

MECKLENBURG
COUNTY

ENVIRONMENTAL LEADERSHIP
POLICY ACTION PLAN

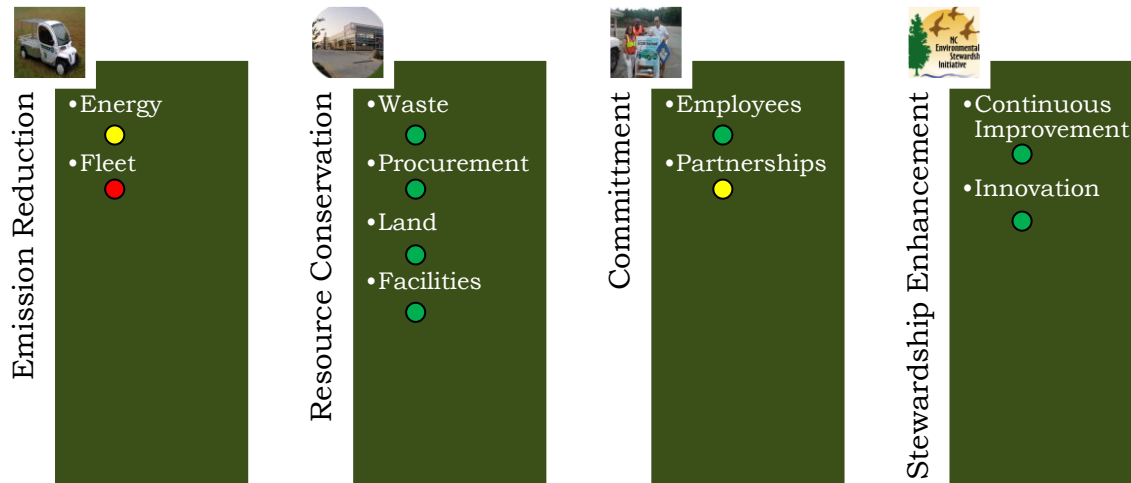
Annual Report 2011 | Mecklenburg County, NC



The Mecklenburg County Sustainable Community strategic focus area includes a component for leadership in protecting our environment. 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 in 2008 and continues today. Annual performance goals become more and more stringent as we stretch to meet our 2020 long-term goals. The Environmental Leadership Index represented in the Mecklenburg County Strategic Report captures the information presented in this report. The Environmental Leadership Index emphasizes Emission Reduction and Resource Management as higher priorities over the Commitment and Stewardship Enhancement goals and therefore may vary slightly from the percent accomplishment described in this report. County departments have adopted action plans and as a result, the 2011 ELI indicates 65% of goals were met. The 2011 result is a marked increase from the 46% of goals met in 2010, however, this result is still equivalent to a yellow light.



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

Mecklenburg County Environmental Footprint

2011 Data

- 112 buildings
- 3.5 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
- 26.9 million kilowatt hours of electricity used

- 16,002 tons of waste generated
- 3,018 tons of waste recycled
- 64,430 reams office paper used

- 9.2 million miles traveled in County fleet
- 1047 fleet vehicles
- 626,146 gallons of fuel utilized by fleet vehicles

- 20 County Departments with action plans
- 3 County Partners with action plans (data not included above)



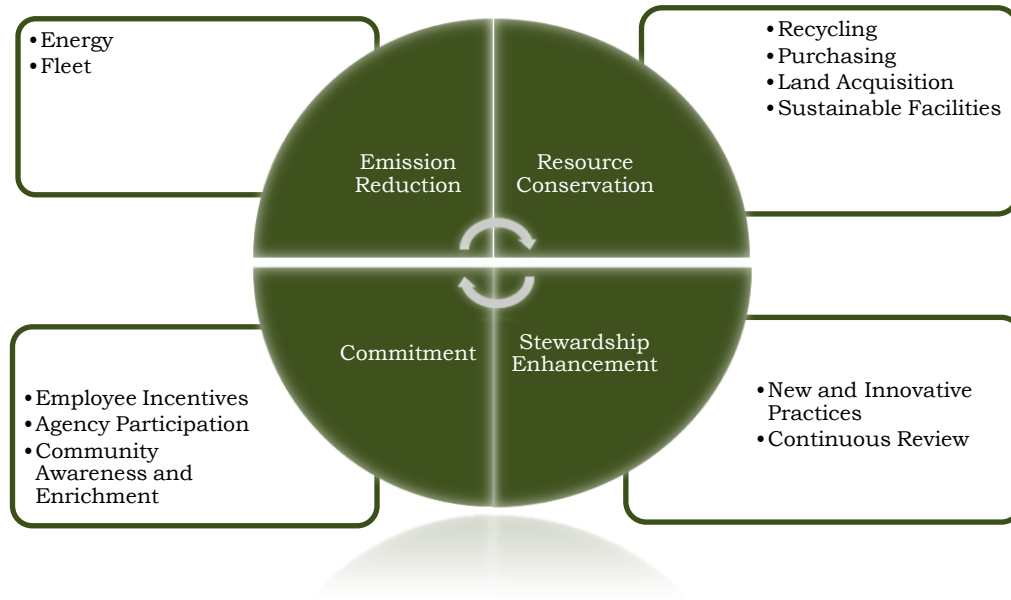
2011 Environmental \$ and ¢

<i>Mecklenburg County realized environmental and economic benefits from implementing our Environmental Leadership Policy</i>	
<p>Recycling</p> <ul style="list-style-type: none"> • 3,395 tons diverted from the landfill • \$105,867 avoided in landfill tipping fees 	<p>Energy</p> <ul style="list-style-type: none"> • 9% kWh / sqft saved in facilities (from 2007 baseline) • \$146,950 avoided utility costs
<p>Paper Use</p> <ul style="list-style-type: none"> • 7.5% less office paper used (from 2009 baseline) • \$26,700 estimated cost savings 	

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.








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 and Partner 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
 Director of Finance – Dena Diorio
 Char-Meck Purchasing – Karen Ruppe
 Charlotte Mecklenburg Schools - Brian Kasher
 Public Library of Charlotte and Mecklenburg County – Kim Arlia
 Central Piedmont Community College – Rich Rosenthal

Focus Area	2020 Goals	2011 Progress Toward Goals											
Emission Reduction	↓ 50% Energy Use (from 2007 baseline)	↓ 9% Energy Use (from 2007 baseline) ●	2011 goal was to reach 11% savings. Savings were realized from HVAC system replacements, roof replacements, and installation of solar thermal systems. Carlton Watkins Center achieved Energy Star recognition. Approximately 1/3 of County facilities are included in this analysis.										
	100% Low Emission Vehicle Fleet	<table border="1"> <thead> <tr> <th>Vehicle Class</th> <th>% Compliant</th> </tr> </thead> <tbody> <tr> <td>Light Duty Gas Vehicles</td> <td>82%</td> </tr> <tr> <td>Heavy Duty Gas Vehicles</td> <td>78%</td> </tr> <tr> <td>Heavy Duty Diesel Vehicles</td> <td>64%</td> </tr> </tbody> </table> ●	Vehicle Class	% Compliant	Light Duty Gas Vehicles	82%	Heavy Duty Gas Vehicles	78%	Heavy Duty Diesel Vehicles	64%	2011 goal was to reach 85% LDG, 78% HDG, and 36% HDD LEV standards for the County Fleet. Fleet downsizing realized attainment of 2/3 rd s of these goals. 5% NOx emission factor from the fleet was an additional 2011 goal. This goal was not attained due to limited fleet replacement.		
	Vehicle Class	% Compliant											
Light Duty Gas Vehicles	82%												
Heavy Duty Gas Vehicles	78%												
Heavy Duty Diesel Vehicles	64%												
↓ 28% GHG Emissions (from 2006 baseline)	Continue emission reduction activities	GHG Inventory and Action Plan is updated biennially											
Resource Conservation	↑ 20% of total waste stream recycled	↑ 18.2% of total waste stream recycled ●	County transitioned to single-stream recycling and added public recycling collection at all County Park and Recreation facilities.										
	↑ Environmentally Preferable Purchasing	↑ 68% of office materials met EPP guide compliance ●	<table border="1"> <thead> <tr> <th>Supply</th> <th>% Compliant</th> </tr> </thead> <tbody> <tr> <td>Recycled Paper</td> <td>90%</td> </tr> <tr> <td>Office Supplies</td> <td>24%</td> </tr> <tr> <td>Green Seal Cleaners</td> <td>90%</td> </tr> <tr> <td>Low VOC Paint</td> <td>90%</td> </tr> </tbody> </table> Language in EPP guide incorporated into County Procurement Policy.	Supply	% Compliant	Recycled Paper	90%	Office Supplies	24%	Green Seal Cleaners	90%	Low VOC Paint	90%
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↑ 5,306 acres of preserved and protected land	↑ 134 acres of land was preserved and/or protected ●	12 acres floodplain returned to natural condition 28 acres of Park land acquired 76 acres of Greenway acquired 11 acres of Nature Preserve acquired 7 acres of Buffer acquired											
New or renovated facilities to LEED Gold standard	LEED certification applications were submitted for both the Jail North Youthful Offender and Revolution Regional Sports and Learning Academy facilities. ●	Water Conservation Plan was developed. Sustainable Facilities Plan adopted and in place.											

Focus Area	2020 Goals	2011 Progress Toward Goals	
Commitment	↑ 500 hours employee volunteer/education regarding environment	↑ 2,623 hours employee volunteer / education regarding environment 	WorkGreen Program hosted numerous educational and volunteer opportunities for employees
	↑ 100% participation of County departments and funded agencies	↑ 55% of 20 County departments participating achieved goals 	Increase from 2010 when 27% of County departments achieved goals. County partners participating include: Charlotte-Mecklenburg Schools, Charlotte Mecklenburg Library, and Central Piedmont Community College
	↑ 10% community awareness of environmental issues	Establishing partnerships to increase community awareness is on-going 	Baseline awareness is 74%
Stewardship Enhancement	Continuous review and certification of County programs	Good standing in NC Environmental Stewardship Initiative 	Maintained and expanded ISO 14001 certification at the Foxhole Landfill Only entity successfully completing the non-regulated NC ESI program in 2010
	↑ New and innovative practices/programs	Implement Single-Stream Recycling Program Information sharing program between County and public/private/institutional organizations regarding environmental data 	Single-stream recycling program successfully launched Countywide Active participant in Envision Charlotte, a program that will share environmental sustainability data

*2007 Baseline Year

2011 Highlights

Emission Reduction

Energy – Energy Star was awarded to the County’s Carlton Watkins Center during 2011.



Solar thermal systems with a total of 141 collectors were installed at four County facilities, one Charlotte Mecklenburg School facility and one Central Piedmont Community College facility as a part of the County’s EECBG funding.



Solar panels at Jail North facility.

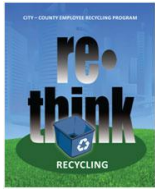
Fleet – Non Road Fleet Inventory During the past 4 years, Mecklenburg County has reduced nitrogen oxides (NOx) emissions from its highway vehicles by 70%, down to 7 tons per year while non-road emissions have stayed constant at 50 tons of NOx production. This inventory highlighted the need for the County to identify a Low Emission Vehicle guide for the County Non-Road Fleet, a project for 2012.



Non Road equipment at Foxhole Landfill.

Resource Conservation

Recycling - Transition to single-stream recycling resulted in an increased acceptance of materials for recycling. The new re-think campaign resulted in the County achieving a 18.2% recycling rate, coming close to meeting the 2020 goal of 20% recycling.



Purchasing – Twenty (20) departments held environmentally preferable purchasing (EPP) goals and 50 employees attending “Green” Purchasing training during 2011. The result is that County EPP purchasing increased to 68% in 2011, up from 53% in 2010.



Land – Acquisition and demolition of property within the floodplain continued in 2011. The total 30 acres of floodplain land along Briar Creek provides for a great investment in open space and future recreational opportunities. Additional land acquisition for parks, greenways, and open space continued to press the County toward our Park Master Plan goals.

Facilities – The County’s Sustainable Facilities Policy was not tested during 2010 due to the lack of new County facility development. Two facilities did complete their construction and are actively seeking USBGC LEE certification.

Commitment

Employees – 536 employees participated in classes, volunteer efforts, and transit ridership during 2011, logging a total of 2,623 hours of participation through the WorkGreen Program. Volunteer activities included: planting trees along Little Sugar Creek, participating in Big Sweep to collect more than 8 tons of trash from lakes, rivers and streams throughout Mecklenburg County with other community volunteers, collection of roadside debris, and distributing tarps for trucks at recycling centers. The County also recognized 7 Green Guardians in 2010!



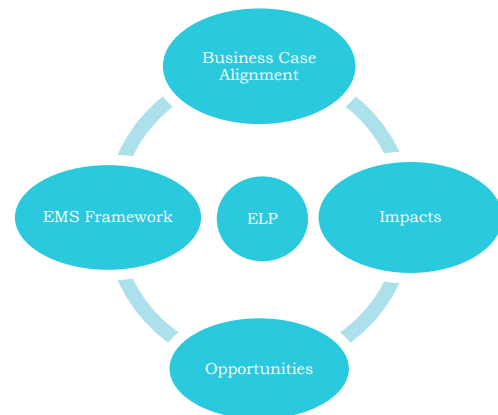
Charlotte Mecklenburg Schools – The CMS Strategic Plan 2014 includes an Environmental Stewardship focus area. CMS goals toward environmental stewardship include: reduce utility consumption by 20%, solid waste by 5% and pollutants by 20%. CMS highlighted 2011 accomplishments are listed below:

- 100% of schools participating in the School Partnership Program – implementing environmental action programs at each school,
- Reduced utility consumption by over 10% from 2008 baseline,
- 50 schools rated as Energy Star schools,
- Recycling 82% increase over 2008 baseline with reduction of waste to the landfill by 9%,
- Avoidance of over 20,000 metric tons of carbon dioxide annually since 2008,
- Developed an on-line Environmental Stewardship Guide,
- On-going efforts toward ISO 14001 framed environmental management program.

Sustainable Community Focus Area – County departments incorporated Environmental Action Plans into their department goals for 2011. In this inaugural year, 55% of departments accomplished 85% or more of their goals and contributed to the overall success of the Environmental Leadership Policy.

Stewardship Enhancement

Continuous Improvement – Mecklenburg County’s Environmental Leadership Team spent considerable effort during 2011 to evaluate this Environmental Leadership Policy against nationwide environmental sustainability plans but within the ISO 14001 framework. Mecklenburg County was able to maintain “good standing” in the NC Environmental Stewardship Program due to this effort. Environmental Leadership Policy Initiatives underway in 2012 will reflect this effort.



For more information, contact Mecklenburg County’s Environmental Policy Administrator, Heidi Pruess, CEP at heidi.pruess@mecklenburgcountync.gov .