# Arlington County, Virginia

# PUBLIC AND GOVERNMENT FACILITIES: ENERGY EFFICIENCY PROGRAM

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

	FY 2023 F	Y 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	10 Year Total
1. County Facility Renewable Energy Assessment	0	80	125	150	0	0	0	0	0	0	355
2. County Facility Renewable Energy Installation	0	800	250	400	475	350	250	400	300	300	3,525
3. Electric Vehicle Chargers - Internal Accessibility	200	200	200	200	200	200	200	200	200	200	2,000
4. Electric Vehicle Chargers - Public Accessibility	125	125	150	150	150	150	175	175	150	150	1,500
5. Energy Performance Upgrades -County Buildings	0	485	515	535	600	600	585	550	550	475	4,895
6. Energy Resilience Planning & Development	0	210	270	340	570	590	0	0	0	0	1,980
Total Recommendation	325	1,900	1,510	1,775	1,995	1,890	1,210	1,325	1,200	1,125	14,255

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

	FY 2023		4 FY 2025				FY 2029	FY 2030	FY 2031	FY 2032	10 Year Total
New Funding											
Federal Funding	0		0 (	0	0	0	0	0	0	0	0
State Funding	0		0 (	0	0	0	0	0	0	0	0
Developer Contributions	0		0 (	0	0	0	0	0	0	0	0
New Bond Issue	0		0 (	0	0	0	0	0	0	0	0
PAYG	325	1,90	0 1,510	1,775	1,995	1,890	1,210	1,325	1,200	1,125	14,255
Short Term Finance	0		0 (	0	0	0	0	0	0	0	0
Stormwater Utility Fee Revenue	0		0 (	0	0	0	0	0	0	0	0
Other Funding	0		0 (	0	0	0	0	0	0	0	0
Subtotal New Funding	325	1,90	0 1,510	1,775	1,995	1,890	1,210	1,325	1,200	1,125	14,255
Previously Approved Funding	ç										
Authorized but Unissued	0		0 (	0	0	0	0	0	0	0	0
Bonds	U		0 (	, 0	U	U	U	U	U	U	U
Issued but Unspent Bonds	0		0 (	0	0	0	0	0	0	0	0
Other Previously Approved	0		0 (	0	0	0	0	0	0	0	0
Funds	U		0 (	, 0	U	U	U	U	U	U	
Subtotal Previously Approved Funding	0		0 (	0	0	0	0	0	0	0	0
Total Funding Sources	325	1,90	0 1,510	1,775	1,995	1,890	1,210	1,325	1,200	1,125	14,255

# 1. COUNTY FACILITY RENEWABLE ENERGY ASSESSMENT



### **Project Highlights:**

- Includes site assessments for solar capacity, including financial modeling.
- Identify third-party Power Purchase Agreement and Countyowned opportunities for solar installations.
- Possibility for public-private partnerships.
- Key objectives: Meet County goal for 100% renewable electricity to power government operations' electricity use (continuous).

#### Associated Plan(s):

Community Energy Plan

Funding Notes: The 1	program may,	from time	to time, b	e supplem	ented dire	cted by Go	eneral Fun	d appropri	iations.		
New Funding	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	Total
PAYG		80	125	150							355
Previous Funding											
Total Funding	0	80	125	150	0	0	0	0	0	0	355
Operating Impact	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	Total
Personnel (\$)		25	30	30							85
Total Impact	0	25	30	30	0	0	0	0	0	0	85

2025

#### **Critical Milestones:**

- CEP Policy 3.1: County operations will achieve 50% renewable electricity by 2022, and 100% renewable by 2025.
- CEP Policy 3.4: Optimize the use of renewable energy technologies in the public, private and non-profit sectors.

# **Changes from Prior CIP:**

Analytics, audits and assessments are new to the CIP. Third-party Power Purchase Agreements are new to the CIP. Financial modeling is new to the CIP.

# **Project Links:**

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

# 2. COUNTY FACILITY RENEWABLE ENERGY INSTALLATION



## **Project Highlights:**

- Blends third-party power purchase agreements (PPA) and County-owned on-site installations.
- Installations can be phased with resiliency technologies.
- Key objectives: Meet County goal for 100% Government renewable electricity goal; pilot resiliency models.

#### Associated Plan(s):

Community Energy Plan

## **Neighborhood(s):**

**VARIOUS** 

<b>Funding Notes:</b>											
New Funding	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	Total
PAYG		800	250	400	475	350	250	400	300	300	3,525
Previous Funding											
Total Funding	0	800	250	400	475	350	250	400	300	300	3,525
Operating Impact	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	Total
Operations Costs (+/-)			25	25	50	50	50	50	60	60	370
Personnel (\$)		40	20	30	30	40	40	40	30	30	300
Total Impact	0	40	45	55	80	90	90	90	90	90	670

#### **Critical Milestones:**

• CEP Policy 3.1: Government operations will achieve 50% Renewable Electricity by 2022, and 100% Renewable by 2025.

#### **Changes from Prior CIP:**

Analytics, audits, and assessments are new to the CIP. Third-party Power Purchase Agreements are new to the CIP. Financial modeling is new to the CIP.

# **Project Links:**

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

# 3. ELECTRIC VEHICLE CHARGERS - INTERNAL ACCESSIBILITY



# **Project Highlights:**

# **Associated Plan(s):**

• The project scope supports the County's electric vehicle (EV) conversion.

Community Energy Plan

• This effort will closely track the Equipment Bureau's EV purchasing plan.

Funding Notes:											
New Funding	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	Total
PAYG	200	200	200	200	200	200	200	200	200	200	2,000
Previous Funding											
Total Funding	200	200	200	200	200	200	200	200	200	200	2,000
Operating Impact	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	Total
Total Impact	0	0	0	0	0	0	0	0	0	0	0

# 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.

#### Associated Plan(s):

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

Funding Notes: The pro	oject may, fi	rom time to	o time, be	suppleme	nted direct	ed by Gen	eral Fund	appropria	tions.		
New Funding	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	Total
PAYG	125	125	150	150	150	150	175	175	150	150	1,500
Previous Funding											
Total Funding	125	125	150	150	150	150	175	175	150	150	1,500
Operating Impact	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	Total
Personnel (\$)	20	20	20	20	20	20	20	20	20	20	200
<b>Total Impact</b>	20	20	20	20	20	20	20	20	20	20	200

#### **Critical Milestones:**

•	2020: 2.7 mt CO2e/capita/year	2020
•	2030: 1.7 mt CO2e/capita/year	2030
•	2040: 0.8 mt CO2e/capita/year	2040

#### **Changes from Prior CIP:**

This is a new project for the FY 2023 CIP.

# 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

Funding Notes:											
New Funding	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	Total
PAYG		485	515	535	600	600	585	550	550	475	4,895
Previous Funding											
Total Funding	0	485	515	535	600	600	585	550	550	475	4,895
Operating Impact	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	Total
Total Impact	-751	-902	-550	-650	-800	-900	-1,000	-1,100	0	0	-6,653

## **Changes from Prior CIP:**

Program expenditures are now adjusted for inflation. Supplement upgrades with electrification measures.

# 6. ENERGY RESILIENCE PLANNING & DEVELOPMENT



# **Project Highlights:**

# Model microgrid 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

Funding Notes:											
New Funding	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	Total
PAYG		210	270	340	570	590	0	0	0		1,980
Previous Funding											
Total Funding	0	210	270	340	570	590	0	0	0	0	1,980
Operating Impact	FY 2023	FY 2024	FY 2025	FY 2026	FY 2027	FY 2028	FY 2029	FY 2030	FY 2031	FY 2032	Total
Total Impact	0	0	0	0	0	0	0	0	0	0	0

#### **Critical Milestones:**

• Completed Energy Assurance Plan from FY 2022.

Summer 2022