

**FAIRFAX COUNTY PLANNING COMMISSION
ENVIRONMENT COMMITTEE
THURSDAY, APRIL 19, 2007**

COMMITTEE MEMBERS PRESENT:

Walter L. Alcorn, At-Large
Frank A. de la Fe, Hunter Mill District
James R. Hart, Commissioner At-large
Nancy Hopkins, Dranesville District
Kenneth A. Lawrence, Providence District
Rodney L. Lusk, Lee District
Timothy J. Sargeant, At-Large

COMMITTEE MEMBERS ABSENT:

None

OTHER PLANNING COMMISSIONER PRESENT:

Earl L. Flanagan, Mount Vernon District

PLANNING COMMISSION STAFF PRESENT:

Christopher B. Remer, Management Analyst II
Linda B. Rodeffer, Clerk to the Planning Commission

**ENVIRONMENT COMMITTEE/ENVIRONMENTAL QUALITY ADVISORY COUNCIL
(EQAC) MEMBERS PRESENT:**

Lyle C. (Chet) McLaren, Braddock District

DEPARTMENT OF PUBLIC WORKS AND ENVIRONMENT SERVICES STAFF PRESENT:

Michelle Brickner, Director, Site Development Services
Judy Cronauer, Engineer III
John Friedman, Engineer III

DEPARTMENT OF PLANNING AND ZONING STAFF PRESENT:

Noel Kaplan, Senior Environmental Planner, Planning Division (PD)
Pamela Nee, Chief, Environment and Development Review Branch, PD
Deborah Albert, Planner, PD
Jennifer Bonnette, Planner, PD
John Bell, Planner III, PD

OTHERS PRESENT:

Michael Zatz, Manager, Manager, ENERGY STAR Commercial Buildings, U. S.
Environmental Protection Agency (U. S. EPA)
Jonathan Passe, Communications Coordinator, ENERGY STAR Residential Programs
U.S. EPA
Michael Rolband, Wetland Studies and Solutions, Inc.
Casey Nolan, Clark Realty
Tom Boylan, Clark Realty

Chairman James R. Hart called the meeting to order at 7:35 p.m. in the Board Conference Room at 12000 Government Center Parkway, Fairfax, Virginia. He noted that the first item on the agenda was approval of minutes.

Commissioner Sargeant MOVED THAT THE ENVIRONMENT COMMITTEE MINUTES OF MARCH 29, 2007 BE APPROVED.

The motion was seconded and carried unanimously.

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Chairman Hart recognized Noel Kaplan, Planning Division, Department of Planning and Zoning, who stated that the committee had requested information on green building programs as part of its consideration of a proposed amendment to the Policy Plan. Mr. Kaplan noted that the committee had been briefed by Brendan Owens, Director, Leadership in Energy and Environmental Design (LEED) Technical Development, U. S. Green Building Council, on March 29, 2007. He noted that a field trip to tour the Wetlands Studies and Solutions, Inc.'s "green" building in Gainesville had been scheduled for Saturday, April 28, 2007, at 10:00 a.m., and that the committee would be briefed by representatives of the Northern Virginia Building Industry Association on Thursday, May 16, 2007, at 7:30 p.m. in the Board Conference Room.

Mr. Kaplan introduced Michael Zatz, Manager, ENERGY STAR Commercial Buildings, and Jonathan Passe, Communications Coordinator, ENERGY STAR Residential Program, for tonight's presentation. (Their PowerPoint presentation is in the date file.)

Mr. Zatz said ENERGY STAR was a well-respected name in energy efficiency and according to a recent survey, over 65 percent of Americans recognized the ENERGY STAR brand. He noted that since the program began 14 years ago, American consumers and businesses had saved about \$14 billion dollars through ENERGY STAR programs.

Mr. Zatz said ENERGY STAR was a U. S. government program under the auspices of the Environmental Protection Agency (EPA) which provided building owners, managers, and developers with solutions and free technical resources to help reduce energy consumption of buildings; provided management guidelines, a step-by-step process to implement energy efficiency; offered advice and training on designing new energy-efficient buildings; provided tools to calculate and evaluate returns on investments; provided materials to help communicate with employees, customers, students, etc.; and provided recognition opportunities.

Mr. Zatz said ENERGY STAR worked in markets with a focus on public sector buildings, K-12 schools, higher education institutions, commercial property, healthcare institutions, small businesses, and congregations. He said a rating system for commercial buildings provided a benchmark to compare a building's energy use against its peers nationwide and was based on a simple scoring system from 1-100. He noted that a score of 50 indicated average energy performance based on statistical analysis and regression models from Department of Energy data

for commercial building energy use across the country. He pointed out that a score of 75 or higher qualified for an ENERGY STAR plaque on the building. He highlighted the "Designed to Earn the ENERGY STAR" program as one that may be of particular interest to the committee, in that this was a design-stage program through which architects could target the building energy use that would be associated with a building score of 75 and could then design the building to attain that target energy use.

Mr. Zatz said the relationship of ENERGY STAR to green building was often confused and explained that LEED was a green building standard whereas ENERGY STAR was not and pointed out that all green buildings were not necessarily energy efficient. Therefore, he explained that it was important to pursue both LEED, or other green building certification, and ENERGY STAR certification. He noted that Washington, D. C. had passed the "Green Building Act of 2006" for non-residential buildings which required that both standards be met.

Jonathan Passe, Communications Coordinator, ENERGY STAR Residential Programs, EPA, said that homes could also be ENERGY STAR qualified if they were at least 15 percent more energy-efficient than homes built to the 2004 International Residential Code and verified by an independent third-party. He explained that any attached or detached home of three stories or less could earn the ENERGY STAR label, noting that the ENERGY STAR policy for low-rise and high-rise multi-family construction was being developed. Mr. Passe pointed out that energy efficient features included effective insulation, high performance windows, tight construction and ducts, efficient heating and cooling equipment, ENERGY STAR qualified lighting and appliances, and third-party inspection and testing.

Mr. Passe said that across the State of Virginia, approximately 95 builders participated in the ENERGY STAR program and had built about 650 ENERGY STAR homes in 2006, but that there had been very limited activity in Northern Virginia and very little, if any, in Fairfax County. He said the easiest way to determine if a new home was energy efficient was to look for the ENERGY STAR label.

Mr. Passe referenced ENERGY STAR's Indoor Air Package Pilot program for new homes, which addressed the indoor air quality component of green building design. He noted that this effort began with ENERGY STAR performance and added approximately 60 design and construction features to protect homes from moisture, mold, pests, chemicals and combustion gases, and other airborne pollutants.

Mr. Passe said the County's proposed Policy Plan Amendment treated green building and energy efficiency as comparable initiatives and pointed out that green building programs and ENERGY STAR required very different levels of builder commitment. He added that there was a wide variance in the requirements of existing green building programs. He said the ENERGY STAR goal was not to identify the highest echelon of energy efficiency performers but to set the bar for energy efficiency that could be met by mainstream builders.

Mr. Passe said in addition to a Plan Amendment, the County might want to consider additional opportunities to foster energy-efficient construction such as sponsoring builder education

seminars on building science and energy efficiency; fostering local energy efficiency "affinity groups" of builders, product manufacturers and vendors, utility companies, and others to encourage energy-efficient construction; offering expedited or revenue-neutral permitting for energy efficient-homes or retrofitted projects; and offering builder incentives such as marketing, awards, and recognition.

Responding to a question from Chairman Hart, Mr. Passe indicated that possible reasons why there was so little energy efficient construction in Fairfax County were due to an extremely good real estate market and the lack of home energy raters to work with builders. He added that utility company involvement, such as offering rebates, could also be an incentive for energy-efficient building.

In response to a question from Commissioner Sargeant, Mr. Passe said that the size of a home was not a factor in rating its energy efficiency. He explained that the ENERGY STAR label could be earned if a home was 15 percent more efficient than a comparable home built to the 2004 International Energy Conservation Code.

Responding to another question from Commissioner Sargeant, Mr. Passe said that higher energy costs could increase a market demand for homes that used less energy, but that high utility bills were not a prerequisite for the success of energy-efficient homes. He explained that when marketing ENERGY STAR to builders, the environmental aspect had been downplayed with greater emphasis placed on comfort, durability, and lower utility bills. However, he said recently, due to concerns about climate change and greenhouse gas emissions, consumers were starting to pay attention to environmental considerations when making a decision to buy a home and as a result, builders were beginning to target that market also.

Mr. Zatz commented that internal studies done by major real estate companies had shown that ENERGY STAR rated buildings were selling for more money per square foot than other buildings and in some markets higher rents could be charged. He explained that like the residential real estate market, the commercial market also had a Multiple Listing Service and starting on May 5, 2007, qualified buildings would receive an ENERGY STAR designation.

In response to a question from Commissioner Lawrence, Mr. Passe said that although builders might say it cost more to build an ENERGY STAR home, there were inherent tradeoffs, such as energy-efficient windows and insulation reducing the size of an air conditioner.

Commissioner Alcorn pointed out that Clark Realty, represented tonight by Casey Nolan and Tom Boylan, had built about 800 energy efficient homes in the Fort Belvoir area of the County and would be willing to share their expertise with interested parties.

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Chairman Hart requested that Commissioners RSVP to Barbara Lippa, Executive Director of the Planning Commission, if they planned to participate in the tour of Wetlands Studies and Solutions "green" building on Saturday, April 28, 2007. He again noted that the Environment

Committee would meet again on May 16, 2007 to receive a presentation from the Northern Virginia Building Industry Association.

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The meeting was adjourned at 8:17 p.m.
James R. Hart, Chairman

For a verbatim record of this meeting, reference may be made to the audio recording which can be found in the Planning Commission Office.

Minutes by: Linda B. Rodeffer

Approved: May 16, 2007

Linda B. Rodeffer, Clerk
Fairfax County Planning Commission