

## **EXECUTIVE ORDER NO. 123**

**TO:** All Agencies Under the Mayor

**FROM:** John W. Hickenlooper, Mayor

**DATE:** December 17, 2010

**SUBJECT:** Greenprint Denver Office and Sustainability Policy

**PURPOSE:** This Executive Order creates the Greenprint Denver Office from the existing Greenprint Denver initiative and establishes the sustainability policy for the City and County of Denver. The following Executive Orders and Memoranda are hereby canceled and superseded by this Executive Order 123, dated October 24, 2007.

The applicable authority relevant to the provisions and requirements of this Executive Order 123 is found in Section 2.2.10 of the 2002 Revised Charter.

This Executive Order is divided into the following chapters and subjects:

Chapter 1 – Greenprint Denver Office  
Chapter 2 – High Performing Green Buildings  
Chapter 3 – Vehicle Replacement and Operation  
Chapter 4 – Materials and Waste Management  
Chapter 5 – Water Conservation  
Chapter 6 – Environmental Public Health Policy  
Chapter 7 – Memorandum Attachments

Chapter 1 – Greenprint Denver Office

- 1.0 The mission of the Greenprint Denver Office is to position Denver as a national leader in sustainability by developing and implementing solutions to resource challenges that meet the needs of current Denver residents while securing the economic, social, and environmental health of future generations.
- 1.1 The following functions shall be the responsibility of the Greenprint Denver Office:
  - a. Promote sustainability as a core business value in City government to seek efficiencies in resource use, reduce environmental impacts, and invoke cultural change.
  - b. Work with City agencies and promote interagency cooperation to adapt operational and administrative processes towards accomplishment of sustainability goals. City government targets can be found in Memorandum 123-A of this Executive Order.
  - c. Ensure that all City policy and program decisions incorporate “triple bottom line” analysis, balancing short- and long-term economic, social, and environmental considerations. Procedural information regarding the structure, functions, and

responsibilities of the Greenprint Denver Implementation Committee can be found in Memorandum 123-B of this Executive Order.

- d. Set clear metrics of success and report progress annually.
- e. Communicate sustainability as a public value and expand the concept of the City as a steward of public resources.
- f. Partner with community organizations, cultural institutions, and businesses to achieve broad impact.
- g. Continually monitor advancements in the science and technology of sustainability to ensure that best management practices are utilized within the City.

## Chapter 2 – High Performing Green Buildings

- 2.0 In order to mitigate the negative environmental impacts of the built environment, and to recognize the total cost of capital project ownership, all buildings constructed, renovated or maintained with City funds or using City bonding capacity are to be designed, constructed, operated, and maintained according to the principles outlined in the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) standards and other applicable best management practices for sustainability.
- a. All new City buildings and major renovations shall be certified to LEED-NC (New Construction) Silver Certification, with the goal of achieving LEED-NC Gold.
  - b. Projects also should achieve ENERGY STAR status after one year of operations (see U.S. EPA's "Design to Achieve ENERGY STAR" program).
  - c. All capital improvement projects shall be designed and constructed using LEED best practices.
  - d. All City construction projects including new and remodel vertical and horizontal projects shall adhere to the requirements set forth in the applicable Greenprint Denver Construction Project Guidance and Closeout Forms.
  - e. All existing and future City-owned and operated facilities shall incorporate all applicable LEED for Existing Buildings: Operations and Maintenance (LEED EB: O+M) best practices into facility operation and maintenance.
- 2.1 It shall be the policy of the City to improve efficiency in all City facilities and to pursue renewable energy projects and programs.
- 2.2 Procedural information regarding green building guidelines can be found in Memorandum 123-C of this Executive Order.

THIS PAGE IS INTENTIONALLY LEFT BLANK.

### Chapter 3 – Vehicle Replacement and Operation

- 3.0 The City's Green Fleet program is designed to ensure that the City procures and operates a fleet of vehicles that minimizes environmental impact, enhances domestic energy security, and maximizes fuel efficiency and diversification.
- 3.1 All light-duty vehicles in need of replacement will be replaced with hybrids, alternative fuel vehicles, or the most fuel-efficient and least-polluting vehicles available for specific functions whenever cost and reliability are similar to traditional vehicles.
- 3.2 All City diesel vehicles will use biodiesel fuel that replaces at least 20% of the petroleum content with fuel derived from biological sources when operationally and economically feasible. The use of biodiesel substantially reduces hydrocarbon and particulate emissions compared to 100% petroleum diesel fuel.
- 3.3 The City will reduce petroleum use by the City's fleet through an increase in the fleet's average fuel economy; increased purchase of hybrid, alternative fuel, and fuel-efficient vehicles; and a decrease in vehicle miles traveled.
- 3.4 Procedural information regarding the structure, functions, and responsibilities of the Green Fleet Committee can be found in Memorandum 123-D of this Executive Order.

### Chapter 4 – Materials and Waste Management

- 4.0 All agencies shall direct efforts to utilize recycling services and pursue integrated waste management strategies that include reducing consumption, collecting used materials for reuse or recycling, and purchasing cost-competitive recycled and recyclable products.
- 4.1 It is the policy of the City to procure products and services that minimize harmful effects to human health and the environment. All City agencies shall work to include the triple bottom line of environmental, social, and economic considerations into all purchasing decisions. For more information on the City's environmentally preferable purchasing policy, see Memorandum 123-E.
- 4.2 Environmentally preferable products and services have a reduced impact on worker health and safety, public health and safety, and the environment when compared with competing products and services that perform the same function. The product or service comparison shall consider raw material acquisition, production, manufacturing, packaging, distribution, reuse, operation, maintenance, and disposal. Examples include but are not limited to products and services that are energy efficient or durable; can be recycled or reused; contain recycled materials (especially post-consumer content); are free of toxic substances; emit lower levels of volatile organic compounds; pose minimal health hazards, pollution potential, or regulatory liability; and save natural resources. Particular attention should be given to products where manufacturer take-back recycling can be utilized.

- 4.3 All City building and infrastructure projects will utilize concrete containing a percentage of fly ash and will use recycled aggregates wherever appropriate, and as long as the availability and price of fly ash and aggregates are similar to cement. Fly ash is a waste product generated from coal-burning power plants that produces a highly durable, less expensive, and eco-efficient concrete.
- 4.4 All construction projects using City funds, including new construction, large and small renovations, and CIP projects shall recycle construction and demolition waste, and install building materials that contain recycled content wherever possible. Project teams shall use the U.S. Green Building Council's Leadership in Energy and Environmental Design (LEED) program for guidance in construction and demolition waste recycling and use of recycled materials.
- 4.5 Recommendations to reduce waste and reuse resources can be found in Memorandum 123-E of this Executive Order.

#### Chapter 5 – Water Conservation

- 5.0 The City will demonstrate wise water use in City facilities, buildings, and parks through identification of water inefficiencies and implementation of water conservation projects to improve plumbing fixtures, irrigation systems, cooling towers, kitchen operations, swimming pool operations, laundries, and other water uses.
- 5.1 City agencies will promote water conservation in all operations, and lead in early adoption of Denver Water's conservation programs.

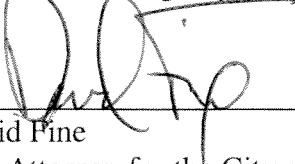
#### Chapter 6 – Environmental Public Health Policy

- 6.0 All City employees and contractors must be familiar with and follow the City's Environmental Public Health Policy, which has been signed by the Mayor and is attached in Memorandum 123-F. The Policy shall be used as a tool to complement the sustainability directives described in this Executive Order, and will support systematic environmental management in all City agencies.

#### Chapter 7 – Memorandum Attachments

- 7.0 The procedures for implementing this Executive Order may be defined by Memorandum Attachments to the Executive Order, which shall become a part of the Executive Order. The Greenprint Denver Office, which is responsible for the content of this Executive Order, shall have the authority to issue procedural Memorandum Attachments relative to this Executive Order.


Approved for Legality:


  
\_\_\_\_\_  
David Pine  
City Attorney for the City and County  
of Denver

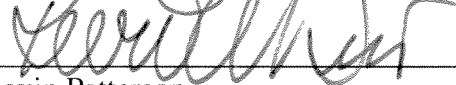
Approved:

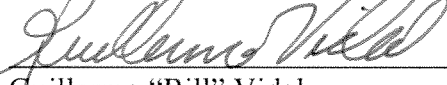
  
\_\_\_\_\_  
John W. Hickenlooper  
Mayor

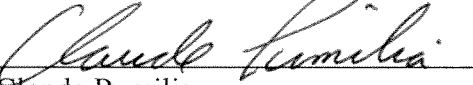
  
\_\_\_\_\_  
Kim Day  
Manager of Aviation


  
\_\_\_\_\_  
Nancy Severson  
Manager of Environmental Health


  
\_\_\_\_\_  
Derek Brown  
Manager of General Services

  
\_\_\_\_\_  
Kevin Patterson  
Manager of Parks and Recreation

  
\_\_\_\_\_  
Guillermo "Bill" Vidal  
Manager of Public Works

  
\_\_\_\_\_  
Claude Pumilia  
Manager of Revenue

  
\_\_\_\_\_  
Mary Malatesta  
Manager of Safety

  
\_\_\_\_\_  
Patricia Wilson-Pheanious  
Manager of Human Services

  
\_\_\_\_\_  
Peter Park  
Manager of Community Planning  
and Development

Memorandum 123-A

**TO:** All Agencies Under the Mayor

**FROM:** John W. Hickenlooper, Mayor

**DATE:** December 17, 2010

**SUBJECT:** City Government Sustainability Targets

This memorandum shall be attached to and become a part of Executive Order No. 123, dated October 24, 2007, subject "Greenprint Denver Office and Sustainability Policy."

- 1.0 All City agencies shall adapt operational and administrative processes towards accomplishment of sustainability goals, including the internal goals listed below as well as the goals identified in the Greenprint Denver Action Agenda.
  - a. The City will reduce energy use one percent annually, and five percent by 2011 relative to the 2006 baseline level, measured per building square foot in City facilities, and per passenger at the Denver International Airport.
  - b. The City fleet will attain a 15% volumetric reduction in vehicle petroleum use by 2011, relative to the 2001 baseline. The DIA fleet will reduce gasoline consumption one percent annually.
  - c. The City shall reduce paper consumption across all agencies 20% by 2011, relative to the 2006 baseline.
  - d. The City shall increase the proportion of eco-efficient annual commodity and service bids 10% annually, and 60% by 2011 relative to the 2004 baseline.
  - e. The City will support and promote the Denver Water Tap-Smart goal to reduce per capita water use 22% by 2016, relative to the 2000 baseline.

Memorandum 123-B

**TO:** All Agencies Under the Mayor

**FROM:** John W. Hickenlooper, Mayor

**DATE:** December 17, 2010

**SUBJECT:** Greenprint Denver Implementation Committee

This memorandum shall be attached to and become a part of Executive Order No. 123, dated October 24, 2007, subject "Greenprint Denver Office and Sustainability Policy."

- 1.0 A Greenprint Denver Implementation Committee shall be established and meet regularly. The purpose of this committee is to make recommendations to the Greenprint Denver Office to ensure that "triple bottom line" analysis, balancing short- and long-term economic, environmental, and social considerations, is incorporated into all agency policy and program decisions. This committee shall be expected to provide updates on current sustainability efforts within each agency, and give members the opportunity to discuss citywide sustainability policy issues.
- 1.1 This committee shall be diverse and represent major agencies within the City. The core membership will consist of representatives from the following:
  - a. Greenprint Denver Office – Facilitator
  - b. Budget and Management Office
  - c. Career Service Authority
  - d. Department of Aviation
  - e. Department of Community Planning and Development
  - f. Department of Environmental Health
  - g. Department of General Services
  - h. Department of Parks and Recreation
  - i. Department of Public Works
  - j. Office of Economic Development
  - k. Technology Services
  - l. Department of Safety
- 1.2 The committee shall consider the effectiveness, efficiency, and implementation of citywide sustainability initiatives, including but not limited to energy conservation, paper reduction, waste reduction and management, and water reduction. When technical expertise is necessary, additional department staff will be added to the committee on an ad hoc basis.
- 1.3 When additional sustainability policies and procedures become necessary, ad hoc subcommittees will be created to research specific issues. These subcommittees will report findings and recommendations to the full Committee.

Memorandum 123-C

**TO:** All Agencies Under the Mayor

**FROM:** John W. Hickenlooper, Mayor

**DATE:** December 17, 2010

**SUBJECT:** High Performing Green Building Guidelines

This memorandum shall be attached to and become a part of Executive Order No. 123, dated October 24, 2007, subject "Greenprint Denver Office and Sustainability Policy."

- 1.0 This policy will apply to all new City building projects over 5,000 square feet (SF) that are funded after July 12, 2006. Projects less than 5,000 SF are expected to meet the intent of LEED-NC (New Construction) Silver certification (with a goal of achieving LEED-NC Gold) and adhere to the Greenprint Denver Construction Project Guidance and Closeout Forms. If it is determined that certification is not feasible, the project team must submit documentation of technical infeasibility and receive a policy exemption from the Mayor or his/her designee. If given a formal exemption the project shall use LEED-NC guidelines and Greenprint Denver Construction Guidelines to achieve the equivalent of LEED-NC Silver certification with a goal of achieving LEED-NC Gold.
- 1.1 This policy also applies to major renovations that include major HVAC renovation, envelope modifications, and major interior rehabilitation. In the rare case that a building's design (e.g., historic or unique features) renders LEED certification cost-prohibitive or technically infeasible, the Mayor or his/her designee may declare a specific project unsuitable for certification following receipt and review of documented infeasibility.
- 1.2 All General Fund agencies are directed to work with General Services to implement LEED EB: O+M best practices.
- 1.3 Projects should achieve ENERGY STAR status after one year of operations (see U.S. EPA's "Design to Achieve ENERGY STAR" program).

Memorandum 123-D

**TO:** All Agencies Under the Mayor

**FROM:** John W. Hickenlooper, Mayor

**DATE:** December 17, 2010

**SUBJECT:** Green Fleet Committee

This memorandum shall be attached to and become a part of Executive Order No. 123, dated December 17, 2010, subject "Greenprint Denver Office and Sustainability Policy."

- 1.0 A Green Fleet Committee shall be established and meet regularly. The purpose of this committee is to ensure that the City procures and operates a fleet of vehicles that minimizes environmental impact, enhances domestic energy security, and maximizes fuel efficiency and diversification. The Committee is responsible for maintaining an approved list of hybrid, alternative fuel, and fuel-efficient vehicles for purchase, and developing policies and procedures to implement this Executive Order.
- 1.1 The Committee shall consist of representatives from:
  - a. Department of Environmental Health - Facilitator
  - b. Budget and Management Office
  - c. City Council (invited and if accepted, appointed by Council President)
  - d. Greenprint Denver Office
  - e. Managers and/or Fleet Directors from the Department of Public Works, Department of Aviation, Department of Safety, and Department of Parks and Recreation
  - f. Purchasing Division of General Services
- 1.2 The following goals will determine the success of the Green Fleet program:
  - a. Increase the average fuel economy of the fleet
  - b. Increase the number of hybrid, alternative fuel, and fuel-efficient vehicles in the fleet
  - c. Minimize the total vehicle miles traveled by City employees using fleet vehicles
- 1.3 Each Fleet Director is responsible for providing data regarding accomplishment of the Committee's goals. A report detailing the current year fleet and a comparison to previous years will be generated on an annual basis and submitted to the Greenprint Denver Office. This report will contain:
  - a. Fuel efficiency of new vehicles purchased during the previous year
  - b. Total number of vehicles in the fleet
  - c. Total miles driven by all vehicles
  - d. Total gallons of gasoline (or equivalent alternative fuel) consumed, by fuel type
  - e. Any additional information required for the annual report

Memorandum 123-E

**TO:** All Agencies Under the Mayor

**FROM:** John W. Hickenlooper, Mayor

**DATE:** December 17, 2010

**SUBJECT:** Environmentally Preferable Purchasing

This memorandum shall be attached to and become a part of Executive Order No. 123, dated October 20, 2010, subject "Greenprint Denver Office and Sustainability Policy."

- 1.0 The City's environmentally preferable purchasing (EPP) policy applies to the procurement of goods and services by all City and County of Denver General Fund agencies and independent agencies that receive City funding. All other City-related entities should purchase environmentally preferable goods and services wherever possible.
- 2.0 The Purchasing Division of General Services shall serve as the lead agency for the City's EPP program by:
  - 2.1 Providing guidance to all City agencies on EPP requirements, processes, and strategies
  - 2.2 Providing training to buyers, purchasing techs, and purchasing contact representatives
  - 2.3 Including standard EPP language in all purchasing documents including proposals and RFPs, and updating as necessary
  - 2.4 Assisting agencies in developing product and service specifications that meet the requirements of the City's EPP Program
  - 2.5 Where appropriate ensuring that EPP criteria is included in product or service evaluations
  - 2.6 Tracking and reporting annually on the City's EPP program
- 3.0 City Agencies shall implement the requirements of the EPP Program by:
  - 3.1 Working with the Purchasing Division to advance the goals of the City's EPP program
  - 3.2 Including EPP language into all requisitions, proposals, and RFPs and in all final contract documents where appropriate.
  - 3.3 Including EPP considerations into initial needs assessment for all product and service procurement

- 3.4 Identifying and pursuing opportunities to reduce overall consumption
- 3.5 Assessing whether or not a product or service is necessary prior to starting the procurement process
- 3.6 Assessing the Total Cost of Ownership by including initial cost, operating costs, and disposal or end of life cost
- 3.7 Selecting environmentally preferable products and services over conventional products if they are on bid and meet required performance standards
- 3.8 Using independent, third party environmental certifications or rating systems when specifying an environmentally preferable product or service
- 3.9 Working with vendors to advance the environmental performance of goods and services and recognizing vendors who do the same
- 3.10 Piloting new and innovative environmentally preferable products and services as they become available
- 4.0 The requirements of this policy apply to all purchasing mechanisms including delegated purchasing authority, requisitions, and RFPs
- 5.0 EPP attributes include, but are not limited to, the following:
  - 5.1 Recycled content
  - 5.2 Recyclability
  - 5.3 Product disassembly potential
  - 5.4 Durability
  - 5.5 Reusability
  - 5.6 Reconditioned/remanufactured
  - 5.7 Take-back
  - 5.8 Bio-based
  - 5.9 Energy efficiency
  - 5.10 Water efficiency
  - 5.11 Low volatile organic compounds (VOCs)
  - 5.12 Indoor air quality
  - 5.13 Bio-degradable
  - 5.14 Less waste
  - 5.15 Other EPP attributes

Memorandum 123-F

**TO:** All Agencies Under the Mayor

**FROM:** John W. Hickenlooper, Mayor

**DATE:** December 17, 2010

**SUBJECT:** Recommendations to reduce waste and reuse resources

This memorandum shall be attached to and become a part of Executive Order No. 123, dated October 24, 2007, subject "Greenprint Denver Office and Sustainability Policy."

- 1.0 The Solid Waste Management Division of the Department of Public Works and the Facilities Planning and Management and Purchasing Divisions of the Department of General Services shall be responsible for the development and implementation of cost-effective initiatives that will advance the programs established by this Executive Order and the Greenprint Denver Office.
- 1.1 All City employees shall take measures to reduce waste and reuse resources, and implement the following strategies whenever possible:
  - Use electronic media in place of paper
  - Store documents electronically, use email, edit online, and employ all possible paper reduction strategies
  - Office-wide memoranda should be emailed, placed in a common area, or circulated for staff to review
  - Refrain from printing meeting agendas and minutes and instead use electronic media and erasable whiteboards
  - Print and copy documents, including letters, memoranda, and reports, on both sides of the page
  - Reduce font size and margins in appropriate documents
  - Disable cover pages and confirmation pages on fax machines
  - Printer banner pages should be used only in high-traffic environments (more than 25 users)
  - Use efficient and cost-effective multi-function devices (MFDs) in lieu of desk jet and laser jet printers. If there is a compelling business or legal reason why MFDs are not appropriate, laser printers should be used.
  - Network printing devices should be used and placed no less than 30 feet apart from each other, which should provide ample coverage to all employees
  - Purchase paper containing at least 35% post-consumer content for all general office paper needs
  - Agencies and contract custodial services should use recycled content items such as paper towels, toilet paper, and trash can liners
  - Direct internal mail to be delivered in reusable inter-office envelopes
  - Require contractors and consultants to use recycled-content products, submit documents electronically, and duplex print and copy all City documents and correspondence

Memorandum 123-G

**TO:** All Agencies Under the Mayor

**FROM:** John W. Hickenlooper, Mayor

**DATE:** December 17, 2010

**SUBJECT:** City Environmental Public Health Policy

This memorandum shall be attached to and become a part of Executive Order No. 123, dated October 24, 2007, subject "Greenprint Denver Office and Sustainability Policy."

- 1.0 The City and County of Denver (CCD) is dedicated to environmental public health stewardship and leadership. CCD commits to environmental public health policies, actions, and programs that:
- Maximize environmental, social, and economic benefits
  - Empower, seek input from, partner with, inform, respect, and value individuals, organizations, and communities
  - Use prevention to reduce environmental health and safety risks and responsibly manage remaining risks
  - Conserve energy and natural resources through efficient use, reuse and recycling, preference for renewable over non-renewable resources, purchasing, planning and design
  - Prevent pollution
  - Promote best management practices
  - Utilize sound business practices and demonstrate accountability
  - Meet or exceed all legal requirements and voluntary commitments
  - Continually improve performance, measure progress, and communicate results to employees and the public
- 1.1 This policy shall be communicated to all employees, individuals working on behalf of or under the direction of CCD or one of its agencies, and others operating on CCD premises. Each is expected to follow this policy and report any environmental, health, or safety concern to the Mayor's Office or to management of the applicable CCD agency. Managers are expected to take prompt action.