Montgomery County Government: Leading By Example: Sustainable Practices

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CountyStat Principles

- **Require Data Driven Performance**

- **Promote Strategic Governance**

- **Increase Government Transparency**

- **Foster a Culture of Accountability**

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Agenda

- **Welcome and Introductions**
- **Follow-up Items**
- **Wrap-up**

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Follow-up Item Progress

Complete

- Finalize and publish DEP's Performance Plan
  - Performance plan has been submitted and is under review

Complete

- Review outcomes reported in the Special Protection Area Program (SPA) report for potential use as headline measures to monitor the new development activities in the County
  - SPA Program outcomes will be reported as Improvements in Watershed Health

Complete

- Develop measures that incorporate DEP's Environmental Policy Advice function and a measure for air quality into the performance plan
  - The following indicator level measures will be tracked by DEP in their Performance Plan
    - Air Quality Condition by Annual Number of Days
    - Greenhouse Gas Emissions Reductions
    - Percent County with Forest Cover

Complete

- Finalize Headline Measures 1 & 2 by incorporating baseline data into the measure
  - Baseline data for percent reduction of pollutant level needed to meet Water Quality Standards and has been included in DEP's Performance Plan

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Follow-up Item Progress

In Progress

- Examine the possibility of benchmarking the amount of carbon emissions avoided against other comparable jurisdictions that do not offer energy subsidies, to determine to what extent offering a subsidy increases the number of participants in alternative energy use through their utility provider
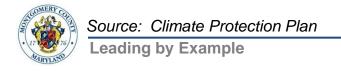   - Comparison of other jurisdictions is underway

Complete

- Compare DEP's budget for Leaf Vacuuming with DOT's expenditures for the program including overtime
    - The budget for Leaf Vacuuming is in line with DOT's expenditures with the exception of years in which there were weather events that increased expenditures

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Leading by Example: Internal County Government Operations

- Montgomery County is a national leader in clean energy and other environmental initiatives. This leadership has been exemplified by the adoption of a comprehensive Climate Protection Plan in January 2009

- Looking inward at daily internal operations, there are opportunities for the County government to become more environmentally friendly, setting a positive example to its residents and surrounding jurisdictions

The Department of Environmental Protection, together with the Department of General Services, have identified suggestions that if implemented, could make the County a model for others in environmental sustainability.

DEP Sustainable Office Practices Flyer: Introduction

Suggestion: Develop an informational flyer outlining actions County employees can take to make their offices more environmentally friendly and cost efficient.

- As part of a County inter-departmental education and outreach plan remind people of personal savings/quality of life improvements from going green (i.e., Go Green and Save Green)*

- DEP is developing a Green Living Guide designed to encourage residents to take action to decrease their impact on the environment

Green Policies

- Promote simplified prompts to take actions to protect the environment
- Make widely and easily available actions list and follow up with reminders
- Serve as a pilot/basis of broad education campaign

There are many opportunities within government operations where changes in individual behaviors can aid the County in leading by example by decreasing the County's carbon footprint while potentially yielding cost savings.

*Recommendation in the Climate Action Plan

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Paper Purchasing: Introduction

> **Suggestion: Increase the percent of recycled material required in paper purchased by County government.**

Current Policy

- The County Code, 11B-56 states that Using Departments should review specifications and, *to the extent practicable:*
    - *(A) require use of goods containing recycled materials*
    - *(B) provide for use of a percentage price preference not to exceed 10%*
    - *(C) or both*

- The Invitation For Bid (IFB) template already includes a recycling provision, and a place where departments can identify a percentage preference for recycling product.

Green Policies

- Switch to paper with 30% post-consumer waste
- Recycle at least 90% of discarded office paper

> **If feasible, highlighting the existing purchasing provision regarding the percent preference, to increase awareness, is one way in which the County can increase award of recycled products.**

Paper Purchasing:
Potential Benefits & Other Considerations

Potential Benefits	Other Considerations
▪ Potential cost savings ▪ Encourages development of markets for recycled paper products, which can drive down the consumer prices of these goods ▪ Reduces environmental footprint of the County associated with production of paper from virgin pulp	▪ Identify reports or other operational requirements (cardstock) in departments that need further study ▪ Determine an acceptable cost differential (Section 11B-56 specifies 10%) ▪ Determine the operational impacts of using recycled paper in current printers and copiers ▪ Identify which recycled paper and paper products are appropriate ▪ Determine what are accepted reasons for buying non-recycled paper and paper products ▪ Work with suppliers to set up ordering systems that limit options to green items

Paper Reduction: Introduction

Suggestion: Decrease the amount of paper used by County government.

Current Policy

- The County has set a goal of reducing and recycling 50% of its waste produced and reversing current trends of increased waste generation per employee

Green Policies

- Encourage employees and the public to enroll in free electronic delivery of documents ie. Tax bills, recreation guide to programs
- Printing fewer copies of reports
- Posting memos in a central location
- Storing computer documents on disk rather than making hard-copy files
- Using smaller fonts to save space
- Set default to double-sided printing
- Reuse single-sided copies for draft printouts and in the fax machine
- Include language on emails to think about impact before printing
- Perform draft markups digitally

Reduction in paper use along with recycling will help the County meet its goal of decreasing the waste stream by 50% while creating more efficient business practices.

Paper Reduction:
Potential Benefits & Other Considerations

Potential Benefits	Other Considerations
▪ Reduces environmental footprint of the County associated with production of paper from virgin pulp ▪ Reduces the amount of waste produced by County government ▪ Cost savings ▪ Slows depletion of landfill space ▪ Improves record retention ▪ Easier to access and search	▪ Some documents due to confidentiality can not be reused ▪ Requires behavioral changes in employee printer usage

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Cafeteria Services Contracts: Introduction

Suggestion: Require Environmentally Preferable Purchasing (EPP) for cafeteria service contracts.

Current Policy
- The County's current policy is bound by contract for pre-wrapped, labeled contents, healthy alternatives, self service, recyclable containers, and barista service

Green Policies

- Develop guidelines for venders and contractors operating in County facilities to use more environmentally friendly-products
- Prohibit/limit the use of polystyrene products
- Require cafeterias to sell reusable products and offer discounts for bringing their own mugs or cups
- Require contractors to offer disposable products that are biodegradable and/or 100% recycled products

Montgomery County can demonstrate environmental leadership by supporting contractors that use recycled and green products and creating a market for our own recycling program.

Cafeteria Services Contracts:
Potential Benefits & Other Considerations

Potential Benefits	Other Considerations
▪ Potentially result in cost savings ▪ Uses the County's buying power to stimulate market demand for green products and services ▪ Reduces greenhouse gas emissions by using less energy to produce ▪ Requires far fewer material resources ▪ Generates lower levels of air and water pollutants and less solid waste in its production, use and disposal than similar disposable products	▪ Cafeteria contracts were just awarded for next five years (Styrofoam is banned, and recyclables are preferred) ▪ Health and hygiene considerations of contact with customers containers from outside

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County Facility Water Bottle Restriction: Introduction

Suggestion: Restriction on government purchasing of bottled water.

Current Policy

- There is no current County policy

Green Policies

- Restrict organizational purchase of single serving and/or large-volume bottled water dispensers
- Include phase out timelines
- Specify alternatives, such as filters, fountains, and bottle-less coolers
- Include exceptions for emergency situations or when alternatives are unavailable

Montgomery County can demonstrate environmental leadership in Implementing restrictions on government purchasing of plastic water bottles to address environmental concerns while achieving cost savings.

County Facility Water Bottle Restriction: Potential Benefits & Other Considerations

Potential Benefits	Other Considerations
▪ Saves taxpayer money ▪ Decreases the environmental footprint of County government ▪ Reduces greenhouse gas emissions ▪ Reduces waste ▪ Demonstrates confidence in the public water supply	▪ Certain Collective or other agreements (e.g., Fire & Rescue) may stipulate requirement for providing these, Recreational summer programs, etc. ▪ Current vending machine contract does not stipulate ban (about 100 machines for next 5 years) ▪ Current food service contract does not stipulate ban (two cafeterias, two kiosks, one snack bar) ▪ Impact of employees will bring containers from outside for convenience of individual containers ▪ Other available methods of dispensing water and alternative methods of supplying water

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Computer Usage: Introduction

Suggestion: Develop County policy regarding computer operation and user practices to maximize energy efficiency.

Current Policy

- DTS has implemented a Server Virtualization program that is saving over 2 million kWh of electricity and 1,100 tons of carbon dioxide emissions per year

- County utilizes DELL ENERGY STAR compliant PCs

- Shutdown all computers connected to the County network on Friday evenings

- Screen savers are employed on all County machines after 30 minutes of inactivity

- Under a DCM Program, decommissioned PCs are sold to a remarketer all non-refurbishable electronic equipment is broken down and 90%-95% of it is recycled

Green Policies

- Changing the sleep mode settings on monitors on older computers
- Turning off monitors after business hours and on weekends
- Shutting down non-VPN and non-critical system computers after hours and on weekends rather than logging off

Changes in business practices and employee behavior is one way to limit government facilities' impact on greenhouse gas emissions, while also yielding cost savings.

Computer Usage:
Potential Benefits & Other Considerations

Potential Benefits	Other Considerations
▪ Server Virtualization is one of the most prominent elements a technology organization can contribute in energy efficiency ▪ Decrease County energy utilization ▪ Cost savings ▪ Optimizes County infrastructure for high efficiency. ▪ DCM desktop and laptop configuration policies reflect energy efficiency best practices ▪ Use of screen saver mode enhances IT security by requiring users to re-authenticate after long periods of inactivity	▪ Currently there is an exemption process and several hundred exemptions have already been granted ▪ Departments may need training/education ▪ Right now DTS can only remotely shut down users CPU's, not monitors ▪ DTS used to send out email to all users, but found this had limited effectiveness ▪ In the future educational information may need to come from higher up ▪ Energy savings efforts for desktops can be compromised by users

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Employee Fuel Usage: Introduction

Suggestion: Decrease the amount of fuel used by County employees by promoting car sharing and car pooling.

Current Policy

- The County has recently implemented an Environmentally Friendly Car Share Pilot Project
    - The one year pilot calls for 30 hybrid and sub-compact vehicles available at three locations for shared use by employees
    - Save money by permanently reducing the need for some administrative vehicles

Green Policies

- Where possible utilize teleconference capabilities, car sharing, and liberal leave policies to reduce the number of trips between facilities especially on Air Action Days*
- Increase the County employee participation in car pooling by enhancing the close parking space incentive
- Expand Ride-On Ride Free Program for Ride-On buses to WMATA buses and Metrorail*
- Develop guidelines for use of County vehicles for non-County business
- Provide driver education focused on fuel efficiency

Promoting environmentally responsible behaviors in County employees links County operational efficiency achievements to the broader community.

Recommendation in the Climate Action Plan

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Employee Fuel Usage:
Potential Benefits & Other Considerations

Potential Benefits	Other Considerations
▪ Reduces air pollution from single-occupancy vehicles ▪ Reduces traffic congestion ▪ Increases parking space availability ▪ Promotes carpooling by providing preferred parking spaces ▪ Funds collected from parking fees can support transit and carpooling programs	▪ Cost and feasibility of implementation ▪ Position types which are permitted to telecommute on Air Quality Action Days ▪ Impact of liberal leave on government operations ▪ Appropriate methods for employee and manager notification of Air Quality Action Days ▪ Impact of ridership on Ride-On, WMATA buses, and Metrorail ▪ Appropriate transit and carpooling programs to support ▪ Identification of parking fee structure

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Fuel Savings: Introduction

> **Suggestion: Assess how the County can use its fleet more efficiently and increase fuel savings.**

Current Policy

- Fleet Management has a vehicle idling policy for its maintenance fleet
    - DGS is currently working on an idling policy to address the County's administrative fleet
    - DGS is identifying anti-idling technology to monitor and report excessive vehicle idling in its transit fleet
    - DGS has worked with major fleet users in the County to create Idling Policies for their respective fleets
    - DGS has created Idle-Free Zones at County fuel sites to help educate County employees and to curb vehicle idling and has posted Idle-free zone signage at the Transit Depots in an effort to reduce bus idling

Green Policies

- Identify and ensure right-size vehicles for specific tasks
- Sell or retrofit less efficient vehicles
- Switch to vehicles with lower number of cylinders, where appropriate
- Increase frequency of routine maintenance if warranted by greater efficiency

> **Developing and enforcing policies that promote fuel efficiency demonstrate the County is fiscally and environmentally accountable.**

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Fuel Savings:
Potential Benefits & Other Considerations

Potential Benefits	Other Considerations
▪ Monitoring compliance with anti-idling policies can yield fuel cost savings ▪ Reduces GHG emissions and other harmful pollutants ▪ Helps the County to achieve compliance with vehicle emissions	▪ Determine which are the most advantageous options to achieve fuel efficiency goals (e.g., emission control devices, using ultra low sulfur diesel, using newer equipment, reducing idling, or some combination of techniques) ▪ Costs may be a deterrent ▪ Determine which types of work should be covered by such requirements and possible exemptions

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Energy Star Purchasing: Introduction

> **Suggestion: Require ENERGY STAR appliances and equipment, and EPEAT registered IT equipment in County facilities to decrease energy usage.***

Current Policy

- The County's current policy is to purchase Energy Star appliances.

Typical Policy

- Adopt procurement guidelines applicable to all County government departments and county agencies, where applicable
- Establish guidelines for the decommissioning and disposal of obsolete or inefficient equipment
- Write specifications to ensure that, where applicable, ENERGY STAR and EPEAT equipment is specified when replacing or buying new appliances and equipment

This change in business practices was identified in the Climate Protection Plan.

* Recommendation in the Climate Action Plan

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Energy Star Purchasing:
Potential Benefits & Other Considerations

Potential Benefits	Other Considerations
▪ Meet greenhouse gas reduction goals in the Climate Action Plan ▪ Establishes data needed for adaptive management of energy plans ▪ Limits the significant negative environmental impacts of the production, purchase, use, and disposal of electronic products ▪ Energy Star appliances yield significant energy savings and environmental benefits ▪ EPEAT registered computers have reduced levels of heavy metals, which protects human health and the environment ▪ EPEAT computers are easier to upgrade and recycle	▪ Employees may buy appliances themselves rather than through DGS ▪ Energy Star models may be more expensive than other models initially ▪ Establish guidelines for the proper decommissioning and disposal of obsolete and inefficient equipment* ▪ Identify what changes need to be made to the procurement process to implement this policy

Recommendation in the Climate Action Plan

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Building Operation: Introduction

Suggestion: Improve energy efficiency of building operations.

Current Policy

- DGS has created a baseline of County facilities and categorized the facilities, based on their energy performance

- The County currently requires Leadership in Energy and Environmental Design (LEED) silver rating certified design for County built or funded non-residential buildings

Green Policies

- Institute LEED certification for Accreditation Professional (AP) 1-to-2 F.T.E for all County properties
- Seek to bring several of our existing facilities under LEED O&M building Management on existing buildings (LEED for Existing Buildings: Operations & Maintenance Rating System (PDF)
- Require the use of recycled building products and non-VOC paint in new construction and retrofits
- Support installation of solar photovoltaic systems through the use of power purchase agreements in public facilities
- Motion sensor and energy efficient lighting
- Purchase and use of green cleaners

County facilities serve as ideal candidates to showcase cost-effective and innovative energy efficiency and other environmental beneficial technologies.

Building Operation:
Potential Benefits & Other Considerations

Potential Benefits	Other Considerations
▪ Implementing energy efficiency improvements can provide positive cash flow to the County ▪ The County can take advantage of relatively low-cost financing via municipal bonds to implement improvements ▪ Public buildings provide a showcase for enhanced energy management and energy conservation measures ▪ Contracts for public facilities can spur local and regional development of energy service professions	▪ More expensive to build, install, and monitor ▪ LEED standards for ratings is being significantly revised in the next 3-6 months ▪ Retrofitting existing buildings might have a better energy efficiency outcome ▪ Consider Life-cycle Cost Analyses of energy systems when evaluating buildings for purchase or lease. ▪ LEED Certified on-site AP for County owned and operated facilities overseeing policies/procedures for new design and on-going operations.

Source: Montgomery County Sustainability Working Group

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Zero Landfill Policy

Suggestion: Decrease the amount of materials produced by County Facilities that ends up in landfills.

Current Policy

- The County currently has an extensive recycling and composting program and has set a goal of reducing and recycling 50% of its waste

Green Policies

- Create a target zero-waste policy pilot project
- In all cafeterias, simple-to-understand color-coded signs encourage employees and visitors to separate compostable waste from recyclable objects and from items which cannot be composted or recycled
- Divert organic waste from kitchens and cafeterias by aggressively collecting and shipping to a composting site
- Implementing an aggressive recycling program that recovers all paper, as well as all metal, glass and plastics generated at the building
- Material can be separated, baled and transported to manufacturing facilities that reuse this materials to make new products

If feasible, implementing a pilot zero landfill policy for government office can be used as a demonstration of viability of this approach for County business and residents.

Zero Landfill Policy:
Potential Benefits & Other Considerations

Potential Benefits	Other Considerations
▪ Reduces the amount of waste going into landfills ▪ Composting enriches soil ▪ Reduce emissions from energy consumption ▪ Reduce emissions from incinerators ▪ Reduce methane emissions from landfills increase storage of carbon in trees ▪ Reduce costs for waste transportation and disposal	▪ Not all materials can be recycled at this time ▪ Requires a market for recyclables ▪ Requires a behavior change for employees

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Other Ways for the County to Lead By Example

DEP & DGS identified several other opportunities to demonstrate leadership

- **Enhance County's Recycling Program**
  - Increase recycling constancy of programs within County government by designating a recycling leader for each department or office

- **Encourage County freight carriers to participate in EPA's Smartway Transport partnership**
  - The Smartway program works with transport carriers to reduce fuel consumption and reduce diesel emissions

- **Require emissions control requirements on County contracts**
  - i.e. County contractors doing construction work reduce diesel emissions from the heavy duty diesel equipment by installing diesel emissions control devices, using ultra low sulphur diesel, reduce idling, etc.

- **Recycle Copier Cartridges**
  - The County is currently working with its new copier contractor, Ricoh, on implementation of copier cartridge recycling program

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Climate Action Plan

Climate Action Plan was established by legislation, and adopted by the County Executive in January 2009

- Implementation of 11 internal county government actions will require actions to be taken by multiple agencies, and official policies and executive regulations to be put in place governing multiple agencies

- Currently existing requirements in the County Code are not uniformly implemented across agencies (e.g., buying recycled paper)

- Changes in standard operating procedures, purchasing policies, and other policies will need training, convincing, and vigilant tracking to overcome institutional inertia, and 'business as usual'

- Tracking progress is vital to meeting the intent of the 11 actions identified for internal county government

- Need to determine a process to implement, and track progress on these internal actions

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Promoting Montgomery County's Environmental Efforts

- County programs and policies that are adopted need to be widely publicized both within County government and to the public and business community

- Publicity will expand the reach of the County's initiatives and promote the County as a leader with regards to environmental initiatives

For the County to truly lead by example any efforts undertaken in this realm need to be adequately publicized and communicated to residents, businesses, and our peers.

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Wrap-Up

- **Confirmation of follow-up items**
- **Time frame for next meeting**