

Draft Actions for the Community Energy and Sustainability Master Plan
 Prince William County, Virginia
 March 22, 2023

The proposed draft actions below are being developed as part of the *Prince William County's Community Energy and Sustainability Master Plan*. These draft actions are actions the county would take to achieve the [goals set forth by the Board of County Supervisors](#). The Board has outlined goals for the entire county, as well as goals specifically targeted at county government operations. The actions have been categorized into the following sectors: electricity, buildings, infrastructure, transportation, natural resources, community, agriculture, waste, and refrigerants. The actions' Greenhouse Gas (GHG) reduction potential and/or climate hazard addressed are listed in the Climate Benefits column to the right. GHG reduction potential ranges are as follows:

Very High: greater than 500,000 metric tons of carbon dioxide equivalent reduced (MTCO₂e),

High: 50,000-500,000 MTCO₂e reduced

Medium: 10,000-50,000 MTCO₂e reduced

Low: less than 10,000 MTCO₂e reduced

Action #	Sector	Action Title	Action Description	Climate Benefits (GHG Reduction Potential, and/or Climate Hazard Addressed)
GREENHOUSE GAS MITIGATION AND RENEWABLE ENERGY ACTIONS				
1	ELECTRICITY	Acquire Clean Electricity Sources for the County	Form an opt-out municipal aggregation program to acquire 100% clean electricity for the community.	Very High
2		Promote Existing Green Power Products	Promote purchasing utility green power options within the community.	High
3		Promote Existing Renewable Energy Incentive Programs	Provide outreach and education on available programs and incentives for residents and businesses to install renewable energy systems (e.g., tax credits, multifamily shared solar program, net metering, community solar, solar renewable energy certificates [SRECs], Solarize NOVA).	Medium
4		Develop Additional Renewable Energy Incentives	Develop additional renewable energy incentives in partnership with stakeholders such as the Residential Solar Task Force.	Medium
5		Streamline Solar Permitting	Establish streamlined permitting for solar installations.	

Draft Actions for the Community Energy and Sustainability Master Plan
 Prince William County, Virginia
 March 22, 2023

6		Purchase Clean Electricity for County Government Operations	Procure 100% clean electricity for all government operations.	Medium
7		Install Solar on County Government Facilities	Develop solar projects on County government facilities.	Low
8	BUILDINGS	Promote Energy Efficiency and Electrification Incentives	Provide outreach and education to residents and businesses about the tools, technology, and incentives for building energy efficiency and electrification.	Medium
9		Incentivize Energy Efficiency and Electrification Retrofits	Incentivize existing building energy efficiency retrofits (e.g., rebates, reductions in transfer fees or the previous year's property tax for sellers, discount or deferral on future year property tax for buyers).	
10		Propose Green Zoning Regulations	Propose green zoning regulations to incentivize water- and energy-efficient buildings, multifamily and mixed-use areas, and transit-oriented developments.	Medium
11		Incentivize Energy Efficient New Buildings	Provide incentives or streamlining for developers who build to a more energy-efficient standard set by the County.	
12		Building Energy Benchmarking	Implement a voluntary commercial building energy benchmarking and reporting program.	Low
13		Incentivize All-Electric Equipment in New Construction and Retrofits	Incentivize use of all-electric systems and equipment in new buildings and retrofits county-wide.	Low
14		Create Net-Zero Plan County Government Facilities	Develop a net-zero building plan for all existing County government facilities.	Low
15		Create All-electric Guidelines for New Construction of County Government Facilities	Develop an all-electric new construction requirement for all new County government facilities.	Low

Draft Actions for the Community Energy and Sustainability Master Plan
Prince William County, Virginia
March 22, 2023

16	Create Mandatory Energy Benchmarking for County Government Facilities	Implement a mandatory energy benchmarking program for County government facilities.	Low
17	Create Policy to Increase Energy Efficiency in County Government Facilities	Adopt a County government energy policy that outlines operational and purchasing requirements that increase energy efficiency.	Low

DRAFT

Draft Actions for the Community Energy and Sustainability Master Plan
 Prince William County, Virginia
 March 22, 2023

These draft climate adaptation and resiliency actions below are actions the county would take to achieve the climate resiliency and adaptation goals set forth by the Board of County Supervisors. These are proposed actions to be taken to address the vulnerabilities of the county’s people and assets to climate hazards. The County’s Vulnerability Assessment completed in January 2023 identified the following categories most vulnerable to climate hazards: socially vulnerable populations, natural resources, energy resources, transportation, and food/water/shelter resources. The following climate hazards propose the greatest risk to the county’s assets and people: precipitation, extreme temperature, drought, sea level rise, earthquakes, and strong winds/tornados. The actions below are proposed to help the county become more resilient and adaptable to climate change.

CLIMATE ADAPTATION & RESILIENCY ACTIONS				
Action #	Sector	Action Title	Action Description	Climate Benefits (GHG Reduction Potential, and/or Climate Hazard Addressed)
40	BUILDINGS	Develop Adaptation Plans for Critical Facilities	Develop site-level adaptation plans for critical facilities and service areas considering future climate change hazards.	All Climate Hazards
41		Expand Building Insulation Standards to Protect Against Extreme Heat	Increase standards for insulation in new construction buildings and homes for resiliency against extreme heat events.	Low, Extreme Heat
42		Protect Existing Buildings Against Earthquakes	Identify structures for earthquake retrofits and implement retrofits on existing structures.	Earthquakes
43		Protect Existing Buildings Against High Winds	Identify structures for high wind retrofits and implement retrofits on existing structures.	High Winds & Tornados
44		Incentivize Improved Cooling Equipment in Apartments	Incentivize expanded access to reliable, efficient cooling for apartments.	Low, Extreme Heat
45		Incentivize Businesses to Reduce Water Usage	Develop incentives, training and technical assistance programs for significant water use reductions including rainwater and greywater harvesting and onsite blackwater treatment with a focus on industrial and commercial properties.	Low, Drought

Draft Actions for the Community Energy and Sustainability Master Plan
 Prince William County, Virginia
 March 22, 2023

47		Incentivize Nature-based Solutions to Reduce Flooding in Residential Properties	Develop program to provide incentives and promote rain gardens, conservation landscapes, green roofs, water harvesting, and permeable pavement for residential properties.	Precipitation
49		Improve Water Infrastructure for Extreme Precipitation Events	Update water and drainage infrastructure design standards to address the projected increase in intensity of precipitation, including the use of retrofits and/or green infrastructure in new construction.	Flooding
50		Protect Electrical Infrastructure from High Winds	Partner with Dominion Energy to increase resilience of the electrical grid including hardening infrastructure and/or burying power lines where appropriate.	High Winds & Tornados
51		Assess Availability of Backup Power for Critical Infrastructure	Assess the feasibility of switching to clean sources backup power.	High Winds & Tornados
52		Invest in Backup Power for Critical Infrastructure	Invest in backup power generation for publicly owned essential services and infrastructure.	High Winds & Tornados
54		Adopt Guidelines to Use Nature-based Solutions on County Construction	Develop guidelines on how to incorporate nature-based solutions into county projects.	Flooding
55	ENERGY	Improve Grid Resilience During Extreme Weather	Evaluate resilient energy systems such as microgrids or other distributed energy resources within the County to provide stable energy supply during times of extreme weather.	Extreme Heat/Cold