

PANEL 11 - Resilient, Sustainable Communities

PANEL LEADERS: **Katherine Johnson**, *District of Columbia Department of the Environment* and **Stephanie Ohshita**, *Lawrence Berkeley National Laboratory*

SESSION TOPICS: Examining how energy analysis at the community scale can contribute to better decisions about urban infrastructure and communities, including: analysis of energy use, emissions, costs, and other variables when construction or retrofit of infrastructure is master-planned at a community scale rather than building-by-building; quantification of energy benefits from sustainable and resilient building strategies, including: deliberate tree canopy, architectural shade, solar-reflective materials, and blue and green infrastructure; assessment of urban sustainability initiatives, such as value added in terms of real estate and other measures, that strive to create livable and walkable neighborhoods through integrated transportation and land-use planning and zoning; examination of the contribution of energy efficiency and renewable energy measures such as district energy, microgrids, and demand management to urban resilience in response to severe weather events, other emergencies, and ongoing climate instability; and analytical methods and case studies to assess both sustainability and resilience at the community scale, as well as their energy implications, life-cycle and operation