

Subject: DES- AIRE Work Plan

**FY 2022 Proposed Budget
Budget Work Session Follow-up**

4/1/2021

The following information is provided in response to a request made by Ms. Garvey at the work session on 3/4/2021, regarding the following question:

Provide more information on the various studies and plans within AIRE.

The attached 2021 AIRE Work Plan provides details on several actions underway for each of the six CEP Energy Sectors: Buildings, Renewable Energy, Transportation, Resiliency, Government, and Equity.

AIRE CY 2021 WORK PLAN

BUILDINGS					
Action/Initiative	Description	Lead	Support/Collaboration	Consultant	Est. Schedule (CY)
Green Building Incentive Policy	Implement Dec 2020 Update to Policy in Site Plans	Jessica Abralind	Joan Kelsch, CPHD, Builders and Developers	None	Continuous (new policy includes auto update review in 3 years)
Green Home Choice Program	Implement virtual (COVID) residential reviews and inspections; energy efficiency consultation	Helen Reinecke-Wilt		None	Continuous
Facility Sustainability Policy for County facilities	Energy and environmental standards in new construction of County facilities	Jessica Abralind	Facilities Design and Construction (FDC), County departments	None	Continuous
Green Building 4.1 Site Plan Review	Conceptual reviews/guidance, construction reviews and permit approvals, site visits, tracking, reporting, presentations, benchmarking	Jessica Abralind	Joan Kelsch, CPHD, Zoning, Permitting	None	Continuous
Green Building Incentive Benchmarking	Monitor, report, and enforce bonus density energy requirements & performance	Jessica Abralind		Cadmus	Continuous
Affordable Housing	Facilitate energy efficiency standards in affordable and special needs housing In-Development – develop/ propose LMI upgrade programs	Joan Kelsch	Jessica Abralind Anne Venezia and Affordable Housing Bureau, external agencies, and MLAG. Possible partners include Dominion.	None	Continuous
County Facility Upgrades	Collaborate with Facilities Maintenance to identify and fund energy upgrades in County facilities	Charles Njoku	Facilities Maintenance (FMB)	None	Continuous
County Facility Energy Tracking & Utility Bill Mgmt	Use sensors and Building Automation and Energy Information Management Systems to track energy usage and coordinate with others on utility bills	Charles Njoku		None	Continuous

RENEWABLES (*some cross-over with Government below)					
Action/Initiative	Description	Lead	Support/Collaboration	Consultant	Est. Schedule
Government Buildings (100% renewable electricity by 2025 target)	Currently at approximately 80% toward goal. Develop options for 100% RE for electricity use (on-site and off-site)	Helen Reinecke-Wilt Charles Njoku	Joan Kelsch (PPA), Facilities, Fleet, Purchasing, Transportation, Libraries, Parks and Recreation, CAO, Dominion	Cadmus	NEW , and continuous until 100% is reached
Solar Power Purchase Agreement (PPA)	Solar installation (rooftop) – Lubber Run Community Center is first	Joan Kelsch	DES Facilities, Purchasing, CAO		NEW , construction complete in Q3 2021 [this could change depending on contract rider]
Community-Facing Large-Scale Renewable Energy (LSRE) (100% renewable electricity by 2035 target)	Develop VPPA options / mechanisms for community solar	DJ McBride Helen Reinecke-Wilt / EPM	Full AIRE Team initiative; CAO, Purchasing, Dominion, EC, C2E2; Multiple VA jurisdictions; VA Dept of Energy	Cadmus	NEW , continuing
Solar Co-op	Promote residential solar	Helen Reinecke-wilt	Virginia Solar United Neighbors		Continuous
RESILIENCE					
Action/Initiative	Description	Lead	Support/Collaboration	Consultant	Est. Schedule
Energy Assurance Strategic Plan	Strategy that models demand sensitivities and solutions against pre- or post- hazard/event inoperability	Rich Dooley	Charles Njoku	Cadmus	NEW - Est. completion in Q2 2022
TRANSPORTATION					
Action/Initiative	Description	Lead	Support/Collaboration	Consultant	Est. Schedule
Fleet Use Analysis	Assessment of County Fleet vehicles by type, use, mileage, age	Charles Njoku	Helen Reinecke-Wilt; Christopher Allison (Fleet)	None	NEW , complete Q1 2021
EV Literature Review	Review of BMPs, Plans and policies for EV-Ready Communities	DJ McBride	Helen Reinecke-Wilt	None	NEW , complete Q1 2021
Comparative Analysis – Total Cost-of-Ownership for EV/ICE	Analyze TCO costs for certain duty- and -class vehicles, comparing EV to ICE (<i>private-vehicle-owner</i>) – Government analysis in EV-Ready Communities Master Plan (below)	Helen Reinecke-Wilt	Charles Njoku; Facilities; Fleet, Transportation	ICF	NEW , complete Q2 2021 (Q2 for website: EV-101)

TRANSPORTATION, cont.					
Action/Initiative	Description	Lead	Support/Collaboration	Consultant	Est. Schedule
ART Bus Assessment Study	Full analysis and assessment for ART Bus Fleet (and supporting new facility construction), including impacts of electrification, renewable gas, etc.	DJ McBride Lynn Rivers	AIRE serving as project manager and partner to Transportation Dept. Team Helen Reinecke-Wilt Charles Njoku	Yes	NEW , estimated launch May-2021 and completion in Q4 2021
Arlington EV-Ready Community Master Plan	Master Plan for government and community EV-readiness	DJ McBride Helen Reinecke-Wilt EPM	Full AIRE Team initiative; DES Communications Internal cross-departmental working group ¹ ; external groups	Yes	NEW , estimated launch April 2021 and estimated completion July 2022
Annual Fleet & EVSE Upgrades	Annual cycle (on a fiscal year basis) for EV replacements and EVSE installation	Helen Reinecke-Wilt Charles Njoku	Fleet, Purchasing, Facilities		FY 2022 replacements done ; continuing EVSE installation
GOVERNMENT (*some cross-over with Renewables above)					
Action/Initiative	Description	Lead	Support/Collaboration	Consultant	Est. Schedule
Replace Energy Program Manager (EPM)	Update and fill position previously held by J. Morrill (advanced RE, grants, etc.)	DJ McBride	Full AIRE Team, DES Administration, HR		NEW , position est. to post in early Mar-2021
2021 Legislative Session	Assess energy-related bills and report back to Legislative Delegate	Pat Carroll	Rich Dooley, DJ McBride, organizational reviews tracked by Joan Kelsch	None	COMPLETE
CEP Implementation Framework / CEP Roadmap	Master implementation framework (strategies and policies) to promote attainment of 2019 CEP goals and policies	Rich Dooley DJM	Full AIRE Team Initiative, DES Communications, interactive engagement of commissions, committees, organizations, public	ICF for CEP Roadmap support	No later than 12/31/2021; est. completion for CMO review ~ September 2021
Energy Equity	Integrating energy equity issues into the CEP through internal and external coordination	DJM, AIRE Team	County Chief Race and Equity Officer County departments Community organizations	None	Continuous

¹ EV-Ready Community M.P. Cross-Departmental Working Group to include Transportation, CPHD, Facilities, AED, Libraries, Utilities, OEM, Purchasing, DMF, CAO, Zoning/Permitting, Communications, and others.

GOVERNMENT, continued (*some cross-over with Renewables above)					
Action/Initiative	Description	Lead	Support/Collaboration	Consultant	Est. Schedule
Risk Assessment & Management Project	Climate projections update, vulnerability and risk assessments, gaps analysis (cross-over with stormwater)	Rich Dooley DJ McBride	Cross-Departmental Working Group	Jacobs (formerly CHM2Hill)	Est. completion: March 2022
Regional and Statewide Collaboration	Net-Zero Energy Coalition, MWCOG, NVRC, VESPN, VAEEC, USGBC, etc.	DJM, Jessica Abralind Rich Dooley, Joan Kelsch, EPM	Full AIRE Team	None	Continuous
Intra-departmental Collaboration	Representing AIRE/sustainability issues on county-wide projects, plans, initiatives, etc.	Full AIRE Team	Plan Lee Highway, Forestry and Natural Resources Plan, Biophilia Symposium, Missing Middle, various Planning Areas (e.g., Clarendon, Columbia Pike)	None	Continuous
Environmental Assessment (EA) 4.4 Update	Updating the EA process and creating an online tool for County project managers to use	Rich Dooley	Joan Kelsch, Adam Segel-Moss. Cross-departmental, engagement	None	Launch the updated one-year EA pilot process by 3Q 2021
Universities Initiative	Develop grant & other partnerships with regional & statewide universities for studies, analytics, projects	Rich Dooley	DJ McBride, EPM Universities	None	Developing project for VA Tech “Connected Communities” DOE grant
State, Regional and Federal Tracking	Tracking state, regional, and federal opportunities re: grants, rebates, programs, and collaborations	DJM, Rich Dooley, Helen Reinecke-Wilt, EPM		None	Multiple ongoing efforts, e.g., RGGI, statewide solar initiative
C2E2 Liaison	Full liaison services to County Board Advisory Commission	Adam Segel-Moss		None	Continuous
Energy Committee Liaison	Full liaison services to C2E2 Advisory Committee to the County Manager	Rich Dooley		None	Continuous
Performance-Based Operations	Examples include: Consulting on WPCP Solid Master Plan (waste-to-energy), manage CPOWER PJM Demand Response and EE program and Dominion Green Power Program, managing County Operations Energy Plan	Charles Njoku	WPCP FMB County Departments	None	Continuous

GOVERNMENT, continued (*some cross-over with Renewables above)					
Action/Initiative	Description	Lead	Support/Collaboration	Consultant	Est. Schedule
Form-Based Code	Energy conservation, renewables, EV, and sustainability measures in update to the Form-Based Code	Jessica Abrialind	CPHD; Jennifer Smith	If needed, through CPHD	2021
Public Engagement, Awareness & Education	Comprehensive outreach / communications platform: <ul style="list-style-type: none"> • Web-based & virtual • Printed material/collateral • Infographic Program Summaries • Special Events, e.g., Zero Carbon series • Manage public comment platforms • Social media 	Adam Segel-Moss	DES Communications; public groups, organizations, and stakeholders		Continuous
EQUITY					
Action/Initiative	Description	Lead	Support/Collaboration	Consultant	Est. Schedule
Energy and Environmental Equity	Approach that focuses on: 1) internal structure; 2) decision-making; 3) program and policy; 4) siting; 5) participation in decision-making; 6) communications, 7) metrics	DJM, J Kelsch	AIRE Team, cross-departmental coordination; CMO	None	Continuous