



AEG Washington 22Q4 Stakeholder Challenge: Grid Modernization

Introduction

- 👉 **DC Has Aggressive Climate and Energy Goals**

The District has committed to being carbon neutral and climate resilient by 2050, including cutting emissions by 50% by 2032
- 👉 **Grid Modernization and Resilience Are Critical to an Equitable Future**

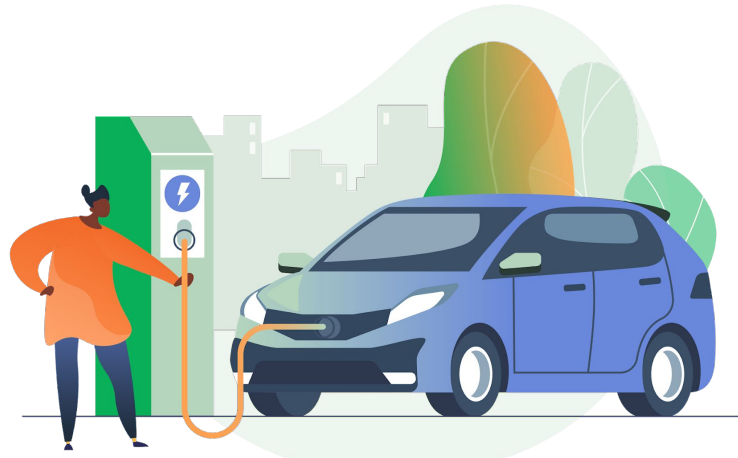
Access to clean, affordable energy is an imperative for all, and too often energy access burdens disproportionately fall on minorities and those at the bottom of the income spectrum
- 👉 **We Already Have Many of the Tools and Technologies Necessary**

The public and private sectors will be critical partners to unlock our existing potential to modernize and optimize the energy grid



What is the Problem We Are Facing?

- Investing in additional grid infrastructure is expensive, time intensive, and can divert resources away from more equitable investments
- In particular, satisfying peak load currently requires heavy use of fossil fuels and existing peaker plants are often located in poorer, majority-minority areas
- We must invest more resources to optimize our existing grid and incorporate the tremendous resources we currently have sitting on the sidelines that are ready to go



What is A Key Obstacle or Challenge in the Coming 12 Months?

- We can work together to develop the region's first city-wide **Virtual Power Plant** pilot project and outline a business model to unlock the necessary supply/demand and educate critical stakeholders on this cleaner future
- We can quantify the current negative impacts and drained resources that the District loses by keeping distributed energy resources on the sidelines of the current energy market

Benefits and Consequences

What are the benefits of addressing this obstacle?

What are the consequences of not addressing this obstacle?

01

Benefits

Meeting and exceeding the solar RPS drives investment and job creation in DC, which has a technical solar potential of 2,700 MW, along with supporting efficient and responsive appliance and electric vehicle deployment

01

Consequences

If we don't get started now, we will continue to lose jobs, entrepreneurs, and revenue to states like MD, VA, NC, and PA who have more land mass available to generate clean energy.

02

Benefits

Supporting energy independence and resiliency for the District can help to insulate DC's economy from future fossil fuel price increases, and curtailment and infrastructure risks associated with transmission from distant states.

02

Consequences

Climate change is potentially nearing a tipping point, and actions that we can take now will give us the greatest chance of avoiding catastrophic climate failures. Local public health, air and water quality, and energy security will also suffer if we fail to take action in the near term

Conclusion

Regarding Grid Modernization, to achieve DC Metro's Climate, Health, and Equity goals, a critical obstacle to collectively overcome in 12 months is **that we must test the thesis that our grid can be modernized from outside of the grid but inside of DC: Virtual Power Plants can meet our peak energy demands while generating additional revenue and jobs, securing an equitable clean energy future for all DC.**





Thank You.

INFO@DCGREENBANK.COM