and managers » Existing buildings » Use Portfolio Manager

Buildings & Plants

about us | press room | help desk | portfolio manager login

Owners and managers

Service providers

Program administrators

Tenants

Tools and Resources

Training

Existing buildings

Learn the benefits

Get started

Use Portfolio Manager

How Portfolio Manager helps you save

The benchmarking starter kit

Identify your property type

Enter data into Portfolio Manager

The data quality checker

How Portfolio Manager calculates metrics

Interpret your results

Verify and document your savings

Share and request data

Updates to ENERGY STAR scores with CBECS data



ENERGY STAR®
PortfolioManager®

The most-used energy measurement and tracking tool for commercial buildings.

Use Portfolio Manager

You've heard it before: you can't manage what you don't measure. That's why EPA created ENERGY STAR Portfolio Manager®, an online tool you can use to measure and track energy and water consumption, as well as greenhouse gas emissions. Use it to benchmark the performance of one building or a whole portfolio of buildings, all in a secure online environment.

Not sure if Portfolio Manager is for you? It is!

You can use Portfolio Manager to manage the energy and water use of any building. Seriously. Any building. K-12 school? Check. Office building? Check. Stadium? Check. We could keep going. All you need are your energy bills and some basic information about your building to get started.

Are you designing a new commercial building? You can also use Portfolio Manager to set your energy use target and see how your estimated design energy stacks up against similar existing buildings nationwide.



ENERGY STAR®

PortfolioManager®

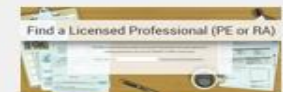
"Ask The Expert" webinar

Wednesdays
at 12pm noon ET



New! Licensed Professional Finder

Enter your zip code to find Licensed Professionals that have verified properties near you for ENERGY STAR certification.



Energy Star Portfolio

MyPortfolio

Sharing

Reporting

Recognition

Holmen High School

1001 Mc Hugh Road, Holmen, WI 54636 | [Map It](#)

Portfolio Manager Property ID: 1488109

Year Built: 1994

[Edit](#)

[Apply for ENERGY STAR Certification](#)

ENERGY STAR Score (1-100)

Current Score: 82

Baseline Score: 11

Summary

Details

Energy

Water

Waste & Materials

Goals

Design

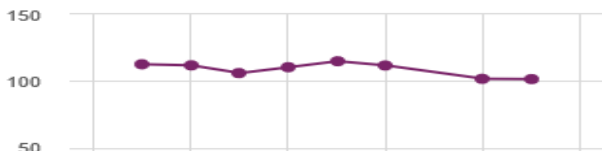
Property Profile [\(Future enhancements\)](#)

Your property is listed on the [REGISTRY of ENERGY STAR qualified buildings](#) with a basic profile. If you wish, you can provide a custom profile to highlight information about your property to the public, including a photo and narrative. The custom profile will need to be approved by EPA before it is published to the registry.

[View Published Profile](#) (approved on 12/09/2008)

[Create Custom Profile](#)

Source EUI Trend (kBtu/ft²)



[Change Metrics](#)
[Change Time Periods](#)

Metrics Summary

| Metric | Aug 2006 (Energy Baseline) | Nov 2017 (Energy Current) | Change |
|----------------------------------------------------------------------|----------------------------|---------------------------|-------------------|
| ENERGY STAR Score (1-100) | 11 | 82 | 71.00 (645.50%) |
| Source EUI (kBtu/ft ²) | 207.8 | 101.9 | -105.90 (-51.00%) |
| Site EUI (kBtu/ft ²) | 83.6 | 47.0 | -36.60 (-43.80%) |
| Energy Cost (\$) | Not Available | 225,898.10 | N/A |
| Total GHG Emissions Intensity (kgCO ₂ e/ft ²) | 11.9 | 5.8 | -6.10 (-51.30%) |
| Water Use (All Water Sources) (kgal) | Not Available | Not Available | N/A |
| Total Waste (Disposed and Diverted) (Tons) | Not Available | Not Available | N/A |

Energy Star Portfolio

MyPortfolio | [Sharing](#) | [Reporting](#) | [Recognition](#)

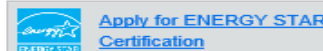
Holmen Middle School

502 N. Main St., Holmen, WI 54636 | [Map It](#)

Portfolio Manager Property ID: 1488120

Year Built: 1955

[Edit](#)



ENERGY STAR Score (1-100)

Current Score: 95

Baseline Score: 86

Summary | [Details](#) | [Energy](#) | [Water](#) | [Waste & Materials](#) | [Goals](#) | [Design](#)

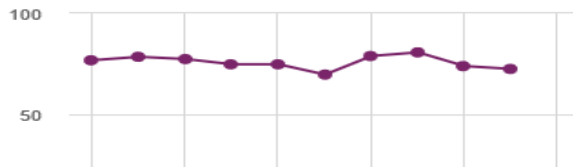
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[View Published Profile](#) (approved on 12/09/2008)

[+ Create Custom Profile](#)

Source EUI Trend (kBtu/ft²)



[Change Metrics](#)
[Change Time Periods](#)

Metrics Summary

| Metric  | May 2007 (Energy Baseline)  | Oct 2017 (Energy Current)  | Change  |
|------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| ENERGY STAR Score (1-100) | 86 | 95 | 9.00 (10.50%) |
| Source EUI (kBtu/ft ²) | 88.5 | 72.3 | -16.20 (-18.30%) |
| Site EUI (kBtu/ft ²) | 45.6 | 38.0 | -7.60 (-16.70%) |
| Energy Cost (\$) | Not Available | 154,612.09 | N/A |
| Total GHG Emissions Intensity (kgCO ₂ e/ft ²) | 4.9 | 4.0 | -0.90 (-18.40%) |
| Water Use (All Water Sources) (kgal) | Not Available | Not Available | N/A |
| Total Waste (Disposed and Diverted) (Tons) | Not Available | Not Available | N/A |

Energy Star Portfolio

MyPortfolio | Sharing | Reporting | Recognition

Evergreen Elementary School

510 Long Coulee Road, Holmen, WI 54636 | [Map It](#)

Portfolio Manager Property ID: 1436611

Year Built: 1980

[Edit](#)

[Apply for ENERGY STAR Certification](#)

ENERGY STAR Score (1-100)

Current Score: 92

Baseline Score: 76

Summary | Details | **Energy** | Water | Waste & Materials | Goals | Design

Property Profile [\(Future enhancements\)](#)

Your property is listed on the [REGISTRY of ENERGY STAR qualified buildings](#) with a basic profile. If you wish, you can provide a custom profile to highlight information about your property to the public, including a photo and narrative. The custom profile will need to be approved by EPA before it is published to the registry.

[View Published Profile](#) (approved on 12/09/2008)

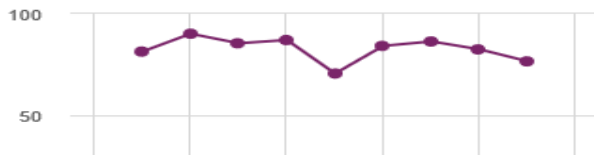
[+ Create Custom Profile](#)

[Change Metrics](#)
[Change Time Periods](#)

Metrics Summary

| Metric | Aug 2006 (Energy Baseline) | Oct 2017 (Energy Current) | Change |
|----------------------------------------------------------------------|-------------------------------|-------------------------------|------------------|
| ENERGY STAR Score (1-100) | 76 | 92 | 16.00 (21.10%) |
| Source EUI (kBtu/ft ²) | 96.0 | 73.9 | -22.10 (-23.00%) |
| Site EUI (kBtu/ft ²) | 45.6 | 36.7 | -8.90 (-19.50%) |
| Energy Cost (\$) | Not Available | 57,582.56 | N/A |
| Total GHG Emissions Intensity (kgCO ₂ e/ft ²) | 5.4 | 4.1 | -1.30 (-24.10%) |
| Water Use (All Water Sources) (kgal) | Not Available | Not Available | N/A |
| Total Waste (Disposed and Diverted) (Tons) | Not Available | Not Available | N/A |

Source EUI Trend (kBtu/ft²)



Energy Star Portfolio

MyPortfolio | [Sharing](#) | [Reporting](#) | [Recognition](#)

Viking Elementary School

500 E. Wall St., Holmen, WI 54636 | [Map It](#)

Portfolio Manager Property ID: 1488138

Year Built: 1972

[Edit](#)



ENERGY STAR Score (1-100)

Current Score: 94

Baseline Score: 46

Summary | [Details](#) | [Energy](#) | [Water](#) | [Waste & Materials](#) | [Goals](#) | [Design](#)

Property Profile [\(Future enhancements\)](#)

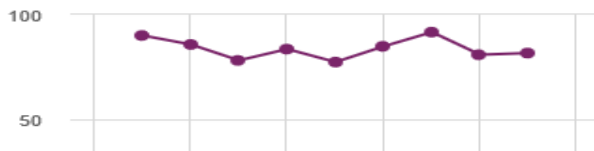
Your property is listed on the [REGISTRY of ENERGY STAR qualified buildings](#) with a basic profile. If you wish, you can provide a custom profile to highlight information about your property to the public, including a photo and narrative. The custom profile will need to be approved by EPA before it is published to the registry.

[View Published Profile](#) (approved on 12/09/2008)

[+ Create Custom Profile](#)

[Change Metrics](#)
[Change Time Periods](#)

Source EUI Trend (kBtu/ft²)



Metrics Summary

| Metric | Sep 2006 (Energy Baseline) | Nov 2017 (Energy Current) | Change |
|-----------------------------------------------------------------------------|----------------------------|---------------------------|------------------|
| ENERGY STAR Score (1-100) | 46 | 94 | 48.00 (104.30%) |
| Source EUI (kBtu/ft ²) | 137.2 | 75.3 | -61.90 (-45.10%) |
| Site EUI (kBtu/ft ²) | 66.4 | 38.3 | -28.10 (-42.30%) |
| Energy Cost (\$) | Not Available | 97,009.83 | N/A |
| Total GHG Emissions Intensity (kgCO ₂ e/ft ²) | 7.7 | 4.2 | -3.50 (-45.50%) |
| Water Use (All Water Sources) (kgal) | Not Available | Not Available | N/A |
| Total Waste (Disposed and Diverted) (Tons) | Not Available | Not Available | N/A |

[Search energystar.gov](https://www.energystar.gov) , portfolio manager

<https://www.energystar.gov/buildings/facility-owners-and-managers/existing-buildings/use-portfolio-manager>

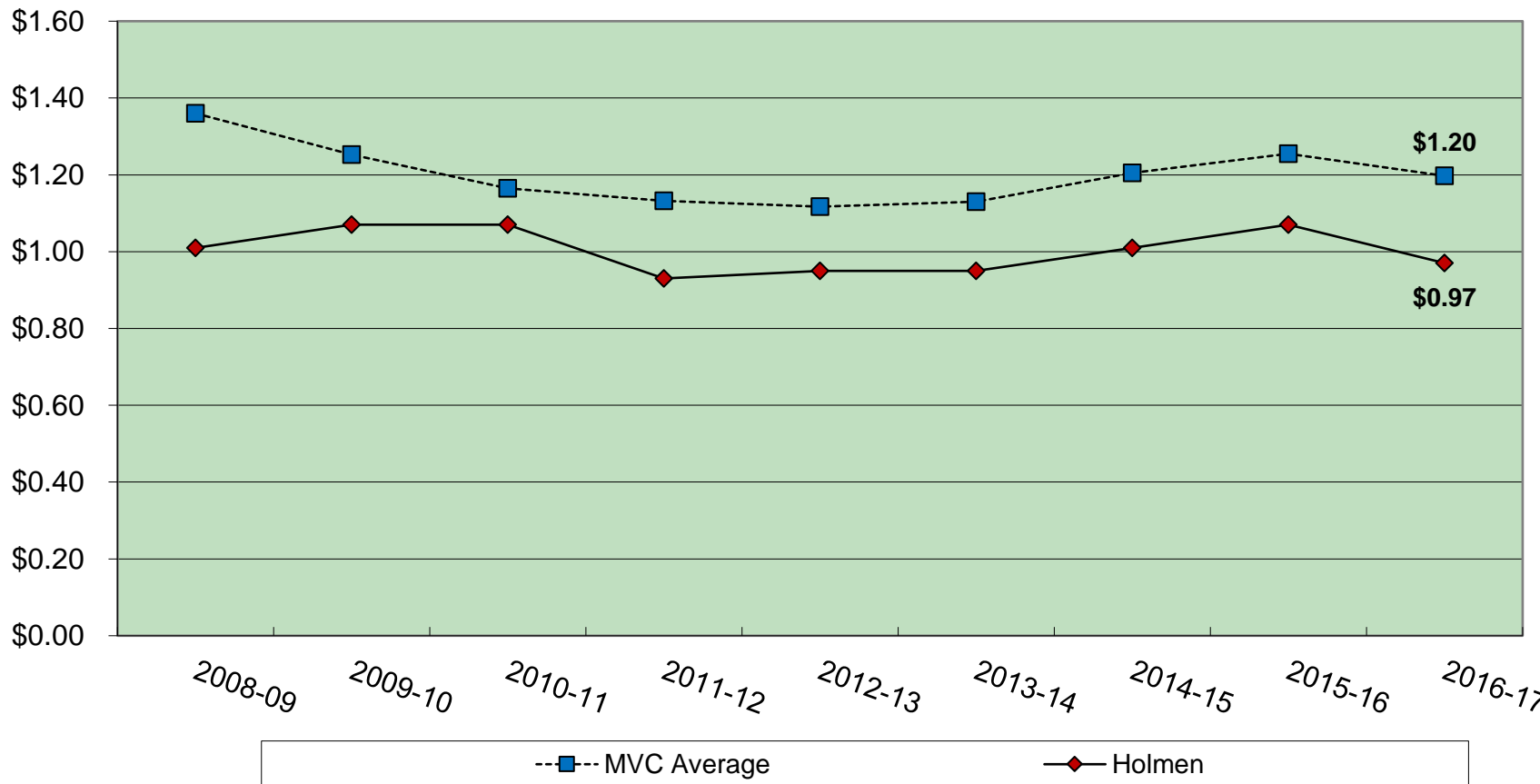


Measure the Physical Classroom Environment

- **Temperature**
- **Humidity**
- **Lighting**
- **CO₂**

Compare Costs to Neighbors

Utilities Expenditures per Square Foot



Any Questions?

