Better Buildings®
U.S. DEPARTMENT OF ENERGY

JUNE 8–11

2020 SUMMIT

A Virtual Leadership Symposium

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U.S. DEPARTMENT OF ENERGY

The Solar Project Development Process: Insights and Best Practices from Local Governments and Higher Education Institutions

June 10th

11:00 – 12:30 PM

Housekeeping Items

- Please note, today's session will be recorded and archived on the Better Buildings Solution Center. We will follow up when today's recording and slides are made available.

- All attendees are in listen only mode, meaning your microphones are muted. If you experience any audio or visual issues anytime throughout today's session, please send a message in your "chat" window located on the bottom of your zoom panel.

Maria Vargas

Director, Better Buildings Initiative
Deputy Director, Solar Energy Technologies Office
U.S. Department of Energy

Welcome and Introduction

U.S. DEPARTMENT OF ENERGY

Agenda

1) Welcome and Introduction
2) Overview of the solar project development process
3) Expert Insights: *Case Study* – ***City of Orlando***
4) Expert Insights: *Case Study* – ***University of Virginia***
5) Solar Project Development Resources
6) Questions and Answer Session

Today's Speakers

James Critchfield
U.S. Environmental Protection Agency

Ian Lahiff
City of Orlando

Jesse Warren
University of Virginia

DOE's Solar Energy Technologies Office

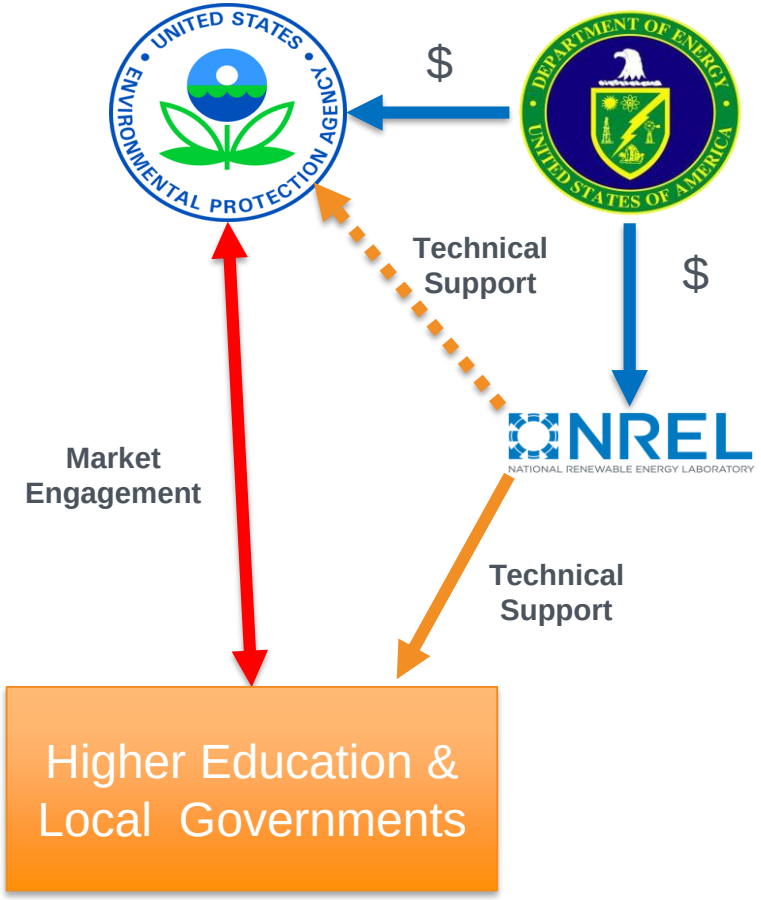
Our mission is to accelerate the development and application of technology to advance low-cost, reliable solar energy in the U.S.

To achieve this mission, solar energy must:

- Be **affordable** and **accessible** for all Americans
- Support the **reliability**, **resilience**, and **security** of the grid
- Create a sustainable industry that **supports jobs**, **manufacturing**, and the **circular economy** in a wide range of applications

DOE & EPA Collaborate to Advance Solar

- Interagency effort between EPA, DOE and the National Renewable Energy Lab focusing on advancing solar use within the mid-scale solar market.
- The initial effort addresses market barriers unique to the deployment and use of solar photovoltaic energy within the U.S. Higher Education and Local Government sectors.
- Under this effort, DOE works with **EPA's Green Power Partnership** to offer both technical and non-technical resources.
- Key areas being addresses are financial, administrative and policy barriers encountered by these individual institutions.



Other DOE Support

	SOLAR ENERGY INNOVATION NETWORK U.S. DEPARTMENT OF ENERGY	SOLSMART NATIONALLY DISTINGUISHED. LOCALLY POWERED.	National Community Solar Partnership 	Technical Assistance to Public Utility Commissions (GMLC)
Who	Local governments, universities, utilities, regional planners, solar companies, etc.	Local government/ authorities with jurisdiction	Local governments, utilities, universities, regional planners, solar companies, etc.	Public utility commissions
How	Topic-driven cycles of collaboration between teams and experts	National recognition program and technical assistance	• Individual support to partners with specific local barriers to community solar; • Group support to partners working towards similar goals	In-depth, longer-term analytical support (12-24 months)
Why	Coordinate research and analysis to scale up innovative initiatives	Cut red tape and expand local solar market	Address persistent barriers to expanding solar access to low income communities	Provide technical support to advance solar integration and disseminate learning

James Critchfield

Director, Green Power Partnership Program
U.S. Environmental Protection Agency

U.S. DEPARTMENT OF ENERGY

Slido

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Select the session – Solar Process Workshop

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Poll #1

How familiar are you with the solar project development process?

Respond to poll and submit questions
www.slido.com event code **#BBSummit, Room – Solar Process Workshop**

EPA's Green Power Partnership

EPA's Green Power Partnership is a free, voluntary program that encourages organizations to use green power as a way to reduce the environmental impacts associated with conventional electricity use

Partners include:

- Fortune 500 corporations
- Higher Education institutions
- Federal, State and local governments
- Small & medium sized businesses
- Non-profits

https://www.epa.gov/greenpower

How EE & Green Power Work Together

$$Energy\ (kWh) \cdot\ Emissions\ Rate\left(\frac{lbs}{kWh}\right) = Air\ Emissions$$

Energy Efficiency

ENERGY STAR

•

Green Power Use

EPA GREEN POWER PARTNERSHIP

=

Lower Emissions

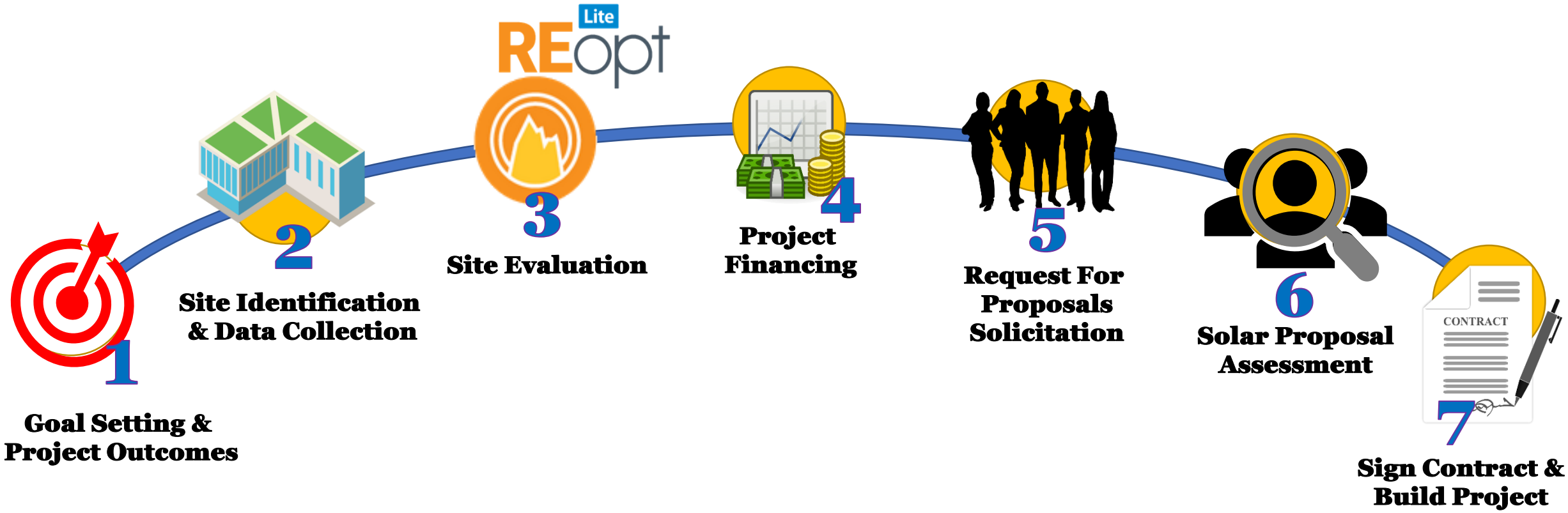
Green Power Supply Options

Retail Options	**Retail (Unbundled) RECs**
	Utility Products or Programs
	Community Choice Aggregation
Project Specific Options	**Self-Supply**
	Physical PPAs
	Shared Renewables
	Utility Green Tariffs
	Financial Contracts

Today's Focus: Solar Project Development

Retail Options	**Retail (Unbundled) RECs**
	Utility Products or Programs
	Community Choice Aggregation
Project Specific Options	**Self-Supply**
	Physical PPAs
	Shared Renewables
	Utility Green Tariffs
	Financial Contracts

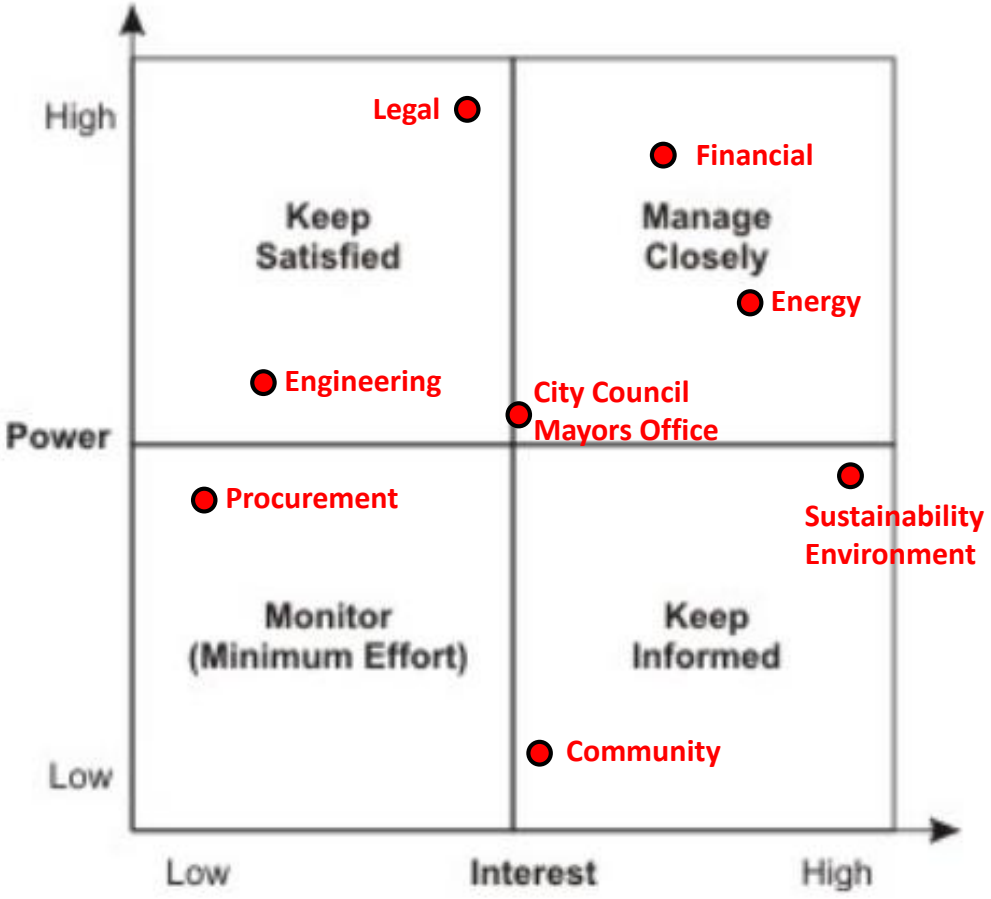
Project Development Process



Decisionmakers and Stakeholders

Early Involvement is Critical!

- President/CEO/Mayor
- City Council
- Trustees
- Facilities/Engineering
- Accounting/Financial
- Legal Services
- Sustainability/Environmental Planning
- Energy
- Procurement
- Local Building Department/AHJ
- Community



Organizational Goals and Project Outcomes

Organizational Goals

- Renewable electricity use
- GHG emissions reductions
- Critical infrastructure enhancements

Project Outcomes

- Electricity Savings
- Electricity Cost Savings
- Emissions Reductions
- Electricity Reliability
- Safety
- Education
- Job Creation
- Economic Development
- Public Visibility

Goal Setting & Project Outcomes

Poll #2

Which of the following project outcomes are you most likely to pursue?

Respond to poll and submit questions
www.slido.com event code **#BBSummit, Room – Solar Process Workshop**

2 Site Identification

- Building Integrated
- Ground Mounted
- Parking Lot/Garage Canopies
- Brownfields and Contaminated lands
- Third-party Sites

2 Collecting Project Site Data

- Site Name
- Site Location
- Site Type
- Type of solar application (roof, ground etc.)
- Number of Building Stories
- Current Building Use
- Future Building Use – Site Use Changes
- Utility Provider
- Retail Rate name
- Retail Rate Schedule
- Site Usage/Consumption (kWh per month; per year)
- Electric Service Voltage to Site
- Electric Service Amperage to Site
- Electric Service Panel/Enclosure Amperage
- Estimated Distance of Electric Service Panel to Roof Area
- Site Building Plan / Architectural Drawing
- Site Plot Plan
- Site Electrical Line Drawing
- Type of Roof
- Year roof installed
- Roof Condition
- Roof Slop and Azimuth
- Roof Equipment
- Roof Access
- Roof Warranty
- Site Usable Acreage
- Soil & Sub Soil Type
- Shading
- Distance to Transmission/Distribution Lines
- Landfill Characteristics

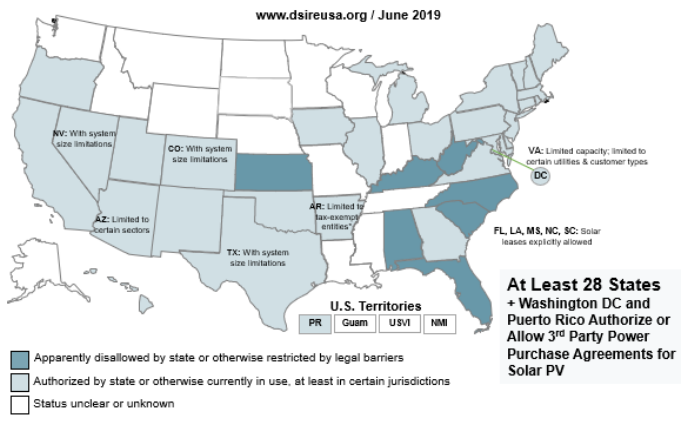
Poll #3

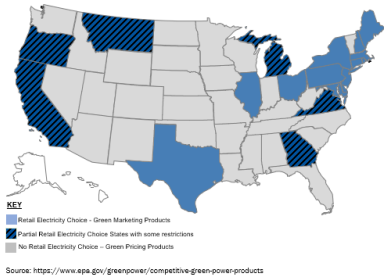
What types of project sites do you expect to consider developing for solar?

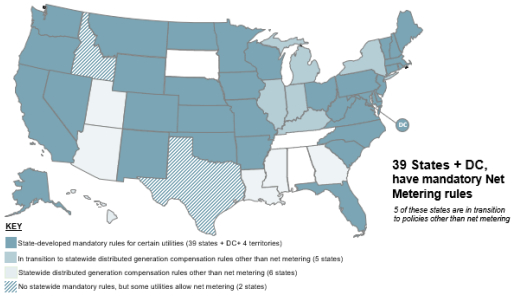
Respond to poll and submit questions
www.slido.com event code **#BBSummit, Room – Solar Process Workshop**

Researching Your Market and Policy Environment

- State authorization of **3rd-party ownership**
- Utility **electricity rates** and schedules
- State **net-metering** policies
- State or utility **interconnection** policies
- Federal, State and local **incentives**
- State electricity **market structure**
- State **regulatory targets and mandates**







Will PV + Storage Work for Your Site?

Solar PV Resource

Technology Costs & Incentives

Space Available

Utility Cost & Consumption

Financial Parameters

3 REopt Lite

Site Evaluation

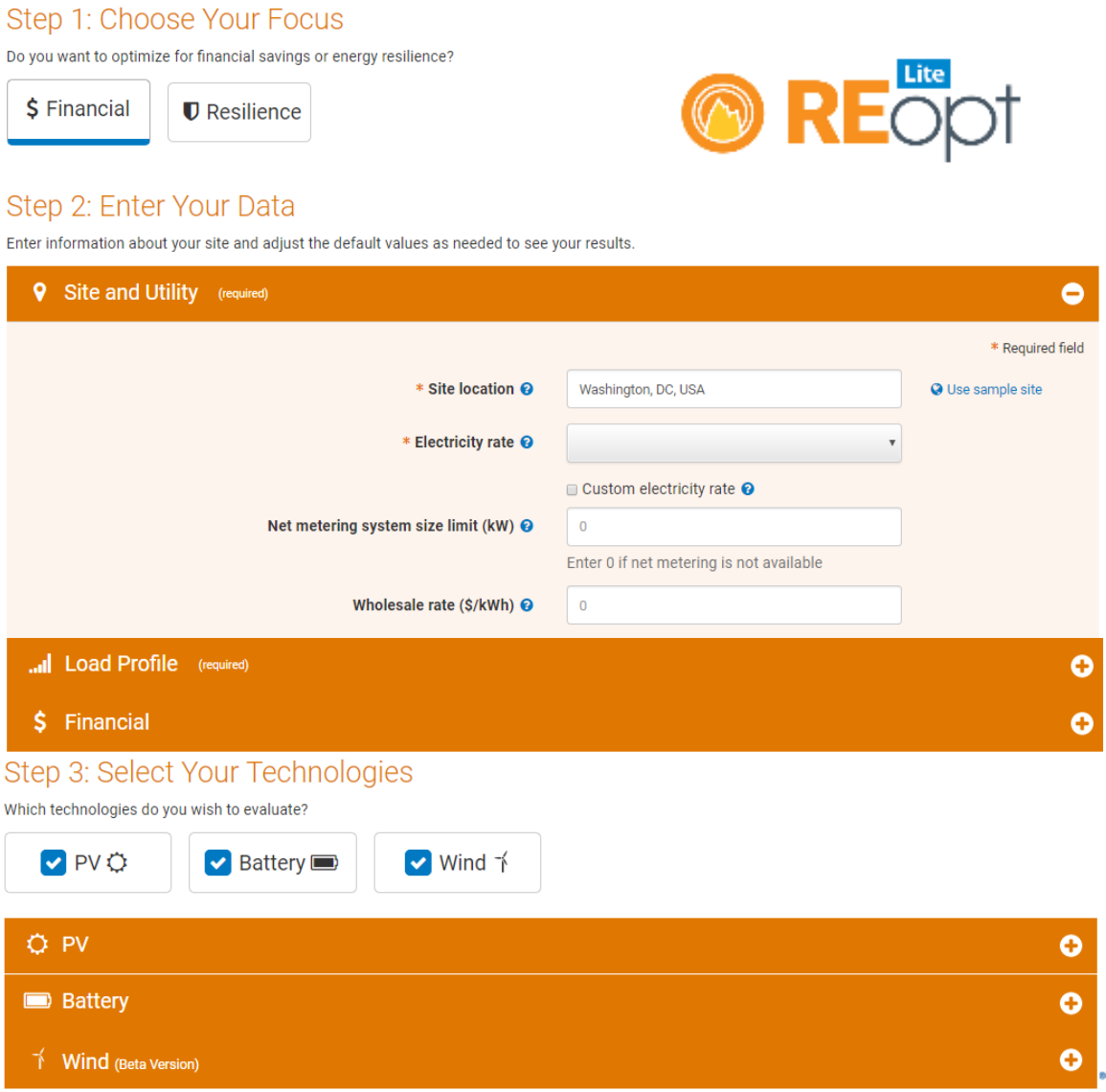
REopt Lite Web Tool

REopt Lite is a web tool that offers a no-cost subset of NREL's more comprehensive REopt model

Financial mode optimizes PV, wind and battery system sizes and battery dispatch strategy to minimize life cycle cost of energy

Resilience mode optimizes PV, wind, and storage systems along with exiting back-up generators to sustain critical load during grid outages

- To access REopt Lite: https://reopt.nrel.gov/tool



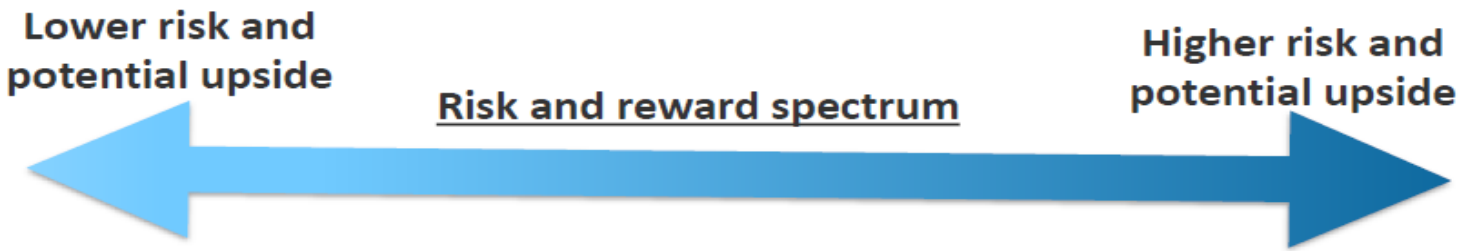
Financing Your Project

Direct Ownership and Internal Financing

- Cash, loans, bonds

Third-party Ownership and Financing

- Physical Power Purchase Agreement
- Lease Agreement
- Financial Contract (e.g., VPPA, Contract for differences)
- Energy Performance Contracts
- Utility green tariff
- Community solar



Renewable Energy Certificates (REC)

- All renewable electricity projects produce two commodities:
  - Physical power
  - Energy attributes
- A Renewable Energy Certificate (REC) is the legal instrument that conveys to its owner, the right to claim the associated energy attributes of its generating resource
  - In essence a REC represents the “renewableness” of the physical power
  - The physical power alone tells us nothing of its origin or source
- A REC is created for every megawatt-hour of renewable electricity generated and delivered to the utility grid

What You Should Know Regarding RECs

- Organizational Goals
  - RECs are used to substantiate both renewable electricity use and GHG reduction goals
- Project Outcomes
  - If your project outcomes include using renewable electricity or reducing your emissions footprint then you need to ensure you own RECs
- Project Financing
  - Most states afford ownership of RECs to the party who owns the source/generator of the RECs
  - Buyers under third-party financing must purchase the RECs contractually from the project owner
  - Buyers that internally finance a project simply need to retain their project's energy attributes or RECs to substantiate claims of renewable electricity use
  - Many community solar projects do not convey RECs to their project sponsors/customers

REC Arbitrage

ar·bi·trage

/ˈärbəˌträZH/

noun

the simultaneous buying and selling of securities, currency, or commodities in different markets or in derivative forms in order to take advantage of differing prices for the same asset.
"profitable arbitrage opportunities"

- REC arbitrage is a process where a project owner sells their project RECs to a compliance buyer at a high price and then uses some of the revenue from the sale to buy less expensive replacement RECs in order to substantiate claims
- The project owner's claims shift from the original solar REC/project to the source of the replacement REC/project

You are only using

RENEWABLE ELECTRICITY

when you have both the

REC and ELECTRICITY

5 Request For Proposals: Key Ingredients

- Bidder Qualifications
- Desired project outcomes
- Contract type(s)/length(s)
- Site Identification and Data
  - Existing site use
  - Facility Load Data (consumption)
  - Type of electrical service (physical interconnect and rate schedule)
  - Construction and operations access points
  - Site photos/maps/plans/drawings
  - Roof type or ground conditions
- Milestones/Timelines
- Site visit schedule / Management of Bidder Questions

5 Request For Proposals: Key Ingredients

- Industry standards on components
  - Modules UL 1703
  - Fixed Tilt Racking UL 2703
  - Inverters US 1741 & IEEE 1547
  - Robust cable management
  - Use like-branded module to DC homerun connectors
- Industry warranties on components
  - Modules - 10-year workmanship defect warranty; 25-30 year power warranty; 2-3% degradation in year 1; until 80-82% at year 25-30
  - Inverters - 5-20 year warranties available
  - Racking - 5-10 year workmanship defect warranty
- Labor Requirements
- Fire safety/access considerations
- System removal or buyout terms

Request For Proposals: Key Ingredients

Operations & Maintenance Considerations

- Availability guarantees
- Remote monitoring
- Response time for system irregularities
- Site access considerations
- Module cleanings
- Snow removal
- Regularly scheduled maintenance inspections and activities
- Monitoring and troubleshooting performance issues
- Equipment repair
- Optimizing project performance
- Response time and availability guarantee
- Documentation requirements of O&M activities
- Ground cover maintenance & erosion control
- Tracking system maintenance

6 Developing Project Evaluation Criteria

- Bidders want to know if they won or if they lost
- Ensure a balance between criteria and weighting
- Criteria Examples:
  - Cost effectiveness
  - Technical approach and implementation
  - Qualifications for designing, developing, owning, operating and maintaining project
  - Project team, experience and organizational approach
- Consider a two-stage selection process with staged levels of response.
  - **Be upfront** about the best and final ("BAFO") or shortlist process
- Follow-up interviews can be used to break scoring ties

Expert Insights – Local Government

Ian Lahiff

Energy Project Manager
City of Orlando

Submit questions
www.slido.com event code **#BBSummit, Room – Solar Process Workshop**

U.S. DEPARTMENT OF ENERGY

THE SOLAR PROJECT DEVELOPMENT PROCESS: CITY OF ORLANDO

Ian L. LaHiff, P.E. LEED AP

AGENDA

City Of Orlando Now & Tomorrow

Pathways to Solar

Procurement

Case Studies

Lessons Learned

Questions

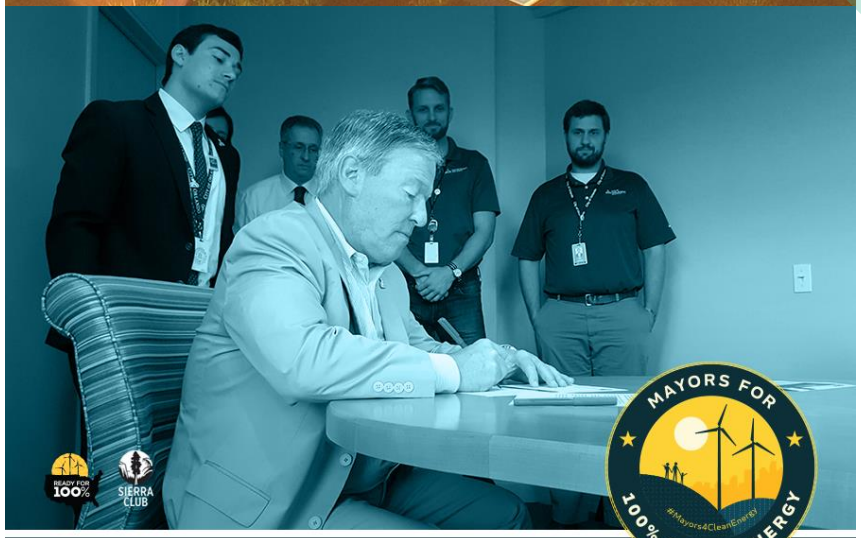
City Of Orlando Now & Tomorrow

ORLANDO'S CLEAN ENERGY GOALS

- **100% of municipal electricity from renewable sources by 2030**

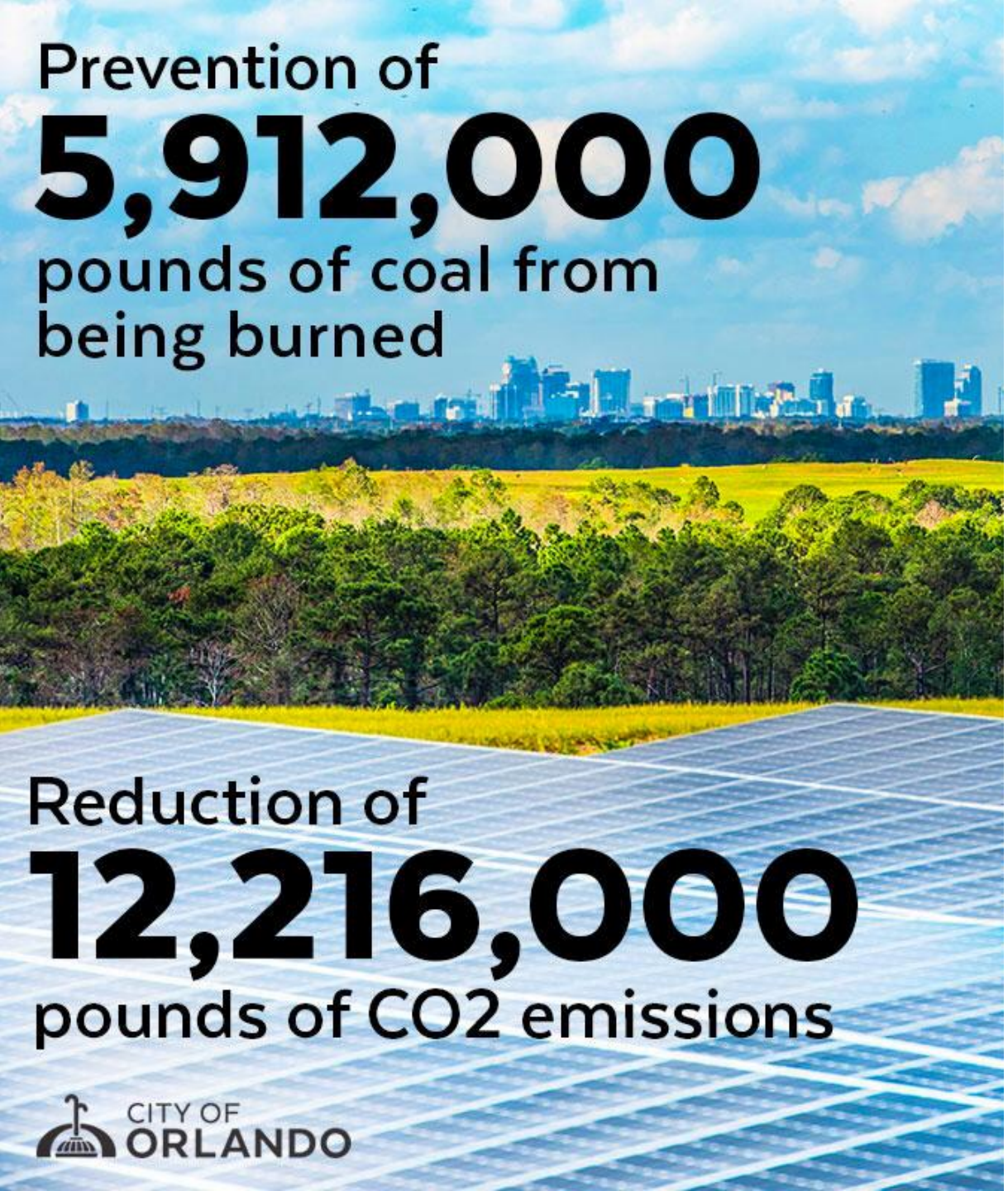
- **Run City Fleet Vehicles on 100% renewable sources by 2030**

- **LEED req. for all new Muni buildings**
  - 15 new LEED certified buildings since 2010



"I am proud to support a vision of transitioning entirely to 100 percent clean and renewable energy in our City."

—**MAYOR BUDDY DYER** *of Orlando, Florida*



ORLANDO NOW

City Operations Currently Powered by ~10% Renewable Energy

On-Site Solar at Fleet & Facilities and Code Enforcement buildings

Developed a "Solar and EV readiness" design guidelines for both the City of Orlando and other local governments.

Community Subscription

5.2 MW from OUC Solar Farm

Subscribed Facilities Include:

- Orlando City Hall
- Orlando Police HQ
- 17 Fire stations

ORLANDO TOMORROW

City operations transitioning to ~20% renewable energy – FY21

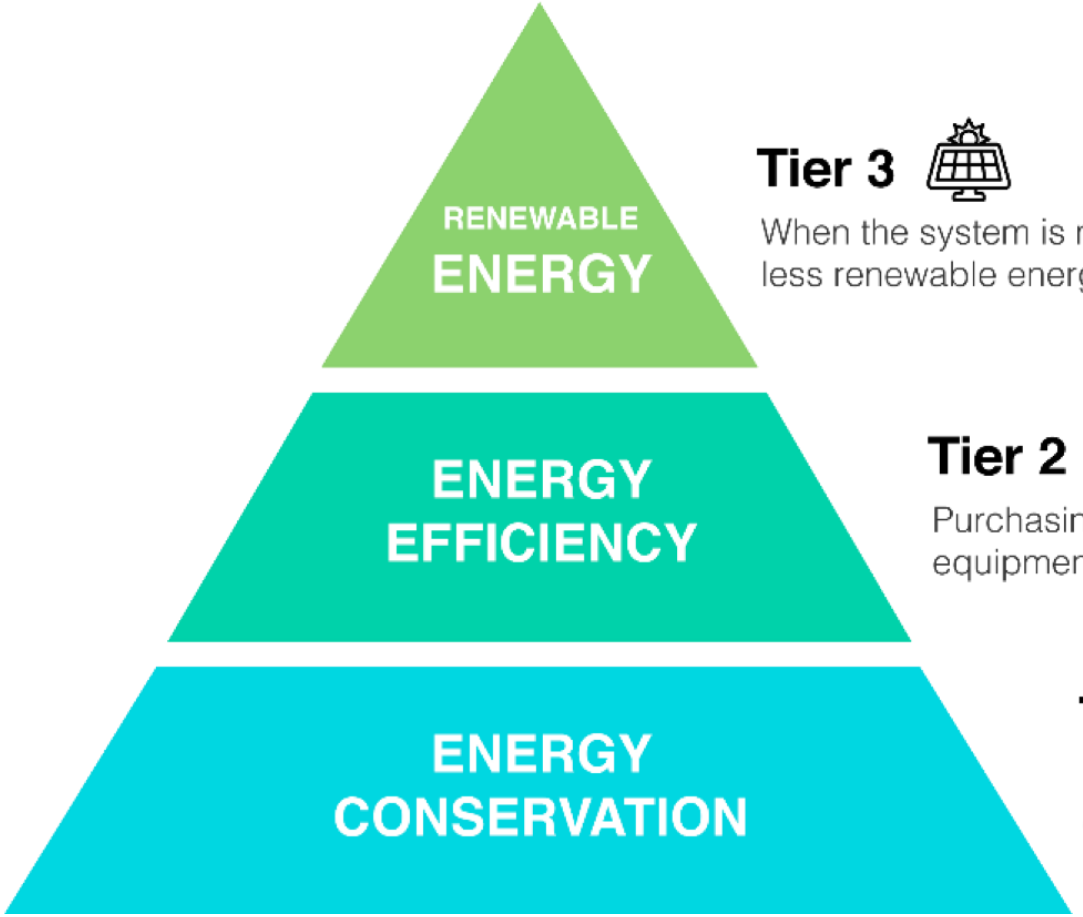
5 On-site Solar Installs this summer

OUC building new Solar Farm with approximately 900,000 solar panels

Fleet and Facilities will install 250+ kW array that integrates solar, battery storage, and EV charging

PATHWAYS TO SOLAR

STARTING WITH THE BASICS



Tier 3

When the system is modified to use efficiency, less renewable energy is needed

Tier 2

Purchasing and installing efficient equipment and processes

Tier 1

Largely based on behavioural & operational practices.
Best return on investment.

SOLAR ENERGY INNOVATION NETWORK
U.S. DEPARTMENT OF ENERGY

NREL
NATIONAL RENEWABLE ENERGY LABORATORY

U.S. DEPARTMENT OF ENERGY

WORLD RESOURCES INSTITUTE

ROCKY MOUNTAIN INSTITUTE

Strategic expert partners

TWO PATHWAYS TOWARD EXPANDING SOLAR:

1. ON-SITE INSTALLATION
2. COMMUNITY SUBSCRIPTION

SOLAR ANALYSIS OVERVIEW

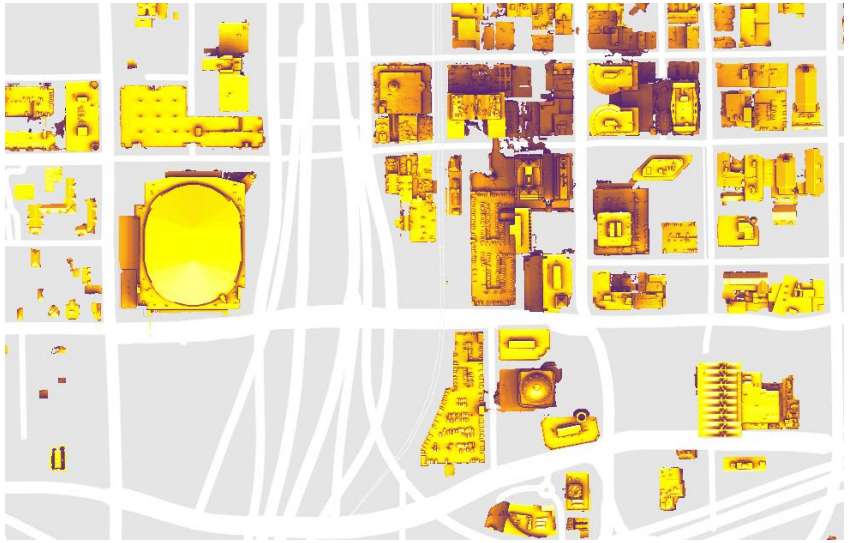
As part of the Solar Energy Innovation Network, NREL has used the tool REopt to evaluate the techno-economic potential PV and storage at 14 buildings in the City of Orlando.

This screening should be treated as an initial step to prioritize and focus additional, in-depth analysis of potential renewable energy projects.

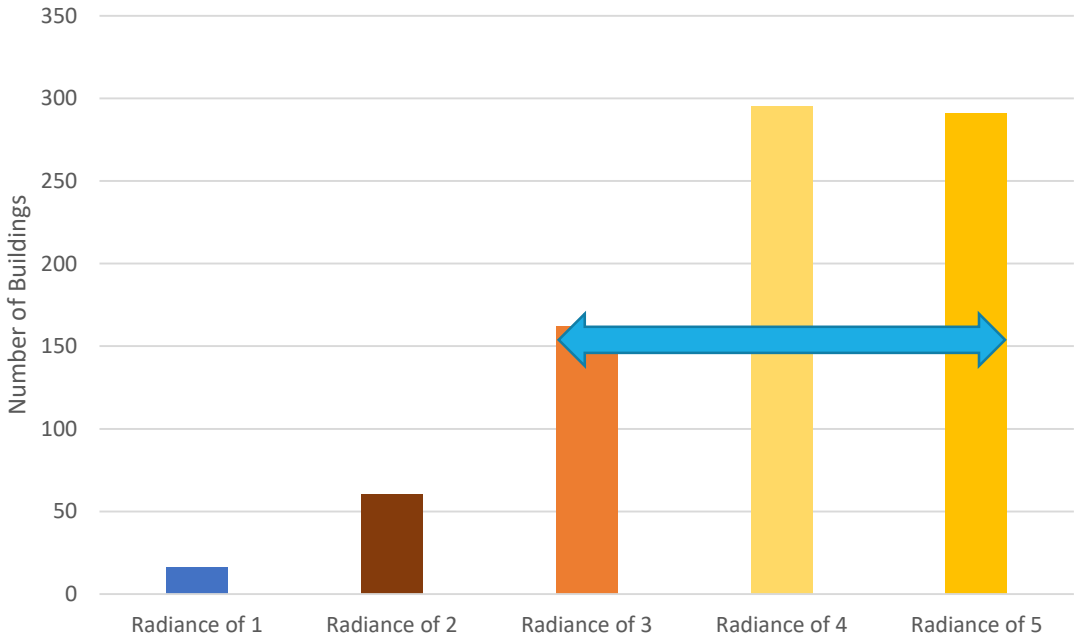
These results follow from a preliminary screening based on feedback on analysis assumptions from the City of Orlando.

REopt
Renewable Energy Integration and Optimization

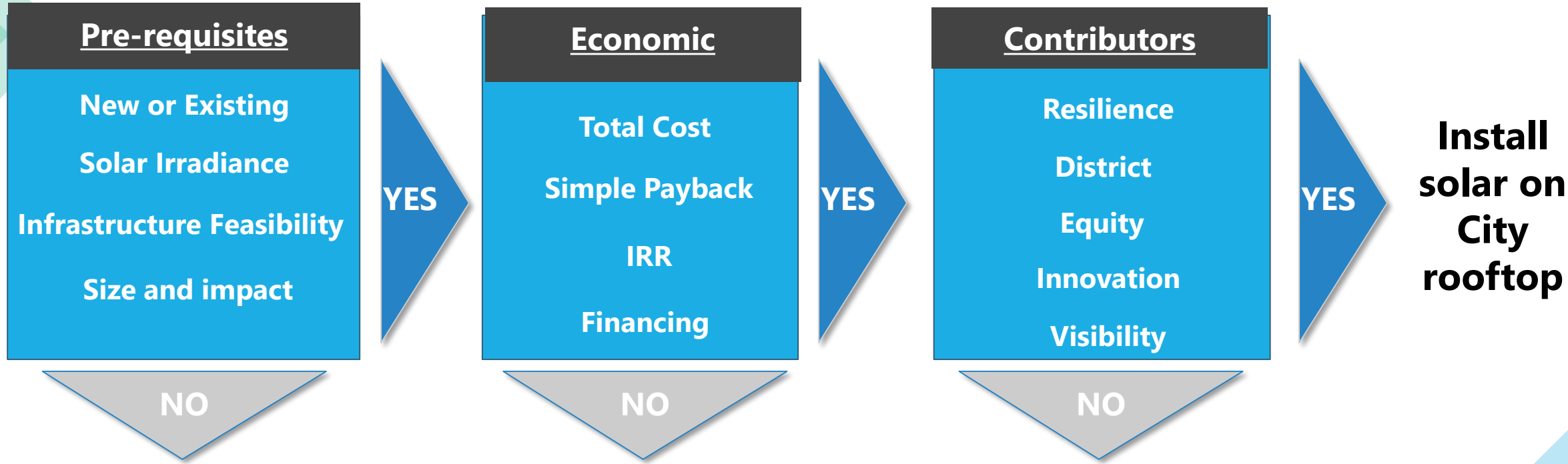
ORLANDO MUNICIPAL ROOFTOP POTENTIAL



748 Suitable Buildings with over 35 MWs solar generation capacity



EVALUATION PROCESS



Subscribe to OUCommunity solar

Are their any other priorities that you can think of in making the decision?

PROCUREMENT

Tools in the Toolbox

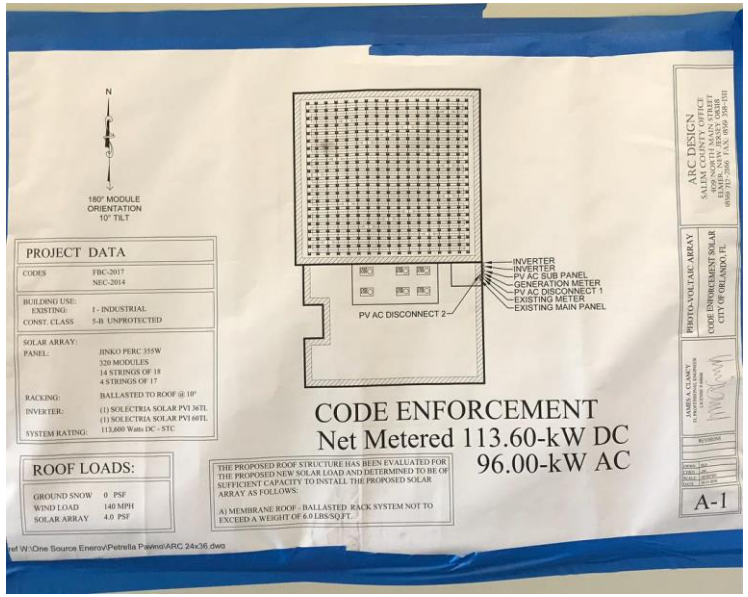
- **Term Contracts-** Budget limited - Quicker
  - **Professional Services- Arch/Eng.**
  - **Job Order Contractors (J.O.C.)**

- **Competitive Solicitation-**
  - **IFB- Invitation for Bid- (2-3 Months)**
    - **Lowest price wins**
  - **RFP- Request for Proposals (3-4 Months)**
    - **Multiple scoring criteria**

CASE STUDIES

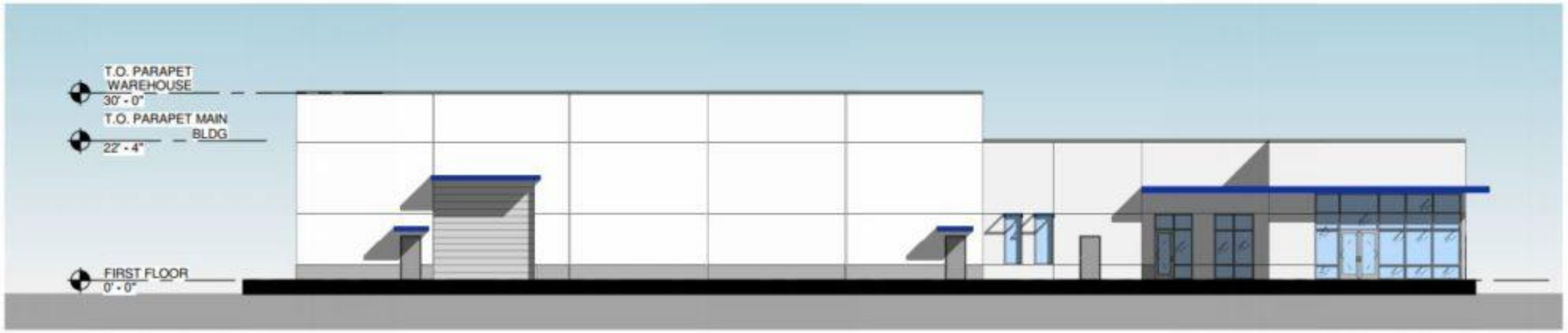
Code Enforcement and Public Records facility

- 22,500 SF office warehouse for code enforcement field inspectors
- 114 KW solar PV
- First Net-Zero *(-ish)* energy facility for Orlando
- $112,000 net savings over the lifetime

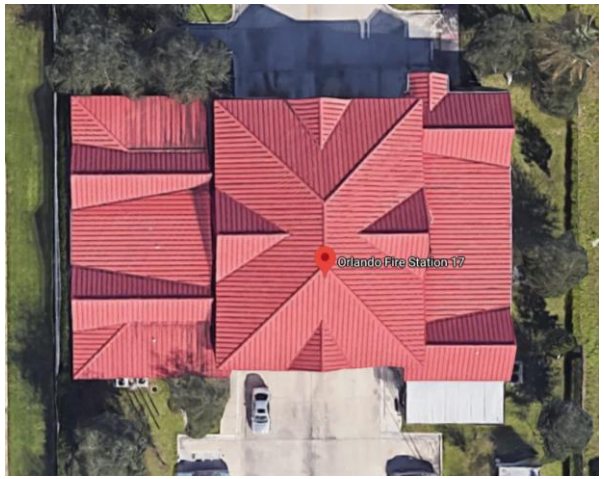


Code Enforcement and Public Records facility

2 A3 SOUTH ELEVATION
1/16" = 1'-0"



1 A3 WEST ELEVATION
1/16" = 1'-0"



2020 ON-SITE SOLAR PROJECTS

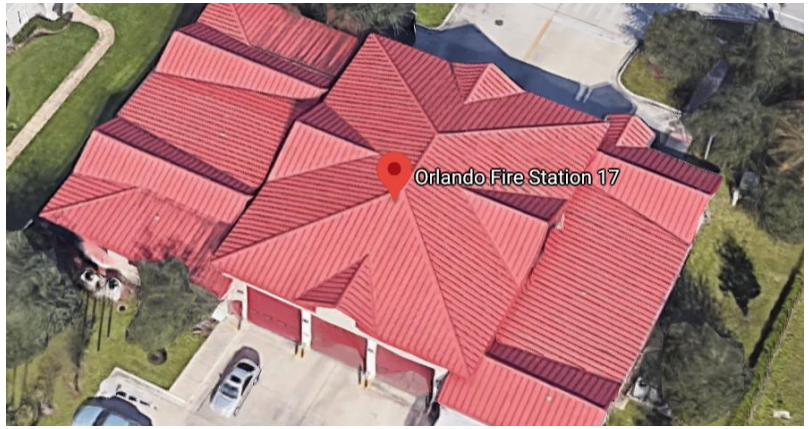
On-site solar projects in process:

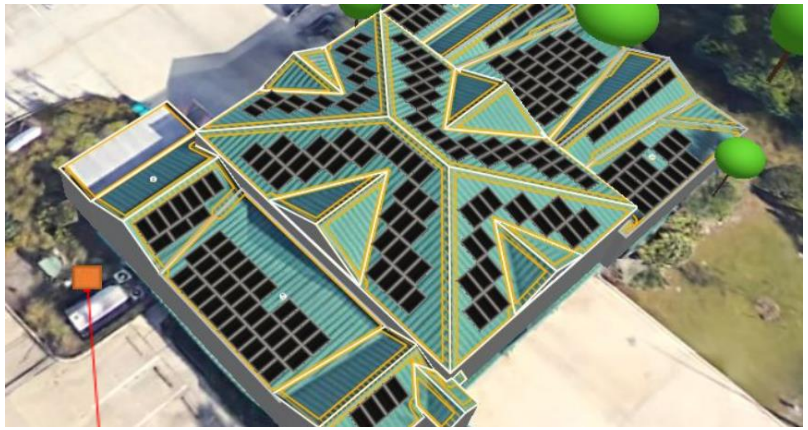
3 Fire Stations

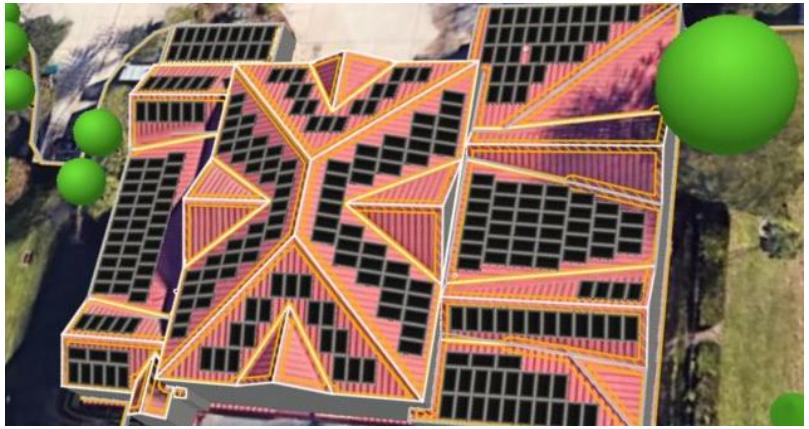
Community Center

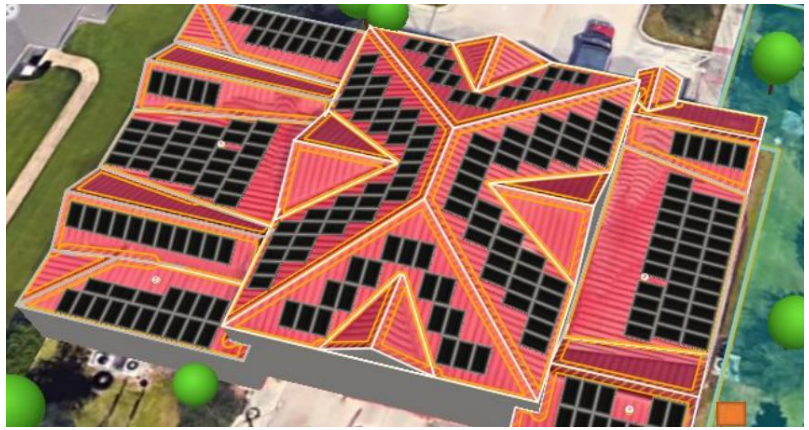
Emergency Operations Center

Located in each community, serving over **110 Sq.** miles throughout the City of Orlando jurisdiction









Fire Station 16: 223 modules of 71.36KW

Fire Station 17: 239 modules of 76.48KW

Fire Station 7: 291 modules of 93.57KW

FIRE STATIONS ON-SITE PROJECTS

LESSONS LEARNED

LESSONS LEARNED

1. Modeling of PV systems should incorporate actual, site specific information and minimize the use of generic assumptions to ensure the system's actual performance closely reflects modeled performance. Software is good- boots on ground is better

2. Coordinate with your organization's IT Department to identify internet security protocol and restrictions; ensure this information is included in the RFP. (Secure) 'Smart Inverters'

3. Identify actual roof mounting area during PV system modeling. Total 'usable' roof area can be significantly reduced when installing on multi-faceted roof planes if the system was modeled using a flat, single face roof; this can greatly reduce the system's total RE production and negatively affect the payback period. Note Code Clearances!

4. Ensure the solar panel type used during modeling is consistent with the solar panel being used during instillation; panel wattage, efficiency and cell count affect the system's RE production.

5. Optimal PV panel instillation angle should be modeled to insure maximum RE production. The Rocky Mountain Institute (RMI) provides assistance on determining optimal panel tilt angles to maximize RE production.

THANK YOU

Ian L. LaHiff, P.E. LEED AP

Poll # 4

What did you learn from this partner example?

Expert Insights – Higher Education

Jesse Warren

Sustainability Program Manager – Buildings & Operations
University of Virginia

Submit questions
www.slido.com event code **#BBSummit, Room – Solar Process Workshop**

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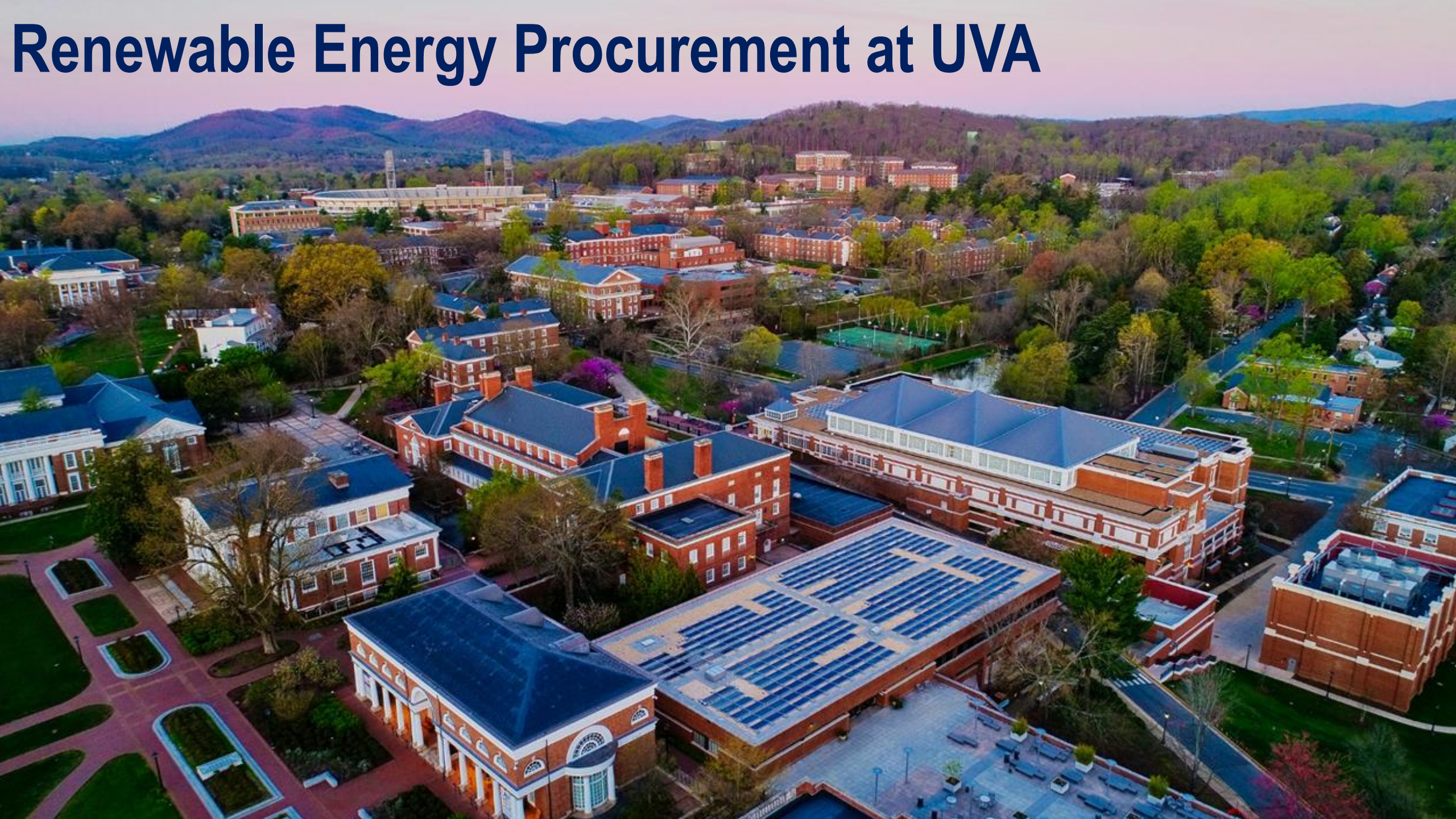
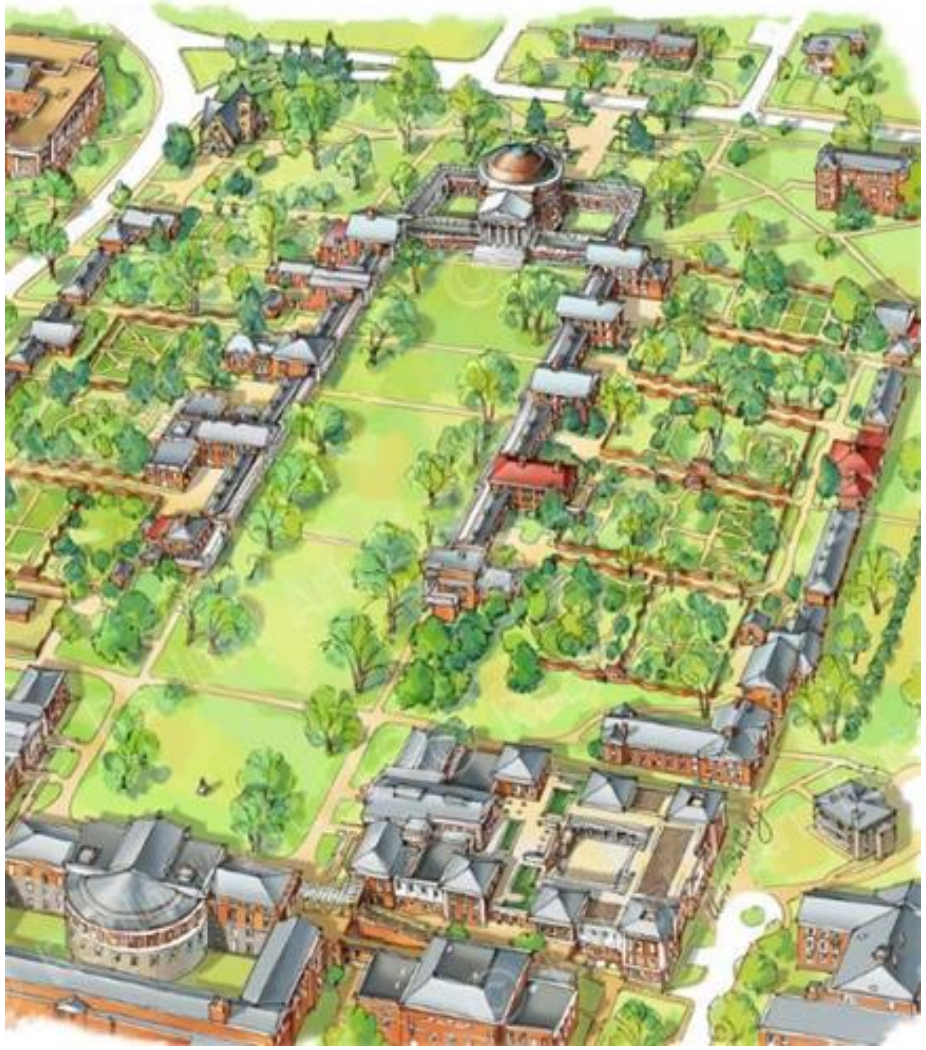
Renewable Energy Procurement at UVA

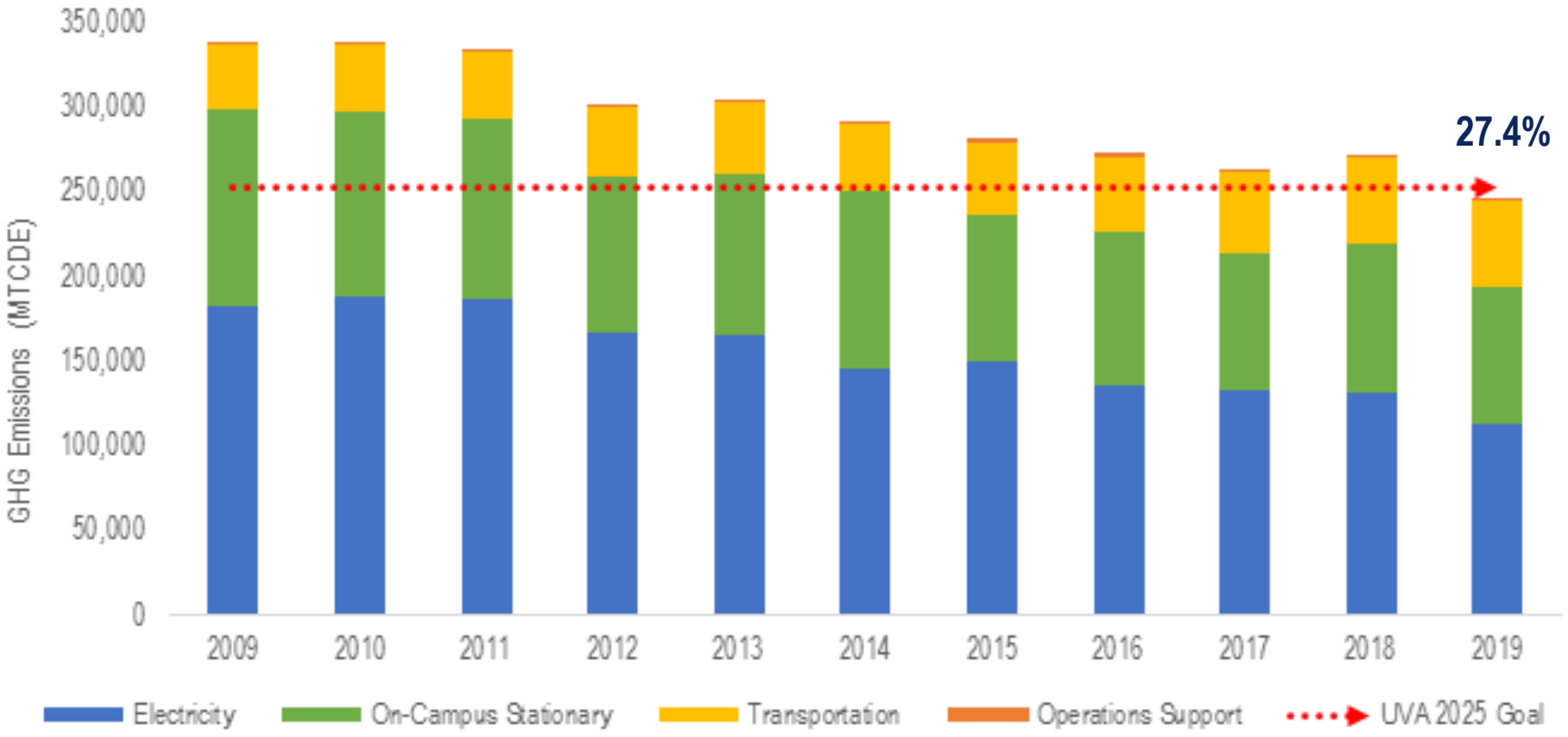


UVA at Glance



- 550+ buildings
- 16.5+ million square feet
- 16,000+ undergrad, 7,800 grad students
- 17,000+ academic faculty and staff
- 12 schools
- 1600+ acres
- UNESCO World Heritage site
- R1: Doctoral University (Very high research activity)
- Health System – 600+ bed hospital, trauma center, 920,000+ outpatient visits

First GHG Goal Reached



UVA GHG emissions by source (MTCDE), 2009-2019

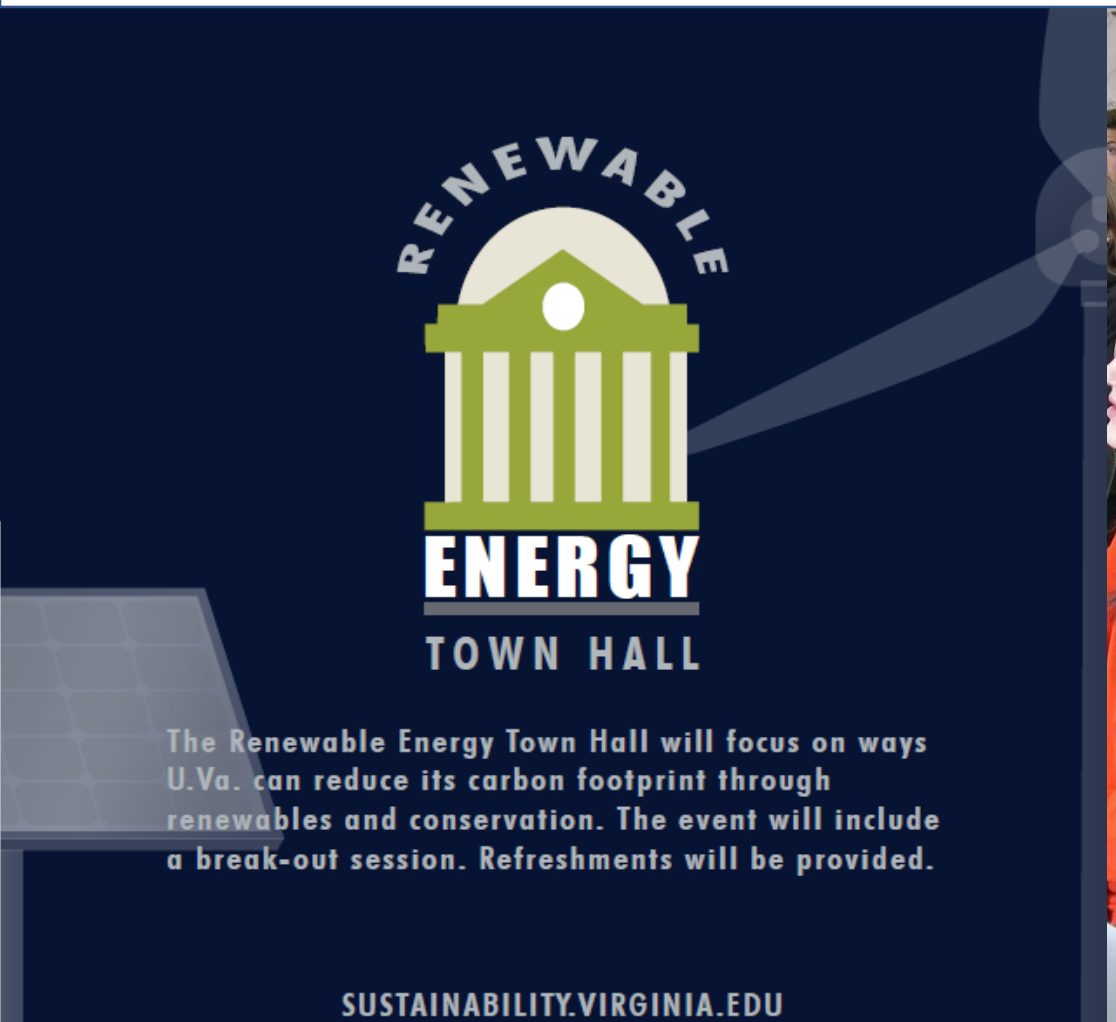
Goal: Reduce emissions 25% below 2009 levels by 2025

2019: UVA achieved and exceeded its first greenhouse gas reduction goal six years early

Stakeholder Process

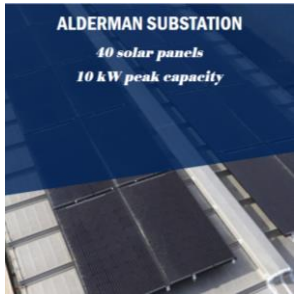
Key Project Stakeholders: Office for the Architect, Senior VP for Operations, Chief Operating Officer, UVA Committee on Sustainability, Board of Visitors, General Counsel, Office for Sustainability, Dominion Energy

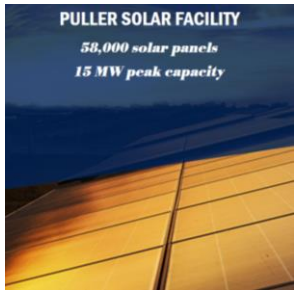
General Stakeholders: Students, rate payers, faculty, staff, patients, community

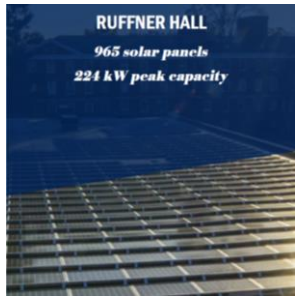


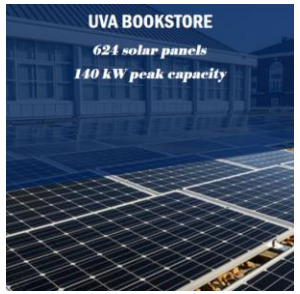
Three “Deliveries” of Solar at UVA

1. On Grounds – Roof Lease
2. On Grounds – Owned and Operated
3. Off Grounds – Power Purchase Agreement



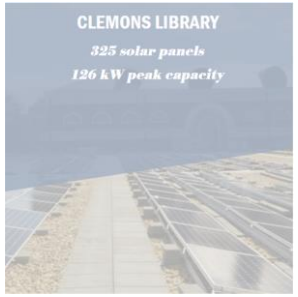


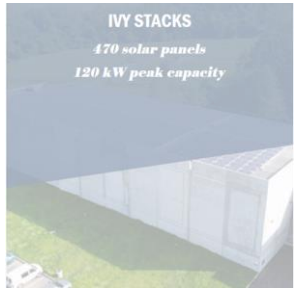


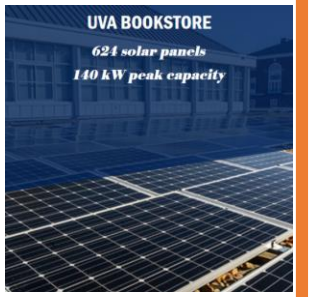


1. On Grounds – Roof Lease

- UVA leased key roofs to Dominion Energy to “test” solar on Grounds
- UVA is paid annually for the roof space
- UVA does not receive environmental attributes (i.e. Dominion keeps the Renewable Energy Certificates (RECs))
- Generated electricity feeds directly to Dominion’s side of the grid
- “Greens” the grid for everyone

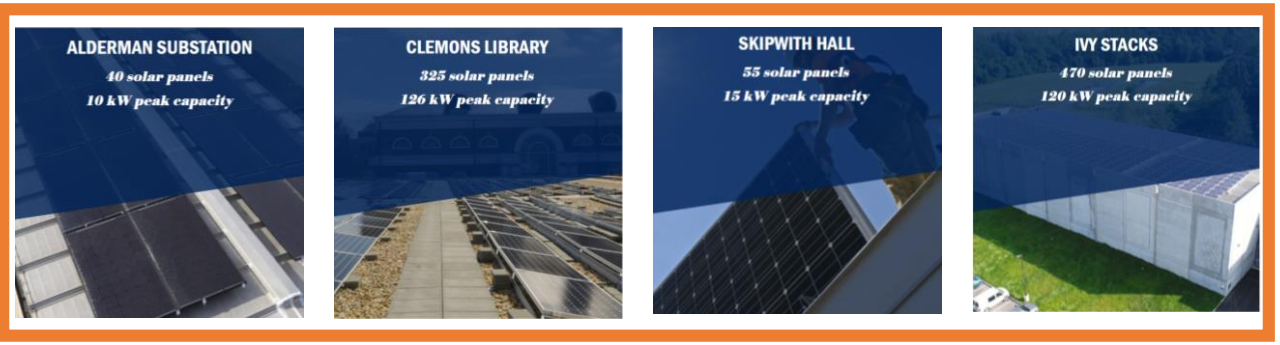






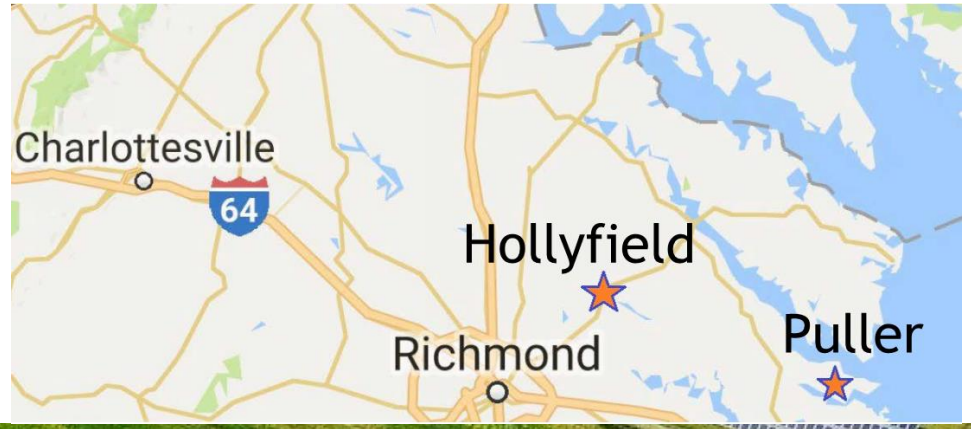
2. On Grounds – Owned and Operated

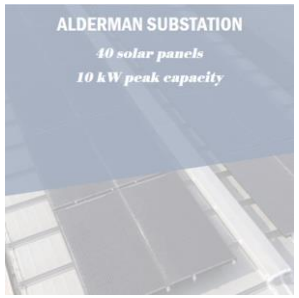
- Largest upfront cost for UVA
- Generates “free” energy for life of the system
- As a non-profit, UVA cannot realize the federal tax incentives
- Reduces grid electricity consumption at the building level
- UVA receives all environmental attributes

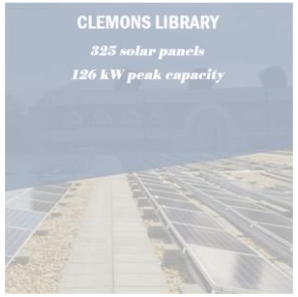


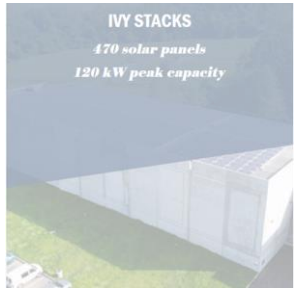
3. Off Grounds – Power Purchase Agreement

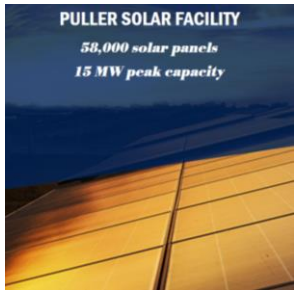
- Results in 20% of UVA's electricity being carbon-free
- UVA buys kWh at a fixed $/kWh rate (which escalates annually)
  - Extensively modeled the finances, testing several escalators
- 25-year agreement with Dominion Energy
- UVA sells the electricity produced into the PJM grid at the Locational Marginal Price (LMP)
- 50x size of all On Grounds solar
- UVA receives all environmental attributes

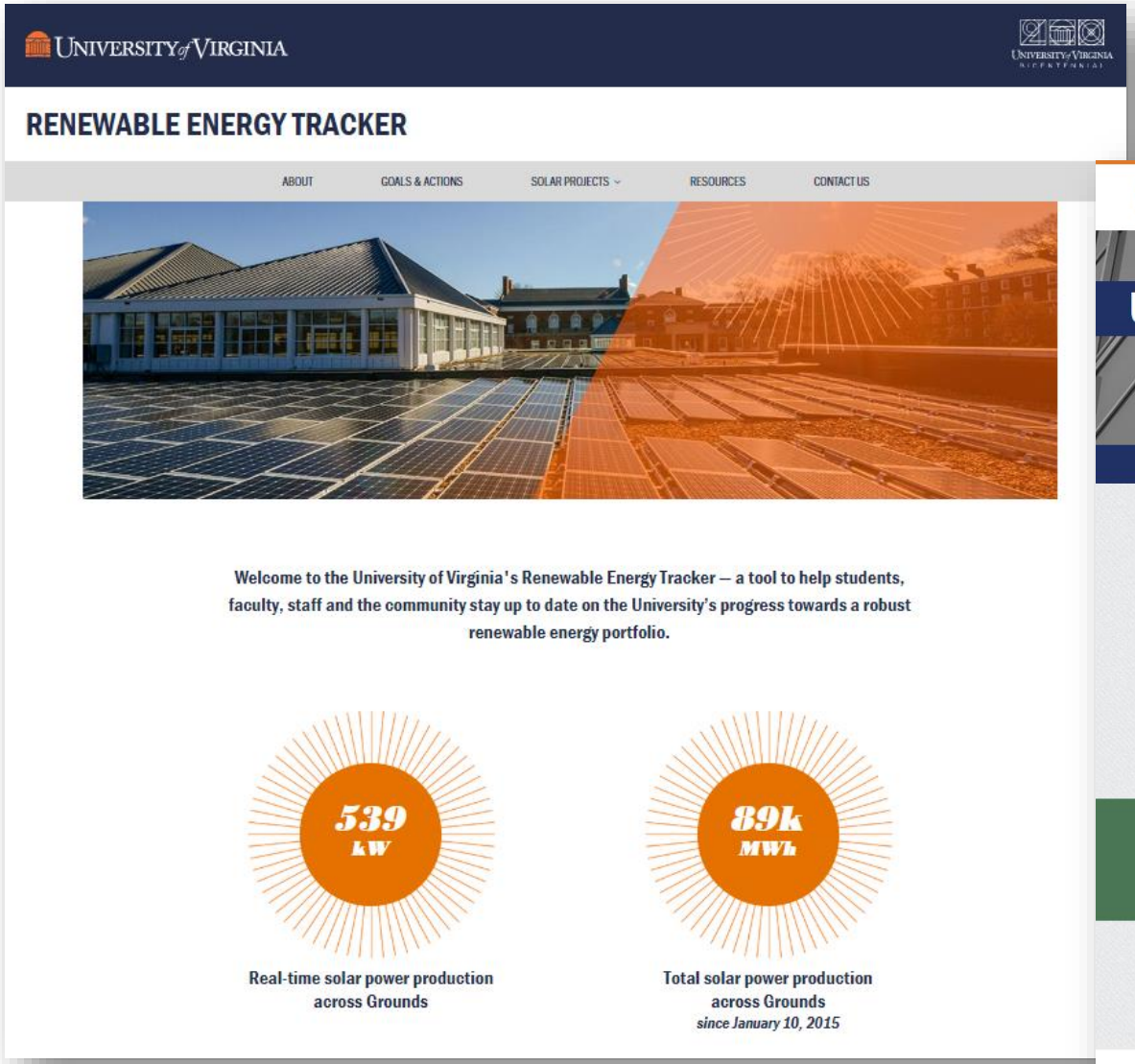






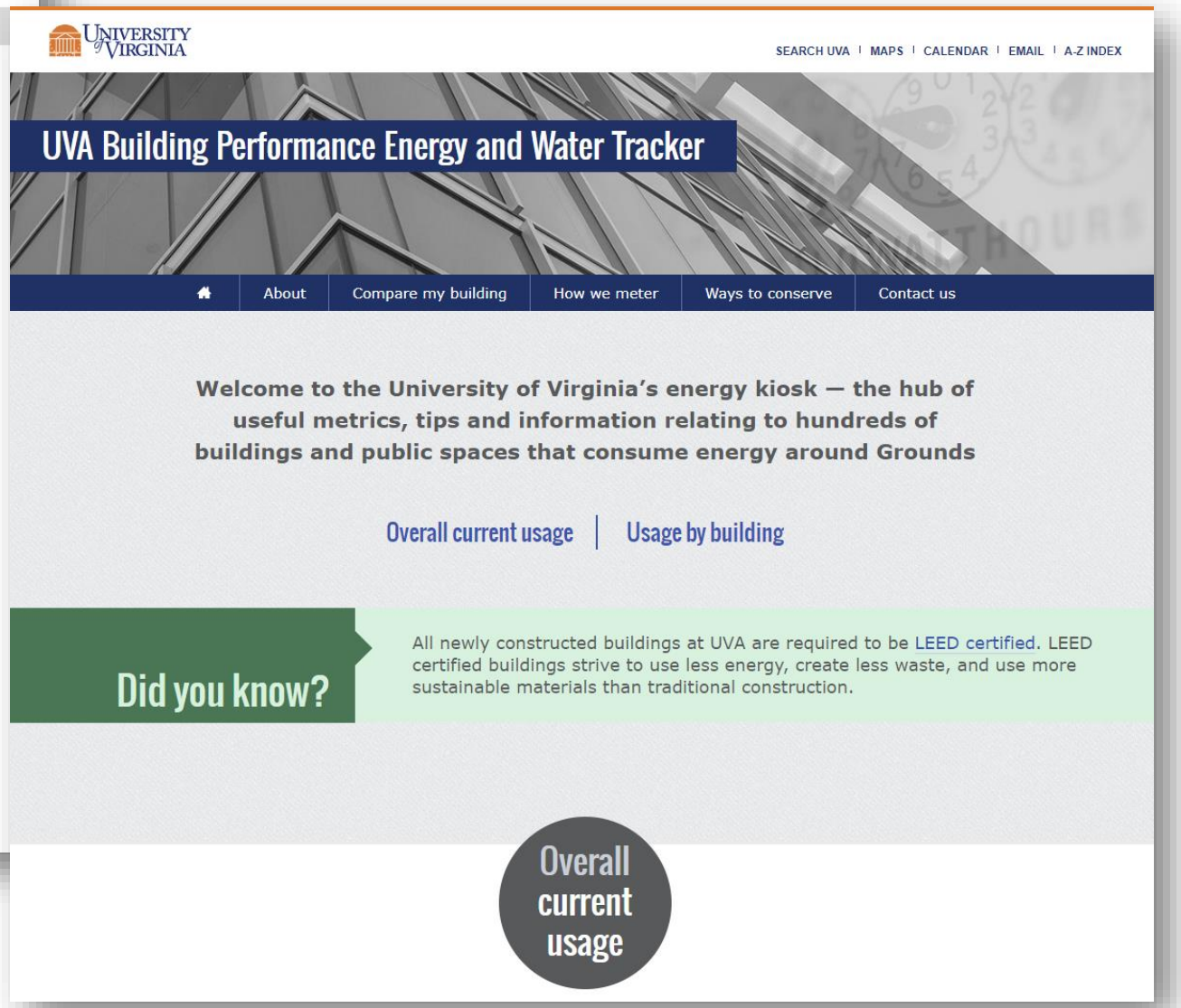






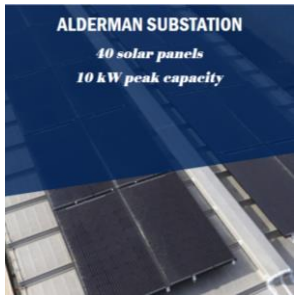
https://renewableenergy.fm.virginia.edu/

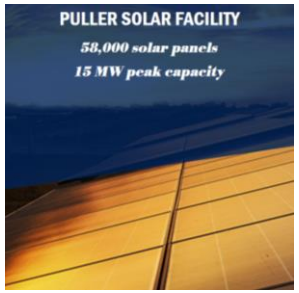
https://energytracker.fm.virginia.edu/

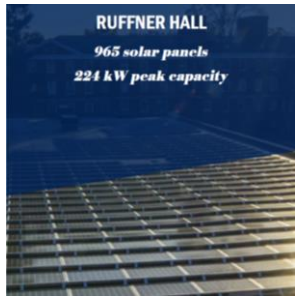


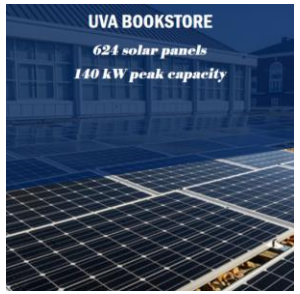
Lessons Learned/Best Practices

- Prioritize efforts to reduce energy: energy efficiency > on-site solar > off-site solar
- Retain environmental attributes of solar installations
- Identify existing partners to move more quickly
- Engage broad group of stakeholders
- Engage community adjacent to off-site solar projects and vet sites prior to agreements
- Negotiate the lowest possible cost escalator for power purchase agreements (PPAs)
- Be creative – leftover solar panels were used for Alderman substation installation









UVA SUSTAINABILITY FRAMEWORK

STEWARD our resources on Grounds and beyond by living our values through our actions and operations

ENGAGE in our community, serve our community, and build sustainability awareness

DISCOVER new solutions to global challenges through research, curriculum, and using the Grounds as a learning tool

2020-2030 GOALS

Serving our Community & the Environment

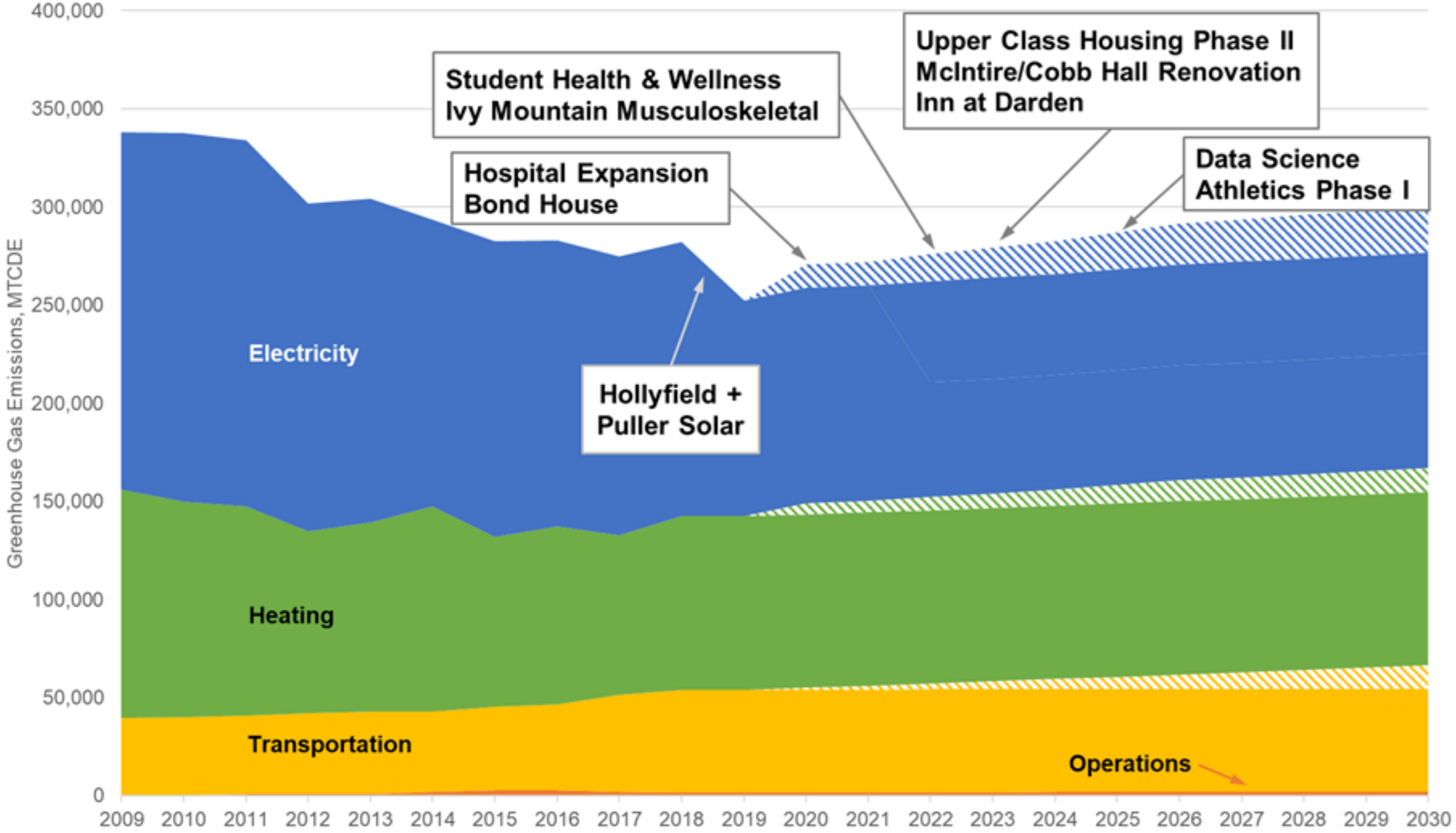
1. Be carbon neutral by 2030 and fossil fuel free by 2050

2. Achieve the “30 by 30” goals by 2030 (relative to 2010 levels)
   - Reduce water use and reactive nitrogen losses by 30%
   - Reduce our waste footprint to 30%
   - Increase sustainable food purchases to 30% by 2030

3. Partner with our community to accelerate collaborative initiatives to advance sustainable, equitable, and healthy places for all

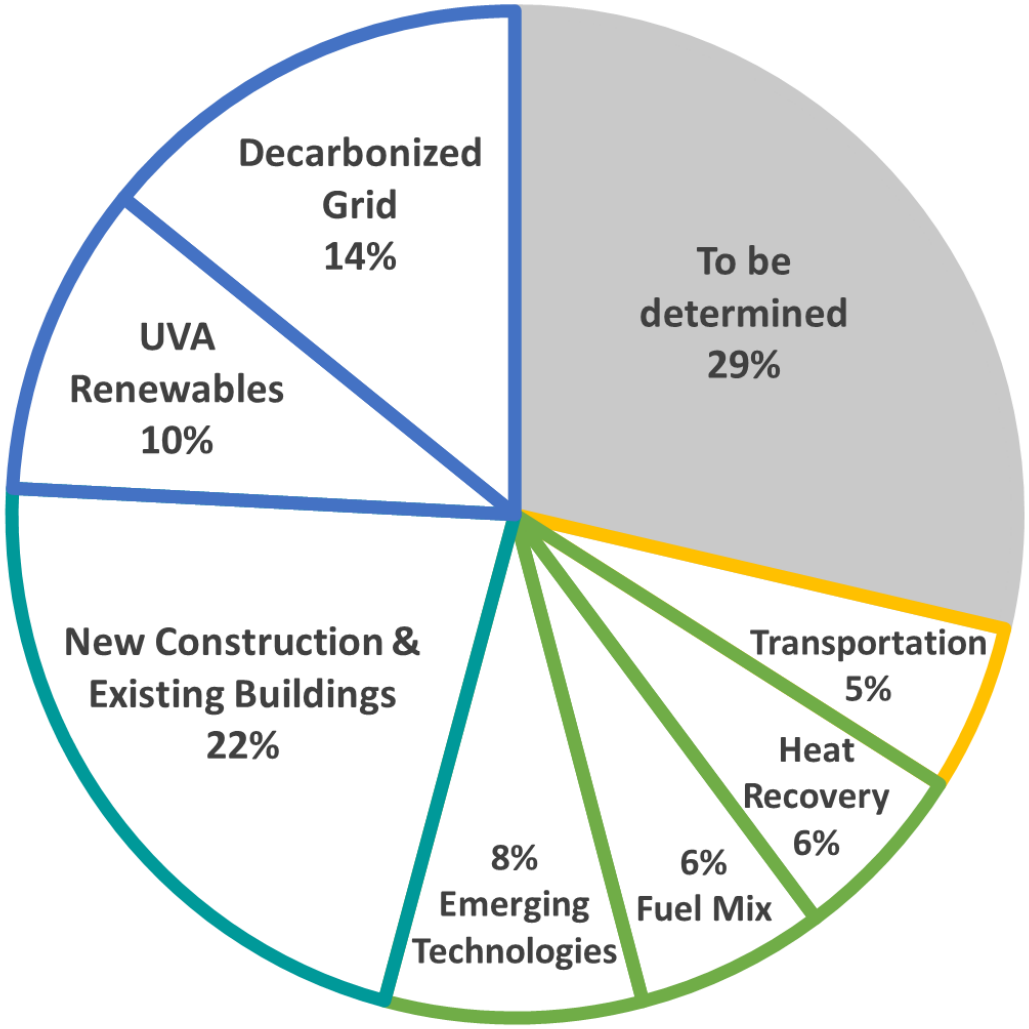
4. Enhance sustainability-focused research and curriculum

UVA Greenhouse Gas 2030 Emissions Projections



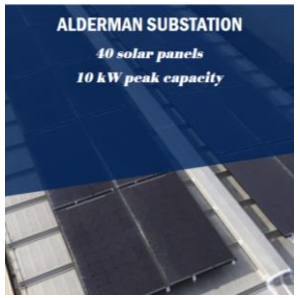
STEWARD - Living Our Values

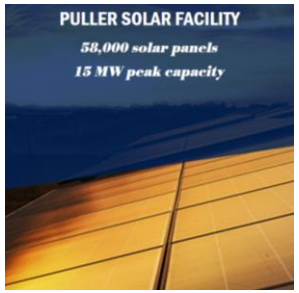
2030 Emissions Reduction Strategies

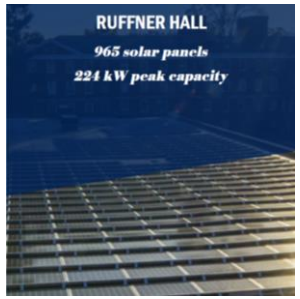


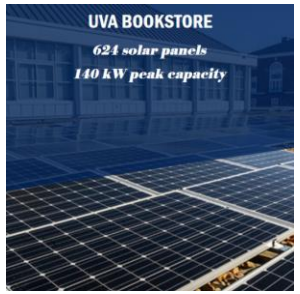
What's next?

- Virginia state renewable energy deal with Dominion (30% renewable power by 2022)
- Power Purchase Agreements (PPAs)
  - On Grounds PPAs could result in instant savings (for now)
- More off-site renewable energy
- More robust community engagement
- More teaching and engagement opportunities for students









CLIMATE ACTION TOGETHER

ADVANCING CLIMATE ACTION IN CHARLOTTESVILLE-ALBEMARLE-UVA

climateactiontogether.org

Poll # 5

What did you learn from this partner example?

Toolbox for Renewable Energy Project Development

- Online searchable database of project development resources assembled by DOE, EPA and NREL
- Includes guidance, templates, tools and information for each step of the project development process
- https://www.epa.gov/repowertoolbox
- Home page link to the EPA Local Government Project Portal

Project Development Resources

Solar Project Development Resource List

EPA's Renewable Energy Project Development Resource Directory

- Toolbox for Renewable Energy Project Development
  https://www.epa.gov/repowertoolbox/renewable-energy-project-development-resource-directory

Solar Policy

- Database of State Incentives for Renewables and Efficiency (DSIRE)
  https://www.dsireusa.org/
- Utility Rate Database
  https://openei.org/wiki/Utility_Rate_Database
- Solar Interconnection Standards and Policies
  https://www.epa.gov/repowertoolbox/solar-interconnection-standards-policies
- Electricity Market Frameworks & Policies
  https://www.epa.gov/repowertoolbox/understanding-electricity-market-frameworks-policies

Renewable Energy Certificates

- What is a Renewable Energy Certificate (REC)?
  https://www.epa.gov/greenpower/renewable-energy-certificates-recs
- Video: How do RECs work?
  http://www.youtube.com/watch?v=_12VYXms6-c
- Renewable Electricity: How do you know you are using it?
  http://www.nrel.gov/docs/fy15osti/64558.pdf
- Legal Basis of RECs
  http://resource-solutions.org/site/wp-content/uploads/2015/07/The-Legal-Basis-for-RECs.pdf
- What is REC Arbitrage
  https://www.epa.gov/sites/production/files/2017-09/documents/gpp-rec-arbitrage.pdf
- What's the difference between RECs and Offsets?
  https://www.epa.gov/greenpower/offsets-and-recs-whats-difference
- Renewable Energy Certificate Monetization
  https://www.epa.gov/repowertoolbox/renewable-energy-certificate-monetization

Solar Project Operations & Maintenance Considerations

- Solar PV O&M Standards and Best Practices
  http://energy.sandia.gov/wp-content/gallery/uploads/SAND2014_19432.pdf

www.epa.gov/greenpower

Last updated: 02/20/2020

- Resources for each of the six solar project development steps
  1. Goals and Project Outcomes
  2. Site Identification and Data Collection
  3. Site Feasibility Assessment tools
  4. Solar Financing Resources
  5. Solar RFP Guidance, Templates and Best Practice Resources
  6. Assessing Solar Project Proposals
- Solar Policy
- Renewable Energy Certificates
- Solar Project O&M resources
- Solar claims and considerations
- GHG guidance resources

Download: https://www.epa.gov/sites/production/files/2020-06/documents/1.0b-solar-project-development-resource-list.pdf

Questions?

Submit questions
www.slido.com event code **#BBSummit, Room – Solar Process Workshop**

Better Buildings Solution Center

More than 2,500 solutions are available publicly in the Better Buildings Solution Center

Showcase Projects:

- Large and small buildings
- All sectors
- Specific building types such as schools, hospitals, hotels, grocery stores, universities, civic centers, libraries, offices and labs

Implementation Models (Playbooks):

- Overcome barriers: finance, data, energy management, staff training, community and customer outreach, partnering with utilities, and more
- Multi-faceted and applicable across sectors

Additional Resources, Toolkits, Case Studies

energy.gov/bbsc

Better Buildings: Summer Webinar Series

BEHIND THE METER DISTRIBUTED ENERGY RESOURCES:
BEST PRACTICES FOR INTEGRATING DERS INTO COMMERCIAL BUILDINGS

July 8

NEXT-GENERATION BUILDING PERFORMANCE POLICIES:
MAXIMIZING ENERGY SAVINGS AND ENVIRONMENTAL IMPACTS

July 16

EVERYONE HAS A DATA CENTER:
HOW TO BE AN ENERGY CHAMPION FOR YOURS

July 28

PROGRAM DESIGN WITH EVERYONE IN MIND:
LOW-INCOME SOLAR PROGRAM STRATEGIES

July 9

STRATEGIES TO COMBINE ENERGY + HEALTH UPGRADES IN MULTIFAMILY HOUSING

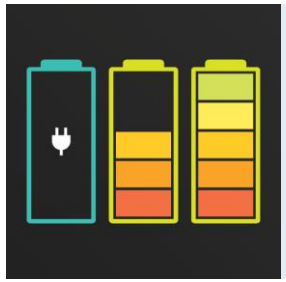
July 21

SUCCEED WITH SUBMETERING:
HOW TO MAKE THE BUSINESS CASE

August 4

THE DYNAMIC DUO:
UNLEASH PUBLIC SECTOR ENERGY SAVINGS WITH FINANCING AND TECHNICAL ASSISTANCE

July 14



CASE IN POINT:
OREGON'S RECENT EFFORTS TO REDUCE PLUG LOAD ENERGY CONSUMPTION

July 22

REGISTER NOW

Additional Questions?

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Better Buildings Solution Center
https://betterbuildingssolutioncenter.energy.gov/

General Inquiries
BetterBuildings@retechadvisors.com

Program Support
ksanderson@retechadvisors.com

James Critchfield
U.S Environmental Protection Agency
Critchfield.James@epa.gov

Ian Lahiff
City of Orlando
Ian.Lahiff@Orlando.gov

Jesse Warren
University of Virginia
jmw4ub@virginia.edu