

Environment and Energy Conservation Commission
Draft

Summary of June 24, 2019 Meeting
2100 Clarendon Blvd, Azalea Conference Room

Members Present: Teresa Leonardo, Claire O’Dea, Shawn Norton, John Bloom, Carol Rakatansky

Members Absent: Gabriel Thoumi, Mike Hanna, Charles Girard, Colleen Orr, Kimberly Fedinatz, Jessica Skerritt,

Guests: Jonathan Morgenstein, Josh Griset, Joan McIntyre, Connie Ericson, Bernie Berne, Alysia Y.

Staff Present: Adam Segel-Moss (DES), Jessica Abralind (DES), Joan Kelsch (DES), Rich Dooley (DES), Demetra McBride (DES)

1. Public Comment

none

2. Green Building Update

Joan Kelsch gave an update on the Green building incentive program. Joan noted that the program incentivizes projects to build projects that use less energy, water, waste, and sit more lightly on the land.

Joan noted that the Green Building (GB) Incentive Program is one of the most important tools that the County uses to achieve Community Energy Plan (CEP) implementation.

Jessica detailed the GB incentive policy proposed amendment. In the last GB update, net zero was introduced as a way for projects to achieve a small amount of extra density and stretch their projects to achieve CEP goals. No developers have used that element of the GB program to date.

In 2018 the International Living Futures Institute released a new certification that is more aligned with Arlington building types. Certification requires performance, not just design, of super-efficient building. It also allows for offsite solar contracts. It also requires all of the carbon associated with the construction of the project be offset. This certification is being proposed to be included as part of the current GB program. The proposed amendment would allow projects to stretch for this certification to serve projects and achieve CEP goals.

This is called zero carbon certification.

Only 3 words are being proposed in the GB amendment to allow for the zero-carbon certification.

Carol asked how much additional density is being offered for zero carbon. Jessica noted that it is case-by-case for the amount of density. Carol asked who makes these choices. Jessica noted that it is ultimately the Board but supports discussions.

John Bloom asked how many takers might participate in this zero-carbon certification. Staff noted that there aren't any assumptions or projections. This will be a case-by-case choice that projects will make based on cost, payback, corporate commitment, and other weighted interests. Staff noted that it is a voluntary option that projects could participate in if they were interested.

Claire asked what happens if they don't achieve their commitment. Staff noted that there is a financial security on the line. The amount of the financial security is in the order of magnitude of hundreds of thousands if not a million dollars.

John asked about the onsite/offsite solar commitment required as part of the zero-carbon certification. Jessica noted that it requires a 15-year commitment of new additional solar. Renewable energy credits are not being allowed. John asked about onsite vs. offsite. Staff noted that it would rarely if not impossible to put enough solar on large commercial buildings to meet the certification requirement. Newly constructed offsite solar is a compliance path through contracting.

John asked about the regional nature of the solar. Staff noted that solar must be developed in the grid region that supplies Arlington power and staff would require it be in our airshed as well.

Joan M. asked about deforestation vs. solar. Staff noted that cutting trees for solar is not the goal. A balanced approach is needed.

Jessica Abralind provided an additional update regarding the County Green Building Administrative Regulation.

It was first approved in 2009 and no revisions have been made since inception. Since then, much has changed. The Community Energy Plan was adopted, the green building industry has evolved, new technology has become cost-effective, and more. Given these changes staff decided it was time to update and align the County Facilities program with best practices.

The goals of the changes include:

- Improve cost effectiveness of County facilities investments
- Multiple levels of sustainability targets to improve flexibility and maximize participation
- More clearly guide design and construction teams with specific guiding principles

- Retain holistic environmental performance goals including indoor air quality and human health, water efficiency, recycling

Jessica detailed summary of changes. The guiding principles emphasizes passive solutions that are designed for cost effectiveness, better energy performance, human health, and ease of maintenance.

- New guiding principles emphasize simple, passive solutions and design for cost effectiveness, better energy performance, human health, and ease of maintenance
- Primary Target is Net Zero Energy Ready, but includes exceptions and options for flexibility and broad applicability
- Target Energy Use Intensity (EUI)
- Stakeholder involvement – set targets early
- DES Director and CMO waivers included for exceptions

Jessica detailed the working group process, stakeholders, and guiding principles to create the Public Facilities Policy.

The key policy takeaways are as follows:

- Provides clearer guidance for project teams
- Prioritizes proper function, ease of maintenance, energy efficiency, human experience, durability and cost effectiveness
- Strong targets and flexible application of the policy
- Set targets early
- Field Verification and Lessons Learned

Claire volunteered to write a letter to the Board regarding this new Administrative Regulation. The Commission will review and consider it at the July 2019 meeting.

3. Community Energy Plan

Rich Dooley provided a briefing on the Community Energy Plan (CEP) update. Rich noted that the CEP includes:

- Long-term vision for transforming how we generate, distribute, store, and use energy.
- Adopted as an element of the County's Comprehensive Plan in 2013.
- Organized by six Goal Areas and related Policies. Focus on:
 - Energy Security
 - Economic Competitiveness
 - Environmental Commitment

Rich detailed the 2013 CEP and noted that the District Energy section has been shifted to Resilience in 2019.

Since 2013 much has occurred to implement the CEP. Some examples include:

- First LEED Platinum community in the nation
- APS & Net Zero Energy Schools
 - Discovery Elementary School
- Innovative Solar Co-op
- 1st Commercial C-PACE program in Commonwealth
- Green Home Choice Program, results in ~50% reduction in energy costs for participating homes
- Updated Bonus Density Program
- Updated policies, e.g., Sustainable Buildings Policy

Saving Energy & Money Every Day

\$4,700,000

saved annually by the community & county government through actionable AIRE program outreach & projects.

Community greenhouse gas emissions 2007-2017



↓ 24%

10 Million Square Feet

of LEED certified space in 38 buildings through AIRE's Green Building program, saving businesses and residents more than \$2 million per year.



325

Green Home Choice certified homes, saving an average of 50% on utility bills.



\$460,000

saved annually by businesses and residents through AIRE's commercial and home energy efficiency rebates.



Doubled



the number of solar systems since 2015. 118 homeowners have installed solar through Arlington Solar Co-ops.

Program energy savings are equivalent to taking 4,000 cars off the road annually.



Rich noted the following community transformation and headwinds:

- Population increased 8%
- Jobs increased 3%
- Number of housing units increased 12%
- Electric grid emissions rate decreased 28% (CO₂ per kWh)
- Total energy used in buildings decreased 11 %
- Total energy used in transportation decreased 13%

Teresa noted that it is great to see 3 MT to 1 MT, but she asked why D.C. is able to get to net zero. Demetra noted that their goals exclude federal facilities. They also have a public utility and a Sustainable Energy Trust. They have control, choice, and independence to partner with the government to achieve renewable energy targets.

Shawn Norton asked how policy changes could be modeled for outcomes. John Bloom noted that an example would be Community Choice Aggregation could be modeled. Rich noted that staff are looking at all options for the implementation framework.

The commission discussed rates of adoption, year of goal adoption, projections for various areas, technology evolution, etc.

John noted that he is looking for what other cities and counties are doing now. He noted that no other jurisdictions have committed to anything less than carbon neutral by 2050 in recent months/year. He noted that the County should reach for similar commitments to continue leadership.

A quorum wasn't available to vote on a letter. The Commission discussed timing of comments and a letter to be submitted in July or August.

4. Amazon Letter – Re: Conceptual

A letter was discussed as something that share community interests.

Shawn noted that it would be helpful to invite Amazon representatives for a discussion. The Commission discussed both writing a letter and inviting Amazon.

Commissioners will try to coordinate Amazon attendance to discuss HQ2 design in July, provide input, and consider a letter to the Board on the topic thereafter.

5. Legislative letter review

The commission discussed topics of interest and decided to push this letter to July.

6. Old / New Business

Shawn Norton agreed to volunteer on NRJAG. He attended the June 3rd meeting and spoke to the new assistant division chief. There was a meeting about biophilic cities. The NRJAG plan will kick off in October.

Claire noted that there wasn't much talk about trees in the CEP. There may be some desire to have the Commissioners raise trees as an issue / goal for the CEP. The Neighborhood Conservation update kickoff meeting happened, and that process is starting.

Mike M. attended the Gulf Branch stream restoration public meeting. There are several areas that need mitigation and there are competing tributaries. There is a meeting on July 17 for public input.

John Bloom noted that that he attended one meeting of the Long Bridge advisory group. Since that meeting, the issue was that the Commission was disappointed in the lack of solar or solar ready for the site. Demetra noted that the operations and capital budgets don't overlap.