

Advanced Energy Group

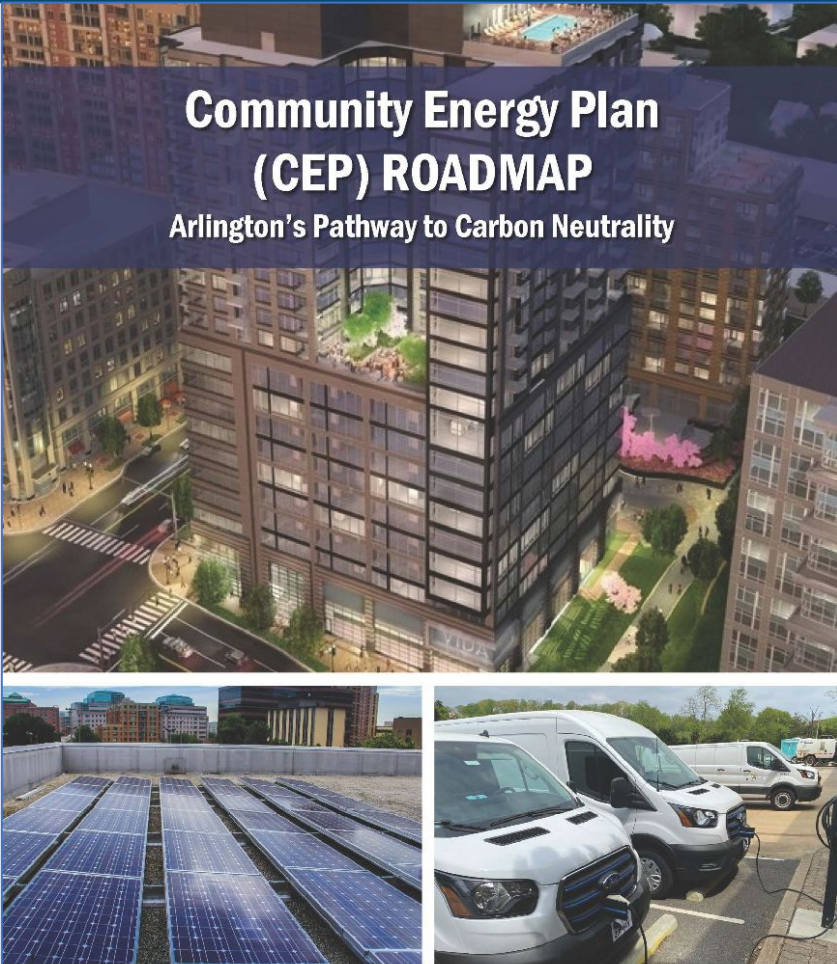
2023 Q3 Grid Modernization Action Challenge

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07/13/2023



Arlington Community Energy Plan: Pathway to Carbon Neutrality

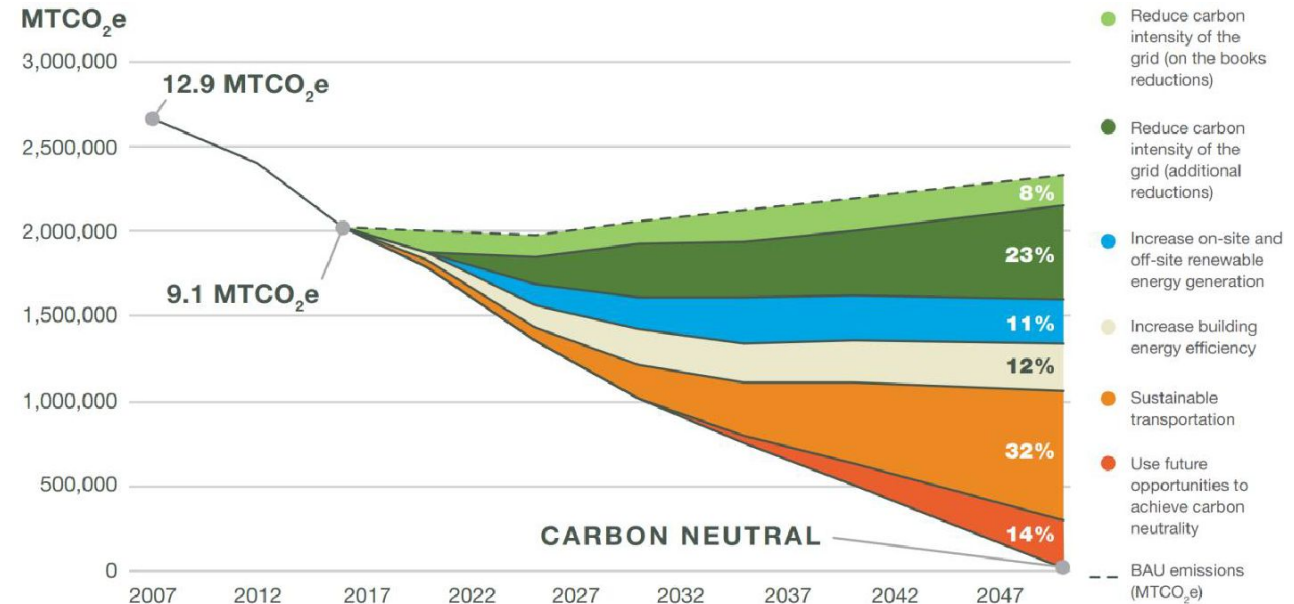


■ Goal Areas:

- **Buildings**: Increase the energy and operational efficiency of all buildings in Arlington by greater than 38%
- **Resilience**: Ensure a resilient, reliable, and secure energy infrastructure for Arlington
- **Renewable Energy**: Increase Arlington's renewable energy resources and achieve 100% renewable electricity by 2035, including Government operations have more ambitious renewable electricity targets, including achieving 100% renewable electricity by 2025
- **Transportation**: Reduce Arlington's transportation-related carbon emissions by moving more people with fewer GHG emissions, including 88% decrease in CO2 emissions from transportation sources
- **Government Activities**: Decarbonization of Government services leads by example and provides demonstration models for the private sector
- **Education & Behavior Change**: Engage, educate, incentivize, and empower the community toward behavioral change and market transformation; to take personal and corporate action to reduce energy usage and achieve the CEP's ambitious energy and carbon emission targets

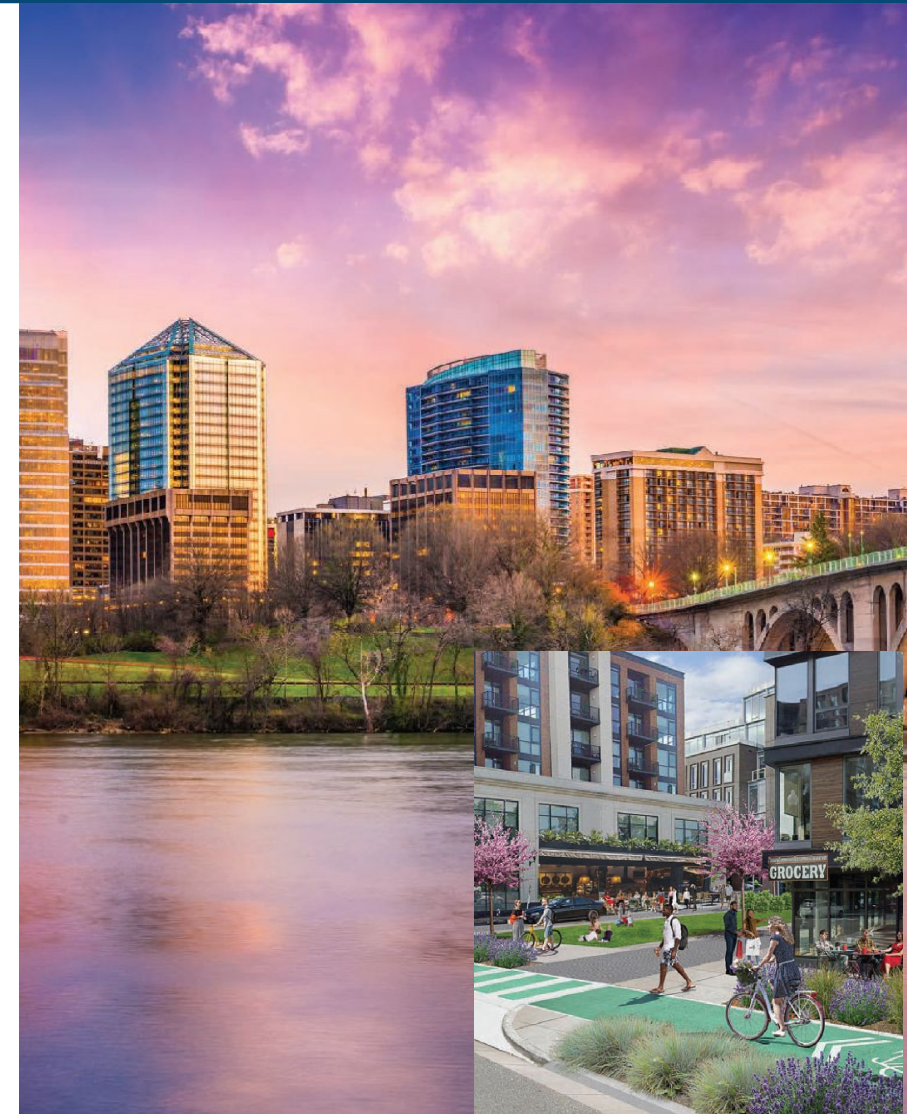
Grid Modernization's Critical Role to Community's Carbon Neutrality

- Actions necessarily require building and transportation electrification, expansion of local and regional clean and renewable distributed energy resources (DERs)
- **Grid modernization efforts should consider local goals, future demands and needs, equitable outcomes, and resilience requirements and may require deeper understanding, robust planning, and coordination and collaboration with local communities (neighborhoods, civic orgs, local governments, CBOs, etc.)**



Grid Modernization Planning: Local Needs, Coordination, & Collaboration

- Benefits
 - alignments with community demand, needs, goals
 - equitable, resilient, affordable outcomes
 - enable innovation, collective action, community investment
 - address land use, stakeholder perspectives, permitting, etc.
- Consequences
 - constrain or eliminate opportunities for modernization technologies or solutions
 - possible piecemeal, inconsistent, costly, un-optimal investments and operations



Regarding Grid Modernization, to achieve DC/DMV climate, health & equity goals, a critical obstacle to collectively overcome in 12 months is **the development of a model for a collaborative, integrated, grid modernization planning initiative.**

This model should consider: **local goals, future demands and needs, equitable outcomes, and resilience requirements and includes deeper understanding, robust planning, and coordination and collaboration with local community stakeholders (neighborhoods, civic orgs, local governments, CBOs, etc.).**

