

Top Energy & Demand Saving Opportunities: College/University

Category	Action Item	Potential Low-Cost/ No Cost	Potential Cost Effective Retrofits or Upgrades at Replacement	Potential Cost Effective New Construction Concepts
Envelope	Upgrade roof and wall insulation to current energy code levels		✓	
	Vestibules			✓
	High performance glazing to eliminate perimeter heat			✓
Lighting	Reduce light levels if over-lit		✓	✓
	Automatic controls for unoccupied areas and times		✓	✓
	Daylight harvesting			✓
	T-8 fluorescent instead of T-12		✓	✓
HVAC	Variable volume		✓	✓
	Dedicated outside air system			✓
	Outdoor air economizer cycle		✓	✓
	Minimize reheat and simultaneous heating and cooling		✓	✓
	No-leak-by control valves for hydronic heating/cooling		✓	✓
	Outside air heat recovery from exhaust		✓	✓
	Clean A/C condenser and evaporator coil fins annually	✓		
	Use high quality filters; replace often to keep coils clean	✓		
Central Cooling	Chiller efficiency 0.5 kW/ton or better		✓	✓
	Lock out below 55 degrees if buildings have air-side economizer	✓	✓	✓
	Variable speed pumping		✓	✓
	Up-size cooling towers to reduce central chiller kW		✓	✓
	Flat plate cooling, only if there are buildings that cannot use air-side economizers		✓	✓
	Evaporative pre-cooling for air-cooled chillers		✓	✓
	Clean condenser tubes annually	✓		
Central Heating	Lock out above 60 degrees	✓	✓	✓
	Air/Water economizers for boilers		✓	✓
	Reduce excess air		✓	✓
	Hot water reset from outside air temperature	✓	✓	✓
	Modular boilers for reduced standby losses		✓	✓
	Separate space heating and domestic water heating equipment		✓	✓
Co-Generation	Combined heat and power		✓	✓

This list is considered representative of typical segment business use, but is not all inclusive and does not replace a formal energy audit. Energy savings are not guaranteed. For additional information, contact Colorado Springs Utilities at 448-4800 or your Account Manager. This information is provided in good faith, for use by the customer in conjunction with a qualified engineer or contractor.