Arlington County, Virginia

PUBLIC AND GOVERNMENT FACILITIES: ENERGY EFFICIENCY PROGRAM

10 YEAR CATEGORY SUMMARY (in \$1,000s)

	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	10 Year Total
1.County Facility Renewable Energy Assessment and	300	1,263	1,248	1,133	1,145	606	657	707	758	808	8,625
2. Electric Vehicle Chargers- Internal Accessibility	250	505	202	204	206	208	210	212	214	217	2,428
4. Electric Vehicle Chargers- Public Accessibility	100	505	152	153	177	179	152	153	177	179	1,927
5. Energy Performance Upgrades -County Buildings	475	707	606	612	591	556	561	480	505	556	5,649
6. Energy Resilience Planning & Development	0	509	758	765	2,121	0	0	0	0	0	4,153
7. Lubber Run Resiliency Hub	1,250	1,212	0	0	0	0	0	0	0	0	2,462
Total Recommendation	2,375	4,701	2,966	2,867	4,240	1,549	1,580	1,552	1,654	1,760	25,244

CATEGORY FUNDING SOURCES (in \$1,000s)

	FY 2025 I	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	Total
New Funding											
Federal Funding	0	458	0	0	0	0	0	0	0	0	458
State Funding	0	0	0	0	0	0	0	0	0	0	0
Developer Contributions	0	0	0	0	0	0	0	0	0	0	0
New Bond Issue	0	0	0	0	0	0	0	0	0	0	0
PAYG	2,375	4,243	2,966	2,867	4,240	1,549	1,580	1,552	1,654	1,760	22,324
Short Term Finance	0	0	0	0	0	0	0	0	0	0	0
Stormwater Utility Fee Revenue	0	0	0	0	0	0	0	0	0	0	0
Other Funding	1,250	0	0	0	0	0	0	0	0	0	2,462
Subtotal New Funding	2,375	4,701	2,966	2,867	4,240	1,549	1,580	1,552	1,654	1,760	25,244
Previously Approved Funding	3										
Authorized but Unissued	0	0	0	0	0	0	0	0	0	0	0
Bonds	U	U	U	U	U	U	U	U	U	U	U
Issued but Unspent Bonds	0	0	0	0	0	0	0	0	0	0	0
Other Previously Approved	0	0	0	0	0	0	0	0	0	0	0
Funds	U	U	Ü	0	0	U	U	U	0	U	
Subtotal Previously Approved Funding	0	0	0	0	0	0	0	0	0	0	0
Total Funding Sources	2,375	4,701	2,966	2,867	4,240	1,549	1,580	1,552	1,654	1,760	25,244

1.COUNTY FACILITY RENEWABLE ENERGY ASSESSMENT AND SOLAR INSTALLATION



Project Highlights:

- Funds solar on four to five County sites annually through a blended approach of third-party power purchase agreements (PPA) and County-owned on-site installations.
- Installations can be phased in with resiliency technologies.
- Includes assessments for solar capacity, including financial modeling.
- Identify third party Power Purchase Agreement and County owned opportunities for solar installations.
- Possibility for public-private partnership.
- The strategy will focus onsite solar on new construction followed by existing buildings that recently had roof replacement.
- Key objectives: County goal for 100 percent renewable electricity to power government operations' electricity was achieved in 2023. As the County's electricity demand is forecasted to increase from electrification, on-site solar will support maintaining 100 percent renewable electricity for County government (CEP Policies 3.1 and 3.4, CEP Roadmap Strategy RE2.1).

Associated Plan(s):

Community Energy Plan

Critical Milestones:

- Contracts for Lubber Run Community Summer 2024 Center solar array executed.
- GHG reduction anticipated of 110 tons Summer 2024 of CO2e annually.
- Contract for Equipment Bureau for solar Winter 2024 array executed.
- GHG reduction anticipated of 29 tons of Winter 2024 CO2eannually.
- Contract for Central Library solar array Summer 2025 executed.
- GHG reduction anticipated of 54 tons of Summer 2025 CO2e annually.
- Complete on-site renewable energy Winter 2026 assessments for the next 6-8 County facilities.

Changes from Prior CIP:

Funding increased to accelerate execution plan.

Funding Notes: Operatin	g costs inc	lude an ad	ditional F	TE (1.0) to	support t	he prograi	n.				
New Funding	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	Total
PAYG	300	1,263	1,248	1,133	1,145	606	657	707	758	808	8,625
Previous Funding											
Total Funding	300	1,263	1,248	1,133	1,145	606	657	707	758	808	8,625
Operating Impact	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	Total
Operations Costs (+/-)	25	40	50	60	70	85	95	110	120	120	775
Personnel (\$)	68	70	72	74	76	79	81	84	86	89	779
Total Impact	93	110	122	134	146	164	176	194	206	209	1,554

Project Links:

CEP:

https://arlingtonva.s3.amazonaws.com/wp-content/uploads/sites/13/2019/10/Final-CEP-CLEAN-003.pdf

· CEP Roadmap:

https://www.arlingtonva.us/files/sharedassets/public/v/1/environment/documents/clean-cep-roadmap-07-26-2022-with-cover.pdf

Energy Efficiency

Capital Improvement Plan FY 2025-2034



2.ELECTRIC VEHICLE CHARGERS-INTERNAL ACCESSIBILITY

Project Highlights:

Associated Plan(s):

- The project scope supports the County's electric vehicle (EV) conversion.
- This effort will closely track the Equipment Bureau's EV purchasing plan. Funding increase in FY 2026 supports the EV infrastructure for the forecasted conversion of public safety vehicles.

Community Energy Plan

Funding Notes: EV charger installations range from \$12k-\$30k per port, with the price per charging port varying based on site-specific infrastructure. FY 2025 funding supports the eight charging port installations included in the Critical Milestones.

New Funding	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	Total
PAYG	250	505	202	204	206	208	210	212	214	217	2,428
Previous Funding											
Total Funding	250	505	202	204	206	208	210	212	214	217	2,428
Operating Impact	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	Total
Total Impact	0	0	0	0	0	0	0	0	0	0	0

Critical Milestones:

 Adding eight charging ports for County fleet vehicles based on gaps in the fleet charging network

Project Links:

 Community Energy Plan (CEP): https://arlingtonva.s3.amazonaws.com/wp-content/uploads/sites/13/. CEP-CLEAN-003.pdf

Changes from Prior CIP:

FY 2026 includes \$250k in additional funding to meet public safety charging needs.

•CEP Roadmap:

https://www.arlingtonva.us/files/sharedassets/public/v/1/environmer cep-roadmap-07-26-2022-with-cover.pdf

Capital Improvement Plan FY 2025-2034

Community Energy Plan

4. ELECTRIC VEHICLE CHARGERS-PUBLIC ACCESSIBILITY

Project Highlights:

- Siting and installation of community electric vehicle (EV) chargers, aka, Electric Vehicle Supply Equipment (EVSE).
- Flexibility for fast-charging hubs.
- Possibility for public-private partnerships.
- Key objectives: Diverse public choices for EV charging, promote/support private EV ownership; new use for public facilities to support the CEP's transportation sector emission CO2e/capita/year targets
- The pending Carbon Neutral Transportation Master Plan (CNTMP) includes an EV charging siting analysis which will be further refined to support public and private expansion of charging network.

Associated Plan(s):

Community Energy Plan Comprehensive Master Transportation Plan (MTP) for Arlington

Funding Notes: Funding may be supplemented by General Fund appropriations and potential grant funding opportunities. EV charger installations range from \$12k-\$30k per port, with the price per charging port varying based on site-specific infrastructure. FY 2025 funding supports the eight charging port installations included in the Critical Milestones.

New Funding	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	Total
PAYG	100	505	152	153	177	179	152	153	177	179	1,927
Previous Funding											
Total Funding	100	505	152	153	177	179	152	153	177	179	1,927
Operating Impact	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	Total
Total Impact	0	0	0	0	0	0	0	0	0	0	0

Critical Milestones:

• Install 8 publicly accessible charging ports at County facilities.

Summer 2025

Changes from Prior CIP:

Cost updated from previous CIP to align with execution plans.

Project Links:

 Community Energy Plan (CEP): https://arlingtonva.s3.amazonaws.com/wpcontent/uploads/sites/13/2019/10/Final-CEP-CLEAN-003.pdf

• CEP Roadmap:

https://www.arlingtonva.us/files/sharedassets/public/v/1/environment/documents/clean-cep-roadmap-07-26-2022-with-cover.pdf

Capital Improvement Plan FY 2025-2034

Connuety inegy Plus

5. ENERGY PERFORMANCE UPGRADES -COUNTY BUILDINGS

Project Highlights:

- A long-standing partnership program between AIRE and DES-Facilities to establish energy performance in design and construction.
- Applies to new construction and remodeling.
- Key objectives: reduce operation and maintenance costs, lead with energy-efficient buildings and resilient/healthy buildings.

Associated Plan(s):

Community Energy Plan

Neighborhood(s): VARIOUS

New Funding	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	Total
PAYG	475	707	606	612	591	556	561	480	505	556	5,649
Previous Funding											
Total Funding	475	707	606	612	591	556	561	480	505	556	5,649
Operating Impact	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	Total
Total Impact	-48	-120	-180	-240	-300	-360	-400	-450	-500	-550	-3,148

Critical Milestones:

- Courts Police/Justice Center lighting Fall 2025 retrofits completed.
- Fairlington Community Center Fall 2026 lighting retrofits

Changes from Prior CIP:

Analytics enhanced for decarbonization and GHG emissions reductions. Methodology for total impact quantification updated from previous CIP.

Project Links:

- Community Energy Plan (CEP): https://arlingtonva.s3.amazonaws.com/wp-content/uploads/sites/13/2019/10/Final-CEP-CLEAN-003.pdf
- CEP Roadmap:

https://www.arlingtonva.us/files/sharedassets/public/v/1/environment/documents/clean-cep-roadmap-07-26-2022-with-cover.pdf

Capital Improvement Plan FY 2025-2034

Connucity Energy Plus

6. ENERGY RESILIENCE PLANNING & DEVELOPMENT

Project Highlights:

- Model microgrid and resiliency hubs that support key service and operational centers.
- Key objectives: Enhance County ability to overcome disruptions from extreme weather, deliberate attacks, climate change, load demand and grid sensitivity, and other influences or vulnerabilities.

Associated Plan(s):

Community Energy Plan

New Funding	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	Total
Federal Funding		458									458
PAYG		51	758	765	2,121						3,695
Previous Funding											
Total Funding	0	509	758	765	2,121	0	0	0	0	0	4,153
Operating Impact	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	Total
Total Impact	0	0	0	0	0	0	0	0	0	0	0

Critical Milestones:

- Begin study of the feasibility of implementing FY 2026 microgrids and energy resilience hub.
- Begin implementing microgrids and energy FY 2027 resilience hub from feasibility study.

Changes from Prior CIP:

Application submitted (but not yet awarded) for Federal grant.

Project Links:

- Community Energy Plan (CEP): https://arlingtonva.s3.amazonaws.com/wp-content/uploads/sites/13/2019/10/Final-CEP-CLEAN-003.pdf
- CEP Roadmap:

https://www.arlingtonva.us/files/sharedassets/public/v/1/environment/documents/clean-cep-roadmap-07-26-2022-with-cover.pdf

• Energy Assurance Plan:

https://www.arlingtonva.us/files/content/public/v/10/government/programs/office-of-sustainability-and-environment/aire/resiliency/eap/eap-final-for-webpage.pdf

Energy Efficiency

Capital Improvement Plan FY 2025-2034

Community Energy Plan

7. LUBBER RUN RESILIENCY HUB

Project Highlights:

- This project funds additional investments for Lubber Run Community Center to become a resiliency hub to serve the community during an event, such as a long-term power disruption.
- Lubber Run Community Center was chosen due to its central location, ample protected parking, planned solar roof installation, and sufficient space to support general assembly.
- Funding will be used to expand the battery storage system to support the peak energy demand of the facility for up to eight hours or a reduced load for critical life safety for up to four days. The battery system will be connected to a photovoltaic (PV) system allowing for recharging and storage of PV generated power.
- Funding is also included for an auxiliary natural gas generator to provide facility emergency power beyond the capabilities of the battery storage system and for mobile platforms for constituent use for low consumption devices, like cell phones and laptops.

Neighborhood(s): Arlington Forest Bluemont Buckingham

Funding Notes: FY 2	2026 funding i	s shifted fi	rom the C	limate Act	ion Fund ((CAF) to I	PAYG as p	part of the	Adopted (CIP.	
New Funding	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	Total
PAYG		1,212									1,250
Other Funding	1,250										1,212
Previous Funding											
Total Funding	1,250	1,212	0	0	0	0	0	0	0	0	2,462
Operating Impact	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	FY 2033	FY 2034	Total
Total Impact	0	0	0	0	0	0	0	0	0	0	0

Critical Milestones:

Expand battery energy storage system FY 2025
Install natural gas generator and mobile platforms

Changes from Prior CIP:

The project is new to the FY 2025 - 2034 CIP.