



September 25, 2018

Dear Mayor Silberberg, Vice Mayor Wilson and Members of Council:

On behalf of the Environmental Policy Commission (EPC), I am writing to share our comments regarding the Environmental Action Plan Phase 1 update proposed by staff, including our recommendations for changes to the staff proposal.

We greatly appreciate the time and effort that staff across multiple city departments have devoted to working with us and our community in this process. The proposal before you reflects a broad consensus between EPC and staff in almost all areas, developed over more than a year of intense deliberation, several public meetings and comment periods, and joint work sessions with the Planning Commission and with Council.

In a few key areas, however, we continue to disagree with staff and respectfully provide the following alternative recommendations for Council's consideration.

1. Renewable Energy

Under short term Action #3, the EPC recommends clarifying that on-site renewable energy is not required and therefore that the \$7.5m capital cost would ONLY apply if staff were to pursue an on-site option. The section should clarify that if the City were to pursue a Power Purchase Agreement (PPA) and/or a Renewable Energy Credit (REC) only strategy, the capital cost to the City would be zero.

2. Energy Efficiency

Under short term Action #3, the EPC recommends that Staff include operational savings, not just capital costs, from the investment in LEDs. Since the payback period for the capital investment is relatively fast, it is important for Council to see that the benefits from the capital investment accrue quickly to the City's operating budget. As currently written, the section makes it seem as if there are no financial benefits to the City from the capital outlay.

3. Climate Change

The EPC recommends moving up the update of the City's Energy and Climate Change Action Plan in short term Action #1 from FY2023, as proposed by staff, to FY2021. We have not updated our strategy since 2011, and waiting longer than 10 years to update our strategy is simply not consistent with our Eco-City charter. Climate change is the defining environmental challenge of our time, and we must prioritize taking action to mitigate our own contribution to the problem as well as adapt to its unavoidable effects on our community.

The numbers from the most recent greenhouse gas emissions inventory for Alexandria conducted by the Metropolitan Washington Council of Governments (COG) do not look good. Although our emissions have gone down, this is entirely due to improvements made by Dominion Energy. If Dominion's emissions rate in producing electricity had stayed constant between 2012 and 2015, Alexandria's greenhouse gas emissions would have gone *up* by 2.2%. In contrast, we will need to reduce greenhouse gas emissions community-wide by roughly 4%—each year, for the next 32 years—in order to meet our longstanding 2050 emissions reduction target. We cannot wait any longer to update our Energy and Climate Change Action Plan.

Proposed Language:

- a. Establish a multidisciplinary task force to guide and complete by FY2021 an update of the Energy and Climate Change Action Plan.

4. Green Building

The EPC recommends both simplifying and strengthening the Target for Green Building to clarify how the updated policy will specifically help achieve Greenhouse Gas Emissions, water use, and storm-water runoff goals in the EAP, and to set as policy a goal for all new city-owned buildings to meet a net zero energy standard as soon as practicable.

The current EAP from 2009 called for all new buildings in the City to achieve a net zero energy standard by 2030, but the EPC believes that this can be achieved sooner, especially for city-owned buildings. For example, Arlington County already has a net zero school and has several more in their near term development pipeline. Alexandria has none and none in our pipeline. We believe that Council should set a clear policy for city-owned buildings to seek to meet a net zero energy standard, which will provide clear direction to the new Green Building Task Force to determine how best to achieve that goal for any projects initiated started in FY2020 or later.

Proposed Language:

- a. By FY2019, the Green Building Policy will set expectations for how both new and existing buildings should contribute to the achievement of the goals for GHG emissions, water use, and stormwater runoff reduction established in the EAP, and will set a goal for new city-owned buildings to seek to meet a net zero energy by FY2020."

5. Open Space

The EPC recommends making the open space and land use recommendations more ambitious by establishing the open steering committee envisioned in short term Action #1 sooner than the staff proposed FY2023, and by clarifying in short term Action #3 that open space should be prioritized that is at ground level, maximizes pervious surface and includes larger shade trees that help meet our tree canopy and stormwater goals. We support staff's effort to evaluate and update the City's open space requirements in FY2019, but believe that it is important for Council to clearly articulate what it believes is "meaningful" open space to sufficiently guide that update and to ensure it is consistent with the City's stated environmental priorities.

Proposed Language:

- a. Protect and add open space through acquisition, preservation, and conservation as prescribed in the Open Space Master Plan (updated 2017) and by FY2023, evaluate

increasing the target to 7.5 acres per 1,000 residents. This includes, by FY2020, City Council will reestablish the open space steering committee to re-asses the methodology, evaluate, and prioritize potential open space sites. Tools to be considered for open space preservation or restoration will include purchase, easements, or repurposing land as funds can be made available, development occurs, or partnerships can facilitate.

- b. By FY2020, evaluate and update the requirements of open space on residential, commercial and mixed-use private development. Issues include rooftop/ground floor open space, framework for developer contributions to off-site open space, impervious surface percentages and consistency of open space requirements across similar zones, with a goal of achieving meaningful open space at ground level, vegetated with native plants including large shade trees, and maximizing the area of pervious surface.

Thank for your continued commitment to our environment and for your consideration of our views.

Sincerely,



Jim Kapsis
Chair
Environmental Policy Commission

Docket Item #5

**Environmental Action Plan Phase I Updates to the
Green Building and Land Use and Open Space Chapters**

**For Planning Commission Discussion:
Commissioner Macek Mark-Up of
Environmental Action Plan Chapters**

October 2, 2018

Proposed Text Changes Highlighted in Yellow

Chapter 3 - Green Building

Goal Optimize the economic, environmental, and social performance of new and existing buildings in the City of Alexandria.

Target By FY2023, the Green Building Policy will enhance sustainable practices within new and existing buildings, establishing the expectations for public and private buildings toward achieving the goals for GHG emissions, water use, and stormwater runoff reduction established in the EAP.

Short Term Actions

1. Review the effectiveness of the current Green Building Policy and update the Policy in FY2019 with a focus on sustainable strategies that have the greatest impact toward achieving targets across EAP principle areas. The Task Force deliberations will inform the medium and long-term EAP actions for Green Buildings. Through this process, with support of third-party consultant analysis, the update will consider topics such as:
 - a. Increasing LEED or equivalent third-party green building certification standards for private development;
 - b. Establishing a separate green building standard, which includes evaluating the feasibility of a net zero standard where applicable, for new public development, including schools in collaboration with ACPS;
 - c. Prioritizing specific green building elements;

- d. Incorporating incentives to promote green building to achieve the quantifiable goals for GHG emissions and water use and stormwater runoff reduction established in the EAP;
- e. **Introducing Investigating the introduction of** green building practices for existing buildings (including historic) and for small buildings not subject to site plan review;
- f. Instituting a building performance monitoring program;
- g. The City's ability to be more ambitious than the private sector in meeting green building goals to serve as a sustainability leader, and
- h. Establishing a Green Zone in the City.

As part of this process, a Green Building Policy Update Task Force will be established by City Council. The Task Force, with critical input from the EPC and the development community, will determine the actual topics to be analyzed by the consultant. (P&Z)

Cost Estimate: \$75,000

Cost Breakdown: The funds will be used for consultant studies on policy analysis on a cost analysis. (does not include staff time)

- 2. By FY2020, evaluate additional sustainable features to incorporate into the "Building Section" of the standard development conditions for the Development Site Plans (DSP) and Development Special Use Permits (DSUP) that will contribute toward achieving targets across EAP principle areas. (P&Z)

Cost Estimate: N/A

Cost Breakdown: Existing staff resources

Legislative Priorities

N/A

Justification

- 1. Climate change presents an existential threat to the future livability of Alexandria and the rest of the planet. Climate science has confirmed that GHG emissions must be rapidly eliminated to avoid a greater than 2°C increase in global average temperatures. Green building is an important instrument in reducing GHG emissions, potable water consumption, raw materials use, and waste output. Green Building also contributes to increased air quality, reduced storm water pollution, reduced energy demands, and economic sustainability.

Accountable Parties

Planning and Zoning (primary); Code Administration; General Services; Transportation and Environmental Services

Chapter 4 - Land Use and Open Space

A. Tree Canopy

Goal Preserve and expand a healthy urban tree canopy.

Target By FY2023, average overall tree canopy is a minimum of 40 percent.¹

Short Term Actions

1. Update and coordinate the Urban Forestry Master Plan, Environmental Sustainability and Management System, and Landscape Guidelines in FY2019 to support increased tree preservation, expansion, maintenance, native species, and a revised tree canopy coverage goal. (RPCA)

Cost Estimate: \$40,000 per year#

Cost Breakdown: \$30,000 - \$40,000 per year. \$30,000 for the yearly tree inventory study plus \$10,000 for the tree canopy survey scheduled for every three years. Existing staff resources are accounted for in current budget. Additional resources may be required to fully implement the goals of the plan/guidelines.

2. Enlist City partnerships (community groups) to provide education and outreach that support technical assistance and opportunities to increase native tree canopy coverage on private property. (RPCA)

Cost Estimate: N/A

Cost Breakdown: Existing staff resources are accounted for in current budget.

Legislative Priorities

1. Advocate for state legislation that would enable the City to expand tree protection and preservation and to increase tree canopy requirements.

Justification

1. A healthy and diverse urban forest canopy coverage in Alexandria provides a broad range of environmental and social benefits such as reduced GHG emissions, improved air quality, enhanced property values, stormwater and flood mitigation, public health benefits, and vibrant public spaces. The reduction of GHG emissions improves air quality and contributes to health and wellness.

Accountable Parties

Recreation, Parks and Cultural Activities (primary); Planning and Zoning

¹ City of Alexandria Urban Forestry Master Plan, approved 2009 and currently under revision

Chapter 4 - Land Use and Open Space

B. Open Space

Goal Increase open space quantity and improve the environmental quality and social benefits of open space.

Target Maintain the ratio of 7.3 acres of publicly accessible open space per 1,000 residents.²

Short Term Actions

1. Protect and add open space through acquisition, preservation, and conservation as prescribed in the Open Space Master Plan (updated 2017) and by FY2023, evaluate increasing the target to 7.5 per 1000 residents. This includes, by 2023, City Council will reestablish the open space steering committee to re-asses the methodology, evaluate, and prioritize potential open space sites. Tools to be considered for open space preservation or restoration will include purchase, easements, or repurposing land as funds can be made available, development occurs, or partnerships can facilitate. (RPCA)

Cost Estimate: N/A

Cost Breakdown: Existing staff resources. No additional cost implications; however, The action is dependent on the development envisioned in small area plans, including city investments, developer contributions, and private philanthropic contributions.

2. By FY2023, increase the percentage of acres of public natural lands that are actively managed, including restoration and invasive species removal, by 50 percent (450 acres). (RPCA)

Cost Estimate: N/A

Cost Breakdown: Existing staff resources

3. By FY2020, Evaluate and update the requirements of open space on residential, commercial and mixed-use private development. Issues include rooftop/ground floor open space, framework for developer contributions to off-site open space, impervious surface percentages, vegetation requirements, and consistency of open space requirements across similar zones. (P&Z)

Cost Estimate: N/A

Cost Breakdown: Existing staff resources

Legislative Priorities

N/A

² City of Alexandria Open Space Master Plan, approved 2003 and updated 2017

Justification

1. Open space, natural spaces and tree canopy provide physical, mental and community benefits, while offering opportunities for social interaction and the conservation of natural resources and biodiversity. Public open space equitably encourages healthy choices and active lifestyles for the City's diverse population.
2. Reduces GHG emissions and improves air quality by encouraging development density around mass transit centers as mandated in the City Master Plan.

Accountable Parties

Recreation, Parks and Cultural Activities (primary); Planning and Zoning

Docket Item #5

**Environmental Action Plan Phase I Updates to the
Green Building and Land Use and Open Space Chapters**

**For Planning Commission Discussion:
Post-October 2 Hearing Mark-Up of
Environmental Action Plan Chapters**

October 3, 2018

10/2/18 Proposed Text Changes Highlighted in Yellow

10/3/18 Additional Proposed Text Changes Highlighted in Blue

Chapter 3 - Green Building

Goal Optimize the economic, environmental, and social performance of new and existing buildings in the City of Alexandria.

Target By FY2023¹⁹, the Green Building Policy will set expectations for how both enhance sustainable practices within new and existing buildings should contribute , establishing the expectations for public and private buildings toward achieving the goals for GHG emissions, water use, and stormwater runoff reduction established in the EAP, and by FY2020 will set forth a path for new city-owned buildings to meet a net zero energy standard.

Short Term Actions

1. Review the effectiveness of the current Green Building Policy and update the Policy in FY2019 with a focus on sustainable strategies that have the greatest impact toward achieving targets across EAP principle areas. The Task Force deliberations will inform the medium and long-term EAP actions for Green Buildings. Through this process, with support of third-party consultant analysis, the update will consider topics such as:
 - a. Increasing LEED or equivalent third-party green building certification standards for private development;
 - b. Establishing a separate green building standard, which includes evaluating the feasibility of a net zero standard where applicable, for new public development, including schools in collaboration with ACPS;

- c. ~~Incorporating~~ Establishing incentives for private development participation in green building certifications. ~~to promote green building~~ to achieve the quantifiable goals for GHG emissions and water use and stormwater runoff reduction established in the EAP;
- d. Prioritizing specific green building elements;
- e. Introducing mandatory and/or voluntary green building practices for existing buildings (including historic) and for small buildings not subject to site plan review;
- f. Instituting a building performance monitoring program;
- g. The City's ability to be more ambitious than the private sector in meeting green building goals to serve as a sustainability leader, and
- h. Establishing a Green Zone in the City.

As part of this process, a Green Building Policy Update Task Force will be established by City Council. The Task Force, with critical input from the EPC and the development community, will determine the actual topics to be analyzed by the consultant. (P&Z)

Cost Estimate: \$75,000

Cost Breakdown: The funds will be used for consultant studies on policy analysis on a cost analysis. (does not include staff time)

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Accountable Parties

Recreation, Parks and Cultural Activities (primary); Planning and Zoning

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2. By FY2023, increase the percentage of acres of public natural lands that are actively managed, including restoration and invasive species removal, by 50 percent (450 acres). (RPCA)

Cost Estimate: N/A

Cost Breakdown: Existing staff resources

3. By FY2020, Evaluate and update using a public process, the requirements of open space on residential, commercial and mixed-use private development. Issues to be addressed include location of and access to rooftop/ground floor open space (e.g. rooftop/ground floor; public/private), framework for developer contributions to off-site open space, reducing impervious surfaces percentages, aligning vegetation requirements with canopy and native species goals described in Chapter 4.A.1. above, and consistency of open space requirements across similar zones. (P&Z)

Cost Estimate: N/A

Cost Breakdown: Existing staff resources

Legislative Priorities

² City of Alexandria Open Space Master Plan, approved 2003 and updated 2017

N/A

Justification

1. Open space, natural spaces and tree canopy provide physical, mental and community benefits, while offering opportunities for social interaction and the conservation of natural resources and biodiversity. Public open space equitably encourages healthy choices and active lifestyles for the City's diverse population.
2. Reduces GHG emissions and improves air quality by encouraging development density around mass transit centers as mandated in the City Master Plan.

Accountable Parties

Recreation, Parks and Cultural Activities (primary); Planning and Zoning

Planning Commission endorsement of Environmental Policy Commission EAP Phase 1 recommendations

Scott Barstow <shbarstow@gmail.com>

Wed 10/3/2018 8:43 PM

To: PlanComm <PlanComm@alexandriava.gov>;

Thank you again for the opportunity to speak at your meeting last night. As you continue to consider the Environmental Policy Commission's recommendations for changes to the Phase 1 update of Alexandria's Environmental Action Plan, I wanted to take a moment to elaborate on why we believe the city staff proposal for the green building target is insufficient.

Climate change is an existential threat to our city's future. A substantial fraction of the greenhouse gases we emit today will remain in the atmosphere for a thousand years or more, further warming the planet, and I cannot think of another area in which city planning will have effects for this length of time. The Trump Administration projects that average annual temperatures in the U.S. for the period 2021-2050 will be 2.5 degrees higher than they were for the period 1976-2006, and that unless we constrain our greenhouse gas emissions those living in Alexandria towards the end of this century will live their lives in a climate with temperatures that are 5 to 11 degrees higher. These are the projected increases in *average* temperatures; temperature extremes would be even higher.

Recent research shows that the city's current greenhouse gas mitigation goal--an 80% reduction below 2005 emissions levels by 2050--may not be aggressive enough to avoid catastrophic climate change. As it is, meeting this target will require a roughly 4% per year reduction in our emissions each year for the next three decades. This will only be possible if we begin making significant, transformational changes immediately.

Despite this challenge, city staff recommend that we wait until FY 2023 to "enhance sustainable practices" and "establish the expectation" that public and private buildings will meet greenhouse gas reduction goals.

I strongly believe that this is far too little, and far too late. In the context of climate change, "sustainable" means net-zero energy. New buildings constructed today will likely have an operational lifetime of decades. Erecting public buildings that continue to require the burning of fossil fuels to operate is akin to buying old-school diesel buses. Alexandria can and should be an environmental leader, and serve as an example to the community; this "city as leader" goal was included in the 2009 Environmental Action Plan.

I urge you to endorse the Environmental Policy Commission's recommended change to the green building target in the EAP Phase 1 update. Your commission has a strong voice, and City Council needs the support of our community to take firm action on climate change. I hope you will join us in providing this support.

Thank you for your consideration, and please feel free to contact me should you have any questions.

Scott Barstow