

Solar Development in Southwest Virginia

**October 4, 2016
Meeting Summary**

The first in a series of meetings around Solar Development in Southwest Virginia was held on October 4th, 2016 at UVA-Wise in Wise, Virginia. Christine Gyovai of Dialogue + Design Associates facilitated the meeting, which was co-convened by Appalachian Voices, People Inc. and UVA-Wise. Meeting participants, which are listed at the end of the summary, discussed their hopes, goals and perceived challenges and opportunities around solar development in SWVA, and then discussed potential next steps for a solar workgroup formation, with meetings planned over the fall 2016 – spring 2017. A summary of the scoping meeting is below, with action items and next steps outlined below and on pages 5-7 of the summary.

Priority next steps and workgroup formation ideas:

1. Develop a POWER Implementation grant proposal for submission in the spring of 2017. Possible next steps include:
 - a. Identify potential partners – the Technology Council, the PDCs, as many partners and friends as possible should be involved in developing the grant proposal.
 - b. Identify other potential POWER implementation grants for the seven coalfield counties. All partners should inquire through existing networks about other potential grants. Is it possible to partner?
 - c. Timing is important; develop the grant ASAP before funding runs out. Projects that are identified should be shovel-ready.
 - d. Look at other states' POWER grants and past awardees for examples.
2. Develop solar projects (so solar is tangible to people in SWVA).
 - a. Look at training possibilities for jobs.
3. What available AML properties has DMME identified that could be excellent sites for solar development?
 - a. DMME will share this inventory with the group.
 - b. Infrastructure connections need to be considered with these sites.
 - c. Examine the DMME inventory next to consider feasibility and possible industrial site development.
 - i. Identify the best potential *regional* sites for solar.
4. Identify and share information about incentives, tax credits, opportunities, grants, and resources for solar development.
 - a. Consider Enterprise Zone/ Technology Zones possibilities.
 - b. What other funding is available?
 - ii. Look at Virginia SAVES.
 - iii. USDA REAP solar program (Rural Energy Assistance Program).
5. Research and information is needed around the latest and greatest in solar technology. Information should be developed and shared with the Solar Workgroup and broader community to build the knowledge base.

At the beginning of the meeting, Adam Wells, Shannon Blevins and Bryan Phipps welcomed participants to the meeting and discussed the purpose of the meeting and work that each organization has done around solar development thusfar. Adam shared information about a POWER Technical Assistance grant that is under development (a summary of which is at the end of this meeting summary, which was also distributed at the meeting), background of the solar workgroup of the Economic Forum, as well as future possibilities for a POWER Implementation grant to be submitted -- in partnership with others -- in the spring of 2017.

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, as well as perceived challenges, barriers and opportunities for solar development. Highlights included:

Hopes or Goals for Solar Development in SWVA

- Economic diversification is needed within the region through a multi-faceted approach (several participants echoed this).
- Power that is produced in SWVA should stay in the region (and the associated monetary gains).
- The governor's Energy Plan makes renewable energy a priority.
- Increase local solar on homes and businesses and schools.
 - Expand programs like Solarize Abingdon – could it be made into a coop?
 - Could another round of Solarize programs be hosted by the Technology Council? Or other groups?
- Breaking cultural barriers, especially around fossil fuels, is needed.
 - Look to home-scale opportunities for solar development.
- Southwest Virginia should become a co-producing region so that power is not only shipped in.
 - Explore opportunities for power production at the St. Paul and Carbo power plants.

Perceived Challenges or Barriers for Solar Development

1. Real estate – solar can take a lot of physical space.
 - a. Others noted that there are new developments in solar that can take less space such as ground-mounted arrays.
2. Jobs – the sustainability of jobs is important; the community should benefit as much as possible.
 - a. Long-term employment vs. short-term construction jobs and other affiliated jobs should be considered.
3. The highest number of jobs per acre (JPA) is desirable.

4. Acceptance of solar is a challenge within the region (many echoed this challenge).
 - a. Example of mobile solar unit at Mountain Empire Community College called Sparky which has received negative criticism at times.
 - b. There is a perception that solar is trying to take jobs away. This needs to be addressed.
 - c. Community education and outreach is needed to address the misperceptions around solar.
 - i. This is a challenge and an opportunity.
 - ii. Solar needs to be viewed as a **both/ and** opportunity -- not either/ or -- for solar and other strategies in SWVA being an energy-producing region.
5. SWVA needs to become a more attractive and competitive environment for business and solar development.
 - a. Education and outreach about the attractiveness of the region needs to happen.
 - b. SWVA needs to focus on becoming more attractive to large companies to locate in SWVA.
 - i. Infrastructure is needed as well.
6. Virginia is not a policy or legislation-friendly state for solar.
 - a. Multiple policy challenges that need to be addressed.
 - b. Del. Kilgore now chairs the House committee, which is an opportunity.
7. There need to be more financing opportunities for solar, including around job creation.
 - a. This is a perceived and real challenge (there are misperceptions about some of the opportunities around solar financing as well as real challenges).
8. The lack of incentives for large-scale solar development needs to be addressed.
9. There is a need for candid conversations about the challenges and opportunities of solar within the region.
10. Solar needs to be affordable.
11. What are the power company perceptions regarding solar?
 - a. Some companies are not interested in being involved or helping.
 - b. There are regulatory challenges.
 - c. There voluntary standards for renewable energy production.
 - i. More information is needed about this.
12. Other elements need to be considered including building weatherization and efficiency when considering solar.

Opportunities for Solar Development in SWVA

1. Can steep slopes be used for solar?
2. Selling electricity is an opportunity!
 - a. Solar electricity should be sold in ways that benefits the region.
3. There is lots of available land that can accommodate solar in the region.
 - a. Solar panels need to be angled at 35 degrees and can be located on steep slopes on ground-mounted arrays.
4. The region is ready for solar.
 - a. Reclaimed mined lands could be used.
 - b. Retraining workers is a strong opportunity and need.

5. Getting started with solar today!
 - a. Begin installing solar projects – more work will follow.
6. The return on investment on solar capacity is needed.
 - a. Making the business case for solar is needed, especially for larger company recruitment.
7. Look at energy parks and other similar opportunities.
8. Look at North Carolina solar examples (what have they done well, not done well with, etc.).
9. How to pay for solar?
 - a. What tax credit possibilities are there? What scaling opportunities are there?
 - b. Look at public/ private partnerships.
10. Look to possibility synergies for solar development (there are several different opportunities that could be taken advantage of).
11. Community-developed solar possibilities should be explored.
 - a. Consider developed a community –owned small utility.
12. Regional collaboration is needed for solar development.
13. The Bush building in St. Paul should be considered. It is 280,000 sq. ft.
14. There will be an increasing demand for electricity generation. Solar should be part of the equation to supplement what is being produced currently.
15. The Cumberland Plateau PDC is having a meeting of its CEDS (Comprehensive Economic Development Strategy) committee tomorrow to look how to build on the natural assets of the region for economic development.
16. Manufacturing opportunities for solar should be closely considered.
 - a. Several potential job opportunities with solar, especially high-tech jobs.
17. VCEDA funding should be considered as a means to help localities (funding is available).
18. Start with small solar projects to build knowledge and awareness around solar and make it **visible**.
19. Innovate!
 - a. SWVA should become a technology leader, not just a user.
 - b. SWVA shouldn't just duplicate – big innovation is needed!
20. What lessons learned can be gathered from other states and regions? SWVA should learn and then do it better to make SWVA a leader in solar development.
21. Acknowledge the importance of coal to the region.
22. Create solar-ready opportunities.
 - a. Consider solar thermal and solar electricity as well.
23. The IDAs and EDAs have quasi-authority to implement projects (for example, they can cross state properties for specific purposes). This should be explored more.

Solar Stakeholder Workgroup formation and Next Steps

After the group discussed possible hopes, challenges and opportunities for solar development, the group looked a possibilities for a possible solar stakeholder workgroup formation, possibilities for next steps both with and without POWER funding, examining what key elements are needed to ensure success of the solar workgroup, and who else needs to be included. Next steps and action items for the Solar Workgroup included (widely shared ideas are in **bold**):

1. Involve local governments including towns, regions and counties.
 - a. Invite county administrators and town managers to participate in the workgroup.
 - b. In terms of ensuring higher success for a potential POWER implementation grant submission in the spring, involving as many partners as possible would be advantageous.
2. Invite power companies.
 - a. This may be a separate, informal, focused meeting.
 - b. Clarify the group focus and direction before engaging power companies.
3. Invite local, private business representatives - they can be big electricity users.
 - a. Identify solar advocates.
4. Engage legislators.
 - a. Look at opportunities to engage legislators and power companies.
5. Look at the example in Accomac with Dominion. There is a dedicated location destination for solar production making the region more attractive.
6. Conduct community engagement around:
 - a. Residential solar information;
 - b. Outreach and education about solar;
 - c. Consider utilizing Sparky, MECC's solar display mobile unit; and
 - d. Solar home tours.
7. Invite a solar company presentation for outreach at a future meeting.
8. Municipal street lighting should be solar.
 - a. Focus on monetary savings this can offer.
9. The Big Stone Gap solar in the greenbelt is a good opportunities, but battery storage for solar is a challenge.
10. Look at solar development opportunities at schools throughout the region.
11. Effectively engage entrepreneurs around solar opportunities.
 - a. There are not many solar developers currently in the region, and there are several possibilities that could be explored.
12. Create training programs through local community colleges for local green job creation.
 - a. What green job opportunities are available? Locally, regionally, nationally?
13. Identify and share information about incentives, opportunities, grants, and resources for solar development.
14. Consider the RECLAIM Act, especially after tax credits expire.
 - a. Look at opportunities on post-mined lands, fast lane opportunities.
 - b. Contact the Forest Land Group (largest land owner in SWVA).
 - c. Consider land ownership – challenges and opportunities.
15. Engage works and workforce opportunities, especially around cross-training.
16. Regarding the number of meetings, make the meetings as efficient as possible (so they are as productive as possible).
17. Learn more about Jack Kennedy's work at the Solar Park.
18. Looking at training opportunities with MECC and others.
19. **Develop a POWER Implementation grant proposal for submission in the spring of 2017. Possible next steps include:**

- a. **Identify potential partners – the Technology Council, the PDCs, as many partners and friends as possible should be involved in developing the grant proposal.**
 - b. **Identify other potential POWER implementation grants for the seven coalfield counties. All partners should inquire through existing networks about other potential grants. Is it possible to partner?**
 - c. **Timing is important; develop the grant ASAP before funding runs out. Projects that are identified should be shovel-ready.**
 - d. **Look at other states' POWER grants and past awardees for examples.**
20. Keep the momentum of the group up.

Ideas for Action and Next Steps

The group also discussed next steps both for the short-term and long-term for the workgroup, considering “low-hanging fruit” for next steps to address some of the challenges and opportunities the group discussed, and any information needs the group had (widely shared ideas for next steps are below in **bold**).

1. Identify other potential POWER implementation grants for the seven coalfield counties.
 - a. Look at other state’s POWER grants and past awardees for examples.
2. **Develop solar projects (so solar is tangible to people in SWVA).**
 - b. **Look at training possibilities for jobs.**
3. Address steep slopes directly in the Solar Roadmap.
4. **What available AML properties has DMME identified that could be excellent sites for solar development?**
 - a. DMME will share this **inventory** with the group.
 - b. Infrastructure connections need to be considered with these sites.
5. Examine the DMME inventory next to consider feasibility and possible industrial sites.
 - a. **Identify the best potential regional sites for solar.**
6. The Bluestone site is consider solar possibilities with the IDA.
 - a. It will be a 1-2 mW system; they are looking at solar projects.
 - b. Consider other wastewater / large energy users
7. **Identify and share information about incentives, tax credits, opportunities, grants, and resources for solar development.**
 - a. **Consider Enterprise Zone/ Technology Zones possibilities.**
 - b. **What other funding is available?**
 - i. **Look at Virginia SAVES**
 - ii. **USDA REAP solar program (Rural Energy Assistance Program)**
8. Look at Wise Solarize or SWVA Solarize potential projects as a means to build workforce opportunities and start new solar projects.
 - a. How can solar panels be acquired?
 - b. Could the Technology Council help partner to make this happen with others?
9. Use the Solar Roadmap as a blueprint for other renewable energy development options.
 - a. Don’t exclude other renewables from the equation.

- b. Look at what would make SWVA more attractive for solar and other renewables.
 - c. Develop case studies to share.
10. Identify 3-5 potential sites to evaluate for solar.
- 11. Research and information is needed around the latest and greatest in solar technology. Information should be developed and shared with the Solar Workgroup to build the knowledge base.**

After the meeting, conveners noted that a Doodle poll will be sent out with meeting times for a late October or early November meeting soon, as well as a list of potential next step and Solar Workgroup meeting invitees to the scoping meeting participant list for feedback.

Meeting Participants

Jimmy Adkins, Lenowisco Planning District Commission
Jim Baldwin, Cumberland Plateau Planning District Commission
Shannon Blevins, Associate Vice Chancellor of UVa-Wise, Office of Economic Development
Stan Botts, SWVA Technology Council
Bob Harrison, St. Paul IDA
Jack Kennedy, Wise Clerk of Court
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
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