

BOARD OF SUPERVISORS ENVIRONMENTAL COMMITTEE

May 17, 2022

11:00 A.M.

Government Center Board Room

Board of Supervisors Members Present:

Board Chair Jeffrey C. McKay

Committee Chair Daniel G. Storck, Mount Vernon District

Supervisor Walter L. Alcorn, Hunter Mill District

Supervisor John W. Foust, Dranesville District

Supervisor Penelope A. Gross, Mason District

Supervisor Pat Herrity, Springfield District

Supervisor Rodney L. Lusk, Lee District

Supervisor Dalia A. Palchik, Providence District

Supervisor Kathy L. Smith, Sully District

Supervisor James R. Walkinshaw, Braddock District

Others Present:

Bryan J. Hill, County Executive

Elizabeth D. Teare, County Attorney

May 17, 2022, Meeting Agenda:

[may17-environmental-agenda-revised.pdf \(fairfaxcounty.gov\)](#)

May 17, 2022, Meeting Materials:

[Board of Supervisors Environmental Committee Meeting: May 17, 2022 | Board Of Supervisors \(fairfaxcounty.gov\)](#)

The following is a summary of the discussion from the May 17, 2022, Environmental Committee meeting.

The meeting was called to order at 11:15 A.M.

Item I Opening Remarks

After a brief introduction from Supervisor Storck, Committee Chair, the Environmental Committee was asked if there were any changes to the minutes of February 15, 2022. With no changes, the meeting minutes were accepted.

Chairman Storck asked the Board if there were any expected updates from the last Environmental Committee meeting that Board members were missing. None were identified.

Item II Climate Action Update

The second item on the agenda was an update on Climate Action, presented by Kambiz Agazi, Director, Office of Environmental and Energy Coordination (OEEC).

Kambiz noted that his presentation on climate action pertained to the operational space. The remaining items on the agenda are also pertinent to climate action, with the second presentation covering the community space, on education and outreach, and the third on master planning.

Kambiz's presentation began with an update on legislative activity in the 2022 General Assembly relating to climate action. The county had two wins in this space. The first was House Bill (HB) 443, granting the Fairfax County Park Authority the authority to install fee-based electric vehicle chargers, and the second was HB 396, codifying amendments to the virtual net metering program, which will help the county implement its solar goals.

Kambiz then presented on the Solar Game Plan (CY 2022/2023) for county operations, sharing a list of county sites where solar is expected to be implemented over the next couple of years. He noted that a staff team meets monthly to discuss potential sites and approach options. There are three options available: The first option is Capital Construction, available for new construction and major renovations; the second is the use of an Energy Service Company (ESCO), available for new construction and retrofits; and the third is the use of a Power Purchase Agreement (PPA), also available for new construction or retrofits. There

are some determining factors on whether the county pursues solar via Capital Construction, an ESCO, or a PPA, such as project size or age of the roof.

Kambiz next presented on the ESCO Game Plan (CY 2022/2023), sharing a list of where and which types of energy efficiency projects will be implemented at county sites over the short term. He noted that the county's Operational Energy Strategy includes a target of 25 percent improvement in energy efficiency by 2030. The aggregate of the three construction projects highlighted on the slide would meet the target. The energy efficiency premium and energy efficiency specific measures for the three projects total about \$1.4 million and have a payback of about 9 years.

Finally, Kambiz presented on the Electric Vehicle Game Plan (CY 2022), sharing a list of county facilities where electric vehicle (EV) chargers will be installed in 2022. A team meets monthly to ensure progress in fleet electrification. The list shown did not include the five locations where EV chargers have already been installed in parking garages at the Government Center, Herrity Building, Pennino Building, Merrifield Center, and Public Safety Headquarters-Phase I, for a total of over 40 spaces. The priority is to achieve the Board's fleet electrification target of 100 percent electric vehicles or non-carbon emitting alternatives by 2035. There are several priority sites identified by the Department of Vehicle Services (DVS) to help achieve this goal. Other opportunities are coming through Capital Construction.

Government center/police station sites are not yet final. Staff has been visiting government center/police stations across the county to look for opportunities, taking into consideration the complexity of the site, as well as environmental and cost considerations. Staff is looking to pilot EV charging at one police station that is urban/suburban (e.g. McLean Government Center) and one that is suburban/rural (e.g. Sully Government Center).

Lastly, there have been significant impacts from pandemic-related market disruptions on cost estimates for EV charging installations. The initial predictions of \$75,000 per site will likely be exceeded, to perhaps double or triple this figure. This is mainly due to construction of the sites. OEEC and DVS are closely tracking the grants that are available from the Bipartisan Infrastructure Law to help pay for the infrastructure.

Board Discussion:

Chairman McKay asked if, with the passage of HB 443 and HB 396, any of the projects listed were modified, expanded, or added in response to the legislation. If not, the Chairman asked if we will be looking at adding or modifying sites to put to use the bills that the county asked for.

Kambiz responded that HB 396 will require the State Corporation Commission (SCC) to develop guidelines before we can take advantage of that bill. We have not taken advantage of it yet, but we intend to.

Chairman McKay asked if we could enlarge the systems at existing sites now that the virtual net metering program has been modified.

Kambiz noted that we have parking garages that went through conceptual design in anticipation of the virtual net metering program being amended. In addition to the parking garages, the wastewater treatment plant also has some open space. Staff is anticipating putting some projects into the queue, which should be reflected in the Solar Game Plan for 2023.

Chairman McKay stressed the importance of putting these bills to use, as they were asks made by the county. He would like to be kept up to date on the regulatory process for HB 396.

Supervisor Walkinshaw asked about the 12 -15-year payback period for solar and what happens after the breakeven point.

Kambiz responded that, for solar and energy efficiency projects, once they break even, they are money makers.

Supervisor Walkinshaw noted that this investment will pay off for decades. For the EV Game Plan, he noted that most if not all of the sites listed were existing facilities and asked how many sites are in the pipeline for facilities that are planned to be built.

Kambiz responded that any project currently going through the Capital Improvement Program (CIP) process as new construction is designed to be EV ready.

Supervisor Walkinshaw would like us to maximize the potential of EV charging at each new facility built.

Item III

Public Education and Outreach Programs in Support of CECAP

The third item on the agenda was a presentation on Public Education and Outreach Programs in Support of CECAP by Ali Althen, Public Information Officer, OEEC.

Ali began with an overview of the five focus areas of the Community-wide Energy and Climate Action Plan (CECAP). Within each of the focus areas, there are several strategies addressing issues such as the implementation of solar, the installation of EV charging stations, and adoption of EVs across the county. Among these five strategy areas, buildings and energy, energy supply, and transportation are the most likely to move the needle on climate change. Those are the three areas of focus for public education and outreach over the short term.

In the OEEC, we define public education as encompassing activities meant to inform individuals about the nature of the problem and possible solutions; public outreach includes activities meant to engage individuals and stakeholders in activities that address our local greenhouse gas emissions.

A brief preview of an education piece we are working on is to clarify and create opportunities for people to engage in climate action. We are creating a new suite of webpages to help individuals drill down by topic to find educational content, metrics, opportunities for action, and ways to stay up to date on nine topic areas.

In addition to relatively passive educational vehicles like our website, we are focused on developing and deploying education and outreach programs to achieve CECAP goals. Four county programs and initiatives within the OEEC support the implementation of the CECAP building and energy and transportation strategies. Each of the four programs, which include Carbon-Free Fairfax, HomeWise, Green Business Partners and Energy Action Fairfax, are at different stages of development. Certain programs, like Carbon-Free Fairfax, will touch on all five of the CECAP focus areas. Other programs are more limited in scope. These programs also fulfill four of the nine environmental strategies in the Strategic Plan.

Since the launch of Carbon-Free Fairfax in February of 2022, it has reached nearly 3,200 county residents with content and events. We launched new webpages on electric vehicles; published a decision-making kit for EV ownership; held a webinar on using lighting to improve health and meet sustainability goals; held an ask an expert session on lighting and air leaks; and held promotional partner

briefings and developed tools and resources for those partners. This initiative is actively running and will continue perpetually with new campaigns to be developed over the coming months and years.

Next, Ali went into more detail on the HomeWise program, which launched in fall 2020 and has been in the pilot phase since that time. The program focuses on supporting low-income households and residents in the county. The program has reached over 375 county residents. Due to staffing constraints, this program is pursuing its mission via virtual educational offerings and hosting or participating in community events. We are currently evaluating a more service-based approach, making certain program offerings available by request or through partner organizations. By working together with human service organizations, we can connect with residents that express interest in the support that HomeWise can provide, improving residents' water and energy cost burdens, which will generally improve our energy efficiency and conservation metrics as a county.

Previous to CECAP and OEEC, two programs were formed to address sustainability in the residential and commercial sectors. The Energy Action Fairfax program was created in 2015 and was initially very successful at encouraging good energy use in the residential sector. Due to staffing constraints, the program has been largely dormant. OEEC is evaluating the program for relaunch, with an emphasis on encouraging efficiency through retrofits, audits, partnerships with HOAs, and incentives for action. This program is essential for direct engagement with residents through partnerships with HOAs and the delivery of financial or other incentives to retrofit buildings. CECAP has a goal to retrofit 100,000 existing buildings by 2030. This program will help us get to that goal.

Similar to Energy Action Fairfax, the Green Business Partners program, also created in 2015, has become relatively inactive. The OEEC has been evaluating how to relaunch the program. It has been holding conversations with business partners across the county to find how best to add value and support the sustainability goals and efforts of the business community. The Green Business Partners program represents one of the best opportunities for robust business engagement in the sustainability space. By celebrating success in the business community and creating conversations about goals, best practices, and impediments to progress, we can build momentum to achieve many CECAP goals.

We are reimagining both of these programs for relaunch, which will be critical to the implementation of CECAP. Additional staffing will be required to increase our

level of service. Without dedicated staff support, programs like HomeWise will not be fully realized and previous programs will not be able to be meaningfully relaunched. Even with the addition of staff support, we expect that the programs will need to be deployed in a cyclical manner, with staff focused on implementation of one or two of these programs over a series of months. We are requesting a consideration item for the FY 2022 Carryover for two full-time positions for this purpose.

Board Discussion:

Chairman McKay asked if the webpage on climate action was live.

Ali responded that it is still in development.

Chairman McKay asked how the webpage will interface with other county webpages.

Ali noted that she has been collaborating with other county agencies to connect our information with that of other agencies on topics that intersect.

Chairman McKay commented that there does come a point in time that we have so many programs that it can become confusing. He noted that HomeWise and Energy Action Fairfax seem very similar in scope and mission. He asked if there was a way to collapse and consolidate some of these programs.

Ali noted that this it is a conversation staff is having.

Chairman McKay reiterated that simple is best in terms of getting residents interested and engaged with our programs.

Supervisor Smith echoed the Chairman's comments. She was also concerned about the request for staffing. She commented that we need to be careful, look at the programs and evaluate what can be streamlined. She would like staff to think about what would have the most "bang for the buck" in terms of working with the community to produce measurable outcomes.

Chairman Storck noted that he is looking forward to more partnerships to help make progress across a range of sectors.

Item IV CECAP Implementation Update

The fourth item on the agenda was an update on CECAP Implementation by Matt Meyers, Division Manager and Maya Dhavale, Senior Community Specialist, OEEC.

Matt noted that his presentation would build on Kambiz and Ali's presentations to discuss how we build on existing programs and integrate them into a long-term process that builds into the annual budget process, similar to the CIP.

CECAP implementation is building on existing programs for both county operations and the community in order to target greenhouse gas emissions. Some other items that are ongoing include developing legislative recommendations for the 2023 General Assembly to help advance CECAP goals. The OEEC is looking into incentives for people to take action and influence behavior. Another initiative that is ongoing is research into a Green Bank. We are looking into financial opportunities and investments in energy efficiency and renewable energy. CECAP implementation includes building on these programs, looking for gaps, and prioritizing the recommendations.

Ultimately, we will be developing a master plan and the first annual work plan that will be presented to the Environmental Committee in the fall of 2022. As part of its acceptance of CECAP in September 2021, the Board directed staff to work with relevant agencies to implement both the short-term and long-term implementation processes. Matt presented the full range of county agencies involved with CECAP implementation.

Looking at the CECAP strategies, the sectors contributing the most emissions are buildings and energy and transportation. These sectors will be a major focus of CECAP implementation. Energy supply and renewable energy will also be a major focus. Although the two remaining sectors, waste and natural resources, have less of an impact on climate, the CECAP implementation team is collaborating with the Zero Waste implementation team; it is also looking at those strategies under the natural resources sector that have co-benefits with health and recreation.

Matt then highlighted the building and energy sector and the CECAP goal that all new, eligible buildings have a commitment to Green Building. He touched on how this relates to the county's own goals and initiatives. As we turn to the community,

we need to look at Comprehensive Plan and Zoning Ordinance changes. The second goal under this sector is to retrofit at least 100,000 housing units with energy efficient measures by 2030. We are looking to build on existing programs to move these initiatives forward. Partnerships are key.

Matt then highlighted the transportation sector and the CECAP goal to increase transit and non-motorized commuting to 30 percent and increase EVs and plug-in hybrids to at least 15 percent of all light-duty vehicle registrations by 2030. Again, Matt touched on the county's related goals and initiatives in this area, including the Operational Energy Strategy, EV Game Plan and regional transportation planning initiatives. To address the community, staff is following EV market trends, looking at ways to address EV charging in common-interest communities, and ways to advance electrification for local commercial fleets.

Next steps for long-term CECAP implementation will include engaging community partners, presenting the Master Plan, and monitoring and reporting progress. We will continue to promote Carbon-Free Fairfax, further develop community-facing programs, and give updates on the legislative proposals as well as a Green Bank proposal at a future Environmental Committee meeting.

Board Discussion:

Supervisor Gross complimented staff on the process. She asked about a figure on slide seven related to the square footage of industrial, office and retail buildings and if that figure was correct.

Matt said that he would revisit that figure and update as needed.

Supervisor Foust asked about the goal to retrofit 100,000 housing units and asked where we are with that as of today.

Matt responded that there are energy efficiency retrofits going on in the community. We are developing ways to track and promote retrofits.

Kambiz Agazi clarified that we are at zero retrofits today in terms of CECAP implementation. He noted that the relaunch of the Energy Action Fairfax program will be important to meeting this goal.

Supervisor Foust asked for clarification on what energy efficient measures include and if there is a percentage of energy use reduction that would be required for certain measures to be considered energy efficient.

Matt responded that CECAP left that open. That is something we can further develop and look at ways to better quantify as we move forward with implementation.

Supervisor Foust asked about non-motorized commuting figures and if we know what percentage that is today.

Matt did not have the number in front of him but would look into it.

Supervisor Foust also asked about the goal to convert buses and fleet vehicles by 2035 and if that means 100 percent of the fleet will be electric at that time.

Kambiz responded that, for the county, all of the eligible fleet will be electric or a non-carbon emitting alternative by 2035 to meet the Operational Energy Strategy target. We will be working with other agencies to get data for the metrics.

Supervisor Palchik commented on the importance of the partnerships with HOAs and asked how we can be more proactive to make change and incentivize retrofits.

Ali Althen responded that we will be listening to community members and creating creative solutions for these plans. She offered to follow up with Supervisor Palchik's office to get more ideas to reach those communities.

Supervisor Palchik said she would be happy to help.

Supervisor Walkinshaw was enthusiastic about the ideas mentioned, especially Green Business Partners. He mentioned the Solarize program and asked if we should fund a mailing to eligible homes.

Ali noted that the Solarize program was very successful this year with close to 800 sign-ups, over 300 being in Fairfax, and appreciated the suggestion of a mailer.

Chairman Storck agreed that it could make a difference in our community. He stressed the importance of partnerships. They are crucial to implementation of our

CECAP goals. We are just getting CECAP off the ground and are looking for other methods and opportunities we can use to move forward.

Item V Resilient Fairfax Update

The fifth item on the agenda was an update on Resilient Fairfax, by Allison Homer, Senior Community Specialist, OEEC.

Resilient Fairfax focuses on the effects of climate change. It is a program that strengthens the county's resilience to changing climatic conditions. The planning process began with a series of analytical steps. First, the Resilient Fairfax project team modeled Fairfax County's future climatic conditions. Next, it analyzed where infrastructure, services, assets, and populations are vulnerable to these conditions. The project team conducted an audit of existing county policies, plans, and programs, identifying how the county is currently doing and opportunities for improvement. These analyses were followed by development of strategies to enhance the county's resilience to climate hazards and a roadmap to facilitate implementation.

Resilient Fairfax is led by the OEEC and a team of consultants. The planning process has over 100 advisors. These advisors include the Planning Team, an Infrastructure Advisory Group, and a Community Advisory Group.

In the midst of a changing climate, there has been an increase of climate resilience-related action at regional, state, and federal levels. The Resilient Fairfax project team has worked with representatives of these related initiatives to ensure that data, plans, strategies, and funding opportunities are aligned. The Resilient Fairfax project team has also ensured coordination with local military base resilience planning, the Regional Hazard Mitigation Plan, the Virginia Coastal Resilience Master Plan, regional climate planning activities of neighboring jurisdictions, and federal funding opportunities, among others.

At this time, the project team has completed the Climate Projections Report, Vulnerability and Risk Assessment, the audit, strategies, implementation roadmap, and compilation of the draft plan. The public comment period will conclude June 15, 2022. Following the public comment period, the project team will compile the

comments and provide a summary to the Environmental Committee. The project team will make final revisions and present the final plan to the committee this fall.

The county is most vulnerable to increasingly heavy precipitation and inland flooding of communities, which causes cascading effects for numerous sectors. Natural systems are highly vulnerable to combined hazard stress. The county is also vulnerable to increasingly severe storm and wind impacts, extreme heat, and in certain neighborhoods along the Potomac River, coastal flooding impacts.

The Resilient Fairfax Plan includes strategies to enhance resilience to these climatic hazards. There are four major pillars: Integrated Action Planning, Resilient Infrastructure and Buildings, Climate Ready Communities, and Adaptive Environments.

Next steps include a fourth public meeting, a Planning Team meeting, an update at the July Environmental Committee meeting, and plan finalization this fall.

Board Discussion:

Chairman Storck asked how the Board offices can get shareable information.

Ali Althen responded that information went out the day before to the Board offices. Additional resources are available upon request.

Chairman Storck said that we are doing the right thing by anticipating where things might go. If we do this right, we could see long-term savings.

Item VI

Review of Environment and Energy Not in Board Packages (NIPs)

Supervisor Storck reminded the Board that five NIPs were included in the Environmental Committee Board package, including Board of Supervisors Environmental Committee Follow-up: February 15, 2022, CECAP Implementation Update, Agency Responses to the Recommendations in EQAC's 2021 Annual Report on the Environment, and Running Bamboo - Education and Communication Plan.

The meeting adjourned at 12:30 P.M.