



# Solar on Public Facilities

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*Presented by*

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# Background

## 1) Renewable Energy

- 100% Renewable for County internal operations by 2030
- 100% Renewable for all of Buncombe County by 2042

2) Renewable Roadmap recommends aggregated solar RFP as a means of achieving our goal. County will collaborate with City, AB Tech and School Systems.



# Facility Analysis

- Staff level collaboration to identify and assess potential facilities/land
  - Work with General Services, Facilities and Maintenance staff to vet potential for solar
  - Key Indicators: roof (type, condition, age/warranty), shade, orientation, energy intensity, interconnection challenges, etc.
- Structural Engineering Assessment
- Preliminary solar design and energy impact
- Financial Impact – budget estimates, return on investment



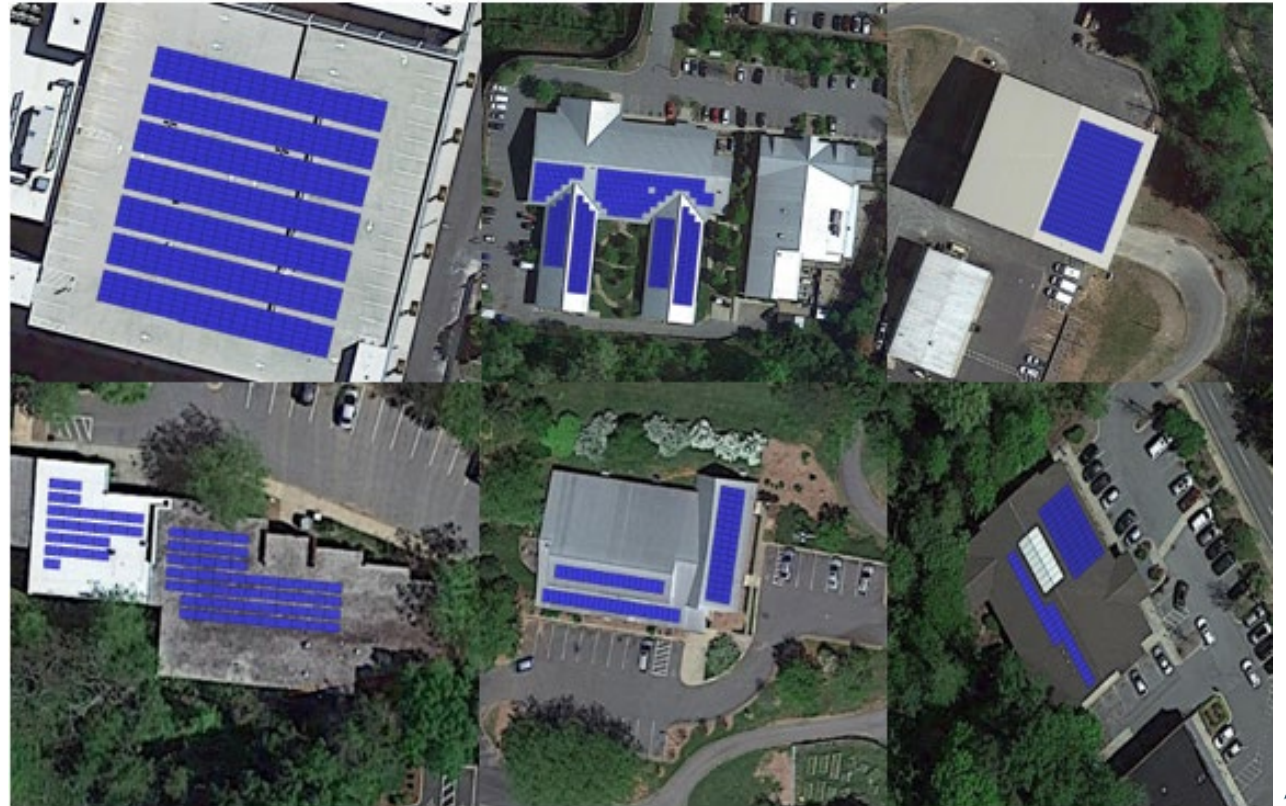
# Partner Sites

- City of Asheville: completed preliminary analysis
  - 10 Sites
  - 1.1 MW Total Capacity
- AB Tech: has requested analysis of 8 potential solar sites
- ACS and BCS have requested analysis of several school facilities



# Results of County Facility Analysis

1. West AVL Library
2. South Buncombe Library
3. Tax Office
4. HHS BLDG and Garage
5. College St. Parking Deck
6. 35 Woodfin (Tied to Deck)
7. Public Safety Classroom
8. Public Safety Training Apparatus
9. Fairview Library
10. Leicester Library
11. North AVL Library
12. Transfer Station
13. Animal Shelter
14. BCAT Training Center



# Preliminary Budgets

<u>County Facility</u>	<u>System Size (KWdc)</u>	<u>Est. Budget</u>
BCAT Training	31	\$70,211
West AVL Library	31	\$73,973
North AVL Library	32	\$74,483
Leicester Library	33	\$74,874
Fairview Library	35	\$79,874
S. Buncombe Library	36	\$82,119
Tax Office	36	\$84,560
Public Safety Apparatus	72	\$139,242
Transfer Station	108	\$209,274
164 College St. (Deck)**	69	\$221,100
Public Safety Classroom	138	\$251,072
Animal Shelter	182	\$313,470
35 Woodfin**	173	\$521,322
HHS Garage**	243	\$728,915
<b>TOTALS</b>	<b>1.2 MW</b>	<b>\$2,924,489</b>





# Solar on County Facilities RFP Outline

- Requests bids for solar construction on public facilities and land
- Bid estimates will be “turnkey solutions”- includes cost of installation, operation, and maintenance
- Option to implement award in multiple phases
- Include request for alternate construction plans or additional options for installation or energy storage, etc.
- Requests purchasing options – lease vs. own
- Requests financing options- private financing vs. installer financing
- Requires payment and performance bonds
- Expectation of 30 year useful life of the solar installations



# Next Steps to Complete RFP

- Complete Analysis for school systems
- Confirm any additional partners – site analysis as needed
- Refine RFP language
  - Using industry standard templates
  - Collaborating with City/County Purchasing staff





# RFP Timeline

- November 2019- BOC presentation- approval of RFP
- December 2019 - Complete all site analysis
- January 2020 – Issuance of RFP
- March 2020 – BOC presentation of recommended bid; contract negotiations
- Spring 2020 - Site construction begins



# Questions?



# Potential Solar Site in Swannanoa

- Reviewing potential for utility scale solar
- Initial letter of inquiry sent to site owner; interest expressed
- Requested a site visit for further evaluation
- Large property with moderate topography near a substation
- Superfund site with no future development plans

