

CPRG IMPLEMENTATION GRANTS COMPETITION PROGRAM DESCRIPTIONS

Washington, DC Weatherization Assistance Expansion for Electrification Readiness.

The District's WAP uses federal funds to help low-income households improve energy efficiency and reduce bills. It offers audits and installation measures like insulation and duct sealing. Currently limited to specific income levels, the program may expand to include more households, aiming at up to 80% of the area median income. The Affordable Home Electrification Program aids qualifying households in switching to electric systems. To prevent increased utility costs from electrification, funds may cover additional weatherization measures. This expansion benefits more households, particularly those unable to afford improvements otherwise. Existing federal WAP funds often run out, causing waitlists. Additionally, households in the 60-80% income range lack support. The District plans to allocate funds efficiently, prioritizing energy efficiency before electrification. All efforts adhere to federal funding regulations.

All-Electric Emergency Heating and Cooling Systems Replacement Pilot, Washington, DC (<https://www.frontdoor.dc.gov/emergency-mechanical>):

The District has programs to aid low-income households in swiftly replacing failing heating and cooling systems. Due to waitlists and limited options, priority often goes to existing fuel sources like fossil fuel gas, despite efficiency concerns. Grant funding will enhance these efforts, facilitating quicker access and promoting electrification. Emergency replacements are managed by District DOE's Emergency Mechanical Systems Replacement program, while electrification is promoted through the DC SEU's Affordable Home Electrification Program. This pilot initiative, inspired by programs in California, aims to expedite emergency heating and cooling solutions using innovative in-room heat pump technology. Targeting low-income households, it prioritizes life safety services and aims to prevent risky coping methods such as indoor combustion heating. The program will engage partner agencies and communities, focusing on environmental justice areas, through various outreach methods. With no current funding available for this innovative approach, its success could pave the way for scalable solutions at minimal extra cost.

Prince George's County Clean Energy Program (<https://www.princegeorgescountymd.gov/departments-offices/environment/sustainability/sustainable-energy/clean-energy-program>):

The Clean Energy Program, part of Prince George's County's initiatives, joins ongoing efforts to address economic, health, safety, and educational challenges in neighborhoods. In the last five years, it processed 2,000 grant applications for energy efficiency upgrades for homeowners. With dwindling funds to install certain measures, it plans to switch a portion of the remaining funds to focus on solar PV grants in the fall of 2024. CPRG funds will support the installation of energy efficiency measures and solar PV adoption in nine designated neighborhoods, classified as Energy Resiliency Communities, which encompass many identified LIDACs. Applicants must also apply to relevant energy efficiency programs. Solar PV grants, starting in fall 2024, will cover up to \$10,000 for installation costs, with a portion allowed for facilitation measures. Existing grants for energy efficiency allow up to \$6,250 per home. CPRG funds aim to provide 160 additional grants for solar PV installation and 1,000 energy efficiency upgrades with a focus on reincorporating funding for those energy efficiency measures no longer supported due to a lack of funding, such as heat pumps and heat pump water heaters.

Frederick County Power Saver Retrofits (<https://frederickcountymd.gov/7575/Power-Saver-Retrofits-for-Residential-Pr>): For low- to moderate-income households, the Power Saver Retrofits (PSR) program provides a free assessment of a home's energy use and what improvements might be made to conserve

energy- and lower energy bills. Then, work can be performed to stop drafts, reduce electricity or other fuel use, and other conduct environmental improvements- all at no cost to the home's occupants/owners.

Since 2014 Frederick County has provided energy conservation improvements to over 810 homes through the PSR program. Through targeted outreach and community engagement the program has expanded and each year the list of applicants exceeds available funding. Additional funding received through CPRG will allow for more homes to be reached through the Power Saver Retrofits program faster.

Eligible Energy-saving projects include air sealing and insulation in attics and basements, window and door caulking and weather-stripping, duct sealing and insulation, energy efficient lighting upgrades, water heater replacements with energy efficient heat pump water heaters, and heating and cooling system tune-ups or upgrades to Energy Star models. Additionally, up to \$1,500 is available on necessary repairs to health and safety issues related to implementing energy-saving improvements.

Takoma Park Home Weatherization/Solar Installation Program

(<https://takomaparkmd.gov/government/sustainability/grants/>): The Home Weatherization/Solar Installation Program assists Low- to Moderate-Income Homeowners with weatherization repairs and electrification changes, including rooftop solar for those who qualify. This program conducted direct outreach and door-to-door campaigns in LIDACs through 2018 to raise awareness. The program resulted in 15 projects being completed in 2021 at low- and moderate-income homes to weatherize, installed energy efficient appliances, and install solar on suitable rooftops, after which it was forced to end due to funding constraints. CPRG funding, aimed at staff time to conduct direct community outreach and provide grants for weatherization, will allow the City to restart the program and continue helping homeowners in LIDACs and support aging in place for seniors.

Montgomery County Healthy, Efficient, Electrified, Climate-Adapted Pilot (HEECAP) Homes Grants Program

(<https://mygreenmontgomery.org/2024/grant-opportunity-for-healthy-efficient-electrified-climate-adapted-pilot-program/>): HEECAP is an income-qualified resilience, repair and electrification outgoing grant program. It is intended to fill gaps within existing state-based weatherization programs where health and safety budgets are insufficient to ready homes for energy efficiency upgrades. Many residents' homes are deferred from weatherization programs because of roof leaks, mold and other problems that leave them with high energy burdens and an unhealthy indoor environment.

HEECAP has three main areas of focus: 1) Electrify homes for lower carbon emissions and remove fossil fuel combustion from the home. 2) Repair health and safety problems, such as asbestos, mold and roof leaks for participation in state-based weatherization programs. 3) Add climate resilience through a range of measures, including central air conditioning for radiator-heated homes, battery storage for households with critical power needs (e.g., medical devices), and flooding mitigation.

This program was directly informed by the Equity Enhancing Measures in Montgomery County's Climate Action Plan and aims to reduce GHG emissions from the residential building sector. The program was initially funded with \$1.5M from the County's general fund. In its initial form, HEECAP will only be able to reach about 75 houses. CPRG funds will be used to expand this program through 100% grant distribution to eligible non-profit community partners and homeowners' associations, to fund repairs, electrification, climate resilience measures, workforce training costs, and staff support as needed. While the materials and labor share will vary per project, a 50/50 split for materials and labor is expected.

Montgomery County's Electrify MC Program

(<https://www.montgomerycountymd.gov/DEP/energy/homes/electrify-mc.html>): Electrify MC is a

pilot residential electrification program, consisting of a help desk for resident questions and direct incentives for efficient electric appliances that replace fossil fuel counterparts. This program was directly informed by the Equity Enhancing Measures in Montgomery County's Climate Action Plan and aims to reduce GHG emissions from the residential building sector. It is intended to complement the EmPOWER Maryland Home Performance with ENERGY STAR program, with its subsidized energy audits and weatherization rebates. Incentives are distributed proportionally across County council districts by building tally to ensure that all areas of the County have similar access to program benefits.

HEECAP is the companion program to Electrify MC. If LIDAC homes reach out to Electrify MC, they would be referred to a HEECAP grant recipient. Electrify MC can fund upgrades in market-rate/non-LMI-eligible homes that happen to be in LIDAC census blocks. LIDAC census blocks are not comprised 100% of low-income residents. This program can help homes in LIDAC areas where residents do not meet the eligibility criteria for the HEECAP program but still need support and incentives to electrify.

Electrify MC launched in July 2023, funded with \$875,000 from the County's general fund. As of February 2024, Electrify MC has reached 265 households through the help desk and resulted in 25 electrification incentives for fuel-switching projects. Additional funds from CPRG will be put toward expanding direct incentives and supporting help desk staffing.

Montgomery County Homeowner Energy Efficiency Program

(https://www.montgomerycountymd.gov/DHCA/housing/singlefamily/singlefamily_rehab/energy_efficiency.html): The Homeowner Energy Efficiency Program, established by Montgomery County, supports energy efficiency upgrades for eligible County homeowners. This program has served 250 households since 2018, with a significant proportion of seniors.

Eligibility is limited to those who live in their home and qualify based on household income. Residents of Montgomery County apply for the program through the Department of Housing and Community Affairs and work with community-based organizations that administer the program. Habitat for Humanity Metro Maryland and Efficient Home LLC partner with the County to administer the program. CPRG funding will go to support program implementation and expand program reach, with an 80/20 split of equipment purchase/installation costs ratio.

Capital Area Solar Switch, Montgomery County (<https://solarswitch.com/en/CapitalArea/home>):

Capital Area Solar Switch helps residents come together to secure a competitive price on a rooftop solar installation through collective purchasing power. This is an annual program offered from April 1st through late July, and installations are completed by a competitively selected installer via reverse auction by January 31st. During the most recent program, participating households were able to save an average of \$4,115 on a typical sized solar installation. The federal tax credit offers an additional 30% reduction in costs. When combined with state incentives, savings can be enhanced further. Through the Capital Area Solar Switch program, residents installed 2.1 Megawatts (5,347 solar panels) to date, offsetting 35,000 tons of CO₂e emissions and bringing renewable energy to households across the Capital region. As of now, the Solar Switch program is primarily geared toward market-rate residents. CPRG funding would help engage low-income residents in switching to solar at their homes.

City of Rockville Sun Power Grant Program (<https://www.rockvillemd.gov/1553/Rockville-Solar-and-Electric-Vehicles>):

By working with a local nonprofit and community partners, this program helps residents better understand the process of going solar and leverages group buying power to get a discount off the installations. CPRG funding would help expand this program to include more grants and reach 200 low-income homes to install rooftop solar during the five-year grant period. Public Works staff works closely with Community Planning and Development Services staff to promote City, Montgomery County, state, and federal energy programs, such as Solar Switch, HEECAP, Electrify MC,

and the Homeowner Energy Efficiency Program to low and moderate income residents, including those residing at Rockville Housing Enterprises, a low income housing provider, to ensure residents and property managers are aware of and able to take advantage of these programs as much as possible. These partnerships make the City's Housing and Community Assistance program successful.

Charles County (<https://www.stmaryshousing.org/resources-programs/>): St. Mary's Housing Authority leads the work for the current weatherization assistance program. CPRG would enable an additional 60 homes to be reached during the five-year grant period.

Solarize NOVA (<https://www.solarizeva.org/nova>): Solarize NOVA is a community-based outreach initiative that reduces the cost and complexity of going solar by providing a one-stop-shop for education and installation. Solarize NOVA is part of the larger Solarize Virginia campaign, managed by the Virginia non-profit LEAP. Since 2014, 1,015 Virginia households have made the switch to solar through Solarize Virginia, generating more than 9.2 MW of solar capacity. Last year alone, 299 Virginia residents went solar through Solarize, 188 of which were in Northern Virginia.

The Solarize NOVA program utilizes a multi-channel strategy, collaborating with governmental, community, and advocacy partners to engage LIDACs. With a history of creative and collaborative community-based events and campaigns, CHP has the experience and staffing to effectively reach underserved and historically marginalized communities. CPRG funding would enable Solarize NOVA to add 5 MW of new solar infrastructure, serving low-income residents in single-family housing.

Arlington County Green Home Choice (<https://www.arlingtonva.us/Government/Programs/Office-of-Sustainability-and-Environment/AIRE/Residents/Green-Home-Choice>): The Arlington County Green Home Choice program provides technical assistance and walk-through audits of mainly single-family residences and consultation on most critical and effective energy performance upgrades, with a recognized list of contractors vetted for experience, QA/QC, and performance in customer service. To date, the program has serviced over 400 single-family homes across the County. However, there is currently no funding available to expand Green Home Choice into the single-family/townhouse/2x2 market; following the County's \$160 Million commitment to Barcroft (largest multifamily community in Arlington, to cover upgrades and a commitment by the owner Jair Lynch to maintain low-income rental rates for 99 years). CPRG funding will allow for reaching additional LIDAC homes through Green Home choice and providing core technical assistance and consultation services to lead to home upgrades.

Fairfax County HomeWise ([HomeWise | Office of Environmental and Energy Coordination \(fairfaxcounty.gov\)](https://www.fairfaxcounty.gov/home-wise)): The HomeWise program was begun in 2019 to assist low-income households with weatherization measures and includes volunteer support to increase awareness and broader activity on home energy efficiency throughout the community. Fairfax is now expanding the program to provide more comprehensive information and referral resources for household energy savings in all types of residential construction. Incentives will be bundled with other existing and emerging Federal and State incentives for improvements to building envelopes (insulation and air-tightness), HVAC efficiency upgrades, and electrification where suitable. All programming leans into a LIDAC emphasis with assistance from the county's safety net agencies (Neighborhood and Community Services, Family Services) and other collaborators include the state's designated weatherization contractor, a 3rd party contractor referral service for market-rate properties (TBD following competition), and Dominion Energy and Washington Gas efficiency programs.

Alexandria Home Rehabilitation Loan Program (<https://www.alexandriava.gov/housing-services/homeowner-resources>): The Home Rehabilitation Loan Program provides no-interest, deferred payment loans for the design and construction of home improvements to help low- and moderate-income City residents remain in their homes. The program serves owner occupants with combined

incomes below 80% of the area median income by family size. Eligible households may receive loans of up to \$135,000 for construction costs, plus additional funds for related costs to improve the safety, accessibility, and quality of their homes. Repayment of the loans is deferred for 99 years or until the property is sold or the owner(s) move, whichever comes first. This program is funded with federal Community Development Block Grant and HOME funds on an annual basis.

Funding can be leveraged with the existing program to provide enhanced design for low-income households and a greater focus on energy efficiency improvements. While the program is focused on upgrades to address health, safety, code, and/or structural issues, the program also provides energy assessments to identify key issues and solutions and loan funding to complete energy efficiency improvements—such as air sealing, insulation, and energy efficient appliances as well as heating and cooling systems. The CPRG grant funding would allow for program expansion and more energy efficiency upgrades.

Electrify DC works with the unincorporated group BFF (Buildings For the Future) to educate contractors as a critical strategy to accelerate the widespread adoption of home electrification and renewable energy generation on the roofs of our DC homes. Electrify DC believes that, if contractors are well informed about energy efficiency, electrification and solar options and incentives available, they are more likely to train their staff on these technologies and approaches and be able to serve their clients. The targets of this proposal are the contractors who pull permits every year to do work to homes (mechanical systems, panel upgrades, or installation of solar). The entirety of this target is reached through educating contractors. Contractors are the first point of contact for homeowners wanting to do work to their homes and are often trusted advisors to this target, making them credible messengers.

The success of this effort relies on contractors being engaged and educated, and then being provided with educational materials that are easily consumable and shareable with their clients. Electrify DC, through existing BFF members, will conduct outreach through the program to industry association, update their website, produce informative and engaging explainers on various issues (IRA incentives, energy efficiency strategies, energy efficient appliances, typologies of solar PVs, Solar for All, strategies by unit type, new legislation, trends in batteries, etc.), and develop a 1-hour introductory course on residential decarbonization which will include elements of energy-efficiency and solar for homes. Taking this course will be one of the requirements to join or to renew the BFF membership. Electrify DC will also develop a 3-hour course on reducing carbon emissions from residential buildings in the continuing education mandatory bundle by these industry associations, meaning that contractors would need to take this course in order to renew their District licenses. Electrify DC will also organize tours of electrified, energy efficient homes showcasing different typologies of solar installs (for example Tesla roofs or solar shingles), on different types of buildings (historic, condos, coops, etc.), and different types of energy storage and other distributed energy resources. The tour is for contractors to see and experience homes that are using different strategies to reduce greenhouse gas emissions.

Emerald Cities Collaborative (ECC), Inc. will rapidly scale our existing programs, the Contractor Incubator and Architecture Construction Engineering Students (ACES) Engineering Pathway Program with CPRG funding. These programs will help build a local pipeline of minority contractors and increase awareness and accessibility for youth of color to high-road ACE careers. With an existing community advisory committee, ECC will expand its outreach and communication with local government agencies and schools in the COG territory by developing webinars on workforce education and training. ECC sees this application as pivotal in enhancing diversity in the energy efficiency and broader ACES sectors while

reducing income and wealth disparities, mitigating GHG emissions, and enhancing health within LIDAC communities.

Prince George's Community College's (PGCC) division of Workforce Development and Continuing Education's Sustainable Energy and Workforce Development Program (SEWDP) partnership with COG will provide area residents with needed certifications and credentials thereby maximizing opportunities for employability and careers in the sustainable and renewable energy sector. CPRG funding will help expand marketing and outreach campaigns, develop curriculum enhancements and support the purchase of equipment and lab upgrades to support training on EV, EVSE, and HVAC maintenance and electric upgrades.

The MC Gudelsky Institute for Technology Education (GITE) Automotive Technology program and the Building Trades program trains individuals from underserved low-income communities in the construction and automotive industries. In fall 2023, 71.4% of credit students (n=12,704) identified as Black, Hispanic, Indigenous, or People of Color and 21% of students (n=3,734) received a Federal Pell Grant. MC's Building Trades courses and Automotive Technology program courses prepare students for the industry recognized Automotive Service Excellence (ASE) exams and certifications. Construction trades courses will provide classroom and practical hands-on instruction for the installation and maintenance of clean energy HVAC equipment and solar technology. The Automotive program prepares individuals for a career in automotive service and repair, with students receiving 330 hours of instruction in the Auto Electrical Certificate course. Students will receive training on electric vehicles (EV). The training and development of construction trades and automotive technicians will contribute to expanding the workforce and supporting COG's clean energy initiatives.

Additionally, MC's Solar training will be a preferred training program for this grant. MC is a NABCEP registered program and MC offers two courses - Solar PV Design and Installation and Advanced Solar PV. While the MC program is designed to help students prepare for the NABCEP PV Associate credential, other credentials are available from NABCEP, most requiring additional training and experience. Enrollment in Solar PV Design and Installation is open and while some electrical knowledge and experience is helpful, such as through taking Fundamentals of Electrical Wiring and Residential Electrical Wiring, students will receive enough basic electrical training to fully understand solar systems and their operation. Solar PV is closely related to the electrical field so additional electrical training is valuable to the students and will help better prepare them for employment, since a significant portion of the solar work being done in our region is performed by electrical contractors.

Funding from the grant will enable MC to rapidly scale existing programs and train individuals to address residential building GHG emissions and the service and repair of electric vehicles (EVs). Funding for the training program is needed to purchase HVAC equipment, an EV, and an EV trainer. Training students to become repair and installation technicians on electric heating & cooling units such as the mini-split and solar PVs will assist with developing a workforce to address replacing gas furnaces with green energy units in homes. Training students to repair EVs will contribute to developing a workforce to support the County's goal of zero emissions technologies by 2035.