



**CHARLOTTE**<sup>SM</sup>

**City of Charlotte**

Policy for Sustainable City Facilities

Adopted by Charlotte City Council  
on September 28, 2009

## City of Charlotte Policy for Sustainable City Facilities

### Policy Intent

The policy is intended to direct City staff to design, construct, and operate sustainable City facilities which meet the functionality and service delivery needs of the citizens of Charlotte while minimizing environmental impacts and conserving and protecting all resources.

The foundation for this policy is City Council's Environment Focus Area Plan, which states Council's intents to:

- Promote environmental best practices and protect our natural resources: the air we breathe, the water we drink, and the natural ecosystems we cherish, including the tree canopy;
- Recognize important interrelationships among air quality, water resources, land preservation, and energy and resource conservation;
- Make sound land use decisions regarding our future growth and development supporting sustainability so as not to jeopardize our future generation of citizens;
- Achieve our goals of becoming a national leader in the successful stewardship of our environment by maintaining a cooperative and open agenda with Mecklenburg County, our regional neighbors, and the business community;
- Lead by example and promote sound, cost effective environmental and energy conservation practices in City operations;

and includes the specific initiative to:

- incorporate environmentally responsible elements in the design, construction and operations of City facilities.

The policy further aligns with and supports the City's:

- Environmental and Infrastructure General Development Policies
- Post Construction Controls Ordinance
- Tree Ordinance
- Resolution Committing to Reduction of Green House Gas Emissions.
- Centers, Corridors, and Wedges Growth Framework under development at the time of adoption of this policy.

The policy shall:

- balance "environmental" and "economic" considerations.
- be applicable for a diversity of facility types; for new construction and renovations.
- be sensitive to neighborhood character and historic structures .
- describe appropriate use of decision and rating tools such as LEED, Energy Star, etc.
- include mechanisms to measure/verify sustainable decision-making.

### Sustainability Priorities

The Policy directs staff to make decisions in the design, construction, and operation of City facilities that support and advance the City's Sustainability Priorities.

City Council's priorities for sustainability have been established through the Environment Focus Area Plan, General Development Policies, and other Council-approved policies, ordinances, and plans.

The Sustainability Priorities pertinent to facilities and therefore reflected in this policy are:

- Preserve Land and Trees

- Conserve Clean Water Resources
- Reduce Energy Use & Carbon Footprint
- Maximize Transportation Alternatives
- Lead by Example & Encourage Local Sustainable Industry
- Protect Occupant Health, Maximize Productivity & Encourage Sustainable Employee Behaviors

**Expectations and Requirements**

This Policy shall apply to every new facility and “major” renovation project. A “major” renovation is defined as a renovation of at least 5000 square feet of internal space.

The policy will direct staff to make decisions about facility design, construction, operation, and renovation that align with local sustainability priorities as measured in relation to the sustainability goals, where established by Council, in those priority areas. The goals are outlined in the following table.

| Priorities  | Goals  |
|---|--|
| <p align="center"><b>Preserve Land &amp; Trees</b></p>                | <p>Meet the intents of City Environmental and Infrastructure General Development Policies (GDP) and other existing City Ordinances.</p> <p>The GDP guides staff and the community to:</p> <ul style="list-style-type: none"> <li>– Take a comprehensive approach to defining the site location and infrastructure needs, based on the City’s land use policies and overall growth framework of Centers, Corridors and Wedges (GDP I1-A)</li> <li>– Pursue sites that encourage and facilitate redevelopment of abandoned/underutilized sites and vacant sites (GDP E2-A)</li> <li>– Encourage infill and redevelopment to take advantage of existing infrastructure (GDP I4-B)</li> <li>– Identify environmentally sensitive areas in site development and discuss protection and mitigations (GDP E1-B)</li> <li>– Consider the impacts to existing neighborhoods when providing infrastructure (GDP I5-B)</li> <li>– Minimize impacts to the City’s tree canopy (GDP E3-B)</li> <li>– Enable site designs that: 2) reduce ground level temperatures; 3) minimize the impact on the environment (GDP E3-A)</li> </ul> |
| <p align="center"><b>Conserve Clean Water Resources</b></p>           | <p>Meet current State Statute (GS 143-135.37) water use reduction targets <i>which at the time of policy adoption are:</i></p> <ul style="list-style-type: none"> <li>• <i>Indoor water usage 20% below State Code requirement</i></li> <li>• <i>Outdoor water usage 50% below State Code requirement</i></li> </ul>   |
| <p align="center"><b>Reduce Energy Use &amp; Carbon Footprint</b></p> | <p>Meet current State Statute (GS 143-135.37) energy consumption targets <i>which at the time of policy adoption are:</i></p> <ul style="list-style-type: none"> <li>• <i>New facility energy consumption calculation 30% below ASHRAE requirement</i></li> <li>• <i>Major renovation energy consumption calculation 20% below ASHRAE requirement</i></li> </ul>   |

|   |   |
|---|---|
| <p><b>Maximize Transportation Alternatives</b></p>  | <p>Meet the intents of City Environmental and Infrastructure General Development Policies (GDP) and other existing City Ordinances.</p> <p>The GDP guides staff and the community to:</p> <ul style="list-style-type: none"> <li>– Facilitate development of well-designed and well-connected mixed/multi-use development (GDP E2-B)</li> <li>– Locate buildings where transportation facilities, public utilities and services already exist, or are planned, in order to minimize impacts of undeveloped areas (GDP E2-C)</li> <li>– Integrate plans for existing and future bus routes/service improvements and expansions with adopted future land use policies (GDP E2-E)</li> <li>– Enable site designs and construction practices that: 1) facilitate the use of alternative modes of transportation (GDP E3-A)</li> </ul> |
| <p><b>Lead By Example &amp; Encourage Local Sustainable Industry</b></p>                                    | <p>Goals will be project-specific.</p>  |
| <p><b>Protect Occupant Health, Maximize Productivity &amp; Encourage Sustainable Employee Behaviors</b></p> | <p>Goals will be project-specific.</p>  |

This Policy directs each Key Business Unit (KBU) responsible for the design, construction, and/or operation of City facilities to report annually on:

- their achievements in sustainable design and construction, and
- the performance of their Facility Portfolio against standardized benchmarks

as described in the section on “Verification and Reporting”.

The Policy further requires that any staff member with facility construction or renovation project management responsibilities will earn the credential of LEED Green Associate or demonstrate an equivalent level of training and/or experience in the area of sustainable facilities.

**Tools & Their Use**

In order to ensure applicability to the broadest set of facility- and project-types, and to accommodate the growing diversity of resources available for sustainable facilities, the Policy will not prescribe the use of a specific tool, rating system, or information source to aid decision-making or to achieve certification/recognition. Staff may utilize a variety of tools, systems, and sources for to aid decision-making, including but not limited to: Leadership in Energy and Environmental Design (LEED), Green Globes, Energy Star, Whole Building Design Guidelines, energy modeling, and cost-analysis tools.

Staff may choose whether to pursue external recognition or certification on a project-by-project or facility-by-facility basis.

The Policy will require that each construction or renovation project be scored using one or more point-based tools (such as LEED and Energy Star) for the purposes of consistency and comparability.

Recognizing that the City has limited resources, that City facilities are long-term assets intended to be functional in service to citizens and contributing to the community for decades, and that additional upfront investment may yield considerable long-term benefits, including but not limited to: energy cost savings, advancing Council’s Sustainability Priorities in the community, preservation of historic structures, increased productivity, the Policy directs City staff to utilize appropriate tools and resources to analyze and report on the costs and long-term effectiveness of sustainable elements within each construction and renovation project.

**Verification & Reporting**

The City Manager or designee, along with the Key Business Units responsible for the design, construction, and operation of City facilities, will verify adherence to this Policy and report on facility status on a regular basis.

Processes and reporting mechanisms will be structured to ensure:

- Appropriate and adequate training and credentialing of facility project managers and operational staff.
- Appropriate and adequate application and use of sustainability tools for decision-making, measurement, and certification, including but not limited to: Leadership in Energy and Environment Design (LEED), Green Globes, Energy Star, Whole Building Design Guidelines, energy modeling, and cost-analysis tools; including process-related incentives for pursuing certification through LEED.
- Documentation of facility project intents and achievements related to each of the Sustainability Priority Areas.
- Robust internal vetting of facility project intents related to sustainability, functionality, and cost.
- Transparency of project intents throughout the design and construction process.
- Technical verification of decisions and outcomes specific to each new facility or renovation project.
- Public reporting on achievements of each new facility construction and major renovation project.
- Public reporting on the performance of all City facilities against standardized benchmarks.

**Policy Review and Revision**

The policy will be reviewed annually to determine the need for revision due to changes in Council’s Sustainability Priorities or Goals, the availability of tools for designing sustainable facilities, the roles prescribed by the policy, etc.