

Spring 2010



Frequently Asked Questions

Social / Environmental

- Environmental Justice
- Natural Resources Stewardship
- Locally & Globally

Environmental

- Natural Resource Use
- Environmental Management
- Pollution Prevention (air, water, land, waste)

Environmental / Economic

- Energy Efficiency
- Subsidies / Incentives for use of Natural Resources



Sustainability is such a broad term...What does 'sustainability' mean for the City of Raleigh?

It means considering how your decisions impact not only the environment, but economic outcomes and other people, as well. For the City of Raleigh, this means adopting policies that lessen our environmental impact, such as reducing the greenhouse gasses we emit in our transportation and building practices. These same policies will also result in cost savings over the life of the investment. Socially, we will support the local community and create opportunities for the people that live in it.

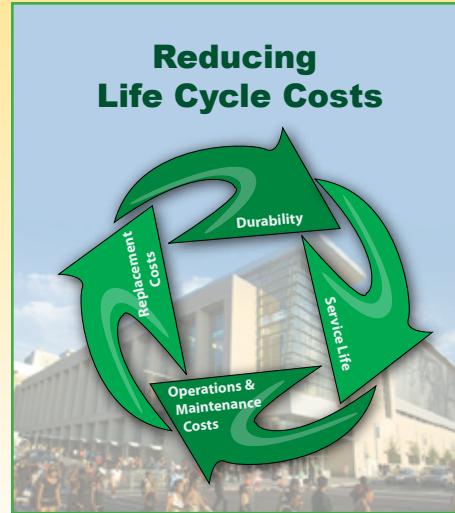
How can sustainability save money?

When you are considering a purchase or upgrade for your home, business, or automobile, you can use a concept called *life-cycle cost analysis* to calculate the purchase, installation, and maintenance over the life of the asset. So, for example, if you were to purchase a fuel efficient vehicle, you might pay more up front, but over time you could save more money in gas. Buying a tankless water heater or solar thermal system for your home might initially cost more than traditional systems, but lower water, gas, or electric bills will help you save money in the long run.

By understanding the 'real costs,' you are able to make more informed decisions that also impact your family, the community, and the planet.

A significant amount of the City's budget is spent on capital improvement programs, such as buildings, infrastructure, parks, and investments that help us meet our community's needs. Life-cycle cost analysis enables us to prioritize durability, low maintenance, and other sustainable features in our purchases.

By evaluating the costs over the life of the investment rather than up-front-only expenses, the City will be able to make better, more informed decisions that have a big impact on the budget and community.



What is the difference between 'green' and 'sustainability'?

'Green' refers to projects typically focused on the environment, whether it's recycling, environmental protection, natural resource conservation, or organic and non-toxic products. Projects tend to be individually focused, rather than part of a wider-reaching vision and plan.

'Sustainability' addresses a broader concept of three fundamental principles: economy, social equity, and the environment. It leads to an integrated approach that is addressed with the question, "How does this decision impact the economic strength, environmental integrity, and social equity of our community?"

What is the City of Raleigh doing with Federal Stimulus funding?

The City of Raleigh has received \$3.8 million in federal money to support sustainability programs funded by the Energy Efficiency and Conservation Block Grant (EECGB) from the U.S. Department of Energy.

The purpose of the EECGB program is to provide federal grants to local governments to reduce energy use and fossil fuel emissions and improve energy efficiency. Energy efficiency, conservation, and renewable energy programs and projects are the building blocks for increased economic vitality, energy security, and environmental quality. Job creation and retention are also focuses of this program.



Raleigh's programs include:

- Weatherization loan program
- Residential and commercial energy efficiency and renewable loan program
- Climate action plan
- Government buildings' energy efficiency performance contracts
- Energy management software and climate control system
- Solid waste services pilot project for enhanced recycling
- Vehicle conversion to electric battery-powered
- Electric vehicle charging stations
- Solar thermal water heating
- Green Builders Certification Program

What is a carbon footprint, and how can I measure mine?

A carbon footprint is the measurement of greenhouse gas emissions created by an individual, organization, or product. It is typically measured in the amount of carbon dioxide (CO₂) released into the atmosphere. Buildings represent 39% of annual carbon emissions and 71% of energy consumption in the U.S.

The City of Raleigh initiated a measurement of its carbon emissions and will develop a plan to reduce its footprint. To learn more about carbon footprinting and how you can reduce your impact on the environment, visit:

www.epa.gov/climatechange/emissions/ind-calculator.html



Where can we go for more information on sustainability?

For more information on what the City of Raleigh is doing about sustainability, visit www.raleighnc.gov/SustainableRaleigh.

North Carolina State University has several training programs for workforce development – both certificate-track and informational. Go to www.continuingeducation.ncsu.edu and select 'Certificate Programs' or 'Seminars.'

For residential energy efficiency programs, check out Progress Energy's website and navigate to their residential programs in the Carolinas. www.progress-energy.com.

To learn more about careers in sustainability, go to www.lohas.com/resources.html.

The City of Raleigh is using some of its EECBG funding to begin a green building training program. Go to www.raleighnc.gov/SustainableRaleigh and type in keyword 'EECBG.'



How does the City of Raleigh recognize community organizations for their sustainability efforts?

In an effort to recognize those who have demonstrated a commitment to sustainability, the City established the Raleigh Environmental Awards Program in 2008. Each year, the awards go to individuals and organizations across the region for their outstanding work in sustainable development and environmental stewardship. Recipients are honored every April at a ceremony held on Earth Day with an oak leaf award hand-carved by a local artist.



The program has grown to include 10 different awards in a broad range of environmental and social responsibility categories:

- Raleigh Environmental Stewardship Award
- Environmental Awareness
- Legacy Award
- Natural Resource Conservation
- Green Design
- Regional Award
- Pioneering Efforts
- Youth Award
- Urban Stewardship
- Market Transformation

What are some examples of the progressive energy projects the City of Raleigh is implementing?

LEDs

- Installing LED lights (or light emitting diodes) in parks, greenways, streets, parking decks, and other facilities and offices throughout the City
- Replacing parking lot lights with solar powered LED fixtures
- Converting traffic signal lights to use LEDs
- Raleigh's City Plaza light towers designed with LEDs
- Converting light fixtures in the Performing Arts Center wherever possible
- Installed LED lighting in the plaza area of One Exchange Plaza
- Installed LEDs in the Mayor's Office



Project Get Ready

In 2009, the City of Raleigh was selected as the only East Coast city to participate in Project Get Ready, an initiative to prepare for the 2011 national roll-out of electric vehicles (EVs).

Project Get Ready is sponsored by the Rocky Mountain Institute, and we are partnering with Progress Energy and Advanced Energy to install electric plug-in stations.

The City is developing the infrastructure, policies, and practices necessary to support the EV roll-out, serving as a model for other municipalities.

Renewables

The City of Raleigh is committed to utilizing renewable energy wherever possible. We have begun implementing programs and pilot projects to determine the environmental and economic benefit of new initiatives. Here are some examples of our progress:

- A field of sunflowers was planted and harvested for the oil the seeds produce. This oil is processed into biodiesel fuel and used to operate City equipment.
- The region's first thin-film solar photovoltaic array was installed at the EM Johnson Water Treatment Plant.
- A geothermal system is being installed at the City's new solid waste facility.



Raleigh's Leadership

1. First LED City in the world
2. Installed the first thin-film photovoltaic panels in the southeast
3. First municipality in the nation to partner with the Environmental Defense Fund in the Climate Corps Program
4. First of three cities nationally to partner in Project Get Ready
www.projectgetready.org
5. One of only two municipal convention centers in the nation to obtain LEED Silver certification
6. First large-scale Solar LED Off-Grid Lighting project in NC
7. First municipality in the state to implement a server virtualization program
8. First municipality to develop state legislation allowing cities to implement sustainability-focused projects that benefit their community.
9. First municipality in the nation to pilot the Periscope program, a building automation software that provides enhanced energy use analytics in buildings
10. Named 2010's Most Wired City by Forbes Magazine, ranking higher overall than any other U.S. city in broadband usage, access options, and wi-fi hot spots



Sustainable Raleigh
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www.raleighnc.gov/SustainableRaleigh