ADMINISTRATIVE POLICY MANUAL

POLICY AREA 1 - GENERAL ADMINISTRATIVE

AP 99 1.03 ENERGY CONSERVATION

Adopted	**March 1999**
Reviewed	June 2001
Reviewed	May 2003
Reviewed	May 2005
Revised	April 2008

1.03.010 Purpose

The City of Corvallis recognizes its responsibility to be a good steward of the City's fiscal resources and of the environment. Given that unlimited supply and availability of fossil fuels can no longer be taken for granted and that use of such fuels poses serious risks to human and environmental health, this Policy aims to establish the City as a model of energy conservation by:

- Balancing the management of natural resources with the desire to provide efficient and cost-effective service delivery to residents of the City;
- Implementing efficiency measures to reduce energy consumption in City-owned buildings, facilities, and vehicles;
- Reducing expenditures through an overall reduction in energy consumption; and
- Providing guidance to employees on how to integrate energy conservation practices in operations and decisions.

Therefore, this Policy aggressively pursues the efficient and effective use of energy in order to:

- Achieve the city-wide goal to reduce electricity, natural gas, and vehicle fuel consumption;
- Achieve the city-wide goal to increase use of renewable energy; and
- Meet the City's commitment to reduce greenhouse gas emissions as a member of the International Council for Local Environmental Initiatives (ICLEI) Cities for Climate Protection Program.

1.03.020 Definitions

1.03.021 Energy-saving programs include any activity that reduces the level of consumption of energy in City buildings, facilities, or vehicles; reduces the amount of energy used; or promotes the efficient use of alternative, renewable energy resources.

1.03.022 Buildings and facilities of the City of Corvallis include administrative offices, public safety facilities, public library, park and recreation facilities, water and wastewater treatment facilities, and public works service areas. Vehicles include all City-owned automobiles, trucks, tractors, and other equipment dependent upon energy for operation.

1.03.023 The ENERGY STAR program was developed under the guidance of the United States Environmental Protection Agency to help individuals, businesses, and governments implement energy-efficient programs. ENERGY STAR provides a detailed list of energy-efficient specifications for office, building, and lighting products which can be used to guide purchases toward reducing energy consumption and promote financial savings to the organization.

1.03.024 Retrofits include fluorescent tube lamps, fluorescent ballasts, exit signs, exterior lighting, windows, insulation, caulking, window shades/treatments, motion sensors, water heaters, electric motors, pumping systems, fan systems, adjustable speed drives, air compressor systems, the use of alternative energy sources, and heating, ventilation, and air conditioning (HVAC) system improvements.

1.03.025 An energy-savings performance contract provides for the audit of buildings or facilities to ensure optimal efficiency and looks at the design, acquisition, installation, operation, or maintenance and repair schedules of identified energy conservation measures.

1.03.026 A shared, energy-savings performance contract is one where the contractor incurs the initial costs of implementing energy-saving measures in exchange for a share in the energy costs savings related to the implementation. Energy-saving measures may include auditing, design, equipment installation, personnel training, or operations and maintenance.

1.03.027 Demand-side management is a utility-sponsored program that increases energy efficiency or improves the management of energy demand, including load management techniques.

1.03.028 Cost-effective payback is a term of less than eight years. For those projects exceeding $2,500, a life-cycle cost analysis will be used to identify the most beneficial, energy-efficiency measures to pursue.

1.03.029 Idling means running a vehicle engine at any location while the vehicle is stationary and not providing essential operational functions.

1.03.030 Topping off is attempting to dispense gasoline into a motor vehicle fuel tank after the dispensing nozzle has shut off automatically.

1.03.031 Fuel re-circulation is pumping fuel into storage tanks to prevent fuel spillage and vapor loss when a vehicle is being refueled.

1.03.032 Upstream and downstream refers to the flow of a product through its life cycle from raw material acquisition and manufacture to use and disposal.

1.03.033 The Leadership in Energy and Environmental Design (LEED) Green Building Rating System is a voluntary third-party certification program for the design, construction, and operation of high-performance green buildings. Buildings can qualify for four levels of certification: Certified, Silver, Gold, and Platinum.

1.03.040 Policy

The City will promote energy conservation as the energy resource of first choice. The City is committed to undertaking cost-effective, energy-saving programs in municipally owned buildings, facilities, and vehicles. The City encourages the purchase of energy-efficient products and requires all energy-saving features available on existing and future City-owned equipment and facilities to be activated to the maximum extent possible, provided activation will not adversely impact other operating systems. The City supports upstream and downstream energy conservation by encouraging departments to purchase materials that are made from recycled content in place of virgin materials and/or that may be reused or recycled after their useful life.

1.03.050 Building and Facility Construction and Operation

1.03.051 All new buildings will be constructed to achieve at least a LEED Silver standard. Projects will be developed to bring existing buildings to at least a LEED Silver standard. Building and facility managers should strive to incorporate energy-saving technologies, such as dual-level lighting controls, occupancy-sensor controls, daylight dimming, photo-sensor controls, automated thermostats, and energy-management systems into regularly scheduled lighting and HVAC maintenance or retrofits.

1.03.052 Existing City-owned buildings and facilities will be operated and maintained using the LEED Existing Building (LEED-EB) Silver standard or better. Building and facility managers have the authority to operate facilities in accordance with these guidelines.

1.03.053 Building and Facility Energy Conservation Guidelines

a. Lighting
   1. Whenever an area will be vacant, occupants will turn off the lights, provided doing so does not compromise health, safety, or productivity.
   2. Overhead lighting shall be reduced as much as possible without creating unsafe conditions or interfering with the performance of duties.
   3. Employees are encouraged to report noticeable malfunctions in lighting controls to the building maintenance staff.
   4. All task lighting should be fluorescent when possible, including light fixtures employees bring from home.
   5. After-hours lighting (does not include facilities that operate 24 hours a day, seven days a week) will be the minimum needed to meet emergency and security lighting requirements.

b. Heating and Cooling
   1. Space temperatures will be maintained for regular, scheduled occupied hours.
   2. Interior building air shall be set at an appropriate level such that temperatures do not pose a health and safety risk to employees or the public. A target would be State and Federal guidelines of no more than 68 degrees F. for heating and no less than 78 degrees F. for cooling in office spaces. Because temperatures may vary throughout a day and within each building, employees should dress appropriately for optimum comfort.
   3. Interior air in other spaces such as garages and storage areas shall not be heated. In certain areas where freezing temperatures may cause damage to contents or sensitive equipment, it is recommended that the air not be heated above 45 degrees F.
   4. Space heaters are discouraged in areas of any building where City standard temperature control is maintained.
      a) Space heaters are safety hazards to buildings and occupants.
      b) Space heaters disrupt building controls causing reduced heating to other occupants.
   5. Building maintenance staff will perform periodic maintenance on all heating systems to ensure peak efficiency.
   6. Temperatures for hot water heaters are to be set at no higher than the following:
      a) Water heaters in areas that require food service utensil and equipment sanitation—170 degrees F.
      b) Other water heaters—120 degrees F.

c. Personal Computers & Shared Office Equipment

1. All monitors, printers, copiers and other electrical equipment shall be turned off outside of normal business hours and when not in use, unless there is a specific and essential need for after-hours operation.
2. When approved by Management Information Systems (MIS), computers shall be turned off outside of normal business hours.
3. MIS will assist in the configuration of power settings for office equipment to power off after a period of inactivity.
   a) All video monitors and computers shall be set for automatic power-down (sleep) mode after 10 minutes of non-operation. (All ENERGY STAR monitors should have this feature available and can be turned on using the "display" option of the desktop "control panel.") Monitors, and when feasible computers, shall be turned off when not in use for more than one hour.
   b) All copiers and printers that have an automatic power-down or "energy saver" feature shall have this feature enabled to power down after a one-hour period of inactivity.
4. Employees working outside regular business hours are responsible for shutting off all shared office equipment in their office space before leaving.

d. Miscellaneous Appliances

1. Departments must ensure appliances are appropriate and energy efficient. Any new or replaced appliances will be ENERGY STAR or equivalent products.
2. Personal fans should be rated at 0.5 amps or less (equivalent to 60 watts).

e. Custodial and Other After-Hours Events

1. Custodial staff will be instructed to turn off any lights that they turn on during the cleaning process. However, employees should not rely on custodial staff to implement energy-conservation practices and should assume all responsibility for shutting off lights, computers, shared office equipment, and heating and cooling equipment each day. Where possible, custodial work shall be done during daylight hours.
2. Departments should make every effort to host special events during regular business hours. Special events occurring after hours should be hosted in areas that minimize operating costs in City facilities by minimizing the lighting, heating, and cooling requirements.

f. Those Doing Business With the City of Corvallis

1. Staff will incorporate these guidelines into all new contracts with organizations or personnel hired to perform work for the City. Organizations or personnel who rent City-owned or operated facilities and/or occupy those facilities must abide by all applicable guidelines described in this Policy.

1.03.060 Vehicle Operation and Maintenance

1.03.061 Eliminating unnecessary engine idling saves fuel, reduces engine wear and maintenance costs, and reduces the release of harmful benzene compounds into the atmosphere. City employees shall not idle City fleet vehicles for more than 20 seconds unless a public safety issue is present or considered imminent or when required to "idle down" the turbo on a diesel engine. See 1.03.063 for other exceptions.

a. When stopped for more than 20 seconds, turn off the engine (except in traffic). Idling a vehicle for more than 20 seconds uses more fuel than it would take to re-start the engine.

b. Reduce warm-up idling to 20 seconds. Avoid high speeds and rapid acceleration for the first five miles to allow all moving parts of the vehicle to warm up.

1.03.062 Idling restrictions also apply to all those engaged in work for the City.

1.03.063 Idling restrictions shall not apply to:

a. Police, fire, ambulance, public safety, other emergency or law enforcement vehicles, or any vehicle being used in an emergency capacity.

b. Vehicles that are stopped by traffic congestion, an official traffic-control device or signal, or at the direction of a law enforcement official.

c. Vehicles engaged in an operation for which the engine power is necessary for an associated work function and alternative means cannot be made available. For example, vehicles that must idle to operate auxiliary equipment, such as cooling units, pumps, compressors, or lifts.

d. Vehicles and equipment that are being serviced or inspected, where idling is required for diagnosis, inspection, or repair.

1.03.064 Proper fueling technique prevents fuel re-circulation and fuel spills. City employees should not top off when refueling at City fueling gasoline stations on City premises and at commercial fueling stations.

1.03.070 Objectives

1.03.071 Inventory, inspect, and evaluate municipal facilities every five years to identify the most cost-efficient, energy-saving opportunities.

1.03.072 Explore alternative funding opportunities for energy-saving projects, either through the State or Federal government or private institutions.

1.03.073 When purchasing any new electrical device, include specifications that, at a minimum, meet the guidelines of the Environmental Protection Agency's ENERGY STAR compliant program or the Federal Department of Energy's purchasing specifications.

1.03.074 Establish guidelines for promoting energy efficiency in current and future Capital Improvement Project planning.

1.03.075 Investigate and develop use of renewable energy sources and vehicles to provide for at least part of the City's needs.

1.03.076 Inform, educate, and encourage employees to actively participate in energy-conservation programs. Train staff in energy conservation, LEED concepts and life-cycle cost analysis. Provide educational materials, newsletter articles, energy information, and documented energy-savings performance data.

1.03.080 Implementation and Assistance

1.03.081 The Public Works Department, through the positions of the Sustainability Supervisor and the Franchise Utility Specialist, shall implement the objectives of this Policy and coordinate energy-conservation activities within the organization, as well as provide information and assistance as requested. The Franchise Utilities Specialist will assist with energy conservation in City-owned and leased facilities, track city-wide energy consumption and evaluate progress toward meeting City goals, and apply for Business Energy Tax Credit (BETC) incentives.

1.03.082 Each department shall be responsible for the energy use of its respective buildings and vehicles and for identifying opportunities to reduce consumption. Department Directors will encourage and assist employees to conserve energy and prevent resource waste.

1.03.083 All employees are asked to contribute to the City's cost- and energy-saving efforts by implementing all energy conservation practices identified in this policy and by suggesting others.

1.03.090 Annual Report

1.03.091 Energy conservation measures initiated during the fiscal year and a summary of results will be reported to the City Council in the Annual Report on Organizational Sustainability Practices.

1.03.092 Innovative projects or projects that generate significant energy savings will be highlighted each year. These accomplishments will be shared with the City Council and other departments to recognize the employees involved and to encourage others to emulate their success.

1.03.100 Review and Update

This Policy shall be reviewed biennially in July by the Public Works Department and updated as necessary.

Reviewed and concur:

Jon S. Nelson

6/5/08
Date