



VAEEC Spring 2019 Forum

---

# **Working Together to Increase Efficiency**

Nell Boyle, City of Roanoke  
Bill Eger, City of Alexandria

John Morrill, Arlington County  
Chris Smeds, Univ. of Virginia

Sponsored by Community Housing Partners



# Working Together to Increase Efficiency

VAEEC Spring 2019 Forum  
Richmond, VA  
May 2019

Chris Smeds  
Technology Officer  
UVA Facilities Management  
[smeds@virginia.edu](mailto:smeds@virginia.edu)



It takes an (academic) village...





## UVA's Solar Projects

UVA has partnered with Dominion Energy to build two large solar fields in addition to solar panels on campus. Together, these solar fields are expected to generate about 21% of the university's energy needs, contributing greatly to the university's greenhouse gas emission reduction goals.

Renewable Energy at UVA

It takes an (academic) village...

### Breaking Global Trends



### HooHacks 2019



### You can make a difference



Sustainable IT:  
Maximizing the value we  
achieve through IT  
while  
minimizing the negative  
impacts of IT

UVA has partnered with Dominion Energy to install solar panels on its rooftops. Together, these solar panels generate enough solar power to offset about 21% of the university's energy needs, contributing significantly to the university's greenhouse gas reduction goals.

Renewable Energy

Breaking Global Trends



HooHacks 2019



You can make a difference



## (some) Sustainable IT Practices

Workstation Power Management

E-Waste Reduction

Servers & Data Center Efficiency

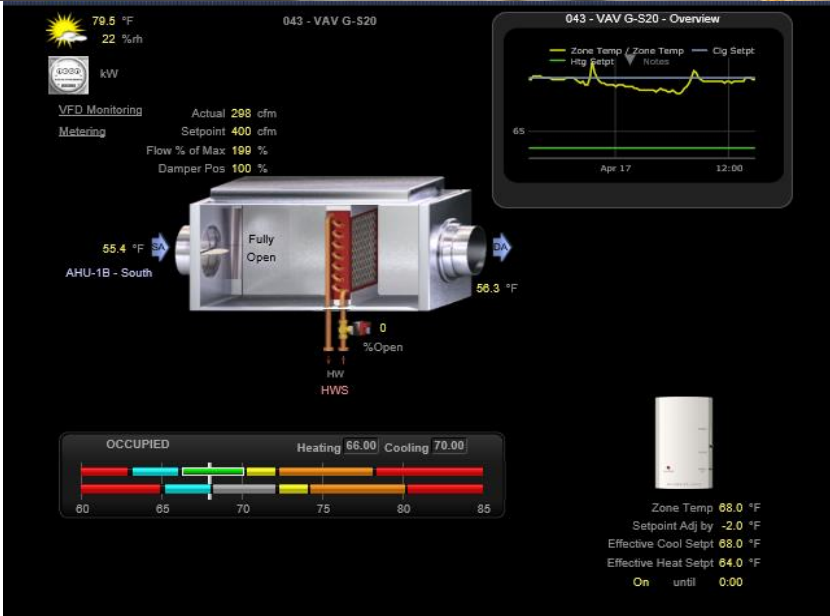
Operational Efficiencies



# Project Example



- Building was built with two large HVAC units which condition the entire building
- Post-occupancy, a server was installed in a ground-floor storage closet which stores audio/visual from 42 cameras
- To keep the room from overheating, one of the large HVAC units must run 24/7
- Its estimated this additional energy consumption cost \$20,000 - \$25,000 a year
- Two options are being explored to be able to set this unit on an office schedule (7am – 7pm)
  - Migrate this serve to the UDC
  - Install a cooling-only unit to decouple this space from the main system
    - First cost: ~\$25,000
    - Ongoing: ~1,800/year







E-911

SAFETY  
COMMUNICATIONS  
CENTER



LIONBERGER  
CONSTRUCTION  
GENERAL CONTRACTORS | ESTIMATORS | PLANNERS



BALZER  
& ASSOCIATES  
PLANNERS | ARCHITECTS | ENGINEERS | SURVEYORS



# Questions?

- **Nell Boyle**, City of Roanoke
- **Bill Eger**, City of Alexandria
- **John Morrill**, Arlington County
- **Chris Smeds**, University of Virginia

Sponsored by  
Community Housing Partners

