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Sustainability Accomplishments 1994 thru 2007

Background and History

Energy Conservation Measures Undertaken

- Electrical Lighting
- Mechanical
- Direct Digital Control (DDC)
- Building Automation Systems
- Maintenance
- Behavior
- Water Conservation
- Renewable Energy Evaluations:
 - Solar
 - Wind (Rec's)
 - Geothermal
- LEED Standards For New Construction
- Fuel Conversion
- Waste Management



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How Did We Do?

Energy and Cost Savings

1994 - 2007

- Lighting
 - Annual kwh reduction 5,803,000
 - Annual savings \$ 430,700
 - Annual CO₂ reduction (T) 4,150
- Mechanical retrofits
 - Annual kwh reduction 3,993,630
 - Annual savings \$ 207,000
 - Annual CO₂ reduction 2,937
- DDC/Controls/BAS
 - Annual kwh reduction 3,497,370
 - Annual savings \$ 167,200
 - Annual CO₂ reduction (T) 2,655



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How Did We Do?

Water Conservation

1994 - 2007

- Irrigation
 - 99% Automated
 - Remote Access
 - Rain Gauges
- Recycled Water from Denver Water Board
 - Installed PP system to accommodate
 - Extend system to get to DU (\$ offset)
 - 28 Million gallons of water for Denver Water Board System
- Well Water
 - Invested to protect Arboretum during drought
 - 1865 trees on campus
 - 5 of them are champions



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How Did We Do?

Recycling 1994 - 2007

- Recycling in all buildings including Iliff
- Approximately 8-1/2% of all waste is recycled
 - 120 Avg. Tons Trash/Month
 - 10.4 Avg. Tons of Recycling
- Goal for end of 2008 - to double recycling
 - Get to about 20 Tons per month
- Behavior Modification
 - Structure of the Program
 - Awareness
 - Saved in excess of \$600,000 the 1st two years of the program.



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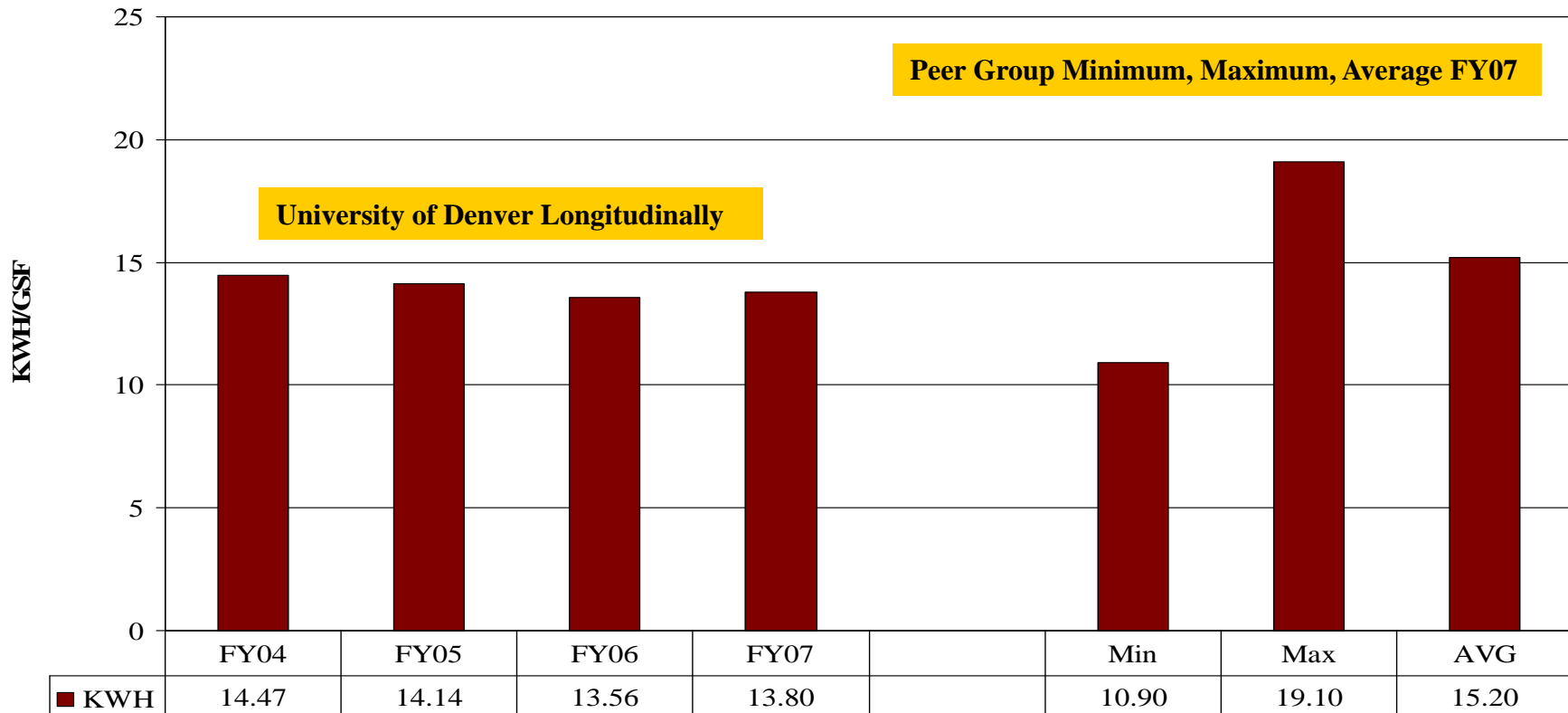
Net Effect of EMC's

- Total Dollar Savings: \$ 1,076,000
- Total kwh Reduction: ~ 16,100,000
- Total Reduction – Tons CO₂: ~ 12,000



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Kilowatt Hours per Gross Square Foot – Our kwh consumption is above the minimum but below the average. Parking Garages are not included in this calculation.



	FY04	FY05	FY06	FY07
GSF	3,096,934	3,143,091	3,264,088	3,176,446
KWH	44,799,596	44,436,851	44,267,742	43,848,037



British Thermal Unit per Gross Square Foot – Our BTU's per gross square feet are above our peer group minimum but below average. Our BTU consumption for electric has dropped below FY04 figures due to energy saving activities.

