



INVESTING IN OUR ENVIROMENT

Leading Collaboration Efforts Across Departments

The Department of Environmental Services and the Arlington Initiative to Rethink Energy (AIRE) Team serves as the County's core agency for energy, climate, and resilience objectives. The past year has been marked by increased coordination within the County, Arlington Public Schools (APS), the region, and the Commonwealth in order to meet the County's fleet, building, renewable energy, and other sector goals under the Board-adopted Community Energy Plan (CEP). As a result of these collaborations:

- The Amazon-Arlington-Dominion new solar facility is projected to launch operations on schedule in June 2022.
- We expect to meet the County's commitment for 100 percent of its operational electricity needs powered by renewable energy in 2023, two years ahead of schedule.
- The County is projected to have replaced over 35 percent of its non-public safety sedans with electric vehicles as soon as the FY 2023 orders arrive.
- New construction of government sites and facilities meet Silver and Gold LEED standards; 1212 Irving Street Residential Facility is projected to achieve zero-net carbon status.
- AIRE continues to exceed prior participation for the County's Solar Co-Op and Green Home Choice programs.

Current Investments Underway that Support the Community's Priorities on Energy, Climate and Resilience Objectives

Multiple environmental-related capital projects, that are multi-year in nature and were previously funded, are also currently underway. Highlights include:

- The Water Pollution Control Plant's (WPCP) Solids Master Plan to modernize the facility and provide substantial environmental improvements. The new processes will reduce energy consumption associated with solids processing and handling, reduce trucking to and from the WPCP by 50 percent or more, and will capture biogas for reuse, all contributing to sustainability goals.
- Investments in on-site solar energy projects, including the Fire Station 8 replacement facility, 1212 Irving Street Residential Facility, and the replacement of the Equipment Bureau roof to include solar panels.
- New ART Operations and Maintenance Facility design is designed to adapt for future electrification of the bus fleet and on-site charging.
- The Equipment Bureau, Facilities and AIRE collaborated with APS to support a successful grant application for an Electric School Bus pilot.

- Transportation projects that promote walking, biking, micro-mobility usage, and mass transit over travel by car. Examples include the Army Navy Drive Complete Streets project, transitway extensions to Pentagon City and Potomac Yard, addition of bike facilities to existing roads and bridges, and expanding Capital Bikeshare.

Climate Change Investments in the FY 2023 Budget

The County continues to commit and execute energy and climate-purposed investments across our departments and programs. These investments not only drive climate, sustainability and resiliency goals, but also maximize return on investment through co-benefits embedded in program and project design.

Of particular note, the County Manager is proposing \$1.0 million in funding be set aside in an **Arlington CEP Action Fund** for one-time energy projects that will advance CEP initiatives. The funding will provide the County with the agility to fund opportunities that arise in a fast-changing industry. Investments could include piloting new electrification, investments in small capital projects, funding for additional consulting studies, matching funds for federal and state grant opportunities, and community energy investments. Some examples that illustrate how the funding could be allocated include, but are not limited to:

- An energy efficiency upgrade program targeted to residential and small-scale commercial buildings in underserved communities. While the Pilot would be directed toward disadvantaged communities, it would also develop a model that could be adapted to existing private-sector buildings countywide. This building class represents a primary challenge in meeting our 2035 and 2050 CEP goals.
- Additional investments to diversify publicly accessible EV charging network.
- Federal and state funding opportunities that are now anticipated will require application design and support as well as the typical match by the local jurisdiction
- Potential regional opportunities, such as a regional green bank
- One-time facility capital investments to pilot HVAC innovations and electrification of building systems

Including the CEP Action Fund, new investments in the FY 2023 Proposed Budget total over \$4.4 million and are summarized below:

CEP Execution:	
• Arlington CEP Action Fund to advance CEP initiatives.	\$1,000,000
• A new Associate Environmental Management Specialist position to increase bandwidth and directly support CEP projects.	\$131,521
• One-time consultant funding to support CEP projects, including renewable energy, tools and analytics, clean transportation, and federal/state grant support.	\$281,035

Vehicle Electrification:	
<ul style="list-style-type: none"> • A new Project Manager to manage electric vehicle (EV) charging infrastructure and solar panel installations. 	\$137,836
<ul style="list-style-type: none"> • Increased funding to replace standard vehicles with EVs. FY 2023 may deliver up to 53 vehicles and include some vans and light-duty trucks. 	\$275,025
<ul style="list-style-type: none"> • EV-charging infrastructure to support County fleet replacements. 	\$200,000
<ul style="list-style-type: none"> • Funding for EV charging infrastructure for public-use county government sites. 	\$125,000
Facility Investments – <i>Every facility investment in the County includes an assessment of energy goals to maximize the return on investment.</i>	
<ul style="list-style-type: none"> • Funding for energy efficiency upgrades at County facilities. Projects will be selected based on energy performance and technologies, using a customized Decision- Support Tool. 	\$350,000
<ul style="list-style-type: none"> • Renewable energy assessments of at least ten County Government sites for on-site solar capacity, readiness, structural requirements, and outcomes. 	\$140,000
<ul style="list-style-type: none"> • Replacement of end-of-cycle HVAC units with more energy- and cost-efficient units. 	
<ul style="list-style-type: none"> <ul style="list-style-type: none"> ○ Court Square West: backup Emergency Communications Center 	\$150,000
<ul style="list-style-type: none"> <ul style="list-style-type: none"> ○ Trades Network Operations Center (NOC) 	\$100,000
<ul style="list-style-type: none"> • Replacement of Fire Station 5 (end-of-cycle) green roof. The new green roof will have a higher R-value and will provide better energy performance. 	\$420,000
<ul style="list-style-type: none"> • Replacement of windows at 3700 S. Four Mile Run with higher R-value and better energy performance versions. 	\$300,000
Other	
<ul style="list-style-type: none"> • Continuing investments that began in FY 2022, ARPA funding is set aside in FY 2023 for continuing to convert hand-held landscape tools from gas to electric. 	\$24,000
<ul style="list-style-type: none"> • Funding for the Zero Waste Plan 	\$300,000
<ul style="list-style-type: none"> • Street Light Program: This funding will be used to continue converting Dominion Energy’s (DE) streetlights to Light Emitting Diode (LED) technology. Conversion of DE’s streetlights began in 	\$427,000

FY 2021 and is expected to be completed in FY 2024. The County has completed converting County-owned streetlights to LED.	
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Planning for the Future

AIRE is also undertaking the pre-developmental work on addressing the far greater community-facing challenges to meet countywide CEP goals. This includes coordinating multiple strategic planning initiatives across County departments and APS, including:

- Completion of the County’s Energy Assurance Plan, a full stratagem to mitigate risk of grid inoperability or interruption and support continuity of critical services and operations (June 2022).
- Update to the 2021 assessment of the potential for and challenges to greater electrification of government and private-sector buildings.
- Update to the market, trade, transactional, and fiscal analysis of the wholesale renewable energy sector.
- Intra-governmental cross-training in use of the decision-support tool for energy upgrades to government sites and facilities, expanding the more transparent, measurable, and “all-of-building/all-systems” approach.
- Completion of the ART Bus Feasibility Study, a comprehensive and comparative assessment of variable alternative fuel options for public transit.
- Development of Arlington’s Plan to Decarbonize Transportation.
- Explore possible use of Regional Greenhouse Gas Initiative (RGGI), federal infrastructure, and other funding to support energy efficiency programs focused on underserved communities and equity. This is a cross-department effort with Affordable Housing and other divisions, low-income housing partners, and non-profits.