

BREAKOUT ROOMS SESSION 2

Discussion Topics:

1. Increasing Energy Efficiency
2. Enhancing Walkability and Bikeability
3. Developing Community Resilience Hubs
4. Sustainable Food Systems and Increasing Access to Healthy Foods
5. Implementing the CAP through County Planning & Operations

PRINCE GEORGE'S COUNTY
DEPARTMENT OF THE ENVIRONMENT



VIRTUAL COMMUNITY MEETING #2
Thursday, June 24, 2021
Session 2: Breakout Room Topics



INCREASING ENERGY EFFICIENCY

Accelerating Deep Energy
Retrofits

Facilitators:

Jenny Egen, Environmental Finance Center
Maia Davis, Metropolitan Washington Council of
Governments



Benefits of Increasing Energy Efficiency

- Reduces greenhouse gas emissions.
- Reduces air pollution.

Environmental Benefit



- Positive impact on outdoor air quality and public health.
- Potential to improve indoor air quality.

Human Health Benefit



- Break the cycle of energy poverty.
- Homes and businesses save money on energy costs.
- Attract new and retain existing tenants.
- Increase a building's value and generate more income.
- Can create net increase of jobs and GDP.

Economic Benefit





Sources: EE Image Database and whistechcollege/ Flickr



Snapshot of Efforts in the County

- County energy performance contracts to perform energy and water improvements to 10 county government buildings generates approximately \$1,000,000 of energy savings annually.
- County's Sustainable Energy Program has set energy efficiency goals to:
 - Help grant recipients achieve at least 15% energy savings for energy efficiency projects and 10% energy savings for solar projects;
 - Help grant recipients reduce energy consumption by 20% or greater for office buildings and multifamily dwellings.
- County Energy Efficiency Grant Program (up to \$7.5K) for residents in Energy Resilience Zones (formerly Transforming Neighborhoods Initiative) County Energy Star Certification and Green Leasing Program.
- The County provides "Energy Coach" serves as an objective and trustworthy advisor for community-based sustainable energy initiatives.
- FSC First is a designated Fund Manager for the Commercial Property Assessed Clean Energy (C-PACE) Program assists commercial property owners in accessing financing energy efficiency and clean energy improvements.

Change is Happening

- Maryland slashed its energy-related carbon dioxide (CO2) emissions 2005 while simultaneously growing the state economy by 17.7 percent.
- GHG emissions in the County have decreased 15% between 2005 and 2018.
- Maryland ranks in the top 10 of the ACEEE Energy Efficiency Scorecard recognized for energy efficiency standards, codes and utility public benefit programs.



Redevelopment Authority of Prince George's County Programs and Projects

The Redevelopment Authority offers first time homebuyers assistance, Community Impact Grants (up to \$75K), Commercial Property Improvement Program (\$50K - \$350K), redeveloped affordable housing to LEED and net zero energy standards.

The Redevelopment Authority homes redeveloped to net zero energy standards include a 100-year-old home near Suitland Federal Center (pictured above) and 8 homes along the DC border.



Preliminary Energy Efficiency Action Recommendations

- Establish building benchmarking requirements and standards across the County for both the public and private sector.
- Accelerate the number of homes and businesses implementing deep energy retrofits.
 - Offer financing solutions, incentives and technical for residential and commercial buildings to improve energy efficiency through deep energy retrofits.
 - Prioritize assistance to seniors, low-income, and other vulnerable communities to retrofit homes or provide energy efficiency upgrades to homes. Consider opportunities to streamline permitting to support and incentivize deep energy retrofits.



Enhancing Walkability & Bikeability

Reducing Vehicle Miles Traveled
and Increasing Support for
Concentrated Activity Centers

Facilitators:

Mike Hunninghake, Environmental Finance Center
Jeff King, Metropolitan Washington Council of
Governments



Benefits of Walkable & Bikeable Communities

- Reduces greenhouse gas emissions.
- Reduces smog and particulate air pollution.

Environmental Benefit



- Positive impact on air quality and public health.
- Expanded opportunity for physical activity supporting weight loss and stress relief.
- Improved quality of life from reduced commute times.

Human Health Benefit



- Reduced commuting costs.
- Can catalyze economic growth.
 - Money saved on commuting is spent on other goods and services which adds stimulus to state incomes, employment, and real wages.
- Construction of trails and other pedestrian and bicycle infrastructure supports jobs and incentivizes private sector investment.
- Home values near trails and pedestrian and bicycle infrastructure are often higher.

Economic Benefit



Snapshot of Efforts in the County

- VisionZero plan looks to make streets safer for walking and biking.
- Ongoing efforts to incorporate complete streets into land use planning and urban design to create bike and pedestrian friendly communities.
- RideSmart Solutions offers free information on accessing bus service, rail lines, carpooling, vanpooling and telecommuting.
- Working with Commuter Connections to promote transportation alternatives and connect commuters to jobs, education, shopping, healthcare, and other important destinations, while reducing auto emissions and traffic congestion.
- Promotion of a collection of commuting apps to inform decisions about about commuting options and rewards programs including:
 - NextBus to track TheBus system
 - PGCTrip for real-time roadway conditions and traffic cameras
 - TransLoc on-demand PGC Link microtransit in the Fort Washington area (pilot program running now through early May 2021)
 - Curb for Prince George's County taxi service options
 - CarpoolNow offers free, real-time ride matches with other commuters traveling the same direction as you to work or home
 - Commuter Connections for ride matches, Park & Ride lots
 - Incentrip which rewards commute choices in cash and/or gift cards
- 2020 review of 2012 Climate Plan draft leading to an upcoming employee commute survey





Preliminary Walkable & Bikeable Recommendations

- Reduce vehicle miles traveled (VMT) through support for teleworking and virtual convenings; County to lead by example through its telecommute policies.
- Increase support for Activity Centers by focusing capital investments, supporting transit, enhancing walkability and bikeability, adopting strategies that bring housing and jobs to these centers in order to reduce VMT and stimulate economic development

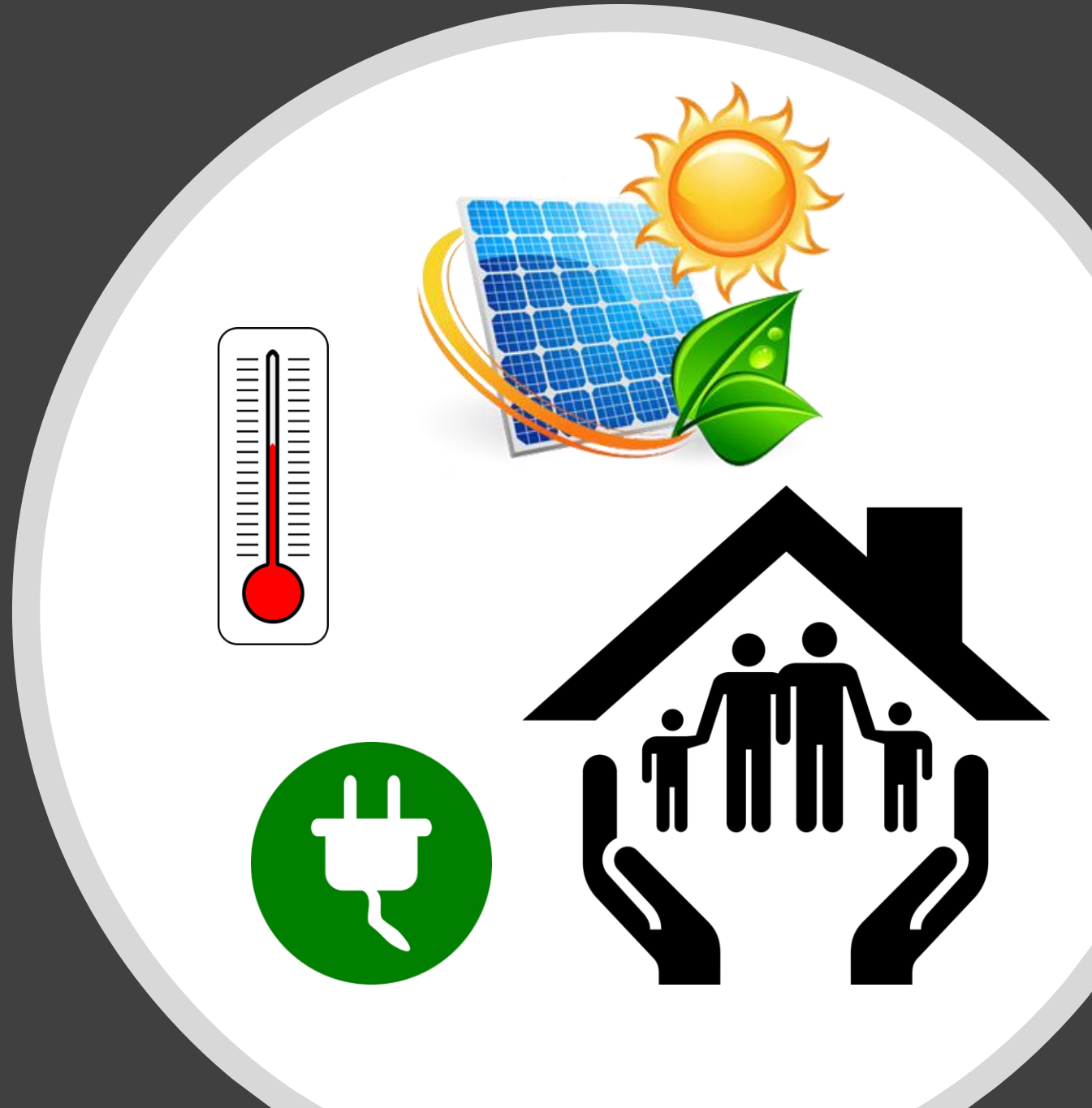


DEVELOPING RESILIENCE HUBS

Identifying Heat Island Hot
Spots and Deploying Solar
Power Storage at
Neighborhood Hubs

Facilitators:

Stephanie P. Dalke, Environmental Finance Center
Deb Perry, Cadmus



What is a Resilience Hub?

- Resilience Hubs are community facilities that have been enhanced to better “support residents, coordinate communication, distribute resources, and reduce carbon pollution while enhancing quality of life.”

WHAT IS A RESILIENCE HUB?



OFF GRID SOLAR POWER

Designed to provide power during an emergency, and reconnect to the grid once power is restored.



RISK REDUCTION AND DISASTER TRAINING

Access to best practice re-construction information to be better prepared for future emergencies.



COMMUNICATION HUB

A single point for access to news and information during and after an emergency.



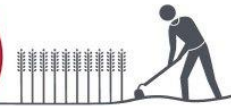
CLEAN WATER

Reinforcing existing water systems so communities have access to safe drinking water.



COMMUNITY GARDEN AND FARMING RESOURCES

To help small farmers recover lost supplies, seed and crops.



EXISTING COMMUNITY CENTER RESILIENCE HUB

- Hubs can be designed to meet a variety of goals, but they should at least provide emergency heating and cooling and electricity for medical needs and device charging.

Benefits of Resilience Hubs and Heat Mapping

- A Hub's solar power reduces greenhouse gas emissions and air pollution
- Planting trees in "hot spots" provides habitat, slows down stormwater, and improves air quality

Environmental Benefit



- Correcting neighborhood "hot spots" will save money on cooling

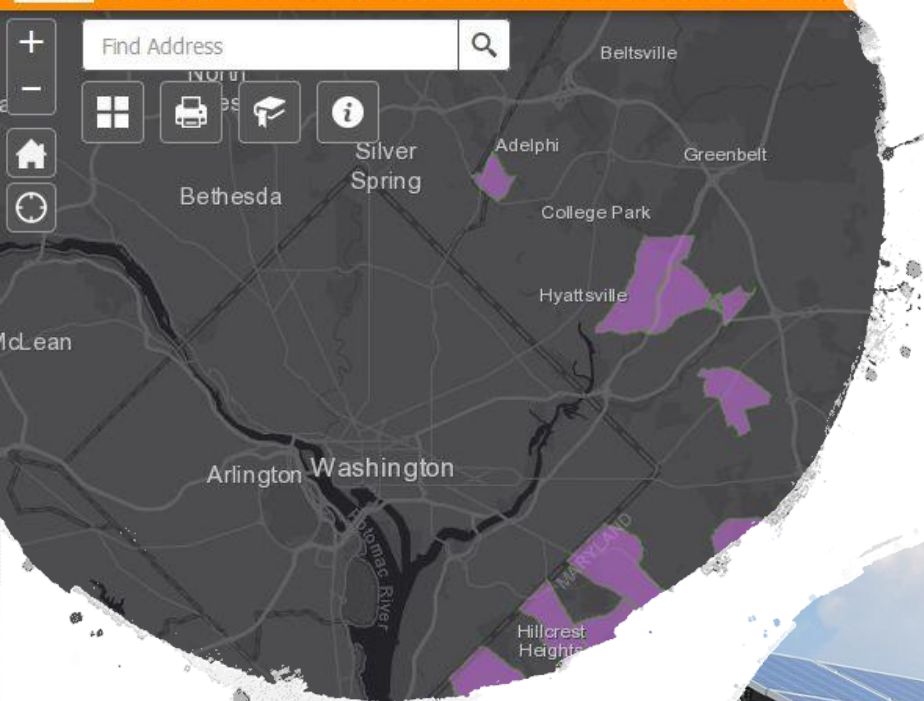
Economic Benefit



- Hubs
 - provide a location to access electricity for medication, etc. during outages
 - serve as cooling and heating centers to prevent deaths
 - support community members
- Correcting neighborhood "hot spots" will reduce heat-related health impacts on vulnerable populations

Human Health Benefit





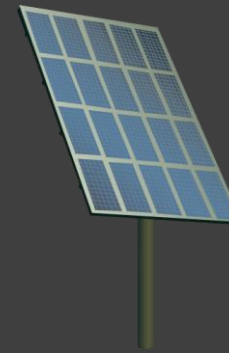
Snapshot of Efforts in the County

- Provide residents with information on avoiding heat-related illnesses
- Plan 2035 (open space, GI)
- The County's Energy Resiliency Zones (ERZs) Initiative focuses on uplifting neighborhoods that face challenges. This includes deploying distributed energy resources (e.g. energy efficiency, renewables such as solar PV and thermal, battery storage, and microgrids).
- Green roofs, which help with cooling, have been installed at newer developments and town buildings.



Change is Happening

- Baltimore now has several Resiliency Hubs across the City.
- The Maryland Energy Administration (MEA) created a Resiliency Hub Grant Program to support development and construction of “solar plus” energy storage systems at Resiliency Hubs. The program prioritizes high density, Low and Moderate Income (LMI) neighborhoods and community/public buildings.
- In 2020, MEA funded 3 sites in Prince George’s County to study microgrid deployment, including: Fairmount Heights, a multi-family complex in Adelphi, and one in Forestville. In 2021 MEA granted \$200,000 for construction of a microgrid in Fairmount Heights.
- MEA also supported solar energy upgrades, including battery storage, at St. Jude Regional Catholic School in Rockville in order to create a Resiliency Hub that is within walking distance of about 3,000 residents.



Maryland Announces Funding for 14 Microgrid Projects

June 11, 2020 By Elisa Wood

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Maryland yesterday announced winners in its resilience solicitation, 14 facilities that speak to the range of operations now pursuing microgrid projects — from marginalized neighborhoods to food production operations to a marine terminal.

The winners will divvy up \$1.05 million provided by the Maryland Energy Administration's (MEA) **Resilient Maryland program**. The funding will go toward completing detailed feasibility analyses, engineering, planning, and designs, positioning them to seek financing.

In all, the program attracted 25 microgrid proposals from a broad geographic and socio-economic swath of Maryland.

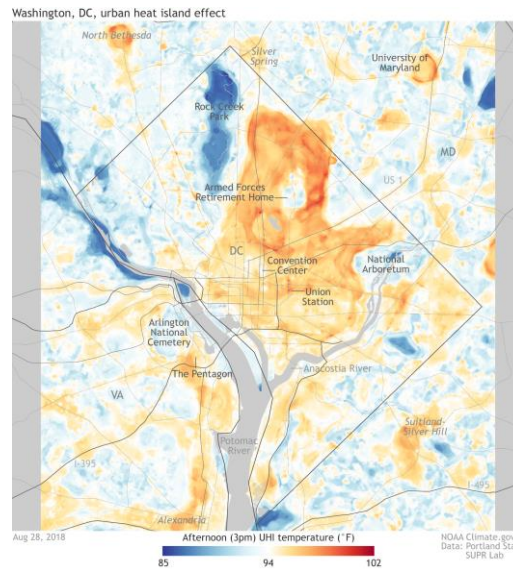
"The response to this pilot was incredible, in fact, it was one of our most popular programs this year," said Mary Beth Tung, MEA director.



Maryland, site of the Montgomery County microgrid project, pictured, is funding 14 new projects. Photo courtesy of **Schneider Electric**

Preliminary Resilience Hub and Heat Mapping Action Recommendations

- Perform thermal mapping to identify urban heat island hot spots, including impacted vulnerable populations, areas for greatest potential for cooling, and potential areas for mitigation strategies and use to develop a County comprehensive extreme heat strategy. Use to inform selection of Resilience Hubs.
- Assess the potential to establish Resilience Hubs in those communities within a 10-minute walking radius. Prioritize County-owned properties such as adult daycare centers, recreation centers, and other existing community focal buildings.



INCREASING ACCESS TO HEALTHY FOODS

Promoting sustainable, low-carbon, conservationist agricultural practices.

Facilitators:

Michelle Kokolis, Environmental Finance Center
Carol Barth, Prince George's County



Benefits of Increasing Access to Healthy and Sustainable Food Systems

- Reduces greenhouse gas emissions.
- Reduces smog and particulate air pollution.

Environmental Benefit



- Positive impact on air quality and public health
- Improving diet and health outcomes

Human Health Benefit



- Boost economic and community vitality by bringing new food outlets into underserved areas can provide an economic stimulus in communities that may need it most.
- Can increase property values in the immediate vicinity
- Buying local food = money stays in the local economy

Economic Benefit





Sources Cliff/Flickr and City of College Park



Snapshot of Efforts in the County

- Prince George's County launched a Food Equity Council in 2013.
- County received Maryland Agricultural Land Preservation (MALPF) certification in 2014.
- County passed legislation in 2015 allowing retail food trucks back into the county.
- County passed urban farm legislation in 2016 allowing farming on 73% of land in the county.
- County passed an urban agricultural property tax credit in 2015 and launched Bloomin' PGC to support urban farming in 2016.
- A 2017 M-NCPPC survey revealed overwhelming interest from residents wanting access to land for urban agriculture. This desire has led to new hydroponic and aquaponics facilities. There is also tremendous interest in raising backyard chickens among residents.
- County funded a permanent full-time Urban Soil & Water Conservationist to provide technical assistance to urban farms in 2018.
- County established its first wine trail (Legacy Wine Trail) in 2018.

Change is Happening

- Acres of farmland in the County have reduced from >62K acres in 1987 to <32K acres in 2012.
- There are 6,165 acres of preserved farmland.
- There are >350 farms in the County producing \$17.5 million in AG sales in 2017.
- There are 24 community gardens, 23 school gardens, and 9 urban farms in the County.
- There are 16 farmers markets and 7 CSAs - Community Supports Agriculture - in the County.
- More farmers markets are accepting SNAP (food stamps) and offering matching programs. The County has been funding the Maryland Money Market program to increase food access.
- There are 3 breweries, 4 wineries, and 1 distillery in the County.
- There are a growing number of agricultural education programs, farm venues, and farm stays in the County.



Prince George's County Food Composting Program

Prince George's County is engaging communities in the County on food scrap separation and composting. Food waste constitutes about 23 percent of the waste stream in the County, and it is expected to increase. The County Organic Composting Facility is the largest municipal installation of its kind on the East Coast. Over 50,000 tons of material is processed annually at the facility. The facility produces a nutrient-rich amendment product called Leafgro Gold® that is great for flower gardens, vegetable gardens, perennials, bulbs, planting trees and shrubs.



Preliminary Healthy Food System Action Recommendation

- Promote a healthy food system supported by low-carbon, conservationist agricultural practices.



Image Sources: Prince George's Soil Conservation District, Forested, Cottage City Garden, Hyatt Park Community Garden

GOVERNMENT OPERATIONS & CLIMATE- RESILIENT LAND USE

Changing How We Do Business to Support
the County's Climate Action Plan

Facilitators:

Jen Cotting, Environmental Finance Center
Mary Abe, Department of the Environment
Council Member Tom Dernoga, Prince George's County Council



BENEFITS OF INTEGRATING CLIMATE ACTION INTO COUNTY GOVERNMENT OPERATIONS AND LAND USE PRACTICES

- Natural resources provide essential ecosystem services for cleaner air and water and flood resiliency.
- Protecting existing forests moderates temperatures, provides habitat, and sequesters carbon

Environmental Benefit



- Create communities embracing healthy lifestyles; live where you work; walking and biking instead of driving.
- Mental health: Connect with nature where you live.

Human Health Benefit



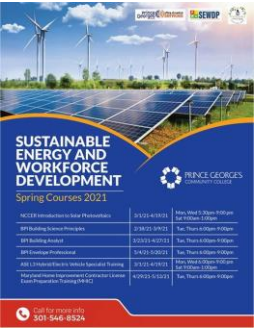
- Global market for clean technologies will create a \$23 trillion market by the end of this decade —promoting innovation helps local business compete in a global marketplace
- Empowering economic sustainability through buying local
- Job creation as we transition to a new way of living, working, and growing our communities.
- Long term energy costs are reduced.
- Bond ratings maintained by proactively embracing climate resiliency measures.

Economic Benefit

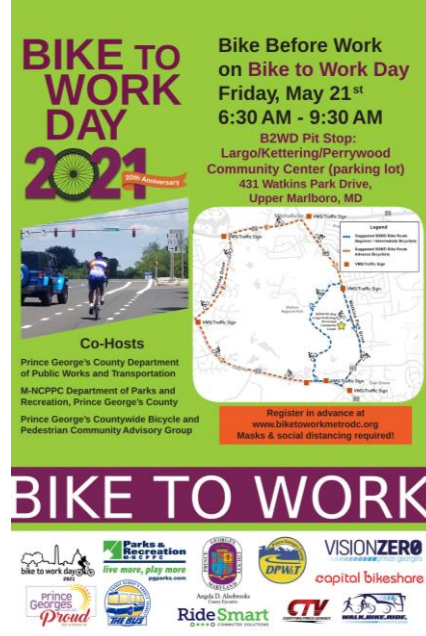




**DID YOU KNOW: PRINCE
GEORGE'S COUNTY IS #1 IN THE
D.C. METRO REGION FOR CLEAN,
SOLAR ENERGY GENERATION!**



Country's largest community solar project opens in Fort Washington



Net-Zero: Suitland Home is 100 Years Old But State-of-the-Art When it Comes to Energy Efficiency

July 9, 2015



Snapshot of Efforts in the County

- Progressive long term plan policy created: Prince George's County Plan 2035
- Land Use Zoning Rewrite :House Bill 980 (PG-416-21), allowing Prince George's County to move forward with modernizing the county's 50-year-old zoning ordinance.
- Prince George's County ranks as the #1 County in Maryland to install solar (15,761 Installations) and is also ranked as the #1 County in the State to produce the most solar energy.
- Housing Initiative Partnership, Pepco and Emera Technologies Awarded \$200,000 Grant by the [Maryland Energy Administration](#) for Innovative Microgrid Community in Fairmount Heights

- **Lead by Example**: Transparency by tracking and measuring Climate Action Impacts to establish indicators and systems of accountability to monitor progress on the recommendations of the CAP. Update the Budget, Procurement, and Capital Improvement Plan Process to reflect climate mitigation and adaptation goals.

-

Apply to be a County Climate Action Resident Expert

- <https://forms.gle/z92cx7LLrYTmNLN17>

Visit the DMV Climate Partners Website

- <https://climatepartners.org>

Learn More About Upcoming Meetings

- mypgc.us/climateactionplan

Explore the County CAP Virtual House

- <https://bit.ly/2S7PgEQ>

Provide Comments and Feedback

- <https://bit.ly/3vBKqNJ>

Stay Engaged

