

Cost Savings through Energy Efficiency in K12 Schools

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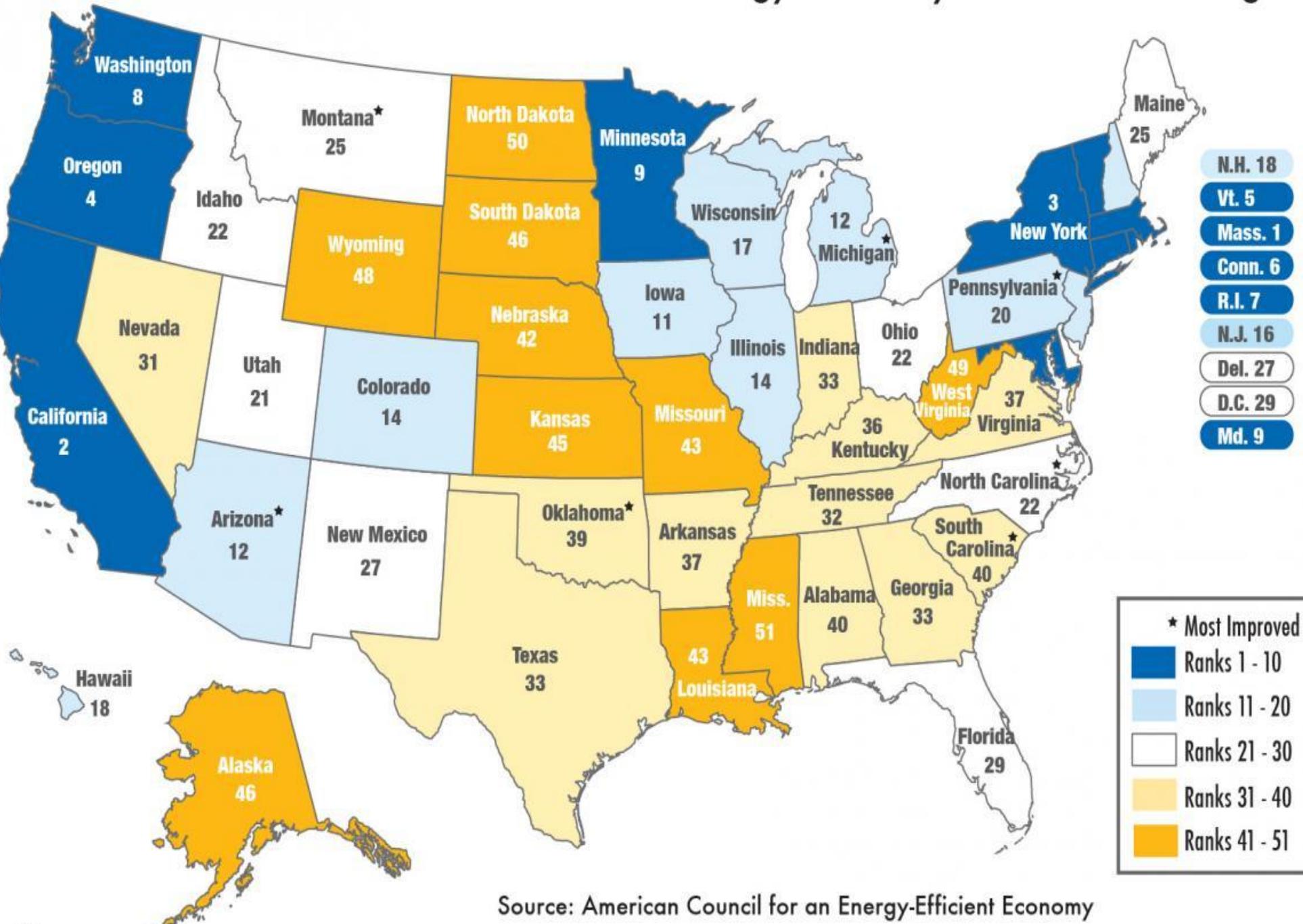
WV Code 18-5-9a

- WV school districts can enter into a “energy savings contract” for the purpose of saving energy
- “Performance Contracting” is a form of an energy savings contract
- WVDE Office of School Facilities will support that energy savings initiative

Evaluating/Improving WV Schools Energy Use

- What do we know
- Where do we want to go
- How do we get there.

2012 State Energy Efficiency Scorecard Rankings



Source: American Council for an Energy-Efficient Economy

What we know

- 730 school buildings in WV
- 1200 total buildings
- 42,750,000 square ft. of space
- 282,088 students
- 19,737 teachers

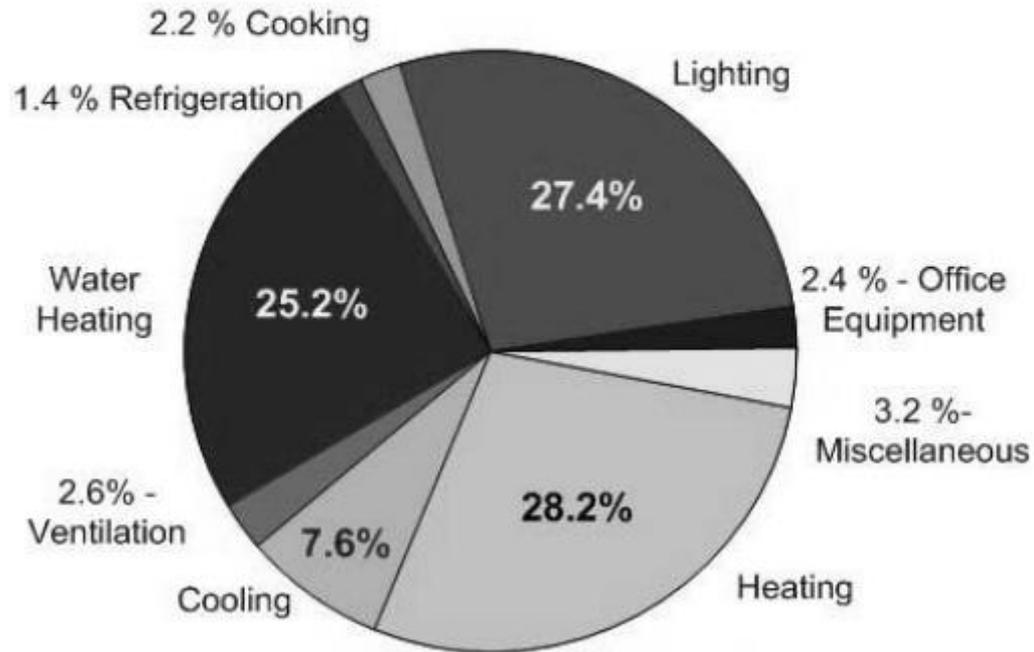
What we know

- Energy usage in WV schools in \$
 - Water/sewer = \$7,495,928
 - Natural gas = \$12,882,211
 - Electricity = \$50,873,410
 - Oil = \$1,505,361
 - Other = \$757,914
- Total = \$75,514,823

What we know

Energy Use in Schools

(averaged across climate zones)



What we know

- About 25% of energy is wasted, according to Department of Energy
- Do the math
- $\$75,514,823 \times 25\% = \$18,878,706$

Where do we want to go

- Simply, return that \$18,878,706 back to the classroom
- $\$18,878,706 / 55 = \$343,249$ per county
- \$67.42 per student

How do we get there

- WVDE Office of School Facilities initiative

**West Virginia Chapter
of the
Energy Services Coalition**

A Public-Private Partnership

How do we get there

WV Energy Service Coalition

- What is the ESC
- Who started
- Purpose
- Who makes up the WV ESC
- Partnership with WV School Building Authority

West Virginia Chapter Background and History

- The West Virginia Chapter was formed through the joint efforts of the Division of Energy and Office of School Facilities
- State leadership has developed a partnership including stakeholders from public and private industry sharing a common goal
- Increase energy efficiency and return the savings to enhance education
- An opportunity to find alternative funding for HVAC and Mechanical Projects
- Extensive work with the National Chapter

West Virginia Chapter Background and History

Our Goals:

- An unbiased informational resource
- West Virginia specific documents
- Partnering with the School Building Authority to promote energy performance contracting - an alternative financing mechanism
- Lower energy costs to build long term facility improvements
- Provide economic stimulus for the local and regional business community

What is an Energy Performance Contract?

“...an agreement with a private energy service company (ESCO)...[that] will identify and evaluate energy-saving opportunities and then recommend a package of improvements to be paid for through savings. The ESCO will guarantee that savings meet or exceed annual payments to cover all project costs....If savings don't materialize, the ESCO pays the difference....”

– ENERGY SERVICES COALITION

The Energy Performance Contract

Summary

Vision, Priorities, Goals and Strategies

- Use Energy Performance Contracting and related cost savings to fund facility improvements in our schools
- Consider energy savings to fund facility or infrastructure improvements
- Reduce energy costs by 10% to 20% in the next few years
- An unbiased resource to allow schools to get the most from Energy Performance Contractors

Currently three projects in WV Schools

- Partnership with School Building Authority
 - Using the savings as local dollars towards the project
 - WVESC.org

Questions?