Chappel, George Washington University

PG, FY2020

Community-Defined Problem - In Washington DC's Ward 7 and 8 many households face a heavy energy burden and do not have access to the latest technologies that could reduce their energy bills. They also have little ability to affect the energy system.

Project Activities to date - So far, this project has held four focus group sessions with members of the community to examine community engagement, policy, finance, and technology issues. Drawing on the insights received during these sessions, we are in the process of developing a metric to measure the level of energy justice in energy projects. This metric will allow us to demonstrate to members of the community concrete benefits from energy technology and help the engineers best understand how their innovations can address community needs.

Broader Impact (Immediate) – The Broader Impact (Sustainability) – The project seeks to increase levels of project will give community members energy justice in the community, a better understanding of how new value defined by community members energy technologies can help them meet the goals that are most importaas being the most important to them in to them – increasing levels of equity the energy area. and justice.



Intellectual Merit - This project will advance our understanding of flexible boundary microgrids and their application in low-income communities in Washington, DC. Specifically, we will develop models for dynamic modular sensor-driven microgrids and determine the use-cases in which they can respond efficiently to community needs.

2	Next Steps – We are planning our first
s a	advisory group meeting for April. Thes
	on-going monthly sessions will help us
	co-design a project that meets
nt	community needs and takes advantage
	of the latest microgrid technologies.

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