

**FAIRFAX COUNTY PLANNING COMMISSION
ENVIRONMENT COMMITTEE
THURSDAY, NOVEMBER 9, 2017**

PRESENT: James R. Hart, Commissioner At-Large, Chairman
Timothy J. Sargeant, Commissioner At-Large
Ellen J. Hurley, Braddock District
John C. Ulfelder, Dranesville District

ABSENT: None

OTHERS: James T. Migliaccio, Lee District
Maya Dhavale, Planning Division (PD), Department of Planning and
Zoning (DPZ)
Denise James, PD, DPZ
Noel Kaplan, PD, DPZ
Debra Jacobson, Sierra Club, Great Falls Chapter
Norbert Pink, Sierra Club, Great Falls Chapter
Ross Shearer, 406 Course St NE, Vienna
Danielle Stephens, Cooley LLP
John W. Cooper, Clerk, Planning Commission
Inna Kangarloo, Senior Deputy Clerk, Planning Commission

ATTACHMENTS:

- A. Draft Plan Amendment Language, Revised October 26, 2017
- B. Ross Shearer's Statement
- C. William Penniman's Statement

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Chairman James R. Hart called the meeting to order at 7:05 p.m. Board Conference Room, 12000 Government Center Parkway, Fairfax, Virginia, 22035.

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Maya Dhavale, Planning Division (PD), Department of Planning and Zoning (DPZ), highlighted the changes to the draft Plan Amendment language per discussion at the last meeting held on October 12, 2017. A discussion ensued among Committee members and staff regarding the green building standards as they related to the following:

- Repurposing of old buildings;
- Stormwater management; and
- Landscaping.

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Debra Jacobson, Sierra Club, Great Falls Chapter, indicated that the proposed revisions to the Plan Amendment language do not reflect the aggressive nature of necessary actions to address

climate change directed by the Board of Supervisors. She further commented the recommendations for ENERGY STAR stipulated in the MITRE Corporation report "Building Energy Technology Recommendations to Fairfax County." Ms. Jacobson concluded by saying that Leadership in Energy and Environmental Design (LEED) system of acquiring points is too weak for energy efficiency and is inadequate.

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Ross Shearer, 406 Course St NE, Vienna, said that the development community in Northern Virginia needed nudging to overcome its irrational behavior. He noted that the Chairman Bulova's private sector energy taskforce sought incentives to induce energy efficiency and sought governmental nudging. Mr. Shearer further highlighted the prescriptions of the Code of Virginia as they related to the comprehensive plans. He suggested to encourage energy efficiency and conservation through adoption of a recognized strategy such as Designed to Earn the ENERGY STAR (DEES) certification or a comparable number of additional LEED points earned on its energy scale. Mr. Shearer read a statement on behalf of William Penniman, 2007 Upper Lake Drive, Reston (Copies of Mr. Shearer and Mr. Penniman's statements are included in the date file).

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The meeting was adjourned at 8:06 p.m.
James R. Hart, Chairman

An audio recording of this meeting is available in the Planning Commission Office, 12000 Government Center Parkway, Suite 330, Fairfax, Virginia 22035.

Minutes by: Inna Kangarloo

Approved: April 25, 2019

Jacob L. Caporaletti, Clerk to the
Fairfax County Planning Commission



Planning Commission Environment Committee Stakeholder Work Session
November 9, 2017

Draft Plan Amendment Language, revised October 26, 2017

The draft language has been updated from the October 12, 2017 version presented at the Planning Commission Environment Committee meeting, reflecting the comments made by staff and Planning Commissioners. The following edits have been made for clarification and to increase ease of readability.

Text that has been added is noted with underlining. Text that has been removed is noted with ~~strikethrough~~.

Policy b. Within the Tysons Urban Center, Suburban Centers, Community Business Centers, Industrial Areas and Transit Station Areas as identified on the Concept Map for Future Development, unless otherwise recommended in the applicable area plan;

- ensure that zoning proposals for nonresidential development or zoning proposals for multifamily residential development incorporate green building practices sufficient to attain certification through the LEED-NC or LEED-CS program or an equivalent program specifically incorporating multiple green building concepts, where applicable; and
- encourage an emphasis on energy efficiency and conservation,

where these zoning proposals seek at least one of the following:

- Development in accordance with Comprehensive Plan Options;
- Development involving a change in use from what would be allowed as a permitted use under existing zoning;
- Development at the Overlay Level; or
- Development at the high end of planned density/intensity ranges. For nonresidential development, consider the upper 40% of the range between by-right development potential and the maximum Plan intensity to constitute the high end of the range.

Where developments with exceptional intensity or density are proposed (e.g. at 90 percent or more of the maximum planned density or intensity), ensure that higher than basic levels of green building certification are attained.

November 9, 2017 Stakeholders' listening session with the Planning Commission Environmental Committee

Ross Shearer

Above all, this issue should be recognized as a small component of a monumental social justice challenge.

- The Tysons plan, market irrationalities and missed opportunities:

The Tysons plan does not respond adequately to the public's view for new buildings to be energy efficient to combat climate change and save energy.

MITRE saw a leadership opportunity for the County if development was built to recognize energy efficiency by adopting Energy Star's Design to Earn Energy Star (DEES).

Energy Star's proven cost effective energy savings should be their own inducement for adoption but they are not. 35% energy savings, costs are recovered within 7 years, buildings made more valuable.

The Nobel Economist Richard Thaler was recognized earlier this year for his work showing how "nudges" are required to counter irrational market decisions.

The development community in Northern Virginia needs nudging to overcome its irrational behavior.

The Chairman's Private Sector Energy Taskforce sought incentives to induce energy efficiency, but little inducement is available when LEED Certified and Silver are the touted successes. Taskforce businesses clearly sought governmental nudging through incentives and education.

Proffered agreements should maximize the public's benefits. When the public gives up its zoning rights to a private party the public should receive something of comparable enduring public benefit. Significantly fewer carbon emissions are just that, a benefit of timeless scope.

The County's green building policy should provide a nudge sufficient to cause investment in the benefits of DEES and LEED's higher levels of energy efficiency.

- Aligning actions with words:

The Tysons plan has a goal to become carbon neutral by 2030 ^{but} without a plan for attaining it. The failure to embrace efficiency means the goal cannot be attained. A nearly identical goal is in place through the Council of Governments.

The Tysons plan and adoption of the lower levels of LEED ^{Silver and Certified} fail to lower energy use and its associated CO2 emissions that the Board's CoolCounties (and COG) commitments require.

The new Vision for climate and energy requires developments be built to encourage sustainable reductions of the County's geographic emissions by promoting energy efficiency. The proposed amendment will do little that supports the Board's Vision for climate and energy.

Everyone has a role and DEES offers a cost effective path in that direction. The County's school system has over 150 Energy Star buildings. Should the public sector continue to so greatly outperform the private one?

- Virginia's Code for Comprehensive Plans

Provide^s for "harmonious development to best promote the health, safety, morals, order, convenience, prosperity and general welfare of the inhabitants." This is an idyllic peaceable-kingdom sort of vision.

Where the code mentions our health and safety, it means responding with preventive steps that progressively reduces our dependence on fossil fuels until the day we are free of its harmful grip.

Where it references our morals, it encompasses the plea of many religious leaders about climate change.

Where it refers to the welfare of us inhabitants, it means every one of us, and where it speaks of prosperity, it means to include energy efficiency that has a solid return on its costs to contribute to housing affordability and the prosperity of every future inhabitant.

My suggestion: **“Encourage energy efficiency and conservation through adoption of recognized strategies such as DEES or a comparable number of additional LEED points earned on its energy scale.”** These programs have demonstrated results.

Good Evening.

I am Ross Shearer from Vienna where I have lived since 1983.

I have served on a Commission for the Town of Vienna, and have some appreciation for the personal dedication to the public service mission of your appointments to the Planning Commission.

I first began my participation in the dialogue on green buildings in Fairfax when I joined in the public meetings for the preparation of the Tysons development plan starting over a decade ago. As I recall, I attended meetings over a period of a year or more. At every single meeting I attended, at least one work group table, sometimes as many as 3 or 4 tables, reported out to the audience that it was important for the future buildings at Tysons to be green, with an emphasis on energy efficiency and to be attentive to lowering the greenhouse gas emissions associated with building usage. At each of the follow-up meetings, we were provided a list of the items from the preceding meeting, and in every single follow-up instance, all reference to energy efficiency, renewable energy such as solar and their enduring benefits for combating global warming were omitted. At the next to last meeting I attended, I challenged one of the contractor's representatives to promise to include what a number of tables had asked for that day including the one I was assigned to, and she promised that it would be. It wasn't.

There appears to be an organized plot to dodge recognition of climate change and to suppress the public's expressions connecting the relationship between global warming with GHG emissions, our dependence on fossil fuels and the need for a new energy economy that is

sustainable and morally just. Now I look to the green building policy to rectify that omission.

The current LEED policy for Tysons should be more aggressive in promoting building energy efficiency as it has been shown that LEED Certified and Silver usually fail to deliver much in the way of added operational energy savings through efficiency. Energy efficiency better than LEED's minimum rarely kicks in below LEED's Gold level. Clearly the people of Fairfax County deserve better.

The Tysons plan includes a goal to become carbon neutral by 2030, but the County and the development community have provided no pathway for attaining this lofty promise.

The County Board's recently adopted Environmental Vision for Climate and Energy foresees a Fairfax County that provides for working "with local authorities, businesses, and residents to encourage sustainable reductions of the county's geographical emissions that will contribute to achieving the targets as identified by the Cool Counties Climate Stabilization Declaration." This Vision is supported by an objective that promises to "promote and encourage energy efficiency and conservation efforts and renewable energy initiatives by employees, employers, and residents." No one is left out and no commercial activity is exempted.

The proposed language to "encourage an emphasis on energy efficiency and conservation" is too vague. I'm unsure it has any practical meaning. Could LEED's version 4 satisfy this language? Metrics with references or Energy Star's DEES are needed.

The County cannot continue under the approach proposed for energy efficiency of large buildings if it has truly embraced its Vision for climate and energy.

How exotic and challenging is achieving Energy Star? Probably not very. The County School system recognized the opportunity for school buildings and has built new or renovated over 150 school buildings to attain Energy Star recognition. Since it is clearly a cinch for our public school system, why is much of the private development community stymied by it? Are they needing incentives, and a nudge?

When the County received the MITRE report in the Spring of 2013, MITRE presented its recommendation as a leadership opportunity for promoting

Design to Earn Energy Star. That concept was little appreciated as the Planning Commission and the Board have been tossing the MITRE report's DEES recommendation back and forth, as though it is a radioactive hot potato. To an outsider, this has played out as deliberate delaying tactic to allow much of Tysons to be built.

It seems the resistance to energy efficiency is filled with irrational hubris that prefers exercising a right to remain unchanged rather than exercising sensible business judgment. Energy Star's DEES is not prescriptive. Linking it to points, 10 for example, on LEED's energy scale would further the flexibility developers and architects demand. Either approach saves energy and saves tenants money. Energy Star's savings are 35% on average, yielding a return on investment that approaches or matches the 7% long-term average of US stock markets. Energy efficient buildings that boast a label such as Energy Star or LEED Gold and Platinum reduce pollution and GHG emissions, deliver a better experience for the occupants and users, while improving a building's marketability and resale value and revenue potential. Money is available at an historically low cost making it easy to finance the investments in energy efficiency. To break out of the rut of an entrenched course of action, people sometimes require nudging to do what is best. The Nobel Economist Richard Thaler was recognized earlier this year for his work showing how "nudges" are required to counter irrational market decisions. The development community in Northern Virginia needs nudging. It may even want to be nudged.

As the green building policy's metrics are entirely within the context of proffers, it's important for proffered agreements to maximize the public's benefits. When the public gives up its zoning rights to a private party, it does so effectively for eternity. The public should receive something in return of comparable enduring public benefit. Significantly fewer carbon emissions is just that, a benefit of timeless scope that should please those particular Supervisors who insist on being practical and cost effective.

The proposed amendment should be revised to encourage adoption of specific high energy efficiency through Energy Star's DEES or a similar number of points earned from LEED's Energy category. My suggestion is "Encourage energy efficiency and conservation through adoption of a recognized strategy such as DEES or a comparable number of additional LEED points earned on its energy scale."

Where the Virginia Code provides what a comprehensive plan should do, it reads like a social justice declaration. The code requires that the comprehensive plans guide in "accomplishing a coordinated, adjusted and harmonious development of the territory which will, in accordance with present and probable future needs and resources, best promote the health, safety, morals, order, convenience, prosperity and general welfare of the inhabitants, including the elderly and persons with disabilities." This is an idyllic quest that seems to be in search of realizing the Peaceable Kingdom or Thomas Jefferson's vision for a nation of yeoman farmers. It's dreamy but it's codified and we should take it seriously. From its references to the probable future needs of us inhabitants, we should infer our current understanding of the causes of climate change. Failing to address the impact of our fossil fuels addiction on climate is potentially the ultimate social justice issue if we do not act aggressively now. Where the code mentions our health and safety, it means responding with preventive steps that address the causes of climate change. Where it references our morals, it encompasses the plea of many religious leaders, notably Pope Francis, to face the challenge of climate change by continually reducing our dependence on fossil fuels until we are free of its insidious grip on us. Where it refers to the welfare of us inhabitants, it means every one of us, and where it speaks of prosperity, it means to include energy efficiency that has a solid return on its costs to contribute to housing affordability and the prosperity of each one of us inhabitants, rather than the corporate plutocrats who are already prosperous beyond imagination.

Many of you may recall Charles Dickens' "Bleak House" from your student years. You may recall that it's about the demise of sizeable estates willed to heirs, often children, whose trusts were stolen from them by the collusion between the judges and pettifoggers. The pettifoggers were the lawyers who filed endlessly litigious petitions with that early/middle 19th Century Chancery Court. Those actions generated fees for the trustees and lawyers bleeding the trusts empty often leaving the orphans and descendent heirs penniless. Bleak House so scandalized the Court's abuses, that it hastened Parliamentary reforms. We herald Dickens as the great social reformer of Nineteenth Century England and Bleak House offers its example for us today as we confront a global social justice issue of epic size that requires each of us to become outspoken social justice reformers countering today's well financed pettifoggers who trivialize the immensity of the challenge we face.

We hold a trustee's duty to the estates of our children, to see to it that their futures are secured so they may be healthy and prosper in an era built around a new way of living that is fully sustainable. We have the tools we need to get started and failing to use them scandalizes us for our indifference and greed. The purpose of the Comprehensive Plan is to fulfill our obligations to the future, particularly for our children and theirs who are the heirs of what we leave them. Adopting strong energy efficiency is about taking one of the many practical steps every one of us is obliged to take to assure ourselves we did what we were able to do for ensuring future generations may securely and comfortably live.

Thank you for your work to improve the green building policy.

Fairfax County Planning Commission Environmental Committee

Comments of William Penniman Regarding Energy Efficiency Policies November 9, 2017

My name is William Penniman. I am a long-time resident of Fairfax County. I have spent a number of years working on comprehensive plan and zoning issues including four years on the Reston Master Plan Special Task Force and three years on the Reston Planning and Zoning Committee. I also spent four decades working on energy issues for a variety of clients and as a volunteer. My comments here are my own.

I urge the Fairfax County Planning Commission to amend the Comprehensive Plan to implement strong policies that clearly require developers seeking rezoning to construct highly energy efficient buildings. Highly efficient buildings are essential to meeting the long-term needs of owners, occupants and the County.

New commercial and multifamily buildings are expected to last for 40-60 years, possibly longer. In that period, the world will need to drastically and steadily reduce its greenhouse gas emissions—to a net-zero level by or after 2050—in order to avoid catastrophic climate change.¹

This was recognized by Fairfax County in its July 2007 Cool Counties Declaration.² In that declaration, Fairfax County committed to

“work closely with local, state, and federal governments and other leaders to reduce county geographical GHG emissions to 80 percent below current levels by 2050, by developing a GHG emissions inventory and regional plan that establishes short-, mid-, and long-term GHG reduction targets, with recommended goals to stop increasing emissions by 2010, and to achieve a 10 percent reduction every five years thereafter through to 2050.”

¹ This was recognized by all nations—including the United States—in signing the 2015 Paris Climate Agreement (which all have now done, notwithstanding Donald Trump’s announced plan to pull out in a few years).

² <https://www.fairfaxcounty.gov/living/environment/coolcounties/declaration.htm>

And, as Fairfax County explains on its website,³ the commitment to reduce CO2 steadily to achieve an 80% reduction goals by 2050 is also embodied in an agreement of COG members:

"2010: On January 28, 2010, COG members executed the Region Forward Compact, which included the region's first official regional GHG emissions reduction targets:

- **Short-term: Reduce emissions to 2005 levels by 2012**
- **Mid-term: Reduce emissions 20% below 2005 levels by 2020**
- **Long-term: Reduce emissions 80% below 2005 levels by 2050**

The Compact's mid- and long-term targets are the same as those established in the Cool Counties Declaration. The Compact's short-term goal differs from Cool Counties in that COG's short-term goal envisioned the region's emissions leveling off in 2012, not 2010."

Steady reductions going forward are essential to protecting ourselves and our children. Since CO2 accumulates and lasts for millennia in the atmosphere, emissions in early years force sharper reductions later. Delay is not a viable option.

Energy efficiency – serving one's needs with less energy – is the cheapest way to reduce greenhouse gas emissions. The only others are sources of zero-carbon renewable energy (solar, wind, geothermal and hydro). Both will be needed to achieve the steady reductions to the 80% reduction by 2050, but the focus here is on efficiency.

Efficiency improvements require up-front expenses (such as better building envelopes), which is why some developers do not like them; but buildings constructed to high efficiency levels will save money and emissions throughout their lives, and they will minimize more costly retrofits later. That will benefit occupants, owners and the County. The County will benefit because, in addition to minimizing air pollution, lower operating costs from a highly-efficient building stock will continue to attract and retain businesses for the County. Jobs, lower pollution

³ <https://www.fairfaxcounty.gov/living/environment/coolcounties/explanation.htm>

and a richer tax base are ample reasons to insist on the highest levels of energy efficiency in new buildings.

The proposal before the Commission would add to existing language about LEED or equivalent designs, the phrase "encourage an emphasis on energy efficiency and conservation." That is weak to the point of toothless.

Based on my experience and the accelerating need to cut energy use and carbon emissions, the proposed language does not go nearly far enough.

First, as the proposal appears to recognize, LEED points (or their equivalent) can be achieved in many ways other than energy efficiency, which is why LEED or its equivalent measures are not sufficient in themselves.

Second, the County's Comprehensive Plan, already calls for developers in the Reston transit corridor to incorporate high levels of energy efficiency. ("High standards should be expected for neighborhood and building practices for all public and private development that incorporate best practices in ... environmental protection and preservation (as appropriate for an urbanizing environment), and energy efficiency and conservation.") However, in my years on the P&Z Committee, I do not recall any developer who has volunteered or responded to questions that it planned to implement distinctive, stronger measures for energy efficiency or conservation. Nor do I sense that the County Staff has ever pressed developers for strong energy efficiency measures, despite the language in the Comprehensive Plan pertaining to Reston.

In other words, in my experience, vague encouragement does not yield results that will benefit either occupants or the County.

Accordingly, I urge the Planning Commission to require developers applying for rezoning approvals to construct new buildings or modify existing buildings:

- To earn **all** of the efficiency points available in LEED;
- To demonstrate the innovative measures it will implement to minimize energy consumption or on-site solar or other zero-carbon energy generation to reduce the need for energy from carbon-emitting sources;
- To meet Energy Star standards (at least as long as the U.S. government or the State implement them) or net-zero emissions considering efficiency and renewable energy;
- To commit to participating in a benchmarking program to publicly disclose actual energy consumption in its building on a per-square foot basis and a per-occupant (tenant or employee) basis with a break out for restaurant, retail and other space if appropriate.
- To demonstrate a plan for how efficiency and renewable energy improvements will be implemented in the future to achieve the 80% or greater reduction in emissions through energy efficiency or zero-carbon renewable energy, which is contemplated for Fairfax through steady improvements from now to 2050.

These should be clear requirements in the comprehensive plan for such efficiency (or efficiency plus renewable energy) improvements since there is no evidence that volunteerism works. Also, once in the Plan, the requirements need to be enforced by the County Staff and the Planning Commission.

Respectfully,

William Penniman
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