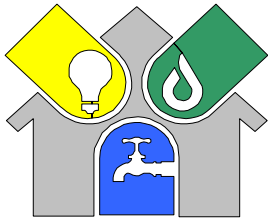


# The Energy Educator



ENERGY MANAGEMENT

YEAR FOUR

Walla Walla Public Schools  
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## The Energy Management Program

**Purpose:** To avoid wasting utilities in order to save money to be used for instructional needs.

### **Guiding Rules:**

- Do not interfere with the classroom instructional program.
- Do not light areas that are not in use.
- Do not heat or cool unoccupied areas. Establish and practice equipment shutdown procedures for daily and holiday savings.

### Three Steps to Energy Savings

1. Turn off lights when you leave the room.
2. Turn off all electronic equipment at the end of the day.
3. Turn off or setback the thermostat every day.

Settings for Setback: Heating 55 Degrees  
Cooling 90 Degrees  
(Fans set on Auto.)



Year 4/ Oct. 2002– Sept. 2003

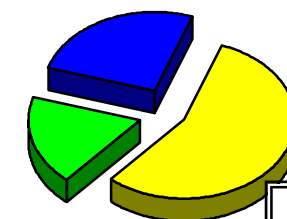
	<u>Percent Saved</u>
ADMINISTRATION	16%
BERNEY ELEMENTARY	20%
BLUE RIDGE ELEMENTARY	22%
EDISON ELEMENTARY	25%
GARRISON MIDDLE SCHOOL	18%
GREEN PARK	18%
PAINE CAMPUS	34%
PIONEER MIDDLE SCHOOL	24%
PROSPECT POINT	27%
SHARPSTEIN	1%
SUPPORT SERVICES	13%
WALLA WALLA HIGH SCH.	27%
<b>Grand Totals:</b>	<b>27 %</b>

### Special points of interest:

- The four year contract the district had with Energy Education, Inc. has ended. The district will no longer be required to pay the consulting fee which will result in an additional \$78,000 savings each year.
- Energy Education Inc. works for and with only K-12 public schools nation wide. They currently have over 300 contracts., 4 in Washington State.
- There was a total reduction of \$105,000 in energy costs in the 1st year of the Energy management program.
- The Energy Management program uses Energy CAP software to track utilities and Automated Logic: Supervision to control energy systems.
- Utilities Tracked: Electricity, Gas, Water / Sewer/, Sanitation.
- There are three phases to the Energy Management Program: Management, Education and Accounting.
- The positive spirit and accountability of the Energy Manager, Principals, Custodians and Teachers will contribute to the success of the program.
- Energy efficiency is brought about by conservation strategies and

Year 4 Costs: \$767,412

\$199,176



\$429,026

\$139,210

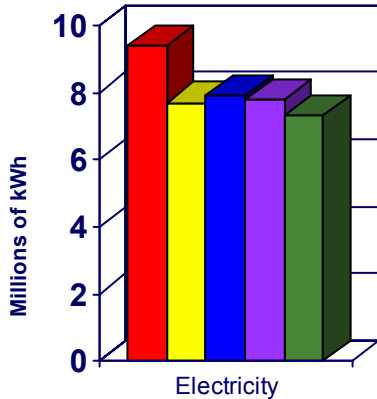
■ Electric  
■ Natural Gas  
■ Water/Sewer

Base Year Costs: \$748,288  
Year 1 Costs: \$645,033  
Year 2 Costs: \$681,280  
Year 3 Costs: \$749,180

# Consumption Comparison

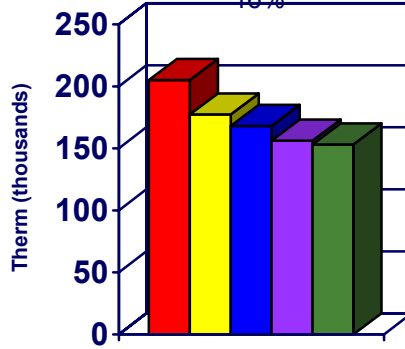
## Electricity

Saved 1,679,472 kWh  
30%



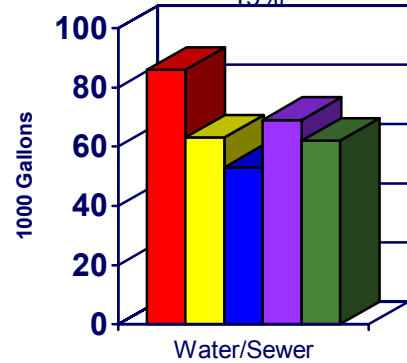
## Natural Gas

Saved 48,809 therms  
16%



## Water/Sewer

Saved 16,714 Kgal  
19%



### FULL PROGRAM SAVINGS

Building	Adjusted Building Cost	Actual Cost	Cost Avoidance	Percent Saved
ADMINISTRATION	\$89,168	\$75,535	\$13,632	15%
BERNEY ELEM.	\$238,926	\$182,949	\$55,977	23%
BLUE RIDGE ELEM.	\$240,344	\$198,586	\$41,758	17%
EDISON ELEM.	\$128,703	\$97,128	\$31,576	24%
GARRISON M. S.	\$333,318	\$264,125	\$69,194	21%
GREEN PARK ELEM.	\$205,122	\$173,425	\$31,697	15%
PAINE CAMPUS	\$157,340	\$103,356	\$53,983	34%
PIONEER M. S.	\$379,362	\$287,147	\$92,214	24%
PROSPECT POINT ELEM.	\$252,149	\$194,471	\$57,678	23%
REFUNDS AND REBATES	\$110,365		\$110,365	
SHARPSTEIN ELEM.	\$70,053	\$64,381	\$5,672	8%
SUPPORT SERVICES	\$98,837	\$83,905	\$14,931	15%
WALLA WALLA H. S.	\$1,363,063	\$990,887	\$372,176	27%
<b>Grand Totals:</b>	<b>\$3,666,751</b>	<b>\$2,715,897</b>	<b>\$950,854</b>	<b>26%</b>

### Year 1 Savings

**Oct. 1999 - Sept. 2000**

ELECTRIC	25%
NATURAL_GAS	10%
WATER	29%
<b>Total:</b>	<b>24%</b>

### Year 2 Savings

**Oct. 2000 - Sept. 2001**

ELECTRIC	23%
NATURAL_GAS	18%
WATER	42%
<b>Total:</b>	<b>27%</b>

### Year 3 Savings

**Oct. 2001 - Sept. 2002**

ELECTRIC	26%
NATURAL_GAS	18%
WATER	36%
<b>Grand Total:</b>	<b>27%</b>

### Year 4 Savings

**Oct. 2002 - Sept. 2003**

ELECTRIC	30%
NATURAL_GAS	16%
WATER	19%
<b>Grand Total:</b>	<b>25%</b>

### YEAR FOUR SAVINGS SUMMARY

Year Four Cost Avoidance	\$252,452
<b>Less Operating Expenses:</b>	
EEI Consulting Fees	\$78,029
Salaries	\$21,410
Software & Computing Costs	\$400
Miscellaneous	\$2,000
<b>NET SAVINGS</b>	<b>\$150,613</b>

### Websites of Interest:

#### Local Weather:

[www.wrh.noaa.gov/pendleton/climate/climateIndex.html](http://www.wrh.noaa.gov/pendleton/climate/climateIndex.html)

#### POWERhouse Home Energy Calculator:

<http://www.article19.com/shockwave/ph.htm>

#### WWPS Energy Management:

[http://www.wwps.org/support/energy\\_management.htm](http://www.wwps.org/support/energy_management.htm)

### FULL PROGRAM SAVINGS

ELECTRIC	28%
NATURAL_GAS	17%
WATER	27%
<b>Grand Total:</b>	<b>26%</b>

### DID YOU KNOW?

- The benefits of turning equipment off include financial savings, longer equipment life and reduced risk of damage to motors, computers and lighting caused by power fluctuations/lightening.
- It takes 20 times the energy to keep a classroom at 68 degrees for 14 hrs., then it does to set it back to 55 degrees for 14 hrs. and then bringing it back up to 68 degrees (in 10 degree weather).
- It is more economical to turn incandescent and fluorescent lights off each time you leave the room.
- A F40 rapid start fluorescent lamp operating continuously lasts 4.3 yrs. The same lamp used for a normal 40 hr. work week, lasts 10 ½ yrs. You cut Power Consumption and Replacement Costs.
- A computer left on 24 hrs. Per. day is wearing out its components at least 3 to 4 times faster than necessary. A computer operating continuously will have an average life of 2.3 yrs. Turned off nights and weekends it increases to 9.6 yrs.
- Experts in the computer industry have determined that turning them off will not hurt them. They have determined that heat is the primary reason for failure. A computer left on for 8 hrs. a day will cost the district about \$50.00 annually, 24 hrs. = \$150.00 annually.
- WWPS uses Vending Misers on vending machines and the Watt Stopper: Isolé Occupancy Power Strips and all desktops.