

Solar Workgroup for Solar Development in Southwest Virginia

November 15, 2016

Meeting Summary

The second in a series of meetings of a Solar Workgroup around Solar Development in Southwest Virginia was held on November 15, 2016 at the Inn at Wise. The first meeting was held on October 4th, 2016, and was a scoping meeting to identify hopes, opportunities, challenges and next steps for solar development in SWVA. Christine Gyovai of Dialogue + Design Associates facilitated the meeting, which was co-convened by Appalachian Voices, People Inc. and UVa-Wise. Meeting participants, listed at the end of the summary, discussed their hopes around solar development, action ideas, and next steps for the Solar Workgroup. Two presentations were shared during the meeting about Solarize Abingdon and SPARC-E – Mountain Empire Community College’s mobile solar unit. A summary of the meeting is below, with **action items and next steps** outlined on pages 3-6 of the summary.

At the beginning of the meeting, Becki Joyce and Bryan Phipps welcomed participants to the meeting. Christine then reviewed the agenda and meeting guidelines, which included: cell phones on silent; acronym alert (spell out acronyms the first time they are used); all ideas are welcome; please be a poet not a novelist (be mindful to not take too long when speaking) and use “ditto” to share that you appreciated / agree with what another person has noted. Meeting participants then shared their names, affiliations, and hopes or goals for solar development in SWVA, which included:

Hopes or Goals for Solar Development in SWVA

- Jobs
- Boost economy
- SWVA should be a contributor to Virginia’s Energy Plan
- Collaboration for change and growth
- Develop a wide range of smaller projects
- Solar projects are built!
- Build community wealth
- Share resources
- Move SWVA forward
- Diversify the economy and region’s energy
- Embrace modernity with GUSTO!
- Create a foundation for new energy
- Job growth – commercial and residential scales
- Build awareness
- Make a Solarize Wise program for the region
- Develop commercial scale projects in the region
- Solar is widely embraced in the region
- Harness the potential of solar!

Christine also provided a recap of the October 4th scoping meeting highlights (a copy of the October 4 meeting summary is available at this [link](https://www.dropbox.com/s/myja1ktp0kb1bfa/SWVA_Oct4_Solar_meeting_summary.pdf?dl=0)¹.) Adam Wells then discussed the purpose of the meeting, the Solar Workgroup, and shared information about a POWER Technical Assistance grant that was submitted in the fall 2016 to assist with the ongoing work of the Solar Workgroup.

¹ https://www.dropbox.com/s/myja1ktp0kb1bfa/SWVA_Oct4_Solar_meeting_summary.pdf?dl=0

Solar Presentations

After Adam's overview, Steve Owen then shared a presentation with background information about solar and solar possibilities in SWVA (available at this [link](#)²). The presentation reflected background information that participants received in advance of the meeting, which is also available at this [link](#)³). A presentation was then given by Lydia Graves, Rick Statzer, and Sarita Moore around Solarize Abingdon, which is available at this [link](#)⁴. Questions from participants about Solarize Abingdon included:

- What was the cost per watt of the solar installations? The response was that the cost was approximately \$3.00 per watt, which was lower than some standard solar pricing as installers could purchase materials in bulk through the group purchasing the Solarize Abingdon program provided.
- Who were the installers? Information about who the installers were is available at this website: <http://www.solarizeabingdon.org/installers/>
- Meeting participants also expressed an interest in having an installer present at a Solar Workgroup meeting to be able to share more specific information about solar.

Bryce Shular and Roger Green, both of Mountain Empire Community College, then gave an overview of SPARC-E (Solar-Powered Alternative Renewable Clean Energy) mobile solar unit, which showcases an off-the-grid solar power system, which they brought to the meeting location. Meeting participants were able to view the unit in person and discuss specific questions about solar and how the system functions. Additional information about SPARC-E is available at this website: www.mecc.edu/2015/11/mecc-students-develop-southwest-virginias-first-mobile-solar-powered-energy-system/.

Solar Workgroup Focus Areas and Action Ideas

After the presentations, Christine shared four themes the Planning Team developed from the October 4th scoping meeting, and opened up an opportunity for additional themes from attendees. Meeting participants then broke into four small groups around the four focus areas to discuss action ideas, which included:

- VA Solar policies and legislation
 - a. Elected official and power company engagement (which may be a separate process)
- Solar workforce training possibilities
 - a. Especially community colleges and academic institutions
 - b. Other strategies to maximize local benefits
- Potential solar site and project identification

² <https://www.dropbox.com/s/ttacaacfg5jc420/SWVA%20solar%20pres.%2011-15-16.pptx?dl=0>

³ https://www.dropbox.com/s/r01ieo2wr190k7c/SWVA_Solar_background.pdf?dl=0

⁴ <https://www.dropbox.com/s/su1waby0vu4al49/SolarizeAbingdon.pptx?dl=0>

- a. Solarize effort
- b. Commercial scale sites
- Community education and outreach

After the small group breakout discussions, the group reconvened and each group shared their top ideas and suggestions for next steps. These ideas included:

A. Solar Policies and Legislation

1. Move forward by developing solar projects that are allowable under existing law (low hanging fruit). In particular, explore projects that would benefit from the exemptions given to IDA's.
 - a. Example: Data Center projects
 - Model that can be replicated
 - Interest in multiple counties: Wise, Duffield
 - Build on existing momentum in VA for attracting stronger data center industry
2. Engage elected officials to improve laws for solar
 - a. There are strong partnership possibilities to consider with Delegate Kilgore who chairs the House Commerce and Labor committee, which oversees energy laws.
 - b. The Solar Workgroup should be prepared to organize and push back if there are attempts to rollback provisions in the law that benefit solar development or new laws that weaken solar development.
 - c. Shepherd future momentum in Richmond around solar policies and legislation.
 - Continued engagement in policy dialogues by work group.
 - Engage with other existing tables where statewide solar policy discussions are happening.
 - Ensure SW Virginia has a voice in policy decisions in Richmond.

B. Solar Workforce Training

1. Acknowledge that workforce training must address an actual demand for jobs. Training programs for jobs that don't exist will not be attractive or valuable.
2. Identify all the job needs and skills that are associated with all aspects of solar development.
 - a. Build these skills and opportunities for solar workforce training in a systematic way.
3. Identify entrepreneurship possibilities around solar development.
4. Identify how other energy clusters or sectors have evolved around workforce training across the state (such as around auto, breweries, etc.).
5. Identify internship opportunities around different solar and renewable energy technologies and specializations.

- a. Develop a roster of certified solar installers in the region (particularly with the NABCEP certification. See this link for more information: <http://www.nabcep.org/certification/pv-installer-certification>).
6. Identify opportunities for partnership with Mountain Empire Community College's solar training program and other academic institutions, community organizations and businesses.
7. Look at the solar industry structure for additional workforce training possibilities (i.e. supply chain, value chain functions and enterprises).

C. Potential solar site and project identification

1. In Phase II, look at larger industrial solar projects in the longer-term.
2. In Phase I, develop residential, commercial and community scale solar projects (this should be the current focus of the Solar Workgroup).
 - a. Develop Ambassador projects that have strong marketing and public relations components (and that can assist with community outreach and education).
3. Identify financing options for solar project development.
 - a. Identify clear mechanisms to access capital and project financing.
4. Develop solar gardens – community solar projects that are of public benefit.
 - a. Consider economies of scale.
 - b. Look at AML sites and possible funding opportunities.
5. Create an inventory of possible sites for solar development in the seven coalfield counties of SWVA.
 - a. Use GIS to develop this inventory.
 - b. Consider schools, hospitals, and AML sites.

D. Community education and outreach

1. Identify community needs and outreach possibilities.
2. Establish a committee for identifying community outreach and education activities and projects.
3. Collaborate with colleges.
 - a. Look at hands-on activities for community outreach.
 - b. Look for opportunities with SPARC-E (at MECC).
4. Develop a Roadmap.
 - a. Engage in a region-wide Solarize project.
 - b. Identify projects.
 - c. Identify partners and next steps.

E. Additional Ideas for Action

1. Develop an inventory of the solar capacity of rooftops in the seven coalfield counties of SWVA.
 - a. Look at the Arlington, Virginia example (which has completed this).
 - b. Use GIS and LIDAR.
 - c. This should be done within 60-90 days.

- d. Next steps should involve reaching out to the GIS directors of each county about this possibility.
2. Identify the number of counties with a tax exemption for solar (where the property assessment will not increase due to solar installation).
 - a. Wise County has this exemption.
 - b. Next steps = develop a map of the Appalachian region.
 - c. Share this information.

After the four breakout groups shared their top ideas for action, the Solar Workgroup discussed overall considerations for the Workgroup for moving forward and next steps, which included the ideas below.

Overall Workgroup considerations

- Site selection is important to the community perception of solar. Sites should be able to have a community education and outreach component wherever possible.
- Engage power companies in the effort.
 - Dominion is moving forward with solar development. The other power companies are slower.
 - The utilities will want to know if solar projects will cost them revenue.
- Examine and understand the regulations around solar systems.
 - DEQ regulates solar systems that are under 20 megawatts (mW).
 - SCC regulates solar systems that are over 20 mW.
- Cost is a barrier to solar development – we need to identify ways to bring the cost down including:
 - Project/installation costs (fair and transparent).
 - Up-front cost (how to pay for a 30-year investment).
- It is important to note that installers just need to be a master electrician – they don't have to be certified to be a solar installer.

Next steps for the Solar Workgroup

- Coordinate community education and outreach around solar, and other potential next steps of the Solar Workgroup, with the upcoming May 10th, 2017 Economic Forum at UVA-Wise (the third in a series of Economic Forums at UVA-Wise).
- Identifying projects is an important immediate next step for the Solar Workgroup.
- Focus on making the Solar Workgroup and community outreach as much of a regional effort as possible.
 - Consider holding meetings and events in different locations across the entire seven coalfield county region.
- There is a sense of urgency for action, particularly around project identify and development.
- Consider attending the American Energy conference at Emory and Henry College on Dec. 5 & 6.
- Examine what could enable or restrict progress of the Solar Workgroup both in legislation and outreach.

- An outreach team is needed.
- Populate the solar website with existing background information and next steps.

A Doodle poll will be sent out with conference call times for a late November or early December around identifying potential solar projects. After the meeting, conveners noted that future Solar Workgroup meetings are planned over the winter 2016 – spring 2017, and a Doodle poll will be sent out for those dates as well. The planning team welcomes additional suggestions for Solar Workgroup invitees at any point, and a website will be developed with information about solar possibilities in SWVA as well.

Meeting Participants

Shannon Blevins, Associate Vice Chancellor of UVa-Wise, Office of Economic Development

Stan Botts, SWVA Technology Council

Kate Boyle, Appalachian Voices

Susan Copeland, VCEDA

Joe Gillespie, Va Small Business Administration

Lydia Graves, Solar Workgroup/ Appalachian Voices

Roger Green, Mountain Empire Community College

Jack Kennedy, Wise Clerk of Court

Carl Knoblock, Small Business Administration

Becki Joyce, UVa-Wise

Janette Kennedy, Micronic Technologies

Sarita Moore, Solarize Abingdon

John Neal, Micronic Technologies

Steve Owen, Appalachian Institute for Renewable Energy

Bryan Phipps, People Inc.

Nick Polier, Dept. of Mines, Minerals and Energy

Bryce Shular, Mountain Empire Community College

Rick Statzer, Town of Abingdon / Solarize Abingdon

Mike Thompson, Tazewell County Economic Development Director

Matt Wasson, Appalachian Voices

Adam Wells, Appalachian Voices

Christine Gyovai, facilitator, Dialogue + Design Associates

Background document

Appalachian Voices, People Inc. and UVa-Wise to Convene Planning Sessions around Solar Development Southwest Virginia September 29, 2016

Appalachian Voices, People, Inc. and UVa's College at Wise will co-convene a series of meetings this fall to gather stakeholder input aimed at developing a renewable energy industry cluster in the coalfield counties of Southwest Virginia.

Recent research shows that benefits from a renewable energy industry in Southwest Virginia could be significant, especially if emerging opportunities are leveraged to build a local value chain. Regional electricity demand is expected to grow over the next 8 years and the types of businesses being recruited to the area (with the expansion of broadband and information technologies) will rely on abundant, redundant, and renewable energy. **Fulfilling a part of that demand growth with locally generated renewable energy would provide an economic boon and a powerful leverage point for scaling up a diverse regional renewable energy industry sector.** Our group is committed to advancing this opportunity by fostering the partnerships, capacities and enterprises required to make that a reality.

We believe renewables, and solar in particular, will bring very real and measurable economic benefits to our region. Renewable energy development relies on many of the same business enterprises, and technical, professional, and vocational skills that the coal mining industry has traditionally employed such as engineering, electrical work, and construction. Our recent economic impact analysis showed that developing just 26 megawatts of solar in Southwest Virginia could:

- Create more than 300 construction jobs and 127 maintenance job-years;
- Generate over \$40 million in local economic activity and pay living wages;
- Represent almost \$50 million in private sector investment; and,
- Generate over \$80 million of valuable renewable energy.

We are now preparing the stakeholder process to jointly and collaboratively create a roadmap for renewable energy economic development in Southwest Virginia's coal mining region. This inclusive process will draw participation from local economic development authorities, planning districts, colleges, businesses, policymakers, investors, utilities, social and civic organizations, and interested community members.

The roadmap will identify opportunities for specific renewable energy projects across the region, as well as workforce development needs, supply chain gaps and local business opportunities. It will also identify project capital networks and lay out strategies to generate project capital. Finally, the process we envision will not end with the publication of the roadmap, but will be ongoing as we work together to implement the recommendations and strategies of the roadmap for years into the future. We hope that participating organizations will elect to come together to submit a collaborative POWER implementation grant in FY-2017 to support the implementation of the roadmap.

Appalachian Voices has applied for a small POWER technical assistance grant to hire Christine Gyovai of Dialogue + Design Associates to facilitate the stakeholder process and to contract with the Appalachian Institute for Renewable Energy to provide technical expertise and hands-on experience in solar project development. Contact: Adam Wells, Appalachian Voices: Adam@appvoices.org