

**Built Environment and Energy Advisory Committee**  
**March 21, 2013**

**Attendance:**

Joan Kelsch, Co-Chair, Arlington County

Olayinka, Co-Chair, DDOE

Bill Eger, Alexandria

Tim Stevens, Falls Church

Said Said, Prince William County

Steve Walz, NVRC

Patti Rose, Greenspace NCR

Noel Kaplan, Fairfax County

William Marsh, Fairfax County

Bill Topper, JFHQ-NCR

Sosina Tadesse, DDOE

Brendan Shane, DDOE

Phone:

Eric Coffman, Montgomery County

Ellen Eggerton, Fairfax County

Marie Genevieve, Loudoun County

Luisa Robles, Greenbelt

Staff:

Julia Allman

Leah Boggs

Jeff King

Joan Rohlf

**1. PART I: CELEBRATING GREEN BUILDING IN THE REGION**

This two-part series will provide an update on green building programs around the region. We'll hear from Alexandria, the District, and Fairfax County on their policies and progress.

Next month, we'll hear from Arlington and Montgomery County.

**Bill Eger, City of Alexandria**

- Alexandria's green building practices date back to its historical roots in the 1700s, when local materials were used and homes were located close to daily needs. This era provided the historical character that continues to define Alexandria today. In 2004 the city codified its green building policy by developing an Internal Administrative Policy which requires all new public development to meet or exceed LEED NC Silver.

- EcoCity Alexandria began being developed in 2007 to bring environmental planning practices to the community. In 2008, the city adopted the EcoCity Charter as an ethos for sustainability practices including built infrastructure. It was created through a working group of city staff, policymakers, development & contractor communities, residents & activists over a year. Two supporting policies were established: the Environmental Action Plan 2030 and the Climate Action Plan.
- The city's green building policy strives to demonstrate public leadership in green building across a variety of facility spaces. Beyond just office spaces, the city has built IT-heavy, security-heavy, and other complex facilities using green building practices. Goals include improving energy performance, conserving water, mitigating stormwater runoff, and reducing carbon emissions, while making solutions palatable to the developer community.
- For non-government buildings, the city has a policy statement encouraging best practices. It is not a requirement and does not have an enforcement mechanism. Development that requires a Development Site Plan or Development Special Use Permit *should achieve* certain outcomes, based on LEED or another applicable rating standard. The city does not offer incentives, feeling that they're not needed because the developer community was included in the policy development process.
- In terms of performance, 44 projects are in progress. Ninety percent of gross square feet of new construction is addressed by the policy, including medium (6000 sf) to large (1.3M sf) projects. These projects primarily use LEED, but others are pursuing NAHB and Earthcraft certifications.
- Next steps are to review performance and assess the need for policy updates. A system of monitoring and compliance may be developed, and the need for incentives will be considered.

#### **Brendan Shane, DDOE**

- Mayor Gray just released the Sustainable DC Plan, which has a significant Green Building component.
- The Green Building Act of 2006 requires LEED certification for private and public development. In 2008, the Clean and Affordable Energy Act required ENERGY STAR benchmarking in the private and public sectors, created the DC Sustainable Energy Utility, and increases the Renewable Portfolio Standard. The Energy Efficiency Financing Act of 2010 authorized financing of water, energy efficiency, and renewable energy through PACE.
- These policies have produced a large increase in green building – there are now over 1,000 registered projects. DC is almost on par with NYC in absolute terms, and is the top city in the country for LEED-Certified space per capita. Many buildings are being certified at the highest levels of LEED.
- DC is moving to IECC 2012 this summer, which applies to development of 10,000 square feet and above. There is an ongoing discussion about how to customize the IECC for the District.

- Other green building policies include stormwater regulations, a proposed green area ratio, and current and future incentives including the SEU, Renewable Energy Incentive Program, Riversmart program, and Low-Income Weatherization program.
- The Sustainable DC Framework is tiered –there are four key challenges: Jobs and economy, health and wellness, equity and diversity, and climate and environment. The plan includes 7 solutions and a large number of goals, targets, and measures.
  - The built environment goal is to increase the population with 250,000 new residents; provide a variety of amenities within 20 a minute walk; new construction and existing big buildings are net-zero.

## DISCUSSION

Q: How do you train code officials on new codes and procedures?

A: DC has hired a Sustainability Director, and is now advertising for green code specialists. We have Green Fund to fund trainings; we're also planning public trainings.

Joan Kelsch: Code official training is a regional issue that hopefully this committee can work on that.

### **Noel Kaplan, Fairfax County**

- Fairfax County's Green Building Program started with a capital projects program in 2001, which piloted LEED and other standards, including Green Globes. In 2008, the Sustainable Development Policy for Capital Projects was adopted by the Board of Supervisors. It adopts LEED as a guiding standard, and applies to projects over 2,500 square feet.
- Thus far, 15 projects have been certified and 8 of them are LEED Gold. There are now enough projects to begin looking at data and assessing the environmental performance of these buildings. There has been a 20%-30% reduction in water; energy savings summary information is not yet available, but it is known that there have been savings.
- In terms of lessons learned, energy tracking can be very helpful in identifying operational issues. A challenge is that some non-traditional building materials are not holding up well enough to daily use. However, better materials are becoming available as LEED becomes standard practice.
- Facilities management has adopted the goal of reducing energy use per SF by 1% per year. Between FY 2001 and FY 2010, the county has saved \$7 million in avoided energy spending. It is now County policy to replace inefficient equipment at the end of its lifecycle, upgrade lighting efficiency and controls, and to right-size systems.
- Green Permitting for the private sector provides an incentive to builders. Rather than providing expedited permitting, builders who commit to green building standards are moved to the front of the line, cutting 4-5 weeks from the process. To be eligible for this incentive, commercial development must achieve LEED silver or above. For residential, several rating systems are accepted.

- Fairfax County has also adopted comprehensive plan policy to support sustainable building. There are no requirements, but the plan offers guidance that is implemented through the development review process. LEED® certification or equivalent is recommended for nonresidential and 4+ story multifamily residential in the county's growth centers for zoning applications involving any of a number of scenarios, and ENERGY STAR® Qualified homes are recommended, countywide, for residential development at the high end of the Plan density range. Area Plan guidance augments this Policy Plan guidance--for example, in Tysons, the Plan recommends that non-residential development achieve LEED Silver or equivalent and that the first inch of rainfall should be captured and retained on-site. Other examples of Area Plan green building and LEED-based stormwater management guidance were noted.
- While the Plan is a guide and not a regulation, 79 approved development cases have green building certification commitments, and many more are pending.
- Implementation Challenges: Certification occurs after construction and there is limited recourse in the case of failure to achieve green building certification. Alternate implementation approaches are needed, such as a green building escrow, or accepting buildings without an escrow if they are on track to achieve one level higher than the expectation. Another challenge concerns the geographic distinctions in Plan policy and whether these should be retained in light of implementation experiences. There is also, at times, developer reluctance to commit to green building efforts as well as staff resource challenges.
- The Comprehensive Plan policy is currently undergoing review. Other future directions include: continued implementation of the Sustainable Development Policy for Capital Projects; continued efforts to expand the tracking of energy for county facilities; and expanded education/outreach efforts (the Energy Action Fairfax program).

#### **Lauren Pagliarulo, Washington Gas Energy Services – Carbon Offsets**

- Washington Gas Energy Services (WGES) has aggressive greenhouse gas reduction goals, and they offer green energy products to customers to help reach that goal. Products include Cleansteps Windpower and Cleansteps Carbon Offsets.
- The offset program is a public private partnership with the Chesapeake Bay Foundation. It strives to improve both air and water quality in the Chesapeake Bay Watershed. Twenty percent of proceeds from offset sales go to the Carbon Reduction Fund, managed by the Chesapeake Bay Foundation to create additional offsets in the future. 70,000 carbon offsets have been purchased so far, equivalent to 8M gallons of gasoline.
- The program matches locally-sourced offsets with WGES customers, all within Chesapeake Bay region. Some project examples include a landfill gas project at the Worcester County landfill and transitioning freight from trucks to rail for JB Hunt Intermodal. All projects are independently verified.
- All WGES natural gas customers receive offsets for 5% of their use. Cleansteps are offered to residents and businesses wishing to offset up to 100% of their use.
- The Energy Partner Network utilizes carbon offset sales as a fundraising platform for churches and NGOs. Dollars are directed to every member that signs up with CleanSteps. Funds can be set aside for a specific project, such as installing a solar array, greening an event, etc.

#### **Staff Updates**

- COG will be hosting a meeting on April 9 to plan a training exercise for an energy emergency.
- Solar Collaborative – an RFP is expected to be issued in June or July.
- Green Streets Workshop – April 8, 1:30 to 4:30
- BEEAC Planning Call - April 8 at 11:00 am