Energy Savings Program
Three Year Report
Nov. 2008 – Oct. 2011

Montgomery County Schools

January 9, 2012

EDUCON

Goal

- Reduce energy consumption and expenditures without compromising safety or comfort.

Energy Savings Program

- 3-Year Program
- Began November 2008
- People-oriented
- Uses proven energy conservation strategies and technologies
- Establishes accountability
- Provides local leadership

Actual Utility Costs Savings

	Annual Savings	Savings %
Year 1	$198,000	19%
Year 2	$ 51,000	5%
Year 3	$ 98,000	9%
Total Savings	$347,000	11%

Electricity Use

	Electricity Usage Savings KWH	Savings %
Year 1	1,700,000	23%
Year 2	1,400,000	19%
Year 3	1,600,000	22%
Total Savings	4,700,000	21%

Natural Gas Use

	Natural Gas Usage Savings CCF	Savings %
Year 1	2,100	19%
Year 2	400	4%
Year 3	800	7%
Total Savings	3,300	10%

Heating Oil Use

	Heating Oil Usage Gallons Saved	Savings %
Year 1	6,000	10%
Year 2	(1,300)	-2%
Year 3	(2,600)	-4%
Total Saved	2,100	1%

Propane Use

	Propane Usage Gallons Saved	Savings %
Year 1	(3,200)	-32%
Year 2	(4,400)	-44%
Year 3	(2,200)	-22%
Gallons Saved	(9,800)	-33%

Environmental Impact

- Reduction in Carbon Dioxide Gases: 7,100**,000 lbs.**
- Equivalent to taking 465 **cars** off the road or planting **952 acres of trees.**

Water Use

	Water Usage Gallons Saved	Savings %
Year 1	2,700,000	24%
Year 2	(500,000)	-4%
Year 3	2,900,000	26%
Total Saved	5,100,000	15%

Sewer Use

	Sewer Usage Gallons Saved	Savings %
Year 1	2,600,000	28%
Year 2	1,000,000	11%
Year 3	3,800,000	41%
Total Saved	7,400,000	27%

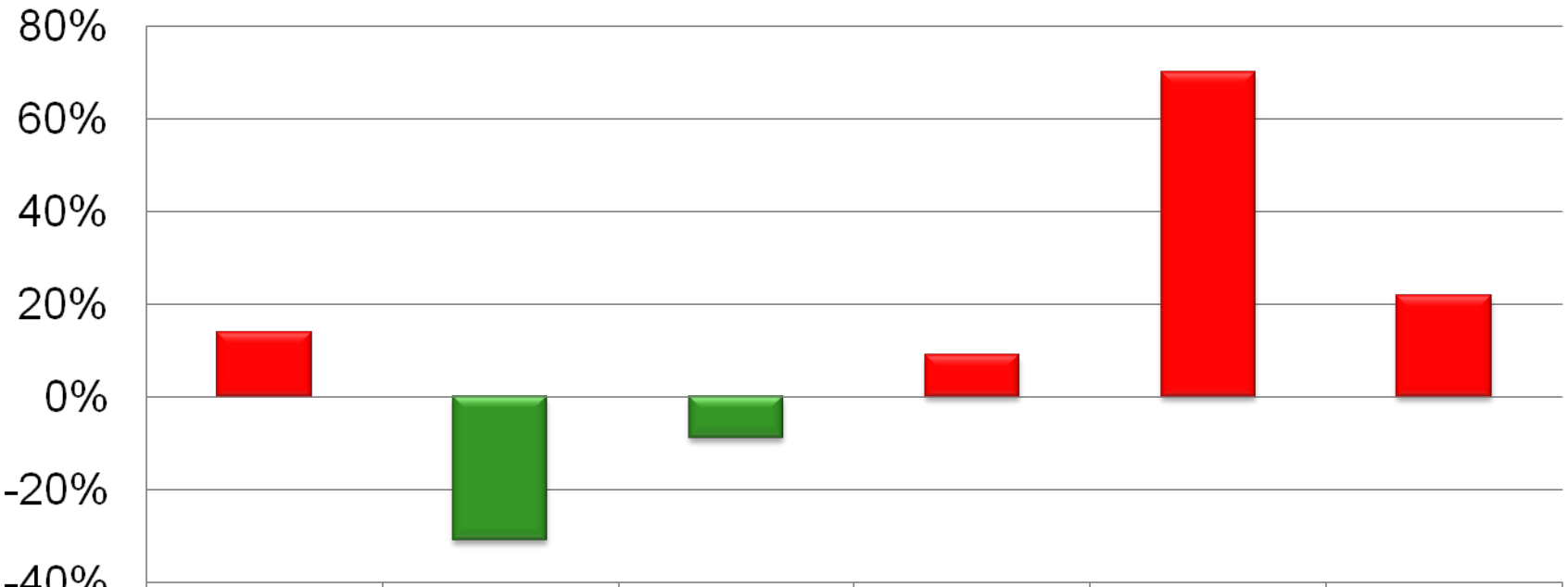
Results: Cost Per Sq. Ft.

		Decrease
Base Year	**$1.55**	
Year 1	**$1.26**	**$0.29 - 19%**
Year 2	**$1.42**	**$0.13 - 8%**
Year 3	**$1.35**	**$0.20 - 13%**

Results: kBtu Usage Per Sq. Ft.

		Decrease
Base Year	**52.2**	
Year 1	**42.8**	**9.4 - 18%**
Year 2	**45.1**	**7.1 - 14%**
Year 3	**44.2**	**8.0 - 15%**

Utility Rate Changes



	Electricity	Natural Gas	Heating Oil	Propane	Water	Sewer
Series1	14%	-31%	-9%	9%	70%	22%

Program Costs Savings

	Cost Avoidance Savings	Savings %
Year 1	$ 252,000	23%
Year 2	$ 150,000	13%
Year 3	$ 241,000	20%
Total Savings	$ 643,000	19%

Energy Star

Overall District Rating – Base Year	69
Overall District Rating – October 2011	85
Facilities Eligible for Energy Star Award	12
Facilities With Rating of 75 or Above	12
Energy Star Success Rate	100%

Looking Ahead

- Rate increases will continue.
- Conservation will be even more important.
- Strategies:
  - Continued monitoring by Energy Manager.
  - Reduce HVAC run times when practical.
  - Encourage care in use of overrides.
  - Encourage Energy Star Certification of Schools.