



Peoria County Sustainability Plan

POLICY STATEMENT

Peoria County seeks, in a fiscally prudent manner, to attain and maintain a leadership role in environmental stewardship and sustainability at our facilities, in our operations, and in the larger community we serve.

SUSTAINABILITY PLAN FOCUS

Peoria County integrates sustainability, stewardship, and resource conservation into our operations and services. We will continue to make decisions to improve the long-term quality and regenerative capacity of the environmental, social, and economic systems that support our organization. We will engage in pollution prevention activities and develop and promote practices that maximize beneficial effects while minimizing harmful effects on the environment. We will develop and implement performance measures to assess the environmental impacts of our operations, activities, and services.

Alignment with Peoria County Strategic Plan Goals



Safe and Healthy Community

Healthy living environment



High Performing Public Organization

County operations practicing green sustainable concepts and principles
Financially sound with resources consistent with policy and best practices



High Quality Public Facilities

County buildings well built and well-maintained, utilizing green and sustainability concepts and principles

Plan Overview

In 2010, the Peoria County Board identified the development of an internal sustainability plan as a priority of its Strategic Plan. To accomplish this goal, a sustainability team was formed that included representation from Recycling and Resource Conservation, Elected Officials, the local environmental community, County Administration, and numerous other County departments.

The County's sustainability plan will enable the organization to conduct the business of local government in a manner that minimizes environmental impact while maximizing cultural, social, and financial resources. Implementation of this plan requires education, communication, and coordination among County departments and offices.

Key components for success of the plan include:

- A policy statement committing the County to sustainable principles and goals
- Active staff involvement in plan development and implementation
- Sustainability champions to promote the program and its importance throughout the organization
- Available user-friendly tools and information resources
- Initial and periodic training on plan requirements and resource tools
- Ongoing education/marketing/communication efforts for employees and the general public regarding plan implementation and performance measurement
- Ongoing commitment from the County Board, Elected Officials, administration, and employees
- Regular performance measurement reporting
- Periodic progress reviews and plan updates
- Establishment of a revolving sustainability fund

APPROACH

This plan focuses on internal County operations. Once implemented internally, the team expects to expand this plan to include actions to promote livable and sustainable communities in Peoria County, in accordance with the County Board's Vision 2025.

FUNDING

A sustainability fund of \$75,000 has been established to address sustainability goals. This account shall be a revolving fund that adds achieved savings from implemented initiatives to support additional projects and goals of this plan.

SUSTAINABILITY PLAN ELEMENTS

Specific sustainability elements, goals, and objectives have been developed by Peoria County's sustainability team. Peoria County's internal sustainability plan addresses the following six elements of county government:

- **Buildings and Construction**
- **Operations**
- **Land Use**
- **Purchasing**
- **Employees**
- **Solid Waste**

Buildings and Construction



Peoria County builds, owns, maintains, and/or operates a variety of buildings and facilities including a museum, courthouse, jail, detention center, nursing home, health department, and office space. A sustainable building is one designed, built, renovated, operated, or reused in an ecological and resource-efficient manner. Higher installation costs, short-term budget considerations, and extended pay-back periods are perceived barriers to building green; however, savings in energy and operating costs can provide returns on investment that recoup the added costs many times over.

Implemented Actions

The following actions have already been implemented by Peoria County:

- 2007: Phase I of energy performance contract with Johnson Controls underway
- 2008: Phase I completed with guaranteed annual savings of \$35,000
- 2010: Phase II of energy performance underway
- 2011: Replacement of induction boxes in courthouse

Other Actions Taken

- LED exit signs in courthouse
- Courthouse lighting changed from T12 to T8; ballast changed to get rid of PCBs
- Jail moving to T8 and LED exit signs: guaranteed savings of \$75,000 in first year
- Quarterly filter changes in HVAC systems
- 90% recycled or recyclable interiors (chairs, desks, etc.) in courthouse
- Carpeting and paint low/no VOC
- Motion sensors for lighting and plumbing installed

Goal: LEED Principles

The Leadership in Energy and Environmental Design (LEED) Green Building Rating System incorporates the most advanced and renowned green benchmarks that have been developed for building design, construction, and facility management. These were established by the U.S. Green Building Council in 1999. Peoria County will incorporate LEED principles and/or utilize the most energy efficient design possible with the resources - financial and natural - available to us to enhance occupant health; boost productivity; use energy, water, and other resources more efficiently; and reduce each facility's overall impact on the environment. The County will build to LEED Silver standards for projects over \$5,000,000, and incorporate LEED strategies for existing buildings into renovations. Additionally, Peoria County will use the cleanest, safest energy that is available to us and will evaluate new sources or technology as they become available.

Action

Objective 1: Minimize electrical consumption. Focus will be on control and equipment upgrades to reduce electrical consumption in County facilities. Electrical use should be reduced by 2% annually

- A. Lighting
 - a. Install motion sensors
 - b. Retrofit for greater efficiency
 - i. Compact or commercial fluorescent lights
 - ii. Low energy LED exit signs
- B. HVAC
 - a. Annually inspect and clean condenser and evaporator coils
 - b. Upgrade burners on boilers
- C. Green roof

Objective 2: Increase use of renewable energy. Increasing ratio of renewable energy sources to fossil fuel energy sources will decrease pollution and reduce the carbon footprint of Peoria County. 2% of energy purchased through cooperative purchase should be from a renewable source. The minimum amount of renewable energy should increase with each cooperative energy renewal.

- A. Wind
- B. Solar
- C. Geothermal
- D. Recaptured energy

Buildings and Construction

Action

Objective 3: Minimize natural gas consumption. Budgeting for gas is challenging in volatile markets. To mitigate this challenge, we will reduce our consumption of natural gas.

- A. Water heaters: set to minimum accepted temperature
- B. Thermostat settings
 - a. Use Building Automation System /programmable thermostats
 - b. Maintain HVAC settings established by energy performance contracts
- C. Insulate pipes
- D. Explore on-demand water heating

Objective 4: Improve air quality. Maintain a healthy workplace by evaluating health of all County facilities to minimize emissions and negative impacts while maximizing the quality of the indoor environment for the comfort, health, safety, and productivity of employees and visitors.

Objective 5: Reduce water consumption by 2% annually with the use of automated fixtures

Operations



Day to day activities significantly impact the amount of resources consumed by an organization. Facility management practices can improve building and fleet performance by reducing the negative impact on building occupants and the environment.

Implemented Actions

- Current vehicle replacement contracts offer departments low emission and hybrid options. Vehicles added to our fleet have hybrid technology, flex fuel or biodiesel fuel capabilities, and exceed Clean Air Act emission standards
- Energy Star electronics are utilized in all County departments and are replaced with more efficient models
- Cleaning contracts require non-toxic products
- Road treatment strategy minimizes salt usage
- In-house courier reduces amount of driving

Goal

Changes in operations will result in a work environment with improved air quality, employee morale, and productivity. Operational changes will increase asset values, lower operational costs, and conserve natural resources such as gas, oil, coal, and water.

Action

Objective 1: Minimize electrical consumption

- A. Minimize number of refrigerators
- B. Turn off lights in areas not in use
- C. Shut down office equipment nights and weekends
- D. Reduce energy use for outdoor lighting through efficient lamps and fixtures
- E. Minimize supplemental heating/cooling (policy recommended)
- F. Energy Star electronics/appliances
 - a. Minimize single use devices
 - b. Power management
 - i. Enable monitor shut down after 15 minutes
 - ii. Enable computer standby mode after 45 minutes

Objective 2: Minimize or eliminate toxic products

- A. Paint
- B. Pesticides
- C. Cleaning products
- D. Interiors

Objective 3: Minimize impact of fleet: reduce fuel usage by 2% per year

- A. Hybrid
- B. Fuel
 - a. Bio fuel
 - b. Additives
- C. Idle time
- D. Carpooling: encourage by strengthening travel policy

Objective 4: Minimize impact of road treatment

- A. Alternative practices
 - a. Brine pre-treatment
 - b. Beet juice
- B. Reduce salt

Objective 5: Utilize technology for electronic documentation

- A. Brochures and forms
- B. Committee and County Board packets
- C. Payroll statements

Land Use



Landscape design and maintenance of open spaces should take into consideration alternative approaches to reduce mowing and its associated emissions and fuel usage. Proper care and maintenance of County-owned land will reduce possible pollution and storm water runoff.

Implemented Actions

- Perennials used in many locations, saving fiscal resources and minimizing water usage

Goal

Utilize best practices to minimize the County's impact on land, air, and water quality.

Action

Objective 1: Improve water resources management. Improve practices at all County facilities to reduce runoff, increase infiltration/evapo-transpiration, improve water quality, and protect adjacent natural resources.

- A. Bio-swales - create or use existing to aid in removal of silt and pollution due to water runoff
- B. Rainwater runoff: install rain barrels, cisterns, or rain gardens to allow proper absorption of runoff from driveways, walkways, and parking lots
 - a. Use native wetland plants
 - b. Plant along roadways and walkways
 - c. Plant near downspouts or storm sewers
- C. Permeable pavement - explore its use
- D. Green roof

Objective 2: Improve grounds management. Improve practices to reduce impact on air and water quality.

- A. Reduce mowing
 - a. Select sites where natural plants can grow and thrive
 - b. Reduce emissions and equipment maintenance costs
 - c. Improve wildlife habitat
- B. No mowing on ozone alert days
- C. Landscape to minimize environmental impact
 - a. Use native plants in higher maintenance plantings
 - b. Increase use of perennials
- D. Determine necessity of irrigation; minimize use through efficient controls
- E. Reduce chemical usage

Purchasing



Sustainable or green purchasing is the purchase of products and services that have a lesser effect on health and the environment than their counterparts. Sustainable purchasing reduces use of natural resources and hazardous materials and conserves financial resources by lowering replacement and disposal costs.

Some sustainable initiatives will incur a higher up-front investment, but purchasing decisions based solely on the lowest bid may hinder the County's ability to consider other factors such as total life cycle cost (LCC). LCC analysis includes the cost of tracking materials that are more hazardous, as well as their disposal costs.

Implemented Actions

- 25% the dollar value of all paper products purchased is recycled paper per the County's Recycled Paper Resolution
- Recycled paper is used to the maximum extent possible, allowing the potential for all copy paper and paper supplies to be recycled content
- Bids for cleaning contracts include green requirements

Goal

Develop a Sustainable Purchasing Program for all County departments. Paper purchases should meet current EPA recommendations for post consumer content.

Action

Objective 1: Reduce environmental impact through green purchasing of products and services

- A. Paper, including office supplies and paper janitorial supplies
- B. All other products and services (janitorial supplies, electronics, interior furnishings, etc.)
 - a. Highest level of post-consumer content
 - b. Biodegradability
 - c. Toxicity
 - d. Manufactured from renewable resources
 - e. Third party certified (Energy Star, Green Seal, etc.)
- C. Office supplies (toner, ink, etc.): feasibility of remanufactured product such as toner cartridge

Objective 2: Improve cooperative purchasing process

- A. Internal: departments shall purchase products jointly to increase buying power and reduce shipping costs and emissions
- B. External: Peoria County can jointly purchase items and/or explore other purchasing options with outside businesses or units of government to increase buying power and reduce waste

Objective 3: Incorporate green initiatives into solicitation of contracts for goods and services to ensure vendors are practicing sustainability

Employees



The daily activities and choices employees make have a significant impact on the amount of resources an organization uses. Educating employees and soliciting feedback from them is critical to the success of this plan.

Implemented Actions

- Established recycling programs
- Employee newsletter encourages sustainability by publishing articles on recycling and reduction
- Periodic sustainability classes offered to employees through Peoria County Academy

Goal

Sustainability in the workplace. Employees are provided tools, training, and opportunities to improve sustainability of the work environment, office procedures, and personal habits.

Action

Objective 1: Implement a waste reduction program to encourage reusing and recycling appropriate items

Objective 2: Implement a purchasing program that provides training in environmentally preferred purchasing methods for employees with purchasing power

Objective 3: Reduce office paper use. Paper comprises 60% of office waste.

- A. Computer settings: default set for draft-quality black and white and for duplex printing
- B. Technology conserves resources and is beneficial in reducing waste
 - a. Email
 - b. Scan
 - c. File electronically

Objective 4: Reduce energy consumption

- A. Create policy for reduction of personal electronic equipment such as fans, space heaters, radios, etc.
- B. Turn off lights and electronics when not in use
- C. Minimize travel to meetings by utilizing technology
- D. Encourage employee carpooling/use of public transportation

Solid Waste



The benefits of using resources wisely and reducing waste go beyond preserving the environment. Reducing waste also cuts costs and improves efficiency.

Implemented Actions

- Established recycling programs at County facilities collect paper, cardboard, metal, plastic bottles, and cans
- Specialty recycling programs at facilities include oil and filters and inkjet and toner cartridges
- Pharmaceutical waste is collected at Bel-Wood Nursing Home
- Landscape waste is composted on site at Bel-Wood
- Kitchen grease is recycled at 24 hour facilities

Goal

Establish a complete waste reduction program by encouraging reuse and recycling of all possible items.

Action

Objective 1: Reduce. Products that are difficult to recycle, are hazardous, or have a short life cycle should be replaced with durable, safer, and readily recyclable alternatives.

- A. Hazardous materials: replacements should be found when possible
- B. Durable goods: those with a better life cycle cost are preferred

Objective 2: Reuse

- A. Develop a process for shared office supplies and equipment
- B. Construction materials
- C. Compost landscape and food waste

Objective 3: Recycle. A comprehensive recycling program should be in place for all departments.

- A. Office materials
 - a. Paper/cardboard
 - b. Plastic
 - c. Metal cans
 - d. Glass bottles/jars
- B. Other materials
 - a. Hazardous waste
 - b. Universal waste
 - i. Electronics
 - ii. Fluorescent light bulbs and ballast
- C. Construction materials
- D. White goods/appliances

Objective 4: Proper disposal. Identify proper disposal for items unable to be reused or recycled.

- A. Ensure pharmaceutical waste flows into the pharmaceutical waste collection system
- B. Hazardous waste

Initial Action

The sustainability team recommends a few easily implemented items be addressed first. Many of these include expanding upon actions already taken by Peoria County.

APPROACH

Buildings and Construction

- Motion sensors in all areas of limited use: conference rooms, closets, restrooms
- Identify areas lamps and fixtures could be upgraded and installed

Operations

- Adjust printers and copiers default to black and white copies and duplex printing
- Adjust power management of computers: default to sleep and shutting down at shorter intervals

Employees

- Educate employees of default settings on their computers and why changes were implemented
- Educate employees on paper reduction
 - Less copying, printing, and faxing
 - Transition to email and electronic storage

Solid Waste: Continue expansion of single stream recycling programs at all County facilities

SUSTAINABILITY TEAM

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