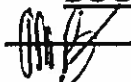

**DOUGLAS COUNTY ADMINISTRATIVE
POLICIES AND PROCEDURES**

NUMBER: 500.03
EFFECTIVE DATE: 03/04/10
REVISED:
AUTHORITY: BOC
COUNTY MANAGER: 
PAGE 1 OF 7

SUBJECT: ENERGY POLICY

- I. PURPOSE:** The purpose of this policy is to reduce energy consumption in County facilities and sustain the County's commitment to environmental improvement. Guidelines are provided in this Energy Policy concerning practices aimed at lowering energy consumption as well as effective use and procurement of energy consuming equipment. Through implementation of the Energy Policy, a positive environmental impact and cost savings for the County will result.

The Energy Policy is not intended to cause discomfort to customers or employees, and there is flexibility for individual situations where adjustments can be made for health and safety reasons.

It is important that each employee in Douglas County do their part to ensure that the guidelines and standards are implemented and followed throughout the course of each work day to reduce energy costs.

II. POLICY GOALS:

- Establish the policy foundation of responsibilities, programs, standards and performance measures to manage the County's energy use and conservation of energy.
- Manage energy and other utility consumption to minimize use to the greatest extent possible, while maintaining safe and acceptable work conditions.
- Achieve a reduction in average energy consumption per square foot annually.
- Incorporate energy conservation and efficiency systems, techniques and design in all major renovations, system replacements and new construction.
- Invest in cost effective energy efficiency measures that will also reduce greenhouse gas emissions attributed to our facilities energy requirements.
- Evaluate renewable energy resources (solar, wind, geothermal) within our facility operations on equal footing with conventional energy resources.

- Implement energy savings measures in order to reduce the County's energy consumption by 20% by 2012 compared to the fiscal year 2007 baseline.

III. RESPONSIBILITIES

Employees

Employees are encouraged to take individual action to minimize energy consumption. Actions include, but are not limited to:

- Complying with the conservation recommendations within this policy.
- Identifying and recommending actions that can be taken in addition to procedures implemented for energy use reduction.
- Providing feedback on the Energy Policy, including recommendations for improvements.

Department Heads

All Department Heads are responsible for ensuring the successful implementation of the County's Energy Policy. This includes, but is not limited to:

- Communicating with employees about the need to conserve energy and the importance of effectively implementing energy reduction measures within their departments.
- Recognizing employees who contribute to the success of the Energy Policy.
- Encouraging and reviewing employee suggestions for additional conservation measures and when appropriate, sharing ideas with Building Services staff to assess feasibility and cost effectiveness.
- Monitoring and ensuring the success of the Energy Policy within their department.
- Providing feedback on the Energy Policy, including recommendations for improvements to the Policy.

Public Works / Building Services

Building Services has the overall responsibility for tracking and monitoring energy use, providing technical assistance and usage information to departments, and taking actions to reduce energy consumption. This includes, but is not limited to:

- Providing electrical, natural gas, and propane use and cost data to all County departments.
- Providing technical support to departments on implementation of the Policy.

- Maintaining and operating mechanical (HVAC) and building lighting systems in compliance with the Energy Policy.
- Establishing equipment and appliance purchasing policies and directives in conformance with the Energy Policy.
- Assessing the technical feasibility and/or cost effectiveness of employee suggestions for energy use reductions.
- Assessing the technical feasibility and/or cost effectiveness of implementing energy performance projects in all County-owned facilities.
- Monitoring compliance of the County's Energy Policy within County-owned facilities.
- Identifying situations above and beyond those envisioned in this Policy that may require individual analysis and action to provide a comfortable, functional work environment.

IV. ENERGY USE STANDARDS

The intent of the Energy Policy is to achieve reductions in energy consumption while maintaining reasonable comfort and safety levels for building occupants.

Initial temperature set points were based upon the American Society of Heating, Refrigeration and Air Conditioning Engineers (ASHRAE) comfort chart for 50 percent relative humidity, and employees at light work. (See attachment)

Heating and Air Conditioning Standards

Except as otherwise noted, temperature set points are based on the standards of the ASHRAE and are as follows:

Cooling Season Set Points 73° F – 79° F

Heating Season Set Points 68° F – 75° F

Occupied air conditioning temperature settings are not set below 73 degrees and heating settings are not set above 75 degree's, except for operations which require other settings based on function such as Health Department examination rooms, medical laboratories, computer equipment rooms, recreation rooms, animal quarters or the like.

Use of windows

Windows are to be kept closed, unless specifically authorized such as when the HVAC system is disengaged, because open windows throw the HVAC system off balance, and interfere with providing uniform heating or cooling in large buildings.

Auxiliary Heating and Cooling Sources

Portable space heaters are not allowed because of their excessive energy consumption, fire code and safety issues. If a room is not consistently within the heating/air conditioning set-point range, Building Services should be notified so that the problem can be addressed. If building conditions are such that acceptable temperatures cannot be achieved by the HVAC system, Building Services takes necessary measures to resolve/rectify. If auxiliary heating or fans are required, Building Services will provide these.

Night, Weekend and Holiday Temperature Set-backs

The heating temperatures are set to 60 degrees for all buildings for periods when buildings are not normally occupied. The air conditioning temperatures are set to 80 degrees when buildings are not normally occupied. Normal occupancy for most buildings is from 8:00 a.m. to 5:00 p.m. This means that from 8:00 a.m., until 5:00 p.m., the temperature will be within the set points defined previously.

Note: Exceptions to the set backs are made for those functions that must remain operational during periods beyond normal occupancy hours such as night meetings, Emergency Management or the Jail. Also, some buildings have unique requirements for longer start up times to reach heating or cooling set points.

**From American Society of Heating, Refrigeration
& Air Conditioning Engineers (ASHRAE) Standards**

Thermal comfort is that condition of mind that expresses satisfaction with the thermal environment. There are large variations, both physiologically and psychologically, from person to person, which makes it difficult to satisfy everybody in a space. The environmental conditions required for comfort are not the same for everyone. However, extensive laboratory and field data have been collected that provide the necessary statistical data to define conditions that a specified percentage of occupants will find thermally comfortable.

This standard specifies the combinations of indoor space environment and personal factors that will produce thermal environmental conditions acceptable to 80% or more of the occupants within a space. The environmental factors addressed are temperature, thermal radiation, humidity, and air speed; the personal factors are those of activity and clothing.

ASHRAE Standard 55-1992 Thermal Environmental Conditions for Human Occupancy, recommends the following acceptable temperature ranges at relative humidity (RH) of 50% and air speed less than 0.15 m/sec. (30 fpm).

Acceptable Temperatures		
Season	Clothing	Temperature
Winter	Heavy slacks, long sleeve shirt and/or sweater	20-23.5°C (68-75°F)
Summer	Light slacks and short sleeve shirt	23-26°C (73-79°F)

Lighting Standards

Office and conference room lights are to be turned off whenever rooms are likely to be unoccupied for more than 15 minutes. Motion sensors will be installed where appropriate to assist with this task. All restroom lights will be set on motion sensors with 10 minute cycles.

All corridor lighting will be set with timers through the County Energy Management System software to turn on 20 minutes before the start of business and turn off 30 minutes after the close of business. All special events and after hour meetings need to be scheduled with the Building Services to ensure lighting needs are adjusted.

All light bulb replacements will be done with high efficiency low wattage fluorescent bulbs (24watt) or compact fluorescent bulbs (CFL) where appropriate. LED lighting technology will be addressed for outdoor lighting replacements.

Each department shall assign an employee to turn off common area lighting other than corridor lights at the end of the business day. Lights are to be turned off even if it is anticipated that custodial staff will soon be in the area.

Custodial staff are responsible for turning on lights on an as needed basis while working; that is, turning on lights only while an office or room is being cleaned, and turning lights off as soon as cleaning has been completed. Custodial staff turns off corridor and related lighting prior to leaving the building at the completion of cleaning.

Parking lot lights will be on for 30 minutes after close of business and scheduled off on weekends and holidays.

Athletic field lights will be operated on an as needed basis. Lights are to be shut off 30 minutes after event ends. Weekend and holiday lighting only as needed.

Equipment Standards

Computers, printers, and copiers shall be turned off at the end of each work day. During normal work hours, all PC's should be programmed for the highest energy saving mode appropriate for that PC using the power options feature.

Microwaves, coffee makers and refrigerators shall be permitted only in employee break rooms or designated employee areas. Appliances shall meet County standards for energy efficiency.

Douglas County shall select Energy Star® equipment for future equipment replacement. For product groups where Energy Star® labels are not yet available, the County will select products that are in the upper 20 percent of energy efficiency for their product categories.

All major appliances (refrigerators, freezers, washers, dryers) shall meet Energy Star® standards for energy efficiency. Used or new appliances offered by the public for use at Douglas County facilities shall not be accepted unless the appliance is certified as an Energy Star® unit.

Fleet Standards

Douglas County commits to reduce petroleum fuel consumption through improvements in fleet fuel efficiency and by the use of alternative fuel vehicles where practical. It shall be the policy of Douglas County to purchase, lease or obtain the most energy efficient vehicles possible that meet the operational needs of the department for which the vehicles are intended.

The acquisition of alternative fuel vehicles shall be considered when replacing County vehicles when it is financially feasible. The leasing and or purchasing of electric hybrid vehicles where practical shall be considered dependant on efficiency versus costs. The County will continually look for alternatives that reduce fuel costs and consumption.

Review the Fleet inventory to identify older vehicles that are used infrequently as well as those that are inefficient and schedule their elimination or replacement.

The County will develop programs to minimize individual trips and promote vehicle sharing during County business.

The County will implement an anti-idling policy prohibiting County employees from idling County owned or operated vehicles for an excessive period of time.

Douglas County shall provide training to employees to improve driving habits for increased fuel economy.

- V. RESPONSIBILITY FOR REVIEW:** The Human Resources Manager shall review this policy as needed or at least once every 5 years.