

Henderson County Public Schools

FY2011 Building Energy Use

District-Wide Summary

***November 21, 2011
Darrel Pfingston, PE, CEM***



District Building Energy Use & Cost FY 2011

Utility	Use	Unit	Cost	% Cost of Total
Propane	16,000	gallons	\$ 33,000	2.5
Gas	273,000	ccf	\$198,000	15.0
Electricity	14,825,000	kwh	\$1,087,000	82.5
Total	---		\$1,318,000	100.0

Annualized District Building Energy Cost per Student

School District FY 2011	Number of Students	Total Cost	Cost per Student	Increase over State Average
Henderson	7215	\$1,318,000	183	-9%
Kentucky– All	675,000	\$ 136 million *	201 *	----

**Preliminary Data. Final Data to be issued December, 2011.*

District Building Energy Unit Prices

Commodity	Unit Quantity	Henderson Unit Price FY 2011	State Average Unit Price FY 2011 *	% Increase over State Average
Propane	\$/gallon	2.06	1.62	+27
Natural Gas	\$/ccf	0.72	0.91	-18
Electricity	Cents/kWh	7.3	8.9	-18

**Preliminary Data. Final Data to be issued December, 2011.*

Observations

- ▶ *District Building Energy Cost is 9% less than Kentucky Schools' Average for FY 2012. (per Student basis)*
- ▶ *District Natural Gas Pricing is 18% less than Kentucky Schools' Average for 2012.*
- ▶ *District Electrical Pricing is 18% less than Kentucky Schools' Average for 2012.*
- ▶ *Total Cost & Unit Pricing Data Suggest that an “Internal” Opportunity Exists for further Reduction of Energy Costs*

2012 Strategy for Improvement

- ▶ ***Exploit “Internal” Opportunity for further Reduction of Energy Costs***
- ▶ ***Use the following Specific enablers:***
 - ❖ ***“Friendly” competition among schools to drive an increase of Principals’ Awareness***
 - ❖ ***Energy Awareness Day Activities, Energy Management Symposia, & Student Teams to drive an increase of Students’ & Instructors’ Awareness***
 - ❖ ***Consider more aggressive Requirements for District Energy Management Plan***