

# **HELPING SCHOOLS SAVE THROUGH ENERGY BEHAVIOR PROGRAMS**

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PIERCE ENERGY PLANNING



**\$8 billion...**

Annual energy bill to run America's primary and secondary schools – 2<sup>nd</sup> highest expense to personnel costs.

Top energy performing schools cost **\$.40** per square foot less to operate than the average performers.

A school can reduce energy use by up to **25%** through behavioral and operational changes.

Statistics from the US EPA, Energy Efficiency Programs in K-12 Schools, 2011  
([https://www.epa.gov/sites/production/files/2015-08/documents/k-12\\_guide.pdf](https://www.epa.gov/sites/production/files/2015-08/documents/k-12_guide.pdf)).



# WHY PIERCE ENERGY PLANNING DOES WHAT WE DO...

To help K-12 school districts save money on energy bills, monitor monthly energy data, and develop operational and behavior change strategies.

## Service offerings:

- Data monitoring and reporting
- Energy management software
- Utility management strategies
- **Behavior change strategies**
- **Professional development and curriculum**

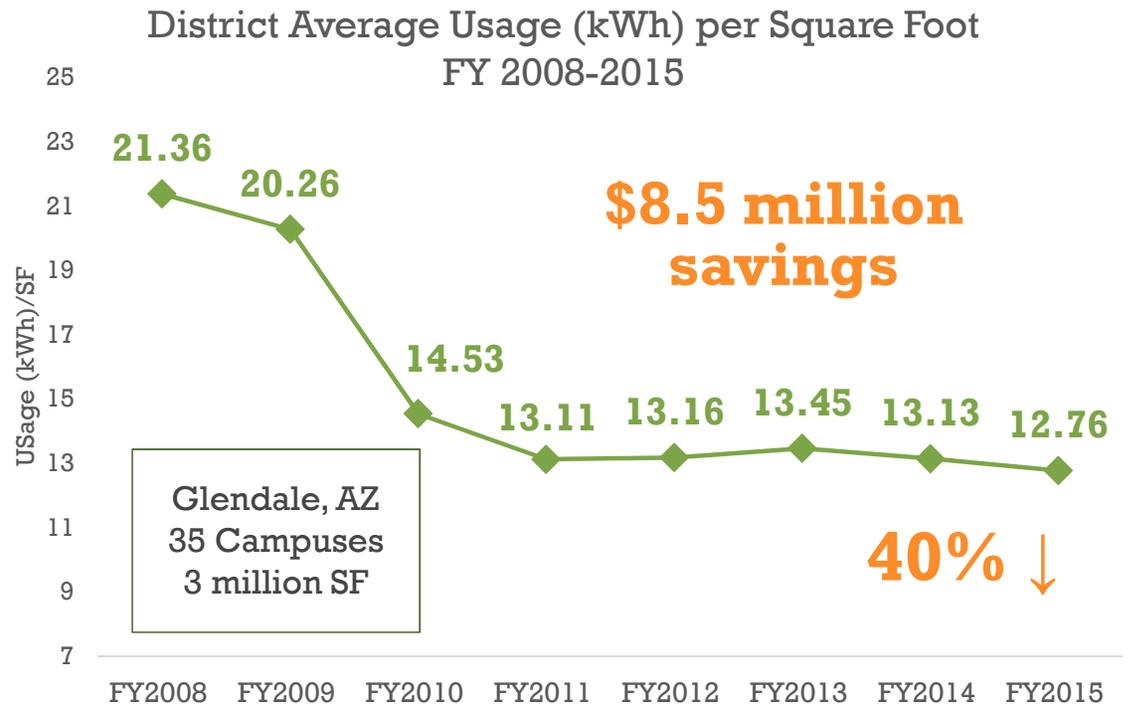


# THE STORY OF A DISTRICT DURING THE RECESSION

## Education and behavior

- Competitions through shared monthly energy data
- Teacher training for energy curriculum
- Student involvement – Energy Violation Tickets

## Washington Elementary School District

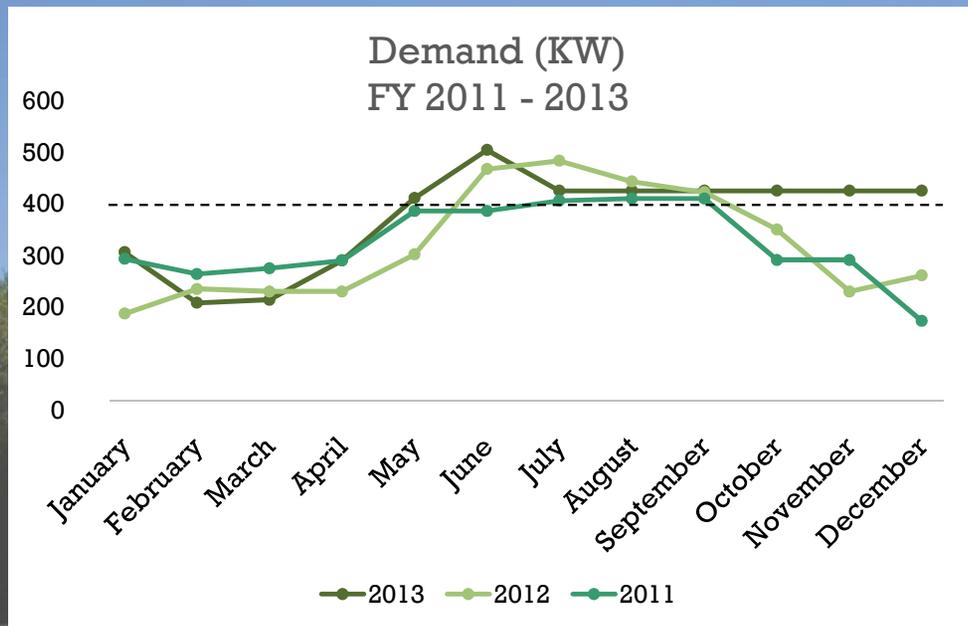


The Safari Green Schoolhouse at Washington Elementary School District.



# THE STORY OF LOWERING HIGH DEMAND (KW)

## Florence K-8



Florence & San Tan Valley, AZ  
13 Campuses  
1.6 million SF

## Controls system (EMS) management

- Load shedding
- Staggered start-up schedule for major equipment

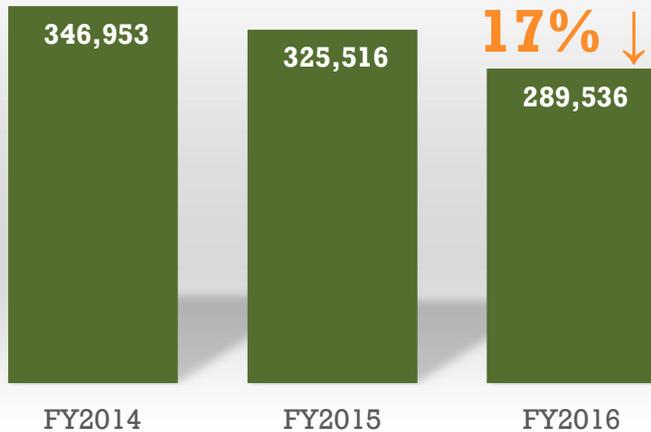


# THE STORY OF STUDENT AND COMMUNITY ENGAGEMENT

## Nogales Unified School District

### Lincoln Elementary School

Electric Usage (kWh)  
FY 2014 - 2016



### Green Team and Community Involvement

- Energy Report Cards for teachers
- Energy actions, policies, and data on district website

Nogales, AZ  
10 Campuses  
700,500 SF



## KEY TAKE-AWAYS

- Mechanical upgrades are great energy efficient solutions, but **involving school staff and students is key** to energy savings.
- Behavior change can **save schools a significant amount of energy and money** on electric bills.





**THANK YOU!**

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