BOARD OF SUPERVISORS ENVIRONMENTAL COMMITTEE

June 15, 2021

11:00 A.M. Government Center Board Auditorium

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 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 Hill, County Executive Joe Mondoro, Chief Financial Officer Elizabeth D. Teare, County Attorney

June 15, 2021 Meeting Agenda:

june15-environmental-agenda.pdf (fairfaxcounty.gov)

June 15, 2021 Meeting Materials:

Board of Supervisors Environmental Committee Meeting: June 15, 2021 | Board Of Supervisors (fairfaxcounty.gov)

The following is a summary of the discussion from the June 15, 2021, meeting.

Today's meeting was called to order at 11:00 A.M.

Item I Opening Remarks

After a brief introduction from Supervisor Storck, Committee Chair, the Environmental Committee accepted the minutes of April 6, 2021. With no further changes, the meeting minutes were accepted into the record.

Committee Chair Storck then acknowledged an incident at Little Hunting Creek in the Mount Vernon District involving a diesel fuel spill. He appreciated the efforts of staff to enact the Spill Prevention Plan. These incidents should be avoided and, if they do happen, the response should be coordinated with the vendor immediately.

Mr. Magdi Imbabi, Director of Wastewater Design and Construction, Department of Public Works and Environmental Services (DPWES) provided an update on actions taken in response to the spill. He first recounted that on December 18, 2020, a diesel fuel bypass pump failed and spilled into its containment area. The containment area subsequently overflowed, and the fuel found its way into Little Hunting Creek. The monitoring company quickly responded and stopped the pump. Unknown to them, a sump pump in the pit filled with the diesel fuel, which pumped the fuel and water into the stormwater spillway. The cleaning company worked for almost two weeks to mitigate the spill. One action that could have been done better would be to immediately inform the residents. The Spill Prevention Plan should ensure a quicker and more robust response to the community.

Board Discussion:

Supervisor Gross commented that she was appalled at the response report of this incident. She referred to a raw sewage spill in 2014 in Lake Barcroft. She stated that DPWES needs to refer to the 2014 response to avoid this ever happening again.

Mr. Carey Needham, Deputy Director, Building, Design and Construction Division, DPWES, responded that he would take that suggestion and cross-check those procedures with those of the Spill Prevention Plan.

Item II
Proposed Update to the 2018 Operational Energy Strategy to Support a
Carbon Neutral Goal

The second topic on the agenda was a presentation on a Proposed Update to the 2018 Operational Energy Strategy to Support a Carbon Neutral Goal by Susan Hafeli, Deputy Director, Office of Environmental and Energy Coordination (OEEC).

Ms. Hafeli began her presentation with background on the Joint Environmental Taskforce (JET) Final Report and what brought these recommendations forward at today's meeting. The overarching recommendation of the JET is the goal for Fairfax County Government to be energy carbon neutral by 2040. The JET proposed specific recommendations to support this goal through an interim emissions reduction goal for 2030 and across the energy, transportation, and waste management focus areas. The JET recommended these goals be implemented in tandem with workforce development goals for students and adult learners.

A May 4, 2021 Board Matter directed staff to develop a set of carbon neutral policy statements. These policy statements incorporate the Board's revisions to the JET recommendations and single out those recommendations pertinent to Fairfax County Government. The policy statements open with the overarching carbon neutrality goal and interim greenhouse gas emissions reduction goal and are followed by statements in the energy, transportation, waste management and recycling, and workforce development focus areas.

Staff proposes to track and report on the carbon neutrality policy statements. Much of the tracking and reporting can be carried out by incorporating relevant goals from the policy statements into an updated Operational Energy Strategy (OES). The emissions, energy, and waste management and recycling goals will fit neatly into an updated OES, as well as the transportation goals regarding fleet electrification. Transportation goals related to bike and pedestrian improvements align more closely with the ongoing ActiveFairfax initiative. As such, staff proposes that these goals be tracked through ActiveFairfax. Staff is currently discussing the tracking and reporting of workforce development goals.

The OES was first adopted in 2018 with 10 focus areas. The OES, as originally adopted, does not include an emissions reduction goal; the proposed update includes a new focus area to reflect both the 2040 energy carbon neutral goal and the interim emissions reduction target. In the update, six of the original 10 OES focus areas would include updated targets. New names for these areas are being proposed to incorporate the JET recommendations.

The proposed new OES targets in the Energy Use and Efficiency, Green Buildings, and Renewables focus areas were proposed by the JET and included in the May 4, 2021 Board Matter. Staff has proposed minor revisions, for example, using an FY2018 baseline rather than the JET recommended FY2019 baseline. This would allow for consistency with current tracking of OES projects. In the Green Buildings focus area, recommended targets will incorporate electric-ready and electric-only building design targets recommended in an April 2021 memorandum to the Board. The renewable energy targets would be revised in two ways: The term "energy" would be replaced with the term "electricity" and the target would no longer require electricity to be produced in the county, allowing us to take advantage of changes in technologies, and laws that expand our options for self-generation of electricity.

The focus area previously titled, "Electric Vehicles" would be renamed "Fleet Electrification" to incorporate the bus fleet targets recommended by the JET and as revised in the May 4, 2021 Board Matter. Staff incorporated the timeline from that Board Matter, which includes transitioning the bus fleet to electric alternatives by 2035 and establishing a moratorium on the purchase of diesel buses after FY2024, unless the Board is informed otherwise.

Finally, proposed updates to the Procurement and Waste focus area were presented. This included incorporating a goal that the county be zero waste by 2030. Staff is working on a zero waste plan now and will be presenting to the Board at a future Environmental Committee meeting. Resources will be needed to build an implementation team and network of zero waste ambassadors, incorporate infrastructure and equipment changes, and establish new recycling and composting programs.

Ms. Hafeli presented a graph on the Contributions to Carbon Neutrality by Energy Efficiency and Renewable Energy for County Operations. This graph illustrated the reductions that the county can achieve by reducing energy from facilities and using renewable energy, reaching the 50% emissions reduction by 2040 goal. Emissions from waste management would remain constant and emissions from transportation are still to be determined. Even with these aggressive efficiency and renewable energy goals in place, substantial county government emissions would remain. Achieving carbon neutrality will require policies and actions from state and federal governments, as well as energy utilities and vehicle manufacturers.

As discussed in the March and April 2021 Environmental Committee meetings, adopting a carbon neutrality goal will have significant staff and funding implications. This includes implementing ambitious building retrofits, pursuing renewable energy and fleet electrification, and changing waste management and procurement strategies. Specific cost estimates are still to be determined. Historically, the projects under the OES have been funded through quarterly reviews. Staff proposes to continue using this approach with the updated OES.

Staff is recommending the adoption of the OES at the July 13, 2021 Board meeting.

Ms. Hafeli introduced Mr. Tom Biesiadny, Director, Fairfax County Department of Transportation, to give his remarks regarding the electrification of the Fairfax County municipal bus fleet.

Mr. Biesiadny stated staff support for the electrification goal included in the May 4, 2021 Board Matter. Staff is preparing a comprehensive presentation for the June 29, 2021 Transportation Committee meeting. In that presentation, staff will discuss steps for Zero Emission Bus implementation and the proposed approach to ensure success in that transition. Staff will also address challenges, work already underway, engineering and infrastructure changes needed and high-level costs.

Board Discussion:

Supervisor Alcorn commented on the electrification of vehicles and the community's concern about purchasing new diesel buses in the coming years. He suggested that the Board consider purchasing used diesel buses, rather than new, to bring the decommission date closer to the electrification goal.

Supervisor Palchik asked Mr. Biesiadny to clarify if the purchasing of diesel buses would stop in 2024.

Mr. Biesiadny responded that, pursuant to Board direction, no more diesel buses would be purchased without the Board's consent beginning in 2024.

Supervisor Palchik expressed that we should focus our efforts on giving bus riders reliable service to encourage alternate forms of transportation.

Supervisor Foust complimented Mr. Biesiadny on his presentation but asked if the county would purchase 18 diesel buses this year.

Mr. Biesiadny responded that in FY2022 the county is scheduled to replace 33 buses.

Supervisor Foust asked about the number of buses that will need to be replaced in three years.

Mr. Biesiadny confirmed that 103 buses will need to be replaced.

Supervisor Foust stated that he does not support the current plan to replace these buses. He feels that of the 329 buses in the fleet, replacing so many with diesel would be a mistake. He thinks three more years of diesel vehicles will be too much. He suggested that we begin buying electric in FY2023, not waiting until FY2024.

Mr. Biesiadny responded that they agree with his suggestion and Supervisor Alcorn's suggestion to buy used buses to get closer to the goal earlier.

Supervisor Herrity commented that he agrees with Mr. Biesiadny's concerns for operational and service issues by purchasing electric buses in the timeframe suggested by the JET. He would like to see a cost estimate. He anticipates an impact on the commercial tax base stemming from the pandemic. He referred to the Virginia Clean Economy Act and its impacts on our residents. He feels that the Board should not rush to make these changes. He wants to wait and see what the costs are versus the benefits.

Committee Chair Storck shared his agreement that the costs should be evaluated and considered with the unknowns, maintaining a balance.

Supervisor Walkinshaw commented that there are many plans the Board considers as part of the annual budget exercise that do not have an associated fiscal impact statement. He suggests using this approach. He asked for clarification on the electric-ready and electric-only building targets for 2022 and 2024 and whether that is fiscal year or calendar year.

Ms. Hafeli responded that she believes it would be fiscal year.

Supervisor Walkinshaw asked about efficiency versus emissions reductions, and whether there is a tension between those.

Ms. Hafeli responded that the priority would be to reduce emissions.

Supervisor Walkinshaw agreed that the goal is to reduce emissions.

Chairman McKay commented that this Board has many tools to set and meet the goals suggested. He echoed Supervisor Walkinshaw that the Board sets priorities for funding for each budget cycle. He expressed his support of electrifying the buses, while considering what staff identifies as the challenges. He commented that the Board and staff will have to work together to inform the public about how to set and meet these goals over time and identify the reasons behind not meeting these goals as discussed. He feels the Board will have to set the standard. He is comfortable with the plan and the flexibility in the plan. He offered a response to the request for metrics from the Board and how metrics cannot be identified without a goal to measure against. Back when the discussion of LEED Certification was before the Board, he recalls that developers were not receptive to the idea but later found that it was a smart business decision. He feels that many of the pieces of costs and technologies are rapidly changing. He trusts that regulations will provide guidance, and if the goals cannot be reached, staff will provide a technical reason why. He feels the Board should move forward.

Supervisor Smith asked if there has been any coordination with schools about their bus replacement since we maintain their vehicles.

Mr. Biesiadny responded that the schools have eight electric buses in service. He does not have any further information at this time.

Committee Chair Storck added that they are learning a lot by having the electric buses in service and have been holding work session discussions to identify where they are with the adoption of the JET goals. They seem to have strong support from their Board. With a consensus to move forward, he asked County Executive Bryan Hill if the deadline for the OES update Action Item in the July 13 Board package could be extended.

Mr. Hill responded that Ms. Hafeli is awaiting the response from the Board if they may have the extension. He supports it if the Board will allow it.

Committee Chair Storck asked for and received support to extend the deadline.

Item III Carbon Neutral Counties Declaration

The third item on the agenda was the Carbon Neutral Counties Declaration, presented by Committee Chair Storck.

The declaration sets a goal for the county to be energy carbon neutral by 2040, in support of the JET recommendation. It urges federal and state lawmakers to provide incentives, requirements, or other such measures to meet this goal. It is intended to update and replace the Cool Counties Declaration of 2007. It would allow us to set more aggressive climate goals and lead nationally in this area. Although other U.S. cities have adopted carbon neutrality goals through various alliances, there is no comparable alliance for U.S. counties. We are asking for the Board to adopt aggressive climate goals before considering community-wide goals through the Community-wide Energy and Climate Action Plan (CECAP) later this year.

This declaration commits us to achieve carbon neutrality by significantly reducing operational greenhouse gas (GHG) emissions in the building, energy, transportation, and solid waste sectors. It also advocates for incentives or requirements at the state and federal levels to support the carbon neutral goal. It also ensures that this goal be implemented equitably. This will be brought before the Board in July 2021.

Board Discussion:

Chairman McKay asked if there is anything in this declaration that is new; he believes that it is highly consistent with what the Board has already discussed. He asked what buy-in we have from our regional partners.

Ms. Hafeli responded that this item is consistent with what has been brought before the Board in the March and April 2021 Environmental Committee meetings. With respect to working with partners, she suggests working with the Northern Virginia Regional Commission (NVRC).

Chairman McKay agreed that the NVRC would be a good follow up. MWCOG would also be another body that could help bring these items to other localities in the region.

Supervisor Gross asked if there is a cost to making this declaration in terms of membership dues associated with participation.

Ms. Hafeli responded no, there was no membership or cost discussed with making this declaration. The costs would be borne by the individual counties that are supportive of this declaration.

Supervisor Foust asked for the definition of carbon neutrality.

Ms. Hafeli responded that energy used, and the emissions associated with use, are balanced out by not creating any additional emissions. Fossil fuel emissions are the focus, at this time.

Supervisor Foust asked if we would be agreeing that, by 2040, if we are increasing energy use, we will be reducing emissions an equal amount.

Ms. Hafeli agreed. Not all jurisdictions experience the same growth that we do in this area. Yes, we will need a more aggressive approach as we grow to offset emissions with that growth.

Supervisor Foust asked if we have committed to eliminate carbon emissions by 2050.

Ms. Hafeli responded that we have an interim emissions reduction goal of 2030, but we have a carbon neutrality goal of 2040. We are on a pathway of achieving that.

Supervisor Foust commented that he does not feel that this declaration is very aggressive.

Committee Chair Storck disagreed; he stated that it is aggressive.

Ms. Hafeli referred to the chart she showed earlier in her presentation to illustrate emissions reductions of goals for both energy efficiency and renewable energy. It does not take into account transportation changes. It is a very aggressive goal. She

referred to the Virginia Clean Economy Act, which is putting us on a path to carbon neutrality by 2040. However, Dominion Energy reported in 2019 that only six percent of energy was provided by renewable energy.

Supervisor Foust asked that the definitions of these terms be provided to the Board.

Item IV CECAP and Resilient Fairfax Updates

The fourth item on the agenda was the CECAP and Resilient Fairfax Updates, provided by Matt Meyers, Division Manager, OEEC, and Maya Dhavale, Senior Community Specialist, OEEC.

Mr. Meyers gave an overview of the OEEC's climate change planning and action initiatives, including CECAP and Resilient Fairfax. CECAP focuses on reducing GHG emissions. It is a community-oriented plan, as 95 percent of emissions come from the community. CECAP will be presented to the Board in the fall of 2021.

Resilient Fairfax will help us better prepare for the impacts of climate change on our community, services, and infrastructure. The process and plan will examine how the county, utilities and authorities, service providers, businesses, and residents can prepare for and bolster themselves against these impacts. This plan is scheduled to be finished in June 2022 and presented to the Board in the fall of 2022.

Mr. Meyers introduced Ms. Dhavale to provide an update on CECAP.

Ms. Dhavale showed the CECAP timeline, highlighting progress made since the project began in January 2020. Major steps included developing GHG inventories, models and goals; climate mitigation planning and support; community engagement planning; and conducting public feedback sessions and surveys. The final CECAP report is currently being developed. An education, outreach and implementation phase will begin in the fall of 2021.

Ms. Dhavale outlined the goals set by the CECAP Working Group. The overall goal is to be carbon neutral by 2050, including an 87 percent reduction in total GHG emissions. The Working Group set two interim goals: 50 percent reduction in GHG emissions by 2030 and 75 percent reduction in GHG emission by 2040. It

also identified sector-based goals in green buildings, retrofitting existing housing for energy efficiency, increasing transit and non-motorized commuting, increasing use of electric vehicles, waste reduction and natural resources.

The sector-based goals are not to be confused with the strategies. Twelve strategies were identified to address the overall goals. There are 37 actions based on these strategies. The Working Group prioritized these strategies and the actions associated with these strategies based on GHG reduction potential, public health, different environmental categories, economic opportunities, equity, payback, cost to the community member, timeframe for implementation, feasibility, and lifecycle analysis.

There were many opportunities for public feedback on CECAP. Three public feedback series were available between August 2020 through May 2021. Surveys were also conducted. A public email was available during the process for comments. Finally, community briefings were conducted during the process. Overall, the reception from the public has been positive on the strategies and actions of the plan.

The Working Group met in June 2021 to review the draft of the final report. Final revisions are being made. The final draft will be brought before the Board for consideration in July 2021. The final CECAP should be available in September 2021. Staff is starting to transition from planning to implementation. Initial implementation will involve public education and outreach, including a survey. It will also build on existing county policies, programs, and efforts.

Ms. Dhavale reintroduced Mr. Meyers to present on Resilient Fairfax. Mr. Meyers reminded the Board that funding was approved for this plan as part of Carryover in FY2020. He then provided background on climate change and its impacts specific to Fairfax County. The county is not immune to climate change. For example, last summer was the hottest on record and recent storms, which have increased in intensity due to climate change, caused approximately \$15 million in damage in 2019 alone.

The key purpose of Resilient Fairfax is to identify climate change effects, vulnerabilities, policies, programs, and plans already in place, and strategies that will strengthen resilience.

Key players of Resilient Fairfax include a project management team, consultant team, Planning Team, Infrastructure Advisory Group (IAG), Community Advisory Group (CAG), and a Steering Committee (SC).

The scope of the project included initiation tasks, kickoff meetings, and charters under the first task. The second task, which began in April, includes developing climate projections, conducting a vulnerability and risk assessment, and undertaking an audit of policies, plans, and programs. The third task will involve identifying and prioritizing strategies. The fourth task includes presenting the plan in the fall of 2022.

Mr. Meyers mentioned that the first public meeting for Resilient Fairfax is scheduled for June 15, 2021. A public survey will be available until July 2, 2021. The next update will be presented to the Board in the fall of 2021.

Board Discussion:

Chairman McKay asked about community involvement and if we are getting a diverse cross-section of engagement, both geographically and demographically across the county.

Mr. Meyers replied that is something that can always be improved upon. The project management team is always asking how they can bring more people to the table. The internal Planning Team is using their resources to involve the community, as well.

Chairman McKay appreciated the involvement of the Chief Equity Officer. The Board also has a roll to play in this. He stated that if there is any additional support as we progress, staff should ask for assistance. He acknowledged the efforts that are already being done but emphasized the need to reach out if there is a need that is not addressed before the plan is adopted.

Supervisor Palchik asked about the involvement of the Latinx community, specifically "The Defenders of the Watershed" group.

Mr. Meyers responded that the Resilient Fairfax team did reach out to the group.

Supervisor Walkinshaw thanked staff for the work on. He asked for clarification on the term, "beneficial electrification."

Ms. Dhavale responded with the definition: "Beneficial Electrification reduces emissions by switching fuels from natural gas to electricity, which is a lower-carbon fuel, depending on the availability of low-carbon electricity."

Supervisor Walkinshaw shared his concerns about a recent storm and its possible impacts on Lake Accotink. One of the challenges of the Resilient Fairfax Plan will be anticipating these events to prepare for or predict the impacts. He asked how we quantify this in the plan and react in time.

Mr. Meyers responded that the Stormwater Division of DPWES, which manages projects like dredging Lake Accotink, is included in the Planning Team. They can look at change and estimate it by projecting rainfall. This would include looking at stream erosion, dredging lifecycles, and dam safety.

Supervisor Lusk referred to slide six and asked about building and energy efficiency. He wanted to know if buildings would be retaining this efficiency over time.

Ms. Dhavale confirmed that the point had been considered as a component in the plan. Working Group members considered the retrofit of existing buildings versus new construction.

Supervisor Palchik commented that there will be a new director of DPWES in July 2021. A lot of what was covered today will be considered as he comes to work for the county.

Item V Fairfax Green Initiatives Update

The fifth item on the agenda was the Fairfax Green Initiatives Update, presented by Kate Daley, Environmental Specialist, OEEC.

Ms. Daley referred to the Fairfax Green Initiatives (FGI) matrix included as a handout to the Board. She highlighted updates on LDS' pursuit of stronger statewide building codes, the proposed update to the OES, DPWES' pursuit of grant funding opportunities, efforts Urban Forestry has taken to help residents plant trees

on private property,	DVS' flee	et electrification	efforts, and	d the ability to	establish a
Fairfax Green Bank.					

Board Discussion:

None.

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

The sixth item on the agenda, the Review of Environment and Energy Not in Board Packages (NIPs), was presented by Committee Chair Storck.

Committee Chair Storck highlighted the NIPs presented to the Board since the last committee meeting: Responses to Questions on Building Systems and Equipment, Recommended Energy Service Company Measures for the Park Authority, Update to the Operational Energy Strategy, Community-wide Energy and Climate Action Plan: Sixth Update, and Resilient Fairfax: Climate Adaptation and Resilience Plan.

Board Discussion:

None.

Committee Chair Storck mentioned the Environmental Expo, taking place on June 26, 2021.

The meeting adjourned at 12:30 P.M.