

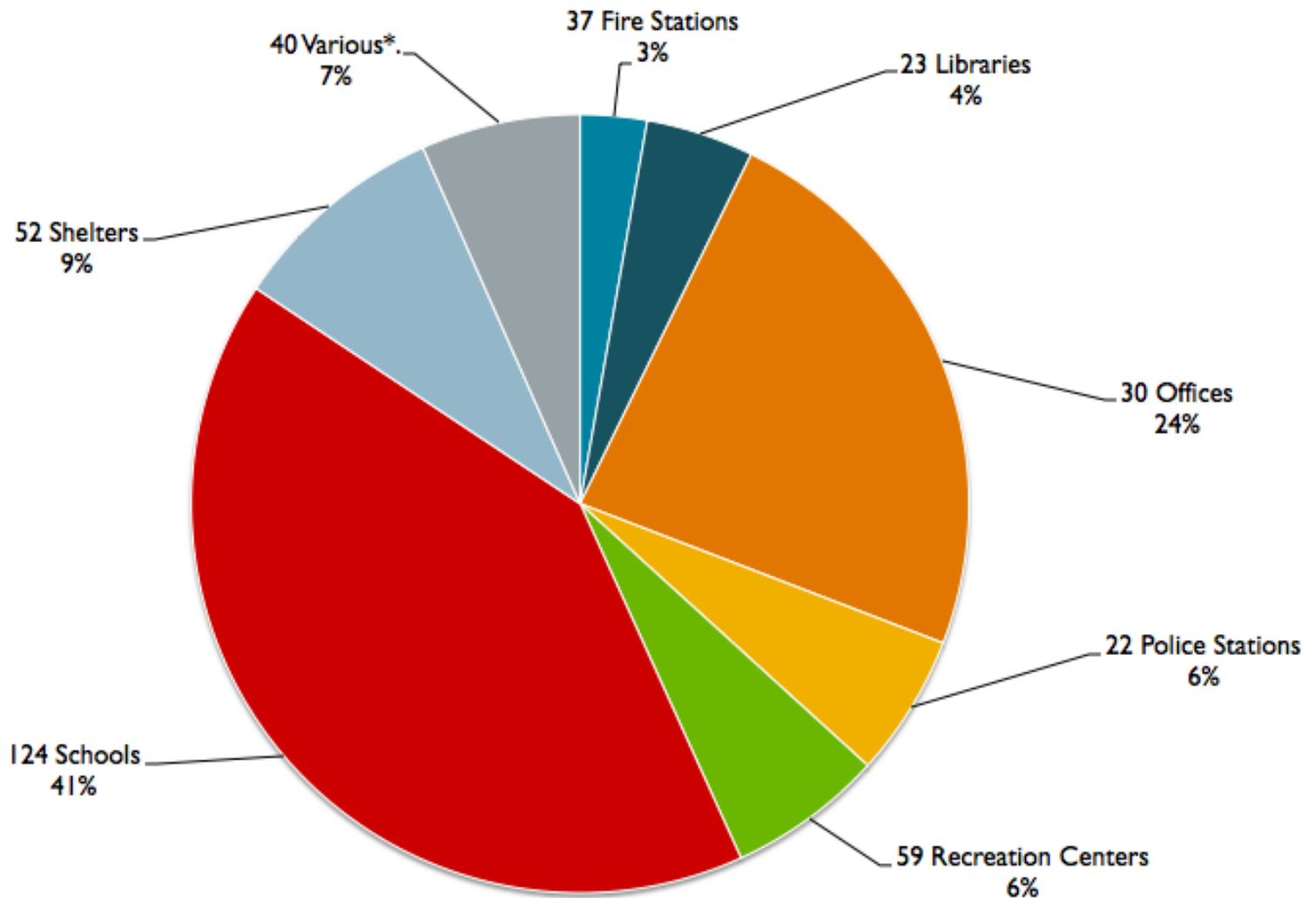
MWCOG Solar Workshop: DG in DC



MWCOG Solar Workshop
November 17, 2014
Washington, DC

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Sustainability Manager
DC Department of General Services



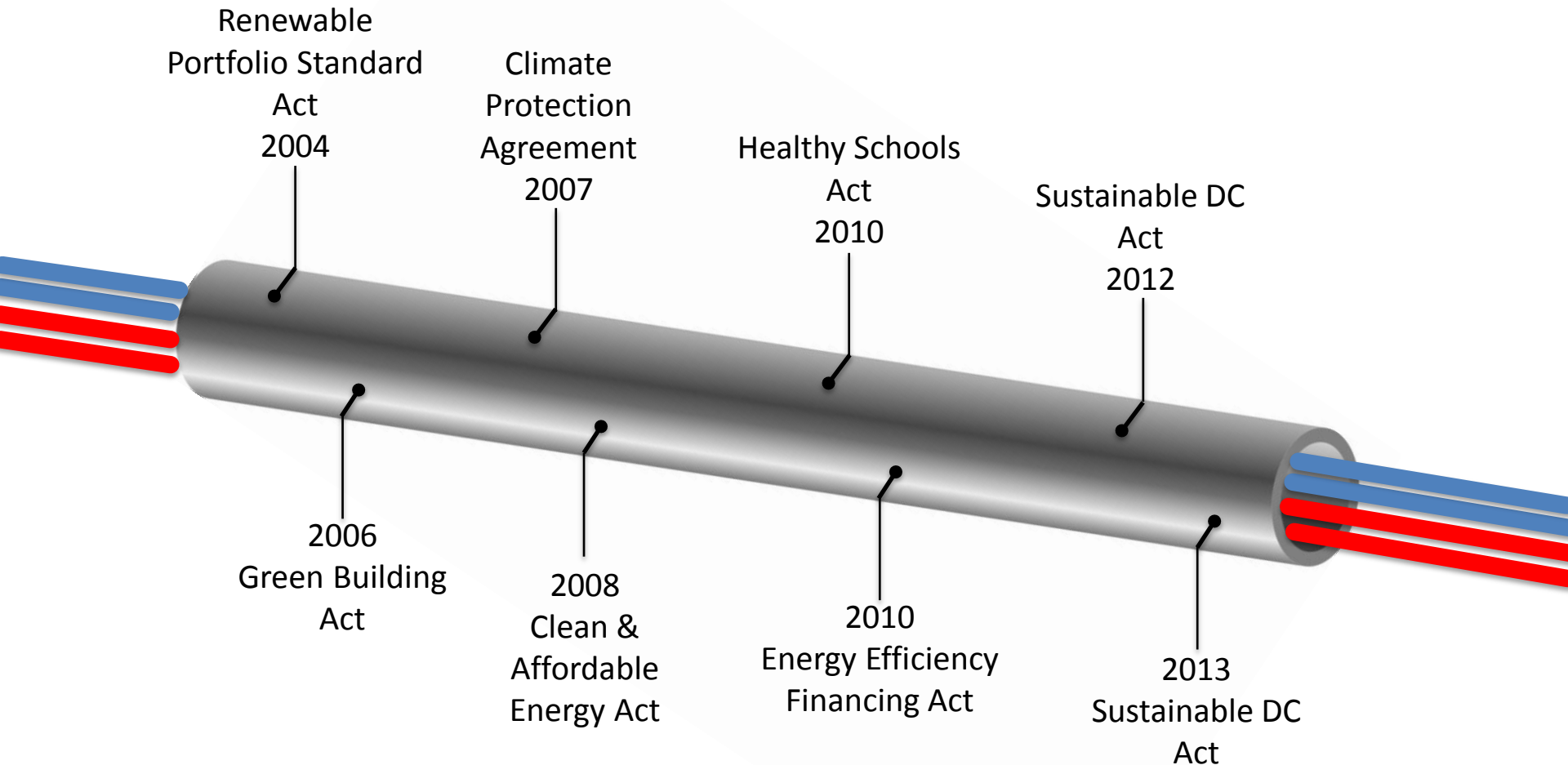


DC Department of General Services Portfolio

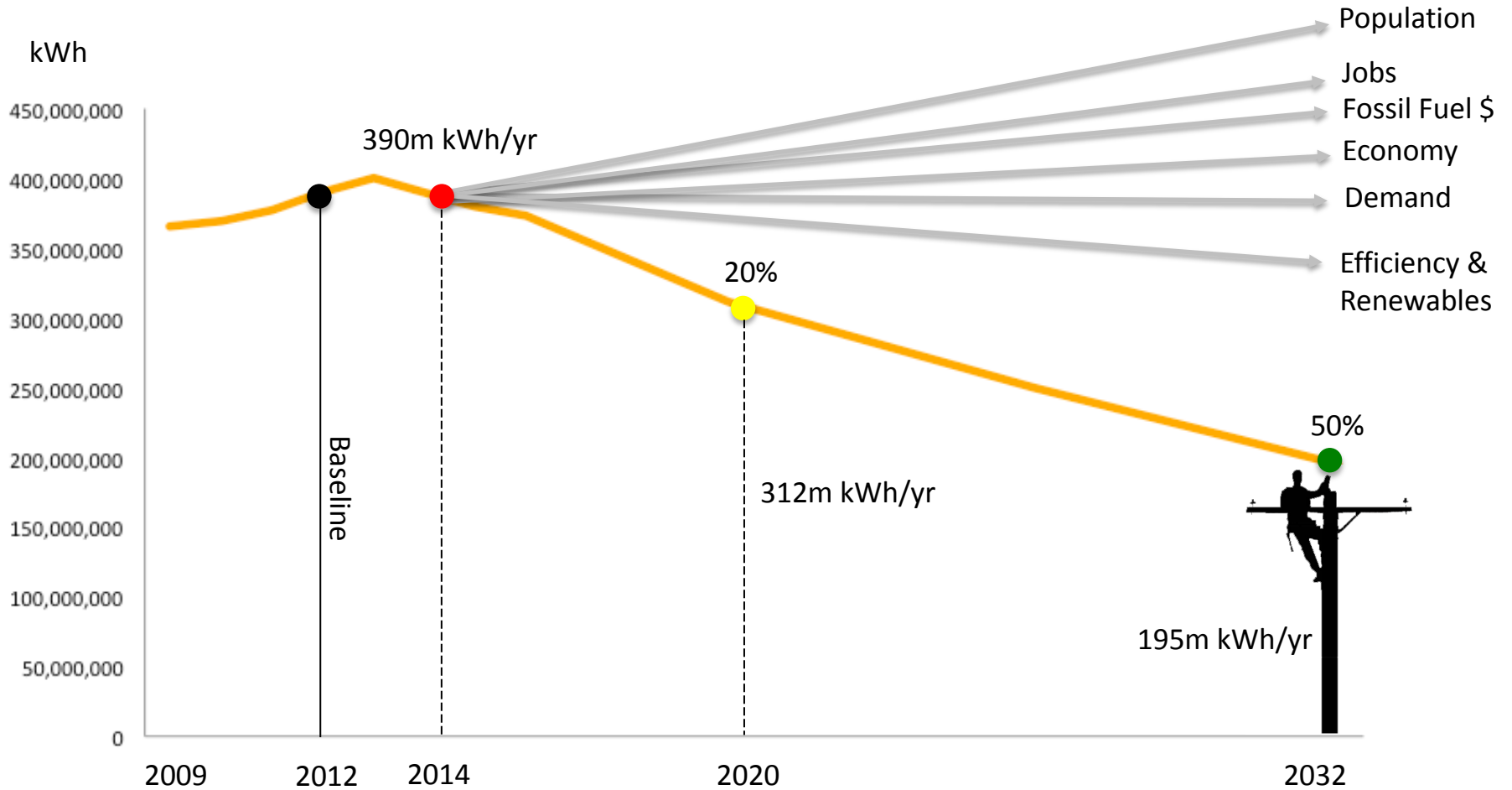
- 650,000+ residents | 50,000+ businesses
- 33,000 DC employees | 55,000 students/teachers
- 80 agencies | 400 buildings | 30,000,000 s.f.
- 380,000,000 kWh/yr. | 12,000,000 therms/yr.
- 300,000 CO2e tons/yr. (DC gov't buildings)



Sustainable DC: 50% Energy Reduction | 50% GHG Reduction



Target Electricity Consumption in DC's Public Buildings



Fifty by Thirty-Two



Data Analytics

- AMI (smart meters and sub-metering)
- Accessible interval data (Green Button Connect)
- MMVV + reporting (BuildSmartDC.com)

Better Buildings

- Green Codes | LEED | ENERGYSTAR
- Assessments & Auditing (AHSRAE + virtual)
- Energy Retrofits + modernizations

Optimized Operations

- Building automation, controls, sensors
- Retro-commissioning
- Operator training & occupant engagement (energy kiosk)

Smart Supply

- Renewable and distributed generation
- District energy and microgrids
- Competitive Energy Purchasing

Good Government

- Planning and budgeting
- Interagency engagement
- Public private partnerships



Solar PPA @ Dunbar HS

Basics

- 1,940 solar photovoltaic panels
- 543,287 kWh per year (~20% demand)
- ~\$0.085 kWh w/1.5% escalation for 20 years
- Green-e RECs provided for 10 years

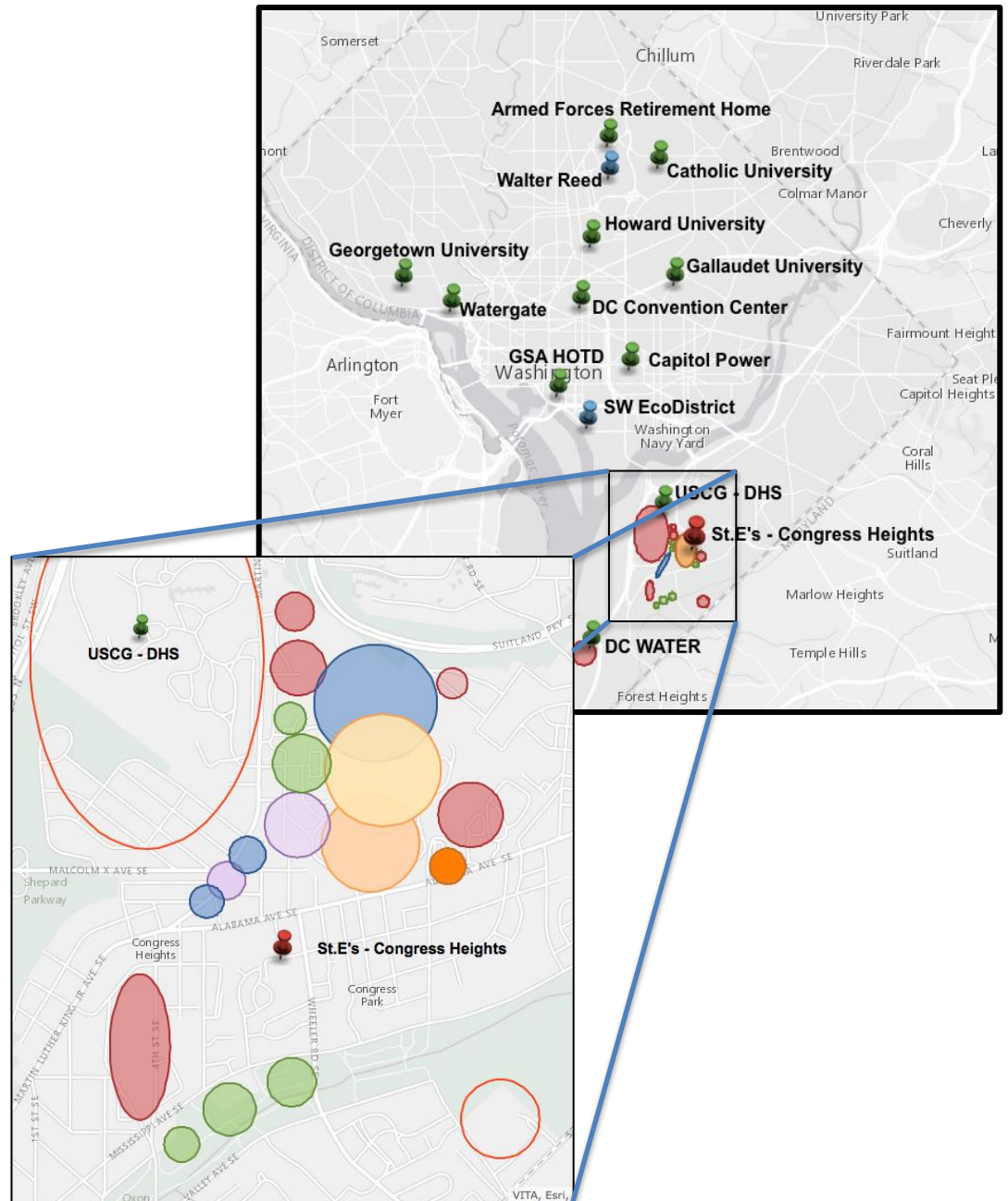
10 MW Solar PPA

50 Sites; 3 Bundles

- Large
- Small-Medium
- Innovation

Benefits

- Reduced GHG
- Lower, less volatile costs
- Peak demand shaving
- Resiliency
- Risk management
- Job creation
- Market transformation
- Integration w/other efforts



@benchmarkdc

Thank you,

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