

MECKLENBURG
COUNTY

ENVIRONMENTAL LEADERSHIP
POLICY ACTION PLAN

Annual Report 2010 | Mecklenburg County, NC



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*Annual Report to the Mecklenburg County Board of Commissioners
Environmental Leadership Policy Implementation
August 2010*

Executive Summary

Mecklenburg County has adopted a strategic focus area of “Sustainable Community” that encompasses performance of County operations as an “Environmental Leader”. The Mecklenburg County Environmental Leadership Team (ELT) is responsible for facilitating implementation of an Action Plan toward achieving the County goal of 85% of County operations to be conducted in an environmentally sensitive manner. The mission of the ELT is:

Mecklenburg County Government will operate in a manner that conserves and protects our air, water and land resources; become a model of environmental stewardship for local governments, businesses, and industry in our region, and; use and apply the County’s existing and future resources wisely for the benefit of its citizens.

Adoption of a scorecard approach to measuring overall progress toward the County’s Environmental Leadership Policy goals was piloted with reporting of the 2008 Annual Report. In comparison to the 2009 reporting year (resulting in 88% goal achievement), the County struggled to meet the annually more stringent 2010 goals. Performance measurement was altered in 2010 with the adoption of the Environmental Leadership Index. This index will permit the Environmental Leadership Policy to be recognized at the corporate level as it becomes incorporated into each department’s daily operations. The 2010 comprehensive scorecard result indicates that 46% of all goals were met, equivalent to a red light.

Reflections Over the Past Year (2010)

Emission Reduction

- Energy efficiency measures taken have resulted in electrical savings for FY10 of approximately 11% better than the FY07 baseline results for the buildings measured, decreasing air emissions by 3,719,118 tons of carbon dioxide over the FY07 baseline “business as usual” energy use. Energy efficiency projects have resulted in a 13% reduction in energy use per square foot between 2006 and 2009.
- In 2009, the average emission factor for NOx dropped 1.4% from the 2008 value to 0.89 grams/mile. The 2009 total emission of 8.7 tons of pollutants which contribute to ground level ozone formation is a new low for the county since this information has been tracked beginning in 2007.
- A goal was more clearly defined this year for all county vehicles to meet Low Emission Vehicle (LEV) standards by 2020.
- The updated GHG inventory estimates that 80,222 tons of CO₂e were released during 2009. While the overall GHG emissions increased between the 2006 and the 2009 report it should be noted that the scope of the report was expanded to cover additional facilities.

Resource Conservation

- Recycling program diverted 3,000 tons of paper waste recycled equivalent to 15.9% of the total waste, stream in FY10. While this amount recycled is several hundred tons less than the FY09 result, waste disposed also decreased during FY10 by approximately 1,700 tons, still yielding an overall recycling rate of 15.9% and above this year's 15.2% goal.
- The quantity of cans and bottles recycled under a pilot program within 100 facilities reduced by about 10% (consistent with overall waste reduction) to approximately 125,000 pounds for the year.
- Purchases of Green Seal Paper Cleaning products during FY10 totaled 28 tons. These purchases resulted in a Green Seal estimate of 1,648 pounds of air pollutants avoided (equivalent to 155 days of driving a car) as well as an estimated 119,265 kilowatt-hours of energy (equivalent to 166 months of power for an average US home), 193,380 gallons of water saved (equivalent to 3,094,084 glasses of 8oz water).
- Land Preservation was accomplished through the acquisition of 316.5 acres for parks and open space, greenways.
- The County achieved LEED Gold certification for the Criminal Courts Renovations and LEED Silver certification for the Valerie C. Woodard Center (Phase I & II) project during 2010.
- The Sustainable Development and Facilities Policy was adopted.

Commitment

Employee incentive programs included participation in the Best Workplaces for Commuters program (encouraging County employees to utilize the transit system) that realized 337 participants (equivalent to 7% of County employees) in FY10, a slight decline from 8% participation in FY09. It is calculated that 337 vehicles off the road equates to a minimum of 3,130 pounds of NOx emissions avoided during 2010 as a result of this program.

- Employees were recognized in the Green Guardian and WorkGreen Program with 19 individuals and one team of employees were recognized across 10 County departments.
- Approximately 24 employees from six County departments planted the trees near McDowell Creek (totaling 100 volunteer hours).
- Mecklenburg County had 13 departments banding together to develop specific actions their departments can undertake to help the County achieve ELP goals.
- Charlotte Mecklenburg Schools, Public Library of Charlotte & Mecklenburg County, and Central Piedmont Community College continued to development and implement environmental action plans as partners with the County.

Stewardship Enhancement

- Performance contracting to enhance energy efficiency of facilities was initiated in 2010.
- The County's Green Permit Rebate program was expanded to include residential developments that are designed and built sustainably.
- A Community Awareness and Enrichment Principal was added to the "Commitment" focus area in collaboration with our partners, Charlotte-Mecklenburg Schools, Central Piedmont Community College, and Public Library of Charlotte and Mecklenburg County.

- A Water Team was established as the third sub-committee of the Environmental Leadership Team with the charge of developing a water conservation plan.

Mecklenburg County Environmental Footprint 2009 Data

- 99 buildings
- 3.9 million square feet of occupied space
- 2,838 utility accounts

- 99.7 million gallons of potable water used
- 1.4 million therms natural gas used
- 88.97 kilowatt hours of electricity used

- 34.8 million pounds of waste generated
- 6.6 million pounds of waste recycled
- 79,388 reams office paper used

- 10.2 million miles traveled in County fleet
- 1091 fleet vehicles
- 641,221 gallons of gasoline used by highway fleet vehicles
- 87,392 gallons of diesel used by highway fleet vehicles
- 7,396 gallons of gasoline used by offroad equipment
- 130,082 gallons of diesel used by offroad equipment



*Environmental Leadership Policy Action Plan
Annual Report 2010*

Overview

Mecklenburg County has witnessed an evolution of addressing operational activities in an environmentally sensitive manner (Figure1).

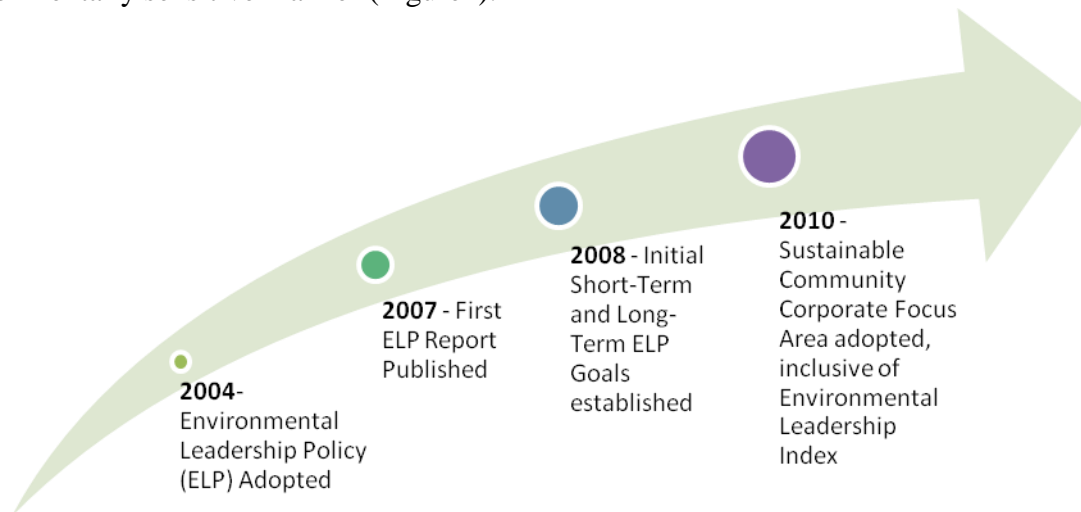


Figure 1. Timeline of Mecklenburg County Environmental Leadership Policy

Adopted by the, the Mecklenburg County Board of Commissioners (BOCC) in February 2004, the Environmental Leadership Policy (Policy) has a mission stating that County government should “operate in a manner that conserves and protects our air, water and land resources, become a model of environmental stewardship for local governments, business and industry in our region, and use and apply the County’s existing and future resources wisely for the benefit of its citizens.”

Recognized in 2010 as a portion of the Sustainable Community strategic focus area, the Environmental Leadership Policy was translated into an index reportable in the County’s balanced scorecard system. The Environmental Leadership Index has a corporate performance goal to have 85% of County operations conducted in an environmentally sensitive manner by 2020.

The Environmental Leadership Team is charged with review of environmental goals by peer organizations and annually deliberation on projects and short-term goals that will help meet the long-term 2020 goals.

Measuring progress toward Environmental Leadership Policy goals, as finalized in development of the Environmental Leadership Index, was modified in 2010 to better reflect the primary focus areas of Emission Reduction, Resource Conservation, Commitment, and Stewardship Enhancement. Trend analysis of progress toward Policy goals is not possible due to

development of the 2010 Environmental Leadership Index. Historically the County has been making progress toward meeting Policy goals, with an 11% improvement between 2008 and 2009. The Environmental Leadership Index for 2010 reports that only 46% of goals were achieved, equivalent to a red light (see Figure 2) on the performance chart. The drastic decline in achievement of goals between 2009 and 2010 is, only in part, due to the reformulation of the performance metric. Other factors playing part in a low percentage of goals met include: increasingly more stringent annual goals set by the Environmental Leadership Team, challenge economic circumstances, and establishment of new measurements resulting in a “learning curve” experienced as implementation is initiated.




Performance Legend	
	A green light indicates a goal has either been achieved or performance is at least 85% of the short-term target
	A yellow light indicates performance is between 65 and 84% of the short-term target
	A red light indicates performance is below 65% of the short-term target

Figure 2 Environmental Leadership Policy Action Plan Performance Matrix

Programs to implement the Policy Action Plan evolve as accomplishments are realized and the ELT strives for continual improvement. The County is proud of accomplishments in conducting daily activities with regard to the environment, however, it is recognized that there is always room for improvement and challenges to overcome. This report identifies previous accomplishments, current projects and future plans envisioned to realize success of the Environmental Leadership Policy.

Policy Requirements

The Environmental Leadership Policy includes numerous Principals within four focus categories of: Emission Reduction, Resource Conservation, Commitment and Stewardship Enhancement (Figure 3). Each Principal has identified long-term 2020 goals as well as annually assessed short-term goals.

The information presented in this report is a compilation of those activities conducted through the actions and dedication of the Environmental Leadership Team.

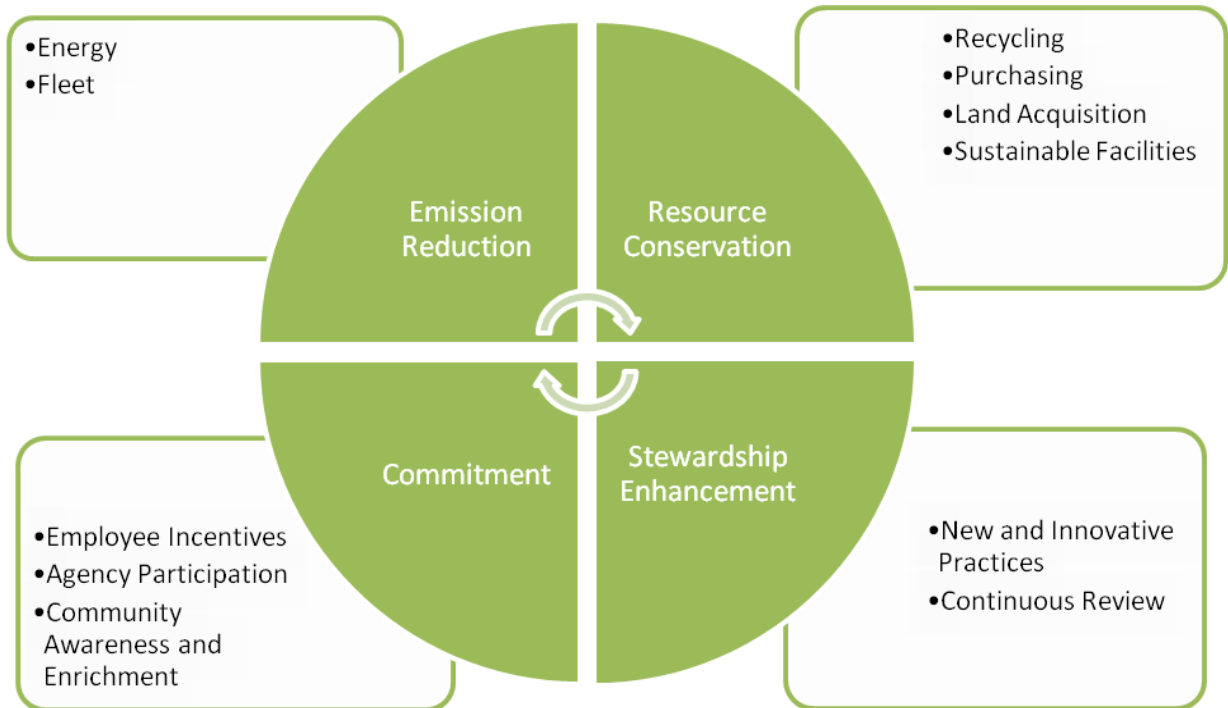


Figure 3 Environmental Leadership Policy Categories and Principals

Environmental Leadership Team

The 2004 Policy instructed the County Manager to appoint an Environmental Leadership Team (ELT) to identify, evaluate, prioritize and act on environmental aspects of County operations that warrant examination, modification or corrective action.

County staff appointed to the Environmental Leadership Team includes:

County General Manager – Bobbie Shields
 Environmental Policy Administrator – Heidi Pruess
 Land Use and Environmental Services Agency Director – Cary Saul
 Director of Solid Waste – Bruce Gledhill
 Director of Air Quality – Don Willard
 Director of Water and Land Resources – W. Dave Canaan
 Director of Real Estate Services – Mark Hahn
 Director of Environmental Health – Bill Hardister
 Branch Manager of Park and Recreation – Michael Kirschman
 Char-Meck Purchasing – Karen Ruppe
 Charlotte Mecklenburg Schools - Brian Kasher
 Public Library of Charlotte and Mecklenburg County – Brian Beavers
 Central Piedmont Community College – Rich Rosenthal

Environmental Leadership Team Sub-Committees

The ELT has three sub-committees with the following membership:

Green Purchasing Team

Char-Meck Procurement
 Park and Recreation
 Solid Waste
 Information Services and Technology
 Social Services
 Sheriff Office
 Public Library of Charlotte and
 Mecklenburg County
 Real Estate Services

Energy Team

Real Estate Services
 Air Quality
 Park and Recreation
 Charlotte Mecklenburg Schools

Water Team

Land Use and Environmental Services
 Real Estate Services
 Park and Recreation
 Charlotte Mecklenburg Utilities

Reporting

The 2004 Policy resolution requires that an annual report is prepared to the Board of County Commissioners regarding actions taken in accordance with the Policy. A brief description of the Principals and their associated short-term and long-term goals are presented in Appendix A. This comprehensive report provides the details, both highlights and challenges, for the fiscal year 2010. A listing of the historical Environmental Leadership Policy milestones accomplished are provided in Appendix B and can be found in more detail in previous Annual Reports available at <http://www.charmeck.org/Departments/LUESA/Environment/ELT+Accomplishments.htm>.


Mecklenburg County funded agencies: Charlotte Mecklenburg Schools, Public Library of Charlotte & Mecklenburg County, and Central Piedmont Community College each report to their respective Boards regarding the Environmental Leadership Policy. Highlights and accomplishments of the FY10 implementation of their plans can be viewed in Appendix C.

Status of Guiding Principals

An Action Plan established specific goals for the Environmental Leadership Policy in 2007 of which the short-term goals are updated annually. This 2010 report identifies the County’s status toward reaching the established short-term annual goals.

Emission Reduction

Table 1. Energy Conservation

Description	Goal	Result
Energy Savings	10% (KWH/ft ² of 2007 baseline)	11%
Promote renewable energy systems	Solar thermal at 4 County facilities	Advertising for bids
Principal 2010 Result		

Emission Reduction 2010 Results

Energy Conservation



Low Emission Fleets



The County was able to attain the Energy Savings goal identified for electricity, reaching a 11% energy savings in 2010 energy savings over 2007 levels.

How did we accomplish Energy Conservation?

Energy savings were calculated through examination of electric bills for 2010 and were compared to 2007. About one half of County facilities were included in this electrical usage analysis for a variety of reasons (e.g., buildings undergoing a major renovation or partially occupied). The County has realized a 11% KWH/square footage electric savings for 2010 over the 2007 baseline. This savings results in approximately \$200,000 saved in the buildings studied, as well as decreased air emissions of 3,719,118 tons of carbon dioxide over the FY07 baseline “business as usual” energy use.

1) Lighting systems

A small number of light fixtures were upgraded in Hal Marshall Services Center

2) HVAC Systems

Capital reserve projects were completed that replaced chillers in Hal Marshall, Southeast Health, and the Historic Courthouse during FY 2010. The savings from these will be recognized in future fiscal years as the Historic Courthouse is not in service due to renovations, and the other two

were completed in late spring.

3) Other facility efficiencies

Sustainably designed and built, energy efficient buildings are playing a key role in helping the County attain stated energy savings goals. Discussed further in Section 2.8 and 2.9 of this document, adoption of a Sustainable Development Policy has promoted an engineering and maintenance culture focused on energy efficiencies. Examples supporting this energy focus beyond those projects discussed in Sections 2.8 and 2.9 include:

- A roofing replacement project has been completed at the Civil Courts building, with a partial replacement at the Historic Courthouse.
- A significant amount of the cost for water is the energy used to treat and distribute it. To save water and energy, the County replaced the faucets, urinals and water closets at CCOB.

4) Computers


Energy is also heavily utilized to operate the computers for County staff. Efficiencies are realized by implementation of the computer monitor energy management program endorsed by the USEPA in approximately 90% of the County's computers (~4,500 computers). During FY10 computer energy efficiencies were equivalent to: 1,616 tons of carbon dioxide emissions avoided, removing 268 cars from the road, or planting 334 acres of trees to sequester the carbon dioxide emissions. The County computer monitor purchasing program was completed in FY09 such that 100% of all Cathode Ray Tube (CRT) monitors were replaced with more energy efficient Liquid Crystal Display (LCD) monitors.

Energy Conservation Goals for 2011 include:

- ❖ Energy Savings of 10% KWH/square footage from 2007 levels,
- ❖ Complete installation of solar thermal systems at 4 county facilities, and
- ❖ Update the County's Energy Plan to include all County owned facilities.

Vehicle Emissions

Table 2. Low Emission Fleet

Description	Goal	Result
Reduce average FY09 NOx emissions (g/mi)	5% (from FY08)	1.4%
Non-road Fleet	Implement Policy	Complete
GHG Inventory	Update with 2009 data	Complete
Principal 2010 Result 		

In 2009, the average emission factor for NOx dropped 1.4% from the 2008 value to 0.89 grams/mile. This is a 50% reduction from the 2004 inventory but failed to meet the 5% per year reduction goal.

The 2009 total emission of 8.7 tons of pollutants which contribute to ground level ozone formation is a new low for the county since this information has been tracked. While the total miles driven and the number of vehicles in the fleet both decreased when compared with the previous year, this is not the only reason emissions have dropped. The average emission factors for all county vehicles, which indicate how much pollutant each vehicle emits, have also declined. The County fleet continues to evolve into a cleaner collection of vehicles. To further expand upon that progress, a goal was more clearly defined this year for all county vehicles to meet Low Emission Vehicle (LEV) standards by 2020. A low emission fleet is defined as all vehicles meeting or exceeding the 2004 California standard of 0.3 g/mi for light duty gasoline (LDG) vehicles and the Federal 2004 standards of 2.73 g/mi for heavy duty diesel vehicles (HDD) and 2.63 g/mi for heavy duty gasoline vehicles (HDG). The 2009 baseline of the County fleet meeting these low emission standards was: 72% LDG, 59% HDG, and 28% HDD.

The Fleet Management program realized a decrease of total NOx and VOC emissions, and simultaneously managed to reduce the actual size of the fleet nominally by 13 vehicles (from 1,102 to 1,089). The county continues to remove older and dirtier vehicles from the fleet and replace them with newer and cleaner equipment. This focus on utilizing the cleaner vehicles whenever possible continues to drive overall fleet emissions down.

During 2010, the County began implementing the non-road equipment purchasing, replacement, and operational policies within the three departments that operate the majority of the County’s 304 pieces non-road equipment inventory (lawn / garden and construction / industrial equipment) including: Solid Waste, Park and Recreation, and Storm Water Services. A Non-Road Equipment Inventory revealed that NOx emissions increased slightly (2%) from the baseline established in 2006. Increase in the number of operation hours on several pieces of Solid Waste equipment resulted in this emission increase. Reductions in emissions by GRADE replacements to Storm Water Operations equipment and removal of equipment in Park and Recreation were not sufficient to overcome the Solid Waste emission increases.

Finally, the Greenhouse Gas (GHG) Emission Inventory for the County was updated with 2009 data. This GHG inventory estimates that 80,222 tons of CO₂e were released during 2009. The 2009 inventory is a significant improvement in both scope and data quality. The enhancements include addition of the county operated landfill, jails and more complete utility usage data. The current inventory includes emissions from Mecklenburg County Government owned and operated buildings, facilities, parks, fleet vehicles, non-road equipment and outdoor lighting. Approximately 72% of all CO₂e emissions originated from the operation of county buildings and facilities. While the overall GHG emissions increased between the 2006 and the 2009 report it should be noted that the scope of the report was expanded to cover additional facilities. A more accurate comparison of the County's effort to reduce GHG emissions is energy use per square foot. Energy efficiency projects have resulted in a 13% reduction in energy use per square foot between 2006 and 2009.


Low-Emission Vehicle Goals for 2011 include:

- ❖ Reducing average NO_x emissions (g/mi) by 5% from FY09 emissions, and
- ❖ On-Road Fleet make-up to attain : 85% LDG, 78% HDG, and 36% HDD.

Resource Conservation

Waste Minimization and Recycling

Table 3. Waste Minimization and Recycling

Description	Goal	Result
Recycling of total waste stream	15.2%	15.9%
Regional Parks to contain recycling dumpsters, trash cans, and bins	24%	28%
Principal 2010 Result		

The County is actively reducing the quantity of potentially recyclable waste being disposed in the landfill. Specifically, the County-wide Paperchase Recycling project recovered and recycled approximately 3,000 tons of waste from the County operations solid waste stream in FY10. While this amount recycled is several hundred tons less than the FY09 result, waste disposed also decreased during FY10 by approximately 1,700 tons, still yielding an overall recycling rate of 15.9% and above this year’s 15.2% goal. Last year we reported that the estimated 16.1% recycling rate achieved may have been an anomaly, higher than anticipated without certain reason for attribution. A small portion of both year’s results are obtained from visual estimates of recyclable quantities in containers and upon comparison with this year’s results and further analysis, it appears that last year’s visual estimates were on the high side. Included in these results are paper, cardboard, cans and bottles, electronic waste and scrap metals collected for recycling.

The pilot program for the collection of recyclable containers from County/CMS facilities begun in FY07 continued into its final year of serving more than 100 facilities. In FY10 the quantity of cans and bottles recycled under this program reduced by about 10% (consistent with overall waste reduction) to approximately 125,000 pounds for the year. FY2010 was a year of transition for this program and the last year in which the recyclable containers were separately counted. Beginning in FY2011, the County will be implementing single stream recycling for residential and the County/CMS program. With the single stream approach the recyclable containers will be combined with the recyclable paper for collection. This should further facilitate container recycling as all County/CMS facilities will now receive an integrated container and fiber (single stream) collection. In addition to significantly increasing the number of facilities served, additional recyclable materials are being added to

*Resource Conservation
2009 Results*

Waste Minimization and Recycling



Green Purchasing



Land Acquisition and Preservation



Sustainable Facilities



the mix, including milk and juice boxes.

The County's Surplus Property Re-Use program managed by Real Estate Services continued to be successful in FY10. This program diverts unwanted furniture and computer equipment from the landfill through reuse and recycling efforts. Quantities handled in FY10 included over 600 pieces of furniture, 780 computers, and 417 monitors resulting in 102 tons of material diverted from landfills. The bulk of the material was recycled, including an estimated 1000 pounds of lead. The County's vendor for this program, eCycleSecure, estimates that enough energy was saved by reusing the recycled material to power 11 typical American homes for a whole year and 1,048,000 pounds of air emissions were eliminated due to avoiding landfill of the waste and allowing for manufacture of products from recycled material. Additionally, this program provides a community service through donations to at-risk schools and non-profit organizations. The equipment that could be reused went in many different directions, but one significant project supported by County surplus was the opening of a new Charter School.

The County's Park and Recreation department initiated expanded recycling availability at 19 Regional Parks (28% of Regional Parks) during FY10. New recycling collection cans were distributed and large recycling dumpsters were placed at five additional Park locations. This effort exceeded the FY10 goal to have 24% of Regional Parks to contain recycling dumpsters, trash cans, and bins.


In addition to the recycling efforts highlighted above, several waste minimization efforts are underway at the Foxhole Landfill operated by the County. The County received more than 4,300 tons of clean concrete waste at the Foxhole Landfill during FY10 which, instead of being disposed, was ground into a stone aggregate replacement for constructing haul roads on the site. This amount is about a third less than the preceding year's 6,200 tons, due to continued declines in residential construction activity which is the source for these materials.. A second effort, recycling gypsum wallboard at the Foxhole Landfill continued through FY10, again yielding about 800 tons of wallboard recycled. Clean wallboard is separately collected and transported from the site by a recycling contractor. The recycled gypsum is used in a number of applications including soil amendments and fertilizers. Recycling of clean wood waste from construction activities expanded significantly at the Foxhole Landfill, removing pallets and dimensional lumber from construction and demolition wastes. This recycled material is primarily mixed with yard waste to produce mulch and compost landscaping products. A total of 1,774 tons of clean wood waste were recycled in this manner for FY10. Finally for FY10, the groundwork was laid for recycling asphalt shingles at the Foxhole Landfill. The necessary front-end regulatory modifications were accomplished, a vendor secured to utilize the shingles in hot-mix asphalt paving materials, and our Solid Waste Fee Ordinance was amended to provide preferential fees to attract the clean roofing materials.

Waste Minimization and Recycling Goals for 2011 include:

- ❖ Realize 17% recycling of total waste stream, and
- ❖ Expanding recycling to all Park and Recreation facilities through the implementation of single stream recycling collection.

Green Purchasing Practices

Table 4. Environmentally Preferable Purchasing

Description	Goal	Result
Environmentally Preferable Purchasing Guide	Update and Partner with City of Charlotte on recommendations	Complete
Procurement Agreements and Contracts containing environmentally preferable language	Develop guide and include in contracts	Complete
Purchase paper products (minimum 20% post-consumer content)	75%	89%
Purchase Office Supplies (10% recycled materials and/or meet the Green Seal standard)	30%	25%
Purchase Remanufactured Inkjet, laser and toner cartridges	75%	36%
Purchase Cleaning products (meeting Green Seal standards)	40%	90%
Purchase Computers and Monitors that are Energy Star® certified	95%	100%
Purchase Paint with low level of VOCs	50%	60%
Principal 2010 Result		

The County met or exceeded each of the 2010 goals above with the exception of the Office Supplies and Remanufactured Cartridge goals. Data below was collected from the primary vendors for the items indicated.

Highlighted accomplishments

The County adopted an updated Procurement Policy that incorporates instruction for use of the Environmentally Preferable Purchasing Guide (EPPG) and inclusion of environmental considerations when determining purchase of goods and services. The EPPG was updated during 2010 to reflect the updated County Procurement Policy guidelines as well as to include provisions for small electrical equipment and guidance on greenwashing.

Challenges

Office supplies are purchased primarily through Office Depot who reports a 0.56% decrease in recycled product purchases over the past year. While recycled product purchases remain significantly more prevalent than during the FY08 baseline year, economic challenges during FY10 year have leveled out additional efforts to bring these products into the workplace. The County continues to work with vendors to increase our environmentally preferable purchasing.

Many County facilities are currently reporting use of Green Seal products and we were able to exceed the goal for direct purchases of Green Cleaning Products with 90% compliance. Green Seal products are those that meet a neutral third party’s stringent environmental standards. Six facilities cleaned by the Keith Corporation include a total of 947,193 ft2. The Keith Corporation utilizes 90% Green Seal Certified cleaning chemicals.


Purchases of Green Seal Paper Cleaning products during FY10 totaled 28 tons. These purchases resulted in a Green Seal estimate of 1,648 pounds of air pollutants avoided (equivalent to 155 days of driving a car) as well as an estimated 119,265 kilowatt-hours of energy (equivalent to 166 months of power for an average US home), 193,380 gallons of water saved (equivalent to 3,094,084 glasses of 8oz water).

Environmentally Preferable Purchasing Goals for 2011 include:

- ❖ Providing all departments training on the new Procurement Policy with regard to the EPPG,
- ❖ 85% purchase of recycled content paper,
- ❖ 35% purchase of recycled content office supplies,
- ❖ 75% purchase of remanufactured ink/toner cartridges,
- ❖ 50% purchase of green cleaning chemicals, and
- ❖ 60% purchase of low VOC paint.

Acquire, Maintain, and Preserve Land to Protect the Natural Environment

Table 5. Land Preservation through Acquisition

Description	Goal	Result
Community / Regional Parks acquired	115 acres	0.5 acres
Nature Preserves acquired	352 acres	226 acres
Greenways acquired	63 acres	90 acres
<hr/>		
Principal 2010 Result		

Acquisition of land to protect the natural environment is a priority for the County. FY10 realized 316.5 acres acquired for parkland, greenways, watershed protection and open space.

Approximately 90 acres will be greenway and 226.5 acres parks and open space. The County, through these acquisitions, failed to meet the 530 acre goal due to a restricted budget.

In recent years, County Storm Water Services has increased its environmental partnership with the northern Towns and are sharing their respective storm water funds for the improvement of water quality in the County's largest drinking water supply watersheds – McDowell Creek. The County, acting on behalf of the Town of Cornelius, has secured State funding for the treatment of runoff from the Cornelius Animal shelter (0.8 acres of impervious area). This was done as part of a multi-faceted approach to improve water quality – consisting of rain gardens, engineered wetlands, level spreaders and stream restoration.

The above project is an expansion of the traditional capital improvement projects performed by County Storm Water, which for FY10, yielded the treatment of 10.5 acres due to the treatment of runoff from North Mecklenburg Recycling Facility, CPCC at Little Sugar Creek at 7th Street and a portion of the Cherry neighborhood that drains to Little Sugar Creek at Kings.


Protection of the natural environment entails restoration of County property as the funds and ability present themselves. The Water and Land Resources program has historically restored 50,000 linear feet of stream. The Little Sugar Creek, Kings Drive and Midtown redevelopment project is still in construction and is designed to restore 4,200 feet of stream and treat runoff from 31.5 acres. During FY10, the stretch of Little Sugar Creek between Charlottetown and McDowell was finalized, resulting in approximately 3890 feet of the project complete.

Land Acquisition and Preservation Goals for 2011 include:

- ❖ Returning 15 acres of floodplain to its natural condition.

Require Environmentally Sensitive Design Options in All New Facilities and Retrofits

Table 6. Environmentally Sensitive Facilities

Description	Goal	Result
Water Conservation	Develop Program	Incomplete
Old Valerie C. Woodard Center (Phase I & II)	Sustainable Construction Complete	Silver Certification Received
Revolution Regional Sports & Learning Academy	LEED Certification	Certification Pending
Jail North Youthful Offender Pod	LEED Certification	Certification Application Pending
Criminal Courts Renovations	Sustainable Construction Complete	Gold Certification Received
District Attorney Expansion	Sustainable Construction Underway	Phase 1 nearly complete
<hr/>		
Principal 2010 Result		

A Sustainable Facilities and Development Policy was adopted during 2010. This policy pertains to all County initiated construction activities, County funded construction activities, and land disturbing activities on County property which shall be conducted utilizing environmental best practices. The policy addresses operation of County facilities as well stating that operations shall be conducted in an environmentally sustainable fashion. Environmental best practices shall meet the intent of the policy goals and standards identified in the policy as recommended by the Mecklenburg County Environmental Leadership Team. These Sustainable Development criteria are supplemental to adherence with State and local regulations. County Buildings that are defined as large projects shall strive to achieve a minimum of Leadership in Energy and Environmental Design (LEED) Silver Certification while small projects will adhere to the Mecklenburg County Small Project checklist that ensures a sustainable approach through incorporation of LEED Principals, while remaining flexible to allow for project-specific approach without the formalities of the certification required of large projects.

Two County facilities received a LEED certification during 2009: Valerie C. Woodard Center (Phase I & II) received LEED Silver certification and the Criminal Courts Renovations received LEED Gold certification. These two facilities add to the growing list of County facilities that have been built in a sustainable manner. The County also initiated two projects in 2009 that are

awaiting LEED certification, the Revolution Regional Sports & Learning Academy and the Jail North Youthful Offender Pod.

Environmentally Sensitive Facilities Goal for 2011 is:

- ❖ Implement the Sustainable Facilities and Development Policy including:
 - Minimizing water usage in the building 20% below State Code and irrigation use 50% below State Code requirements,
 - Reduce up to 90% of the sediment load in a minimum of 75% of the County funded projects starting design after 2010,
 - LEED Silver certification for all large projects,
 - LEED checklist for all small projects and renovations.

Commitment

Comply with Applicable Regulations

Table 7. Regulation Compliance

Description	Goal	Result
Compliance with Regulations	No Issues	No Issues
Principal 2010 Result		

The County did not identify any deficiencies in compliance with all Federal, State, and local regulations during FY10.

Employee Opportunities and Incentives to Practice Environmentally Sound Behaviors

Table 8. Employee Incentives

Description	Goal	Result
Best Workplaces for Commuters (staff participation)	8%	7%
Green Guardian and WorkGreen Recognition	Program Continued	Continued with 11 Green Guardian's selected and 7 WorkGreen winners
Volunteer / Education (staff participation hours)	2,000	192
Principal 2010 Result		

Best Workplaces for Commuters Participation

The County was successful with implementation of the United States Environmental Protection Agency (EPA) Best Workplaces for Commuters program again in 2010. The Best Workplaces for Commuters program is designed to reduce emissions from motor vehicles through promotion of alternative modes of transportation to and from the workplace. The County program contributed at least half of the cost of a transit pass for employees and provided an emergency ride home for participating employees.

*Commitment
2009 Results*

**Regulation
Compliance**



**Employee
Incentives**



**Business Unit
Integration**



Participation of County employees in the subsidized transit monthly bus pass program (a.k.a. Best Workplaces for Commuters) experienced the first decrease in participation since 2005. Average monthly participation in 2010 was measured at 337 employees (equating to 7% of County staff, a decrease from the 8% participating in 2009). It is calculated that 337 vehicles off the road equates to a minimum of 3,130 pounds of NOx emissions avoided during 2010 as a result of this program. Best Workplaces for Commuters is viewed as a proactive environmental program worthy of continued budgetary support.

Communications

A communications plan was developed in 2009 to convey the message of the Environmental Leadership Policy Action Plan to all County staff. The communications plan included initiating the WorkGreen Mecklenburg campaign. The WorkGreen Mecklenburg campaign continues to include:

- “10 Tips” employees can implement to WorkGreen,
- Peer to peer nomination of employees that implement WorkGreen habits for a monthly Green Guardian award,
- Recognition of Green Guardian employees via video of “Green Guardian” mascot presenting goodie bag of environmentally friendly prizes.

The Green Guardian recognition program enjoyed a third year of outstanding employee nominees and winners. Through this program, employees nominate their peers in an effort to recognize environmental stewardship leaders and acknowledge the individual efforts each staff member can make within their daily jobs and lives to help implement the County’s Environmental Leadership Policy. Ten (10) individuals and one (1) team were selected as Green Guardians and highlighted in the County’s monthly Outlook magazine during FY10. These Green Guardians represented staff from eight (8) County departments indicating that this program has been adopted countywide. An additional nine (9) WorkGreen winners were recognized as the WorkGreen communications plan was launched. The WorkGreen and Green Guardian programs have been merged and Green Guardians will continued to be recognized throughout the next year.

Volunteer Hours

Mecklenburg County employees participated in “Creek ReLeaf” tree planting for the second consecutive year during 2010, resulting in 500 trees planted near McDowell Creek. Approximately 24 employees from six County departments planted the trees near McDowell Creek (totaling 100 volunteer hours). The County employee tree planting was part of a week-long effort to plant 2500 trees on an 11-acre site along the creek. McDowell Creek flows into Mountain Island Lake, the site of the main drinking water intake for Charlotte-Mecklenburg Utilities. In addition to tree planting, 23 County employees participated in Big Sweep, an annual event that removes litter from lakes, rivers and streams throughout Mecklenburg County. Together with many community volunteers, County employees helped collect more than 4 tons of trash, mostly bottles, cans, food wrappers and other litter.

County HR Policy includes a program for “Commitment to Quality Education and Volunteer Activities” that provides a match of time away from work (up to 24 hours in a calendar year) for

participation in approved activities. This program remains available for employees, however, this program did not result in an improvement of employee participation in environmental volunteer efforts. A new approach to promoting and incentivizing employee volunteerism toward the Environmental Leadership Policy goals is being developed for FY2011. The County will continue to promote programs that encourage employees to becoming active in County environmental activities.

Employee Incentive Goals for 2011 include:

- ❖ 250 hours of volunteer / education for environmental programs, and
- ❖ Maintain Green Guardian and WorkGreen Mecklenburg programs.

Integration of Environmental Considerations into all County Business Units through LUESA Staff Assistance

Table 9. Business Unit Integration

Description	Goal	Result
Department Environmental Action Plans	Each department to achieve a “green light”	3 of 13 reporting attained “green light”
Principal 2010 Result ●		

Mecklenburg County has 15 departments that have banded together to develop specific actions their departments can undertake to help the County achieve the goals stated herein. During 2010, a Department Environmental Action Plan Implementation Guide was developed to aide the understanding and activities of departments in establishing environmental sustainable business practices. Of the 13 departments reporting progress in 2010, three met 85% or more of their individual goals. Some department highlights include:

- Three departments (CSS, BOE, and MED) meeting 100% Low Emission Vehicle goals,
- DSS Green Team was established,
- LUE processed at least 15,000 Code Enforcement trade permits electronically, and
- AMH repurposed approximately 27 pieces of furniture & equipment with an estimated avoided cost of \$10,000 for purchasing new furniture as well as avoiding landfill space.

The entire suite of County departments will be establishing and reporting on environmental goals during FY2011 for a total of 19 departments participating.

County Partners

Charlotte-Mecklenburg Schools, Central Piedmont Community College, and the Public Library of Charlotte and Mecklenburg County have continued their partnership with the County in developing Environmental Action Plans with the same focus categories of Emission Reduction, Resource Conservation, Commitment and Stewardship Enhancement. Each of our partners has

continued to progress their Environmental Leadership efforts as highlighted below and as fully described in Appendix C.

Charlotte-Mecklenburg Schools

The Strategic Plan 2014, includes Environmental Stewardship, specifically establishing objectives to reduce, at minimum, utility consumption by 20%, solid waste by 5% and pollutants by 20% by July 2014. The environmental stewardship focus area draft plan was circulated and reviewed at a series of public forums conducted throughout the county.

- 1,466 tons (12%) of 10,458 tons solid waste recycled primarily at the school house level
- Reduction of 2.15 Million Miles travelled by yellow bus fleet. Carbon dioxide emissions as a result of the reduction in fleet miles traveled during the past school year alone equates to a 7,954,999.9 pounds (3608.327 metric tons) carbon equivalent reduction.
- Reductions in kilowatt hours of electricity consumed by the district from 226,985,229 in 2008 to 210,628,272 in 2009 represent a total savings of 16,356,957 kilowatt hours for the district in 2009.
- Therms of natural gas consumed by the district were reduced from 3,711,327 in 2008 to 3,596,381 in 2009 or a savings of 114,949 therms for 2009.
- CMS Custodial Services instituted a fluorescent lamp recycling operation which has recycled in excess of 11,000 fluorescent lamps in the first year of the program.

Public Library of Charlotte and Mecklenburg County

- Energy savings of 5% in kW/Sq. Ft.
- Delivery schedule revised to commence during early morning hours, avoiding traffic and being able to more direct routes between location
- 589 lbs of batteries recycled (\approx 12% increase)
- 4000 fluorescent bulbs diverted from regular waste stream and recycled
- 75% of computers/monitors purchased were Energy Star rated
- 75% of plants acquired and planted are drought-resistant with landscaping topography designed to capture and retain sufficient natural moisture
- Hickory Grove Branch Library – (new) Location contains designated space for a Certified Wildlife Habitat
- 147 volunteer hours by staff participation in green education programming or volunteer activities (exceeded goal by 27%)
- Staff facilitated 30 hours of environmental-related programming, during the past year
- Worked with students at Phillip O’Berry High School, on multiple occasions to educate them on the importance of environmental prowess

Central Piedmont Community College (CPCC)

- Energy efficiency efforts include initiation of performance contracting and facility shut-down in the summer with establishment of 4 day, rather than 5 day, operations.
- CPCC has assessed their fleet composition and established a suite of electric and hybrid vehicles as well as a policy for deferring the use of 2-cycle motor equipment on Air Quality Code Red action days.
- Each CPCC campus has a National Wildlife Federation designated wildlife area.
- The CPCC Center for Sustainability is a partner with UNCC and CMUD on the Greater Charlotte Area Biofuel Facility. The goal is to develop biofuel from brown grease.


Business Unit Integration Goals for 2011 include:

- ❖ Integrating the Environmental Leadership Index into the Community and Corporate Scorecard,
- ❖ 85% of County department environmental action plans to attain a “green light” achievement, and
- ❖ Continue coordinating partner agency plans to provide a system of BMPs and joint program opportunities.

Stewardship Enhancement

Actively Investigate New and Innovative Products and Practices

Table 10. New and Innovative Practices

Description	Goal	Result
Performance contract	Implement County’s first contract	Proceeding with Investment Grade Energy Audit
Business investment program	Incentivize relocation and expansion of “green” companies	Incomplete
Green Permit Rebate	Continue and Expand GPR to include more programs for residences	GPR was expanded to include residences through 2010
Principal 2010 Result		

Stewardship Enhancement 2009 Results

New and Innovative Practices



Continuous Improvement



Performance Contract

The performance contract for the jails is progressing toward an investment grade energy audit. We also anticipate issuing RFP’s for performance contracts for additional government facilities, parks and recreation facilities, and libraries.

Business Investment Program

The Environmental Leadership Team reviewed and suggested modification to the Business Investment Program (BIP), an economic development incentive offered by the County and City of Charlotte. The suggested modifications addressed environmental best practices to be considered and requested from those entities applying for BIP funds. Discussion regarding modification of the BIP to include environmental criteria was held between the City of Charlotte and the County Economic Development program. Lack of available funding eliminated the possibility of developing financial incentives for “green” companies. Concentration during FY10 was in use of Federal American Recovery and Reinvestment Authorization (ARRA) funds which are focused on implementing sustainable practices for existing commercial businesses.

Green Permit Rebate

The Green Permit Rebate Program was established in 2009. The Mecklenburg County Building Development Commission acknowledged that responsible development should be rewarded. The Green Permit Rebate program was developed to proactively encourage Smart Growth development through permit fee incentives using regulations and the existing permitting and inspection (P&I)


process to verify compliance. Those commercial developments that demonstrated a minimized impact on our natural resources, through attaining a certification through the US Green Building Councils Leadership in Energy and Environmental Design (LEED) or Green Globes, Inc. could realize a rebate of up to 25% of the permit fee for those projects. During 2010, the Green Permit Rebate program was expanded to include rebates for residential developments attaining a certification through Earthcraft House, North Carolina Healthy Built Homes, or the National Association of Home Builders’ National Green Building Program.

Innovative practices to improve sustainable practices are also being evaluated in 2011 including:

- ❖ Implementation of Single-Stream Recycling, and
- ❖ Development of a program for environmental data collection and information sharing between the County and educational and/or other local government entities (specifically with regard to water quality or emission reduction).

Develop Processes for Continuous Review of County Activities to Realize Continual Improvement

Table 11. Continuous Improvement

Description	Goal	Result
Annual Report to BOCC	Complete	Complete
Establish system of BMPs	Coordinate Partner Plans	Complete and several BMPs established
Water Team	Develop	Complete
<hr/>		
Principal 2010 Result		

System of BMPs

The County’s partner agencies implementing this Environmental Leadership Policy include: Charlotte Mecklenburg Schools (CMS), Central Piedmont Community College (CPCC) and Public Library of Charlotte and Mecklenburg County (PLCMC). Working together, these agencies have adopted the four categories of: Emission Reduction, Resource Conservation, Commitment, and Stewardship Enhancement (reference Figure 2 at the beginning of this document). Additionally, in order to better marry the functions of the partner agencies with those of the County, a new measure of “Community Awareness and Enrichment” was developed in 2010 to capture community education. The Community Awareness and Enrichment measure was established as part of the “Commitment“ focus. Together the County and partner agencies collaborated on calculations for the measurements of fleet emissions, waste stream recycling, and energy avoidance, establishing best management practices for measuring and reporting. This

effort will continue through 2011 as both the County and CMS work toward establishing Environmental Management Systems in accordance with NC Environmental Stewardship Initiative guidelines.

Water Team

A Water Team was established in 2010. This team consists of members from Real Estate Services, Park and Recreation, Groundwater Services, and Charlotte Mecklenburg Utilities. This team will be developing a Water Conservation Plan for the County during the 2011 year.

Continuous Improvement Goals for 2011 include:

- ❖ Participation and reporting to NC Environmental Stewardship Initiative as a pilot program member in good standing.

Environmental Leadership Policy Trends and the Future

Measuring progress toward Environmental Leadership Policy goals, as finalized in development of the Environmental Leadership Index, was modified in 2010 to better reflect the primary focus areas of Emission Reduction, Resource Conservation, Commitment, and Stewardship Enhancement. Trend analysis of progress toward Policy goals is not possible due to development of the 2010 Environmental Leadership Index. Historically the County has been making progress toward meeting Policy goals, with an 11% improvement between 2008 and 2009. The Environmental Leadership Index for 2010 reports that only 46% of goals were achieved, equivalent to an overall red light on the performance chart (see Figure 2 and Table 12). The drastic decline in achievement of goals between 2009 and 2010 is, only in part, due to the reformulation of the performance metric. Other factors playing part in a low percentage of goals met include: increasingly more stringent annual goals set by the Environmental Leadership Team, challenge economic circumstances, and establishment of new measurements resulting in a “learning curve” experienced as implementation is initiated.

Table 12. Environmental Leadership Policy Trends

Principal	FY 2008 Results	FY 2009 Results	FY2010 Results
Emission Reduction			
Energy Savings	●	●	●
Fleet Emission Reduction	●	●	●
Resource Conservation			
Waste Recycling and Minimization	●	●	●
Land Acquisition and Preservation	●	●	●
Environmentally Preferable Purchasing	●	●	●
Environmentally Sensitive Facilities	●	●	●
Commitment			
Employee Incentives	●	●	●
County Business Unit Environmental Integration	●	●	●
Stewardship Enhancement			
New and Innovative Practices	●	●	●
Continuous Review Programs	●	●	●

The Environmental Leadership Team strives to help the County conduct its daily work in a progressively environment friendly manner. The ELT will continue to meet on a quarterly basis to discuss Policy successes, challenges, and new horizons, any of which may result in future recommendations to the County Manager's Office or Board of County Commissioners but, at a minimum, will be reported on an annual basis. Additional information on the projects identified in this report is available upon request.

APPENDIX A : Environmental Leadership Policy Goals

Mecklenburg County Environmental Policy Action Plan

Mission = Mecklenburg County Government will operate in a manner that conserves and protects our air, water and land resources; become a model of environmental stewardship for local governments, businesses, and industry in our region, and; use and apply the County’s existing and future resources wisely for the benefit of its citizens.

Description	2010 Goal	2011 Goal	Long-Term Goal (2020)
Comply will all applicable local, state and federal environmental regulations in all County facilities.	100 %	100%	100% Compliance
Emission Reduction			
Practice energy conservation in all County facilities.	Energy Savings Goal – 10% savings (units per sf) compared to FY 07. Promote renewable energy systems through installation (funding through grants) of solar thermal systems at 4 county facilities.	Update Energy Plan to include all County owned facilities Energy Savings Goal – additional 1% to equal 11% of FY07 baseline	Energy Savings Goal – 50% savings
Reduce emissions contributing to ozone creation and air quality issues	Reduce average FY09 NOx emissions (g/mi) by 5% from FY 08 Implement Non-road Fleet purchasing, replacement and operational policy (Solid Waste, StormWater, P&R) Conduct GHG inventory of County operations and facilities for CY 2009, reportable in 2010	Reduce average FY 10 NOx emissions (g/mi) by 5% from FY 09 On Road Fleet make-up : LDG 85%; HDG 78%; HDD 36%	100% low emission on road fleet (LEV Std 0.30) 100% low emission non-road fleet (LEV Std 2.63 Gas and LEV Std 2.73 Diesel) Reduce GHG emissions by 28% from 2006 baseline data.
Resource Conservation			
Practice waste minimization and recycling in all County facilities.	15.2 % recycling of total waste stream Two additional Regional Parks to	17 % recycling of total waste stream	20% recycling of total waste stream from all County facilities (including

Description	2010 Goal	2011 Goal	Long-Term Goal (2020)
	contain recycling dumpsters, trash cans, and bins. (24% of Parks)		County funded agencies)
Include environmental considerations in purchasing decisions for goods and services.	Partner with the City of Charlotte on ROI analysis tools or other recommendations from UNCC & Wake Forest studies	Implement new County procurement policy with regard to EPPG; providing all department training	100% compliance with revised policy (effective implementation)
	Purchase printer/copy paper products that contain 100% recycled material with a minimum 30% post-consumer content; 75% compliance	85%	95% compliance
	Purchase Green office supplies: Paper (other than printer/copier), metal or plastic products that contain a minimum 10% recycled materials and/or meet the Green Seal standard; 30% compliance	35%	70% compliance
	Purchase Remanufactured Inkjet, laser and toner cartridges ; 75% compliance	75%	90% compliance
	Purchase Cleaning products that meet the Green Seal standards; 40% compliance	50%	70% compliance
	Purchase Paint with low level of VOCs; 50% compliance	60%	95% compliance
Acquire, maintain and preserve land to protect the natural environment	115 acres for Community / Regional Parks acquired 352 acres of Nature Preserves acquired 63 acres of Greenways acquired	Return 15 acres of floodplain to its natural condition	5,306 acres for Community / Regional Parks, Nature Preserves, Greenways and watershed protection acquired

Description	2010 Goal	2011 Goal	Long-Term Goal (2020)
<p>Require environmentally sensitive design options in all new facilities and retrofits</p>	<p>Develop Water Conservation Program</p> <p>Using the County's Sustainability Development policy process, reduce up to 90% of the sediment load from over 75% of County-funded projects.</p> <p>District Attorney Expansion Sustainable Construction - complete</p> <p>Revolution Regional Sports & Learning Academy – LEED certification achieved</p> <p>Jail North Expansion – LEED certification achieved</p>	<p>Implement Sustainable Facilities and Development Policy including:</p> <ul style="list-style-type: none"> • Minimize water usage in the building 20% below State Code and irrigation use 50% below State Code requirements • Reduce up to 90% of the sediment load in a minimum of 75% of the County funded projects starting design after 2010 • LEED Silver Certification for all County facilities over \$2million • LEED checklist for small projects and renovations 	<p>All new or renovated facilities designed to a LEED Gold standard.</p> <p>Continued Re-use of County buildings where feasible.</p>
Commitment			
<p>Provide employees with opportunities and incentives to practice environmentally sound behaviors.</p>	<p>8% staff participation in Best Workplaces for Commuters</p> <p>2,000 hours of volunteer / education for environmental programs</p> <p>Maintain Green Guardian and WorkGreen Mecklenburg programs.</p>	<p>250 hours of volunteerism with environmental programs</p> <p>Maintain WorkGreen Mecklenburg program with Green Guardian recognition</p>	<p>20% staff participation in Best Workplaces for Commuters</p> <p>10,000 500 hours of volunteer / education time in environmental programs</p> <p>Implement Green Guardian employee action team</p>
<p>Direct all County business units to integrate environmental considerations into their activities, and direct LUESA staff to assist business units with</p>	<p>County departmental environmental action plans to attain “Green Light” achievement.</p>	<p>Integration of the Environmental Leadership Index into Community and Corporate Scorecard</p> <p>85% of County departmental environmental</p>	<p>100% participation (including all County funded agencies)</p>

Description	2010 Goal	2011 Goal	Long-Term Goal (2020)
identifying and implementing environmentally sound practices.		action plans to attain “Green Light” achievement. Coordinate local partner (CMS, CPCC, and PLCMC) action plans with County measures and targets to provide a system of BMPs and joint program opportunities.	
Community Awareness and Enrichment	NA	Establish partnerships regarding measuring and reporting environmental policy efforts and finalize implementation plan	Increased community awareness of environmental issues by 10% (2010 baseline = 74% community awareness)
Stewardship Enhancement			
Actively explore the feasibility of implementing new and innovative products and/or practices that provide environmental benefits, and inform elected officials of new opportunities.	Pursue the implementation of the county’s first performance contract. Revise the Business Investment Program to effectively incentivize the relocation and expansion of “green” companies, thus diversifying the county’s employment base. Continue the Green Permit Rebate Program for LEED certified facilities and residences.	Implement Single-Stream recycling Develop program for environmental data collection and information sharing between the County and educational and/or other local government entities (with regard to water quality or emission reduction)	3 new innovative products/practices implemented each year
Develop a program for continuous review of County activities to insure we seek practical ways to reduce the adverse environmental impacts of our activities, and carefully evaluate new opportunities to achieve sound environmental practices in government operations.	Annual reporting to BOCC regarding status of this Action Plan. Coordinate local partner (CMS, CPCC, and PLCMC) action plans with County measures and targets to provide a system of BMPs and joint program opportunities. Develop Water Team	Participation and reporting to NC Environmental Stewardship Initiative as a pilot program member in good standing	Evaluate and implement certification programs with continuous review requirements for application within County programs

APPENDIX B : Historical Achievements

The Environmental Leadership Team worked diligently and successfully at creation of specific goals for each Principal in the Environmental Leadership Policy during 2007. County departments began to work together in 2008 through the Green Purchasing and Energy Team subcommittees of the Environmental Leadership Team. A Water Team was added to as a subcommittee to the Environmental Leadership Team during 2009

2007

- Foxhole Landfill achieved ISO 14001 certification.
- The County Energy Plan adopted.
- Fleet Emission Reduction Tools developed including:
 - NC Green Vehicle Guide, ranking those vehicles available for purchase that are the cleanest (lowest emission) and most fuel-efficient.
 - Fleet Management Plan that is estimated to prevent 87.84 tons of pollution over the projected 8-year life cycle of new vehicles, equivalent to avoiding over 8 million miles of travel.
 - Fleet Utilization Analysis developed to maintain an optimally sized fleet via industry standards for replacement cycles to eliminate or reassign underutilized vehicles.
- Environmentally Preferable Purchasing Guide developed including items ranging from recycled paper products, to cleaning supplies, to non-invasive plant species for landscaping existing and new facilities.
- Pilot can and bottle recycling program initiated for select County facilities.
- Leadership in Energy and Environmental Design (LEED) policy for new or renovated properties adopted.
- Development of Green Guardian employee recognition program.

2008

- Green House Gas Inventory completed for County operations.
- Pilot can and bottle recycling program was expanded throughout County facilities and at selected CMS facilities, building on the 2007 effort.
- The County became an Energy Star Partner with the US Environmental Protection Agency.
- The Environmental Leadership Team membership has also expanded to include Charlotte Mecklenburg Libraries (CML), Charlotte Mecklenburg Schools (CMS), and Central Piedmont Community College (CPCC) with each of these entities developing plans and goals coinciding with the County's action plan.
- Low Impact Development (LID) techniques, specifically rain garden installation, instituted as a supplement to the sustainable building process.

2009

- Adoption of a County corporate focus area called “Sustainable Community” with measures inclusive of a new Environmental Leadership Index performance measurement.
- Energy efficiency measures taken have resulted in electrical savings for FY09 of 2.8 watts/square foot, or approximately 13% better than the FY07 baseline results for the buildings measured.
- Reduced ozone-forming emissions from the County vehicle fleet by 1.16 tons (8.7% lower than 2007 emissions).
- Recycling program diverted 3,300 tons of paper waste recycled equivalent to 16.1% of the total waste.
- Land Preservation was accomplished through the acquisition of 323.24 acres for parks and open space, greenways.
- Adoption of a Sustainable Development and Facilities Policy, while achieving LEED Gold certification for the Medical Examiner facility.
- Employee incentive programs have been expanded from the very successful Best Workplaces for Commuters (encouraging County employees to utilize the transit system) realizing an increase of participants to 388 (equivalent to 8% of County employees) in FY09, up from 6.4 % of employees in FY08.
- Charlotte Mecklenburg Schools (CMS) adopted an Environmental Stewardship Policy requiring the development of a district-wide environmental management system. CMS was recognized by the NC Department of the Environment as a Partner in the Environmental Stewardship Initiative. CMS has identified 25 campuses that meet the Energy Star certification rating and realized a 6.77% reduction in electrical use during FY09.
- Public Library of Charlotte & Mecklenburg County reported on their first year implementation of an environmental action plan. Accomplishments included: 4% reduction in energy consumption, replacement of two delivery vehicles to lower emission vehicles, 30% of landscaping installed as drought-resistant at a library, staff volunteer hours in green programs and activities.
- Green Cleaning Contract was awarded for 342,500 square feet of County facilities.
- Green house gas (GHG) action plan was completed, highlighting the potential 28% GHG emission reduction possible through existing Environmental Leadership Policy actions.

APPENDIX C : Mecklenburg County Funded Agency FY09 Environmental Reports
(including: Charlotte Mecklenburg Schools, Public Library of Charlotte & Mecklenburg County, and Central Piedmont Community College)

Charlotte Mecklenburg Schools Report ([link](#))

Public Library of Charlotte & Mecklenburg County ([link](#))

Central Piedmont Community College ([link](#))