



County of Fairfax, Virginia

MEMORANDUM

DATE: September 22, 2021

TO: Board of Supervisors

FROM: Bryan J. Hill
County Executive *[Signature]*

SUBJECT: Fairfax Green Initiatives Update

On February 5, 2019 the Board of Supervisors (Board) unanimously approved the [Fairfax Green Initiatives Board Matter](#), introduced by Supervisors Storck, Foust and (now Chairman) McKay. The Board Matter outlines 19 energy-related action items for Board offices, three Board committees, the Tree Commission and the County Executive.

On July 28, 2020, the Board unanimously approved a follow-on motion, [the Fairfax Green Initiatives #2 Board Matter](#), introduced by Supervisor Storck. The second Board Matter includes 14 additional environment and energy-related action items for the County Executive, County Attorney, Land Use Policy Committee and several County departments and agencies.

Quarterly updates on Fairfax Green Initiatives are provided to the Board. This memorandum highlights progress on Fairfax Green Initiatives #1 and #2 action items that has occurred since the Board was last updated in June 2021. In addition, Attachment 1 includes an updated Fairfax Green Initiatives Implementation Matrix, which staff developed to track completed, ongoing and anticipated consideration of action items, as well as identify lead and partner agencies for each item.

Updates on Fairfax Green Initiatives #1 Action Items

- Action item 2b refers to the Land Use Policy Committee consideration of building design and code changes that could inspire and expedite energy saving practices on all new construction and significant renovations. In response to an April 2021 Board Matter introduced by Supervisor Smith, and issued jointly with Chairman McKay, Supervisor Storck and Supervisor Foust, Land Development Services (LDS) has established a [Green Building Recognition Program](#), to acknowledge designers and contractors who voluntarily build green in Fairfax County. Additional information on the program is included in the September 17, 2021 memorandum distributed to the Board. LDS also continues to seek adoption of the International Energy Conservation Code (IECC) and energy provisions of the International Residential Code (IRC) into statewide building codes during the 2021 code development cycle.
- Action item 4a refers to the Environmental Committee consideration of accelerated goals

and targets for the Operational Energy Strategy (OES), first adopted in 2018. On July 13, 2021, the Board of Supervisors adopted an [update to the OES](#), coinciding with the issuance of the [Carbon Neutral Counties Declaration](#). The Declaration commits Fairfax County Government to be carbon neutral by 2040. To support this goal, the updated OES incorporates the carbon neutral goal in a new greenhouse gas emissions reductions focus area, as well as accelerated goals and targets across the energy use and efficiency, green buildings, renewables, fleet electrification, goods and services, and waste management and recycling focus areas. For instance, the updated OES includes targets to be zero waste by 2030 and to use 100 percent non-carbon emitting fuels for County fleet vehicles by 2030. Several of these updated goals and targets track the recommendations included in the Joint Environmental Task Force (JET) [Final Report](#).

- Action item 4b directs staff to brief the Environmental Committee on options to increase the pursuit of grant and cooperative agreement funding for energy efficiency, conservation, weatherization, cogeneration, renewable energy, energy resilience and greenhouse gas emissions reductions through public-private partnerships, foundations, the Commonwealth of Virginia and the federal government to provide greater energy reduction support for all residents, consistent with One Fairfax. The Department of Public Works and Environmental Services (DPWES), Department of Economic Initiatives (DEI), Department of Transportation (FCDOT) and Government Relations all have ongoing initiatives in this area, as described below.

Several County agencies have received grant funding for the purchase of electric vehicles and associated charging infrastructure through the Virginia Clean Air Communities Program. This includes four electric vehicles for solid waste collection and transport for which DPWES is working to install charging infrastructure at its Solid Waste facilities; four electric transit buses for the Fairfax Connector fleet; and a transport truck, on which the Department of Vehicle Services (DVS) and Department of Procurement and Material Management are partnering. A separate state grant is allowing FCDOT to purchase an additional four electric transit buses for the Fairfax Connector fleet.

FCDOT and DEI were granted a one-year extension from the Virginia Department of Rail and Public Transportation (VDRPT) to continue the Relay demonstration project, an autonomous electric shuttle operating in Merrifield working to meet first and last-mile transit needs for area workers and residents. Project partners include Dominion Energy, Virginia Tech Transportation Institute, the Virginia Transportation Research Council, VDRPT, Edens, and George Mason University. This extension enables these partners to continue research on the impacts of Relay on local ridership and on transit.

FCDOT and DEI also supported two proposals by Virginia Tech Transportation Institute (VTTI) to the U.S. Department of Energy (DOE)'s request for projects that evaluate the energy efficiency and emissions of smart-tech mobility systems. One of the two proposals submitted by VTTI was competitive to the second round of DOE review. While not funded by DOE, FCDOT and DEI are supporting VTTI's pursuit of other sources of funding such as Go Virginia and U.S. Department of Commerce for this innovative

research that positions Fairfax County as a leader in connected autonomous vehicle technology (CAV).

Finally, regarding action item 4b, Government Relations staff submitted federal funding requests to help seed a Green Bank and purchase electric fleet vehicles. While these requests were ultimately unsuccessful, staff will continue to identify potential opportunities for federal funding.

- Action item 4c refers to the Environmental Committee for discussion setting a goal that by 2025, locally generated energy would offset Fairfax County Government energy usage. As noted under item 4a, the Operational Energy Strategy was updated on July 13, 2021. The update includes a target to produce 25% of county electricity from renewable energy by 2030, and 50% by 2040, using FY 2018 energy use as the baseline.

To implement renewable energy targets in the OES and Sustainable Development Policy, DPWES is incorporating solar PV in new Capital Building projects to offset energy usage and meet Net Zero Energy standards. Several agencies are also working with the County's solar power purchase agreement (PPA) service providers to install rooftop and canopy-mounted solar installations at County facilities. DPWES continues to evaluate off-site renewable energy credits to offset the energy usage.

To address barriers to renewable energy generation, the County has had a longstanding position in the legislative program in support of removing barriers to net metering for municipalities, including eliminating restrictions on the use of PPAs. This will continue to be an issue in the 2022 General Assembly.

- Action item 6a directs the County Executive to report to the Board on strengthening Green Building policies for County facilities. An update to the Sustainable Development Policy for County facilities was adopted in September 2020, which has a goal for Capital projects to achieve a minimum of LEED Gold certification for new construction and major renovations, with a focus on increased energy performance and use of renewable energy to meet the goal of Net Zero readiness. However, the 2021 update to the Operational Energy Strategy includes more stringent targets for County facilities, including a target that all new construction and major renovation of facilities greater than 10,000 square feet beginning planning and design in 2021 meet Net Zero Energy standards. DPWES will revise the Sustainable Development Policy to align with the updated targets. DPWES continues to evaluate and implement new strategies to meet these targets.
- Action item 6c.v directs the County Executive to report to the Board on developing partnerships like the U.S. Department of Energy's Better Buildings Challenge. DEI and the Office of Environmental and Energy Coordination (OEEC), along with university and technology partners, will recruit start-ups to participate in a new Pitch and Pilot event focused on carbon neutral technology in early 2022. This event will be an opportunity for Fairfax County to support cutting-edge technology solutions.

DEI is also partnering with FCDOT, Smart City Works, and the Center for Innovative Technology, on a Bike/Ped Safety Pilot project. This pilot will be conducted with the private sector winner of the April 2021 Fairfax Innovation Challenge Competition. This project will be one of the largest bicycle and pedestrian safety analytics pilots in the country and will inform new approaches to improving pedestrian and cyclist safety in the community.

Updates on Fairfax Green Initiatives #2 Action Items

- Action item 1a directs DPWES to report on options for expanding the existing internal County compost pilot to the community as part of trash/recycling services or drop-off locations. On November 16, 2020, DPWES announced the launch of a pilot program, allowing community members to drop off food scraps for composting at the I-66 Transfer Station and I-95 Landfill. The pilot program for these two fixed locations has gone well and DPWES is currently in the process of issuing a new contract for continuation of this service beyond the pilot period. DPWES presented to the Environmental Committee on February 2, 2021 on organics collection options and ongoing and proposed pilots. DPWES coordinated with the Fairfax County Park Authority (FCPA) to identify markets that would be good candidates to participate in the pilot program. Three FCPA markets were chosen as well as one location at a year-round market run by FreshFarm. The service at these four markets began on June 23, 2021. Food scraps drop off is available only during regular market hours.
- Action item 2b directs staff to return to the Board with a schedule to accelerate the replacement of vehicles and infrastructure to support these vehicles. In support of these efforts, Fairfax County has been awarded two state grant applications which will allow FCDOT to purchase eight electric buses. The purchase order for these buses is expected to be issued by the end of September 2021. FCDOT and its contractors are working to acquire the charging infrastructure to support these vehicles. It is anticipated that the eight vehicles can be placed in service by mid-2022.
- Action item 2c directs the OEEC to find immediate solutions to charging infrastructure, such as upgrading existing electrical outlets in County garages to accommodate plug-in electric vehicles, and to adapt purchasing practices to this new goal. In support of this item, wall-mounted chargers are being installed in the parking garages at the Government Center, Pennino Building, and Public Safety Headquarters.
- Action item 4a directs the OEEC to provide a plan to the Environmental Committee for consideration to implement a five-cent plastic bag fee in 2021. On September 14, 2021, following a public hearing on the matter, the Board of Supervisors adopted an [ordinance](#) enacting a five-cent tax on disposable plastic bags. The ordinance will go into effect on January 1, 2022. The tax will be administered and enforced by the state Department of Taxation. Revenue from the tax may go toward environmental cleanup, pollution and litter mitigation, and environmental waste reduction educational programs. The revenue may also be used to provide reusable bags to recipients of Supplemental Nutrition Assistance Program (SNAP) or Women, Infants, and Children Program (WIC) benefits.

Fairfax County's ordinance tracks the [enabling legislation](#) passed in the 2020 General Assembly session, which includes additional provisions and exemptions for the disposable plastic bag tax. Fairfax County is working regionally to address outreach and education on the tax, following the adoption of the plastic bag tax by both Arlington County and the City of Alexandria on September 18, 2021.

- Action item 7a directs the County Executive to report on the feasibility of creating an Energy Efficiency Funding Pool (EEFP) pilot, considering potential Public Private Partnerships (PPP), existing non-profit housing partnerships and other energy efficiency focused organizations to provide a competitive grant process for funding local entities to provide workforce energy efficiency and weatherization (green jobs) training opportunities while upgrading the energy efficiency of eligible low-income and seniors homes. In support of these objectives, DEI is exploring a partnership with Dominion Energy to understand their workforce needs. Dominion is interested in creating pathways to energy-related jobs from middle school on and partnering with Fairfax County in job fairs and in other workforce development activities. DEI continues to work with the Fairfax County Economic Development Authority (FCEDA) to segment green economy sectors to understand areas of economic competitiveness.

If you have comments or questions on this memo, please contact Kambiz Agazi, Director, Office of Environmental and Energy Coordination, at (703)-324-1788 or at Kambiz.Agazi@fairfaxcounty.gov.

Attachment: Fairfax Green Initiatives Implementation Matrix

cc: Rachel O'Dwyer Flynn, Deputy County Executive
Christopher Leonard, Deputy County Executive
Kambiz Agazi, Director, Office of Environmental and Energy Coordination



Fairfax Green Initiatives Implementation Matrix

On February 5, 2019, the Board of Supervisors (Board) unanimously adopted the [Fairfax Green Initiatives Board Matter](#), introduced by Supervisors Storck, Foust and (now Chairman) McKay to expedite consideration and implementation of 19 energy-related action items.

On July 28, 2020, the Board unanimously adopted the [Fairfax Green Initiatives #2 Board Matter](#). Introduced by Supervisor Storck, the Fairfax Green Initiatives #2 Board Matter includes 14 additional environment and energy-related action items.

In June 2019, staff developed an Implementation Matrix to track progress on Fairfax Green Initiatives action items. For each action item, the matrix identifies the County department(s) charged with implementation, whether the item is complete or ongoing, whether the item will be addressed through the ongoing planning process for the Community-wide Energy and Climate Action Plan (CECAP) or through implementation of the Joint Environmental Task Force (JET) recommendations, when consideration for action items not yet addressed is anticipated, and a summary of action to date. The matrix is updated on a quarterly basis; the latest version is included below, with amendments shown in **bold**.

Fairfax Green Initiatives #1

Action Item	Lead Dept.	Complete	Ongoing	CECAP	JET	Anticipated Consideration	Action to Date
1. Direct the County Executive to report to the Environmental Committee no later than June 2019 on:							
1a. A draft process, resources and timeline to develop a CECAP.	OEEC	X		X			Staff presented a draft process, resources and timeline for a CECAP at the June 2019 Environmental Committee meeting. The Board approved funding in September 2019, and the CECAP planning process kicked off in January 2020.



Fairfax Green Initiatives Implementation Matrix

Action Item	Lead Dept.	Complete	Ongoing	CECAP	JET	Anticipated Consideration	Action to Date
1b. A process for contracting with an ESPC or recommend other such initiatives that produce a similar outcome and timeframe.	OEEC	X					<p>Staff presented a process to contract with an Energy Service Company (ESCO) at a June 2019 Environmental Committee meeting. Following Board endorsement, two ESCOs were selected to undertake an Investment Grade Audit at select County facilities.</p> <p>Through a separate process, in September 2020, DPWES contracted with an ESCO to perform an Investment Grade Audit at the Noman Cole Pollution Control Plant.</p>
2. Refer to the Development Process Committee for discussion and consideration whether County staff should review and report back to the Committee on the costs and benefits of the following:							



Fairfax Green Initiatives Implementation Matrix

Action Item	Lead Dept.	Complete	Ongoing	CECAP	JET	Anticipated Consideration	Action to Date
2a. Comprehensive Plan and Zoning changes that would incentivize and support more environmentally sustainable development.	DPD		X	X		CY2021	As part of the Zoning Ordinance Modernization (zMOD) project, a new Zoning Ordinance, adopted in March 2021, includes new uses to support electric vehicle charging infrastructure and solar projects at residential, commercial and County facilities. Additional Comprehensive Plan and Zoning changes may be identified in the ongoing CECAP planning process.
2b. Building design and code changes, including the International Green Construction Code (IgCC), that could inspire and expedite energy saving practices on all new construction and significant renovations.	LDS Gov't Relations		X			CY2021	As directed in an April 2021 Board Matter, LDS is seeking adoption of the IECC and energy provisions of the IRC into statewide building codes during the 2021 code development cycle and established a Green Building Recognition Program to acknowledge designers and contractors who voluntarily build green in Fairfax County.
3. Refer to the Budget Committee for discussion and consideration the following:							



Fairfax Green Initiatives Implementation Matrix

Action Item	Lead Dept.	Complete	Ongoing	CECAP	JET	Anticipated Consideration	Action to Date
3a. GO, ED and other capital bonding options that could accelerate energy saving initiatives, provide high economic returns on investments and support other community benefits that would enable green building, energy savings renovations and green purchasing practices.	DMB	X					The County will continue to utilize all debt financing mechanisms to address its capital needs and maintain adherence to its self-imposed debt ratios. The County's Capital Improvement Program assumes an out-year bond referenda program that incorporates LEED certification for all future project cost estimates to further the County's commitment to green initiatives.
3b. Support for the County Executive's current consideration for the FY 2020 budget of increased dedicated County energy, climate change and environment related staffing.	DMB	X					The FY 2020 budget included dedicated funding for the Office of Environmental and Energy Coordination (established in July 2019).
4. Refer to the Environmental Committee for discussion and consideration the following:							



Fairfax Green Initiatives Implementation Matrix

Action Item	Lead Dept.	Complete	Ongoing	CECAP	JET	Anticipated Consideration	Action to Date
4a. Discuss accelerating goals and targets for the Operational Energy Strategy.	OEEC FMD FCPA DVS	X			X		First adopted in 2018, the Board adopted an update to the Operational Energy Strategy (OES) on July 13, 2021. The update includes a new goal to be carbon neutral by 2040, as well as accelerated goals and targets across the energy use and efficiency, green buildings, renewables, fleet electrification, goods and services and waste management focus areas.



Fairfax Green Initiatives Implementation Matrix

Action Item	Lead Dept.	Complete	Ongoing	CECAP	JET	Anticipated Consideration	Action to Date
4b. Brief Committee on options to increase the pursuit of grant and cooperative agreement funding for energy efficiency, conservation, weatherization, cogeneration, renewable energy, energy resilience and greenhouse gas emission reductions, through public-private partnerships, foundations, the Commonwealth of Virginia and the Federal government to provide greater energy reduction support for all residents, consistent with One Fairfax.	DEI DPWES Gov't Relations		X			CY2021	<p>DPWES receives remittances from two energy efficiency grants, which funded equipment upgrades at Noman Cole Pollution Control Plant and result in annual energy use savings of 10,399 kWh.</p> <p>Grant funding from the Virginia Clean Air Communities Program is being used to purchase 4 electric transit buses (FCDOT), a transit truck (DVS/DPMM) and 4 EVs for Solid Waste Collection and Transport (DPWES), as well as charging infrastructure for each. Staff is working to install charging infrastructure to support vehicle operation.</p> <p>FCDOT and DEI were granted a one-year extension of the Relay pilot program operating in Merrifield to continue research on the impacts on local ridership and transit.</p> <p>FCDOT and DEI supported 2 VTTI proposals to the U.S. DOE on smart-tech mobility systems. While DOE funding was not awarded, the County continues to support the pursuit of alternate funding sources for this innovative research that positions the County as a leader in connected autonomous vehicle technology (CAV).</p> <p>Gov't Relations submitted federal funding requests to help seed a Green Bank and purchase fleet EVs. While ultimately unsuccessful, staff will continue to identify potential opportunities for federal funding.</p>



Fairfax Green Initiatives Implementation Matrix

Action Item	Lead Dept.	Complete	Ongoing	CECAP	JET	Anticipated Consideration	Action to Date
4c. Discuss setting a goal that by 2025, locally generated energy (like solar) would offset County Government energy usage.	OEEC DPWES DPD FMD FCPA Gov't Relations	X			X		<p>The 2021 update to the OES includes a target to produce 25% of county electricity from renewable energy by 2030, and 50% by 2040, using FY 2018 energy use as the baseline.</p> <p>To implement renewable energy targets in the OES and Sustainable Development Policy, DPWES is incorporating solar PV in new Capital Building projects to offset energy usage and meet Net Zero Energy standards. Several agencies are also working with the County's solar power purchase agreement (PPA) service providers to install rooftop and canopy-mounted solar installations at County facilities. DPWES continues to evaluate off-site renewable energy credits to offset the energy usage.</p> <p>To address barriers to renewable energy generation, the County has had a longstanding position in the legislative program in support of removing barriers to net metering for municipalities, including eliminating restrictions on the use of PPAs. This will continue to be an issue in the 2022 General Assembly (GA).</p>



Fairfax Green Initiatives Implementation Matrix

Action Item	Lead Dept.	Complete	Ongoing	CECAP	JET	Anticipated Consideration	Action to Date
4d. Complete Committee and staff work for C-PACE adoption by July 2019 with implementation by the end of 2019.	OEEC	X					Fairfax County's C-PACE program launched in February 2020.
4e. Expedite consideration of R-PACE or other capital funding options to support residential energy use reductions.	Gov't Relations OEEC		X				Implementation requires the passage of enabling legislation in the GA. Staff will continue to monitor and provide updates on legislative activity to the Board. The 2021 GA passed budget language that directs DMME to establish a work group to assess the feasibility of creating a Virginia R-PACE program. DMME is required to submit a report with its findings to the General Assembly no later than December 1, 2021.
4f. Identify timeframe for developing a County-specific Climate Resiliency and Adaptation Plan.	OEEC DPWES OEM DPD LDS FCHD	X					Staff presented a timeframe for a Climate Adaptation and Resilience Plan at the May 2020 Environmental Committee meeting. The Board approved funding in September 2020, and the Resilient Fairfax planning process is underway.
4g. Report quarterly on all energy and climate initiatives.	OEEC		X			CY2021	Quarterly updates are provided to the Board's Environmental Committee. Additional updates are distributed in memoranda to the Board.



Fairfax Green Initiatives Implementation Matrix

Action Item	Lead Dept.	Complete	Ongoing	CECAP	JET	Anticipated Consideration	Action to Date
4h. Review local advocacy group initiatives: <ul style="list-style-type: none"> i. Fairfax to Zero Campaign (Faith Alliance for Climate Solutions or FACS) ii. Fossil Free Resolution for Fairfax County (350 Fairfax) iii. Resolution in Support of a National Carbon Fee and Dividend Program [Energy Innovation and Carbon Dividend Act of 2019 (H.R. 763)] (Citizens' Climate Lobby) iv. 12-Point Energy & Climate Action Plan for Fairfax County (Great Falls Group of VA Sierra Club and Clean Energy for Fairfax Now) 	OEEC	X		X			<p>Leadership from FACS and 350 Fairfax agreed that their initiatives could be considered under the ongoing CECAP planning process. Both groups are represented in the CECAP planning process.</p> <p>Staff shared their reviews of H.R. 763 and the 12-Point Energy & Climate Action Plan with the Board in a June 2019 memorandum.</p>
5. Charge the Tree Commission with:							



Fairfax Green Initiatives Implementation Matrix

Action Item	Lead Dept.	Complete	Ongoing	CECAP	JET	Anticipated Consideration	Action to Date
5a. Recommending to the Board low-cost and no-cost options along with public-private partnerships that can assist residents in planting additional trees that will increase existing tree canopy. The Commission should report annually to the Board on progress and accomplishments.	DPWES FCPA	X	X			CY2021	<p>The Tree Commission approved a letter at its September 2020 meeting that serves as its first annual report. The commission anticipates providing its next annual report in June 2021.</p> <p>DPWES-Urban Forestry has entered into a contract with a nonprofit whereby the nonprofit will work with residents to plant trees on private property. This pilot program is focused in areas near the Route 1 CRD.</p>
6. Direct the County Executive to report to the Board no later than September 2019 the following:							
6a. Report on strengthening Green Building Policies for County Facilities.	DPWES FMD FCPA FCRHA OEEC	X					<p>An update to the Sustainable Development Policy was adopted in September 2020. The updated policy has a goal for Capital projects to achieve a minimum of LEED Gold certification for new construction and major renovations with a focus on increased energy performance and use of renewable energy to meet the goal of Net Zero readiness. In response to the updated OES, DPWES will revise the Sustainable Development Policy to align with the new OES targets in the Green Buildings focus area. DPWES continues to evaluate and implement new strategies to meet these targets.</p>



Fairfax Green Initiatives Implementation Matrix

Action Item	Lead Dept.	Complete	Ongoing	CECAP	JET	Anticipated Consideration	Action to Date
6b. Report on a solar public-private partnership agreement.	OEEC	X					In December 2019, the County announced contracts with multiple solar PPA service providers. Solar PPA projects are being implemented at sites throughout the County.
6c. Report on increasing County leadership and accountability for climate change initiatives:							
i. Ensure County leadership accountability for results and outcomes through SMART goals.	OEEC		X			CY2021	
ii. Include energy management criteria in performance evaluations of departmental heads and senior executives.	DHR	X					6c.ii. In February 2021, DHR issued an updated performance evaluation form for departmental heads, which includes criteria related to the Environmental Vision and green initiatives.
iii. Engage County staff and departments in competitions to lower energy use.	OEEC		X			CY2021	
iv. Develop incentive program to reward employees who provide energy saving ideas that are acted upon.	OEEC		X			CY2021	6c.v. DEI, OEEC, university and technology partners will recruit start-ups to participate in a new Pitch and Pilot event focused on carbon neutral technology in early 2022.
v. Develop partnerships like the DOE's Better Buildings Challenge.	DEI OEEC		X			CY2021 - CY2022	DEI, FCDOT, Smart City Works, and the Center for Innovative Technology are partnered on a Bike/Ped Safety Pilot project to inform new approaches to bike/ped safety in the community.



Fairfax Green Initiatives Implementation Matrix

Action Item	Lead Dept.	Complete	Ongoing	CECAP	JET	Anticipated Consideration	Action to Date
7. Encourage each Board office to:							
7a. Identify, if it has not already done so, a District environmental liaison to foster community energy savings outreach, initiatives, education and engagement, County programs awareness, partnerships with local groups and serve as liaison with County staff and other Board offices.	BOS		X				OEEC has developed an Environmental and Communications Collaborators group to share relevant environmental and energy information with liaisons in each of the Board offices.



Fairfax Green Initiatives #2 Implementation Matrix

Fairfax Green Initiatives #2

Action Item	Lead Dept.	Partners	Complete	Ongoing	CECAP	JET	Anticipated Consideration	Action to Date
1. Direct DPWES to:								
1a. Research and report to the Environment Committee on the options for expanding our existing internal County compost pilot to the community as part of our trash/recycling services or drop off locations. Options to be considered could include partnering with Arlington or Prince William, like with our purple bins – placing “green” compost bins beside purple bins; collections at Farmers Markets, FCPS locations, libraries and community centers; collecting, selling and/or giving away compost materials at the I-95 Landfill Complex & I-66 Transfer Station. In addition, work with other County agencies to provide community education on backyard composting at community centers, libraries and RECenters.	DPWES	FCPA		X			CY2021	<p>DPWES launched a food scraps drop-off pilot program in November 2020, allowing community members to drop off food scraps for composting at the I-66 Transfer Station and I-95 Landfill. DPWES is in the process of issuing a new contract for continuation of this service beyond the pilot period.</p> <p>DPWES presented to the Environmental Committee on February 2, 2021 on organics collection options and ongoing and proposed pilots. DPWES coordinated with FCPA to identify three FCPA farmers markets as well as one location at a year-round market run by FreshFarm to participate in the pilot program. Service began on June 23, 2021. Food scraps drop off is available only during regular market hours.</p>



Fairfax Green Initiatives #2 Implementation Matrix

Action Item	Lead Dept.	Partners	Complete	Ongoing	CECAP	JET	Anticipated Consideration	Action to Date
2. Direct the County Executive to:								
2a. Update the vehicle purchasing policy to accelerate purchases of County electric vehicles for the fleet of eligible sedans and expand the County's charging infrastructure to support additional electric vehicles. One hundred percent of eligible vehicles scheduled for purchase in FY2021 shall be replaced with electric vehicles and the infrastructure needed can be supported in FY2021.	DVS FMD OEEC	DMB DPMM FCPA Gov't Relations		X			CY2021	<p>One hundred percent of eligible vehicles scheduled for purchase in FY2021, of which there were 14, have been replaced with EVs. DVS has received these 14 Nissan Leafs.</p> <p>In November 2020, DPMM announced a contract with an EV charging services vendor to provide charging stations at County facilities. DVS recently ordered stations for the Gov't Center, Herrity and Pennino Buildings, Public Safety HQ and Merrifield Center.</p> <p>FCPA is currently not allowed by state law to resell electricity through EV charging stations, though FCPA is working with OCA for possible future options, including revisions to state statutes.</p>



Fairfax Green Initiatives #2 Implementation Matrix

Action Item	Lead Dept.	Partners	Complete	Ongoing	CECAP	JET	Anticipated Consideration	Action to Date
2b. Direct staff to return to the Board with a schedule to accelerate the replacement of vehicles and infrastructure to support these vehicles, with the associated investment required, before the end of calendar year 2020 to inform the FY 2022 Budget.	DVS FMD OEEC	DMB DPMM FCDOT FCPA	X				CY2020	<p>One hundred percent of eligible vehicles scheduled for purchase in FY2022 were replaced with electric vehicles.</p> <p>Fairfax County has been awarded two state grant applications which will allow FCDOT to purchase eight electric buses. The purchase order for these buses is expected to be issued by the end of September 2021. FCDOT and its contractors are working to acquire the charging infrastructure to support these vehicles. It is anticipated that these eight vehicles can be placed in service by mid-2022.</p>



Fairfax Green Initiatives #2 Implementation Matrix

Action Item	Lead Dept.	Partners	Complete	Ongoing	CECAP	JET	Anticipated Consideration	Action to Date
2c. Direct the OEEC to find immediate solutions to charging infrastructure, such as upgrading existing electrical outlets in County garages to accommodate plug-in EVs, and to adapt purchasing practices to new goal.	OEEC	DMB DPMM DVS FCPA FMD Gov't Relations		X			CY2020	<p>Wall-mounted chargers are being installed in the parking garages at the Government Center, Pennino Building, and Public Safety Headquarters.</p> <p>FCPA is currently not allowed by state law to resell electricity through EV charging stations, though FCPA is working with OCA for possible future options, including revisions to state statutes.</p>
3. Direct the County Attorney to:								
3a. Report to the Environment Committee on whether the County can provide incentives for consumer EV purchases and charging stations, or similar kinds of energy reduction or efficiency investments; or what legislative changes might be necessary to do so.	Gov't Relations OCA	DMB DEI		X	X		CY2021	<p>OCA determined that the Board has authority to adopt a lower tax rate for electric vehicles, but other incentives the Board may want to provide would require enabling legislation in the General Assembly. These incentives should be identified and assessed prior to the pursuit or support of such legislation. Incentives will likely be considered under the CECAP.</p>



Fairfax Green Initiatives #2 Implementation Matrix

Action Item	Lead Dept.	Partners	Complete	Ongoing	CECAP	JET	Anticipated Consideration	Action to Date
4. Direct the OEEC to:								
4a. Provide a plan to the Environment Committee for consideration to implement a five-cent plastic bag fee in 2021, as now allowed by law.	OEEC	DMB DPWES DTA OCA		X			CY2020 - CY2021	An ordinance on a five-cent disposable plastic bag tax was adopted by the Board on September 14, 2021. The ordinance will go into effect on January 1, 2022. Following the adoption of the plastic bag tax in Arlington County and the City of Alexandria on September 18, 2021, the County is working regionally to address outreach and education for retailers and consumers.
5. Direct FMD to:								



Fairfax Green Initiatives #2 Implementation Matrix

Action Item	Lead Dept.	Partners	Complete	Ongoing	CECAP	JET	Anticipated Consideration	Action to Date
5a. Assess and report to the Environment Committee costs and process to phase out all existing hydrofluorocarbon (HFC) refrigerators, refrigerant cases and air conditioners from all County facilities and equipment purchases as soon as practical but no later than 2030, including ensuring proper disposal and recovery of gases and materials. Where comparably performing non-HFC products are available, effective in 2021, all new purchases would not contain HFC.	FMD DPWES FCPA FCRHA	DMB DPMM		X			CY2021	<p>The lead departments are collaborating to assess, determine and report on the process necessary to accomplish this item by 2030. The departments are investigating market options, timelines and resource needs to purchase HVAC equipment with non-HFC refrigerants. However, FCPA notes that replacement options are currently not widely available to the domestic U.S. market.</p> <p>DPWES notes that new construction and major renovation projects undertaken by Capital Facilities continue to prohibit the use of refrigerants with HFCs.</p> <p>The departments will continue to properly dispose of HFC refrigerants under the DPWES-Solid Waste Management program.</p>
6. Refer to the Land Use Policy Committee for consideration:								



Fairfax Green Initiatives #2 Implementation Matrix

Action Item	Lead Dept.	Partners	Complete	Ongoing	CECAP	JET	Anticipated Consideration	Action to Date
6a. Require energy use disclosures on residential home sales. Direct the County Attorney to provide legal review for considerations.	Gov't Relations OCA	DPD	X					OCA determined that legislation passed in the 2020 General Assembly, requiring a seller of a residential property to disclose that a buyer may obtain a building energy analysis, does not require the seller to provide an energy cost and consumption history such as the one required by Montgomery County, MD. Additional legislation would need to be passed in the General Assembly to impose the requirement on sellers or authorize localities to do so.



Fairfax Green Initiatives #2 Implementation Matrix

Action Item	Lead Dept.	Partners	Complete	Ongoing	CECAP	JET	Anticipated Consideration	Action to Date
6b. Direct DPD to evaluate and report to the Land Use Policy Committee on further strengthening the County's Comprehensive Plan policy regarding provisions for EV ready or EV infrastructure during the rezoning process in private parking facilities.	DPD	LDS		X			CY2021 - CY2022	<p>As part of the zMOD project, a new Zoning Ordinance was adopted in March 2021, which permits electric vehicle charging (EVC) as a new accessory use, with certain provisions. The ordinance allows EVC spaces to count toward minimum parking requirements, canopies for solar collection systems, and the inclusion of EVC infrastructure accessory to county facilities.</p> <p>DPD and LDS continue to develop a parking study, expected in 2022. Based on study results, DPD may develop follow-on recommendations for EV parking space rates and infrastructure needs. In coordination with the Land Use Policy Committee and the Planning Commission's Environmental Committee, DPD may then review the Green Building policy for potential changes.</p>



Fairfax Green Initiatives #2 Implementation Matrix

Action Item	Lead Dept.	Partners	Complete	Ongoing	CECAP	JET	Anticipated Consideration	Action to Date
6c. Direct DPD and the County Attorney to provide a report analyzing requirements and impediments for new commercial construction and incentives for new residential construction to incorporate community solar and/or geothermal systems in project planning.	DPD LDS	OCA	X					<p>Solar Power Facilities and Solar Collection Facilities are new uses proposed as part of zMOD to more readily incorporate solar projects into County and other community facilities, commercial construction projects and individual residential sites. A public hearing on zMOD is scheduled before the Board in March 2021.</p> <p>The County has processes in place to expedite reviews for solar and geothermal systems and permitting costs are waived for residential and commercial solar systems. LDS recently developed a geothermal publication, providing guidance on permitting and review processes for customers. This is similar to guidance LDS offers for residential solar customers. LDS will incorporate these materials into future outreach opportunities.</p>



Fairfax Green Initiatives #2 Implementation Matrix

Action Item	Lead Dept.	Partners	Complete	Ongoing	CECAP	JET	Anticipated Consideration	Action to Date
6d. Direct DPD to provide a report for ways to encourage and incentivize developers and builders in the County to adopt or accelerate residential and commercial green building practices. For example, create a green building profile that builders and developers can receive a rating on their green building practices.	DPD LDS		X					DPD and LDS have determined that the creation of a Fairfax County Green Building Profile would duplicate existing third-party certifications and rating systems, and as such, the agencies suggest such a profile not be developed.
7. Direct the County Executive to:								



Fairfax Green Initiatives #2 Implementation Matrix

Action Item	Lead Dept.	Partners	Complete	Ongoing	CECAP	JET	Anticipated Consideration	Action to Date
7a. Report to the Environment Committee on the feasibility of creating an Energy Efficiency Funding Pool (EEFP) pilot. Consider potential Public Private Partnerships (PPP), existing non-profit housing partnerships and other energy efficiency-focused organizations to provide a competitive grant process for funding local entities to provide workforce energy efficiency and weatherization (green jobs) training opportunities while upgrading the energy efficiency of eligible low-income and seniors homes.	DEI	CSB FCRHA OEEC OSM		X			CY2021	DEI is exploring a partnership with Dominion Energy to understand their workforce needs. Dominion is interested in creating pathways to energy-related jobs from middle school on and partnering with Fairfax County in job fairs and in other workforce development activities. DEI continues to work with the FCEDA to segment green economy sectors to understand areas of economic competitiveness.



Fairfax Green Initiatives #2 Implementation Matrix

Action Item	Lead Dept.	Partners	Complete	Ongoing	CECAP	JET	Anticipated Consideration	Action to Date
7b. Report to the Environment Committee on the feasibility of creating a Fairfax Green Bank.	DOF Gov't Relations	DEI DMB OCA OEEC		X			CY2021	In fall 2020, OCA determined that the Board lacked enabling authority to establish a Fairfax Green Bank. At the direction of the Board, staff drafted a bill for the 2021 session of the Virginia General Assembly to enable a locality to enact an ordinance establishing a green bank. The bill (HB 1919), which was sponsored by Delegate Kory, and as amended to include consumer protection standards, has been signed into law. The County is initiating a feasibility study of a Green Bank to supplement existing sources of private financing for clean energy projects and act as a catalyst for clean energy projects and program delivery in Fairfax County.



Fairfax Green Initiatives #2 Implementation Matrix

Action Item	Lead Dept.	Partners	Complete	Ongoing	CECAP	JET	Anticipated Consideration	Action to Date
8. Direct the County Executive and County Attorney to:								
8a. Report to the Board on the feasibility and legality of providing guidance to Fairfax County retirement fund managers to increase support for non-greenhouse gas emitting energy investments, local green business investments and decreasing those in fossil fuels.	OCA	Retirement Administration Agency	X					OCA determined that the Board may lawfully provide guidance to Fairfax County retirement fund managers on increasing support for non-greenhouse gas emitting energy investments and decrease support for fossil fuels. However, legal difficulties could arise if mandates or limitations on investment choices are imposed.