PA State Solar Legislative Guide
Updated 07/1/21

Bills marked with (☼) are of significant interest to watch and have potential positive impacts for solar development in Pennsylvania; bills marked with (✹) are of significant interest to watch and for which the PA Solar Center has concern for the possible negative impact on solar development in Pennsylvania. Bills marked (•) are unlikely to pass in the current legislative session – January 2021 through December 2022.

Increasing the Renewable Energy Goals in Pennsylvania

The Alternative Energy Portfolio Standards (AEPS) was passed in 2004 and set a goal of 8% renewable energy with 0.5% coming from solar by May 2021. The Electric Distribution Companies (EDC) and Electric Generation Suppliers (EGS) are obligated to meet these goals through the purchase of Alternative Energy Credits (or known as Renewable Credits or Solar Renewable Energy Credits – RECs or SRECs). The overall goals are woefully out of date and low compared to most neighboring states that have goals of 50% or more. This policy drives the price of the REC/SRECs and since the goal has been met and exceeded, the SREC price is quite low (~$15-$35 per credit). Increasing the goals, would increase investment into solar energy because it would likely increase the price of the SREC for the next several years. There are several bills in the PA General Assembly that would raise that goal, including:

- ☼ **HB 1080** - Sponsors: Rep. Chris Quinn (R) and Rep. Dianne Herrin (D); currently in the House Environmental Resources & Energy Committee
- ☼ **SB 501** - Sponsors: Sen. Dan Laughlin (R) and Rep. Art Haywood (D); currently, in the Senate Consumer Protection & Professional Licensure Committee

  These companion bills (HB 1080 and SB 501) increase the renewable energy goals to 18% with the solar carve out set at 5.5% by 2026. The solar carve out is specified that 3.75% would come from utility scale solar and 1.75 % from distributed generation. The bills call for an energy storage study and for the EDCs to enter into long-term contracts for utility scale solar. These bills would result in an estimated 50,000 jobs, attract about $15 billion in private investment to Pennsylvania, help save family farms through dedicated lease payments for utility scale solar and create a more diverse energy mix. Getting to 5% solar on our grid will bring down the wholesale cost of energy to all Pennsylvanians, because it shaves the need for dirty, expensive peaker plants to meet peak demand energy. The implementation of the bill will not require any revenue from state coffers.

- ☼ **HB 1531** – Sponsor Rep. Chris Quinn (R); currently in the House Consumer Affairs Committee

  This bill would create a new renewable energy scheme (different from the AEPS) that would require the addition of 7% renewables with 2.5% coming from distributed solar by 2030. (These percentages are additive to the current AEPS goals)

  Considerations: The bill doesn't specify that the solar carve out must be comprised of in-state generation only as is currently in the AEPS and this provision should be added. The solar carve

out does not include utility scale solar but it would be included in the larger goal. An improvement of this bill would be to add a separate in-state solar carve out for utility scale solar as in HB 1080 and SB 501. There is no Alternative Compliance Payment (ACP) set for the goals outside of the solar carve out. The ACP serves as a ceiling for the REC prices and protects ratepayers. Many of the provisions and definitions that are explicit in the AEPS should be added including how the utilities will pay for the RECs traded under this scheme (e.g., ratepayers?). Creating a new renewable energy standard outside of the AEPS that serves the same function as Tier I in the AEPS could be cumbersome and confusing with little added benefit. This approach would require additional rule making at the PUC that will delay benefit to the industry.

- **HB 1394** Sponsor: Rep. Chris Quinn (R); currently in the House Environmental Resources & Energy Committee

  This bill would increase the renewables goals in the AEPS to 15% by 2030 with the solar carve out for customer generators (distributed generation) only to 2.5% by 2030.

  Considerations: This bill does not include a specific increase to in-state utility scale solar in the solar carve out. Utility scale solar (both in Pennsylvania and anywhere in PJM) would be included in the larger Tier I goal increase, but it doesn't specify location. To assure Pennsylvania benefits from most of the jobs, the solar carve out should include a separate goal for in-state utility scale solar as in HB 1080/SB 501.

- **SB 300** - Sponsor: Sen. Steve Santarsiero (D); currently, in the Senate Consumer Protection & Professional Licensure Committee

  This bill would increase renewables to 30% by 2030 with 10% coming from in-state solar. The bill is similar to SB 501, but with more aspirational goals.

Community Solar/Shared Solar

- **HB 1555** – Sponsor: Rep. Aaron Kaufer (R); currently, in House Consumer Affairs Committee.

  This bill provides the mechanism to allow community solar projects up to 5 megawatts (MW) in Pennsylvania. Community solar is not currently permitted in Pennsylvania. Community solar developers could build facilities for which subscribers purchase subscriptions and pay for their allocation of solar on their utility bills. The bill includes provisions for a Grid Service Payment (GSP) of $0.18/watt (DC) that developers would receive from the utility through the first five years after passage of the bill. The GSP cannot be acquired until the project has a minimum subscription level of 75% for the first year. After the five-year period, the Public Utility Commission (PUC) will calculate a value stack payment that subscribers would receive based on the grid services that community solar project provides and the subscribers would pay that amount. There are provisions to require all community solar facilities to be built with prevailing wage and requires bonding and recycling. EDCs are permitted to keep the SRECs from these projects.

Considerations: This bill is geared for the larger community solar projects and could be improved to encourage small community solar or shared solar projects. For instance, system sizes less than 500 kilowatts (and all rooftop systems) could be exempt from compliance with bonding and prevailing wage requirements as well as having to include descriptions for land use on their website, etc., since these will make smaller project uneconomical. These changes would support the use of community solar for projects that allow, for instance, several homeowners to create a shared solar project or a company sharing their solar energy with a nearby fire station or library. Some industry companies are concerned about the unknown and uncertain price of the value stack payment that will be determined by the PUC in the future and how to incorporate that into their financial modeling, since investors need certainty before agreeing to finance projects.

☼ **SB 472** - Sponsor: Sen. Mario Scavello (R); currently, in the Senate Consumer Protection Committee

This bill is similar to HB 1555 above but was introduced earlier. Some changes have since been included in HB 1555 that make this bill slightly different. It's likely those changes will be incorporated into this bill with amendments or HB 1555 would be the vehicle to move in the House first instead of this bill.

✹ **HB 1161** - Sponsor: Rep. Lori Mizgorski (R); this bill passed out of the House Consumer Affairs Committee and was voted for on the House floor during 1st and 2nd consideration. It has not been scheduled for a 3rd consideration vote, which would be the final vote in the House. If passed, it would move to the Senate for consideration.

This bill allows EDCs to issue proposals from solar developers to build solar projects up to 20 MW within their service and enter into long-term Power Purchase Agreements (PPAs). The EDCs can then solicit their customers to become subscribers to the facility to purchase a portion of the power and be credited on their electric bill, similar to a community solar program. A percentage of the power must be sold to lower income customers.

Considerations: This bill allows only EDCs/utilities to sanction the building of community solar-like projects but doesn't permit non-EDC entities to build solar projects for which they can solicit customers to get credit on their bills for the power generation. Therefore, it sets up a non-competitive situation that give the utilities full control over the building of these projects --or not (they may opt not to build at all since there is little incentive for them to do so). This is not a true community solar program that allows private entities to build the projects and solicit customers to get credit through the EDC billing program. In addition, this bill permits EDC projects to be up to 20 MW, which is four times the size of projects allowed in the other community solar bills – if both this bill and the community solar bills are passed, this bill creates an unfair competitive advantage for the EDC programs because the EDC projects will benefit from economies of scale.

- **HB1396** - Sponsor: Rep Chris Quinn (R); currently, bill is in the House Environmental Resources & Energy Committee

This bill permits community solar and is similar to HB 531 from the previous session. This bill provides for full net metering benefits to subscribers rather than the GSP as described above, but

the full net metering provision was controversial for utilities who voiced some opposition to community solar receiving the full net metering benefit.

Solar Bonding Requirements

- **SB284** - Sponsor: Senator Gene Yaw (R); voted out of the Senate Environmental Resources & Energy Committee and sent to Senate Floor for first consideration; no votes have been scheduled yet for this bill

  This bill requires alternative energy projects included in the AEPS, including solar and wind, that generate power not used for onsite consumption to issue a bond to the Pennsylvania Department of Environmental Protection to cover "hazardous liabilities, decommissioning, to create a reclamation plan, and disposal/recycling of the project." An amendment to this bill prohibits the use of solar panels that contain polysilicon sourced from the Xinjang Province in China or that used forced labor in manufacturing.

  Considerations: The solar industry already includes standard bonding language in their land lease agreements with landowners and there are a number of different bonding or other options that are available to ensure that solar panels or wind equipment are removed at the end of their life. The trade groups are working with legislators to improve the language of this bill so that it is not overly financially burdensome.

  The national industry solar trade organization SEIA (Solar Energy Industries Association) has created a pledge against forced labor that is an industry-wide effort to support the development of a supply chain traceability protocol and a comprehensive update to SEIA's Solar Commitment, which defines common practices and expectations for the solar industry. There are also efforts underway by the federal government to enforce the use of forced labor and to regulate and trace many products – not just solar – that are manufactured in the Xinjang Province. This is not an issue that each state should create separate regulations to manage. These unnecessary provisions and the processes outlined in the bill could create overly burdensome regulations and procedures that may significantly delay or deter solar development in Pennsylvania.

Solar Panel Recycling

- **SB 530** - Sponsor: Cris Dush (R); currently, in the Senate Environmental Resources & Energy Committee

  This bill calls for solar panels to be added to the state's "Controlled Device Recycling Act," which would require solar manufacturers, importers and installers to setup reclamation and recycling programs and include the costs for that in their pricing.

  Considerations: Several waste recycling companies testified at the committee's hearing in 2020 and stated that it is not appropriate for solar panels to be added to the Controlled Device Recycling Act because of the nature of the equipment.

While solar recycling programs are definitely important – and could create additional job opportunities in the supply chain in Pennsylvania if done appropriately – this process laid out in this bill is burdensome to the solar industry in PA. SEIA is in the process of setting up a national recycling program and has good information about end of life recommendations and processes.

Approximately 95% of all solar panels installed globally are made of silicon crystalline PV solar cells, which are the most efficient cells on the market today. The panels are made from common materials -- glass, aluminum, and steel -- and the cells are constructed using silica sand. The other components include ethylene vinyl acetate (EVA) encapsulate (commonly used as padding in sports equipment such as ski boots, bike saddles, running shoes), and the electrical components in the junction box. There is no cadmium in silicon-based solar cells.

While most PV panels have a useful life of 30 years or more, like any technology, they will inevitably reach the end-of-life. High-value recycling, like the Solar Energy Industries Association (SEIA) National PV Recycling Program, helps minimize lifecycle impacts and recover valuable and energy-intensive materials, increasing sustainability within the PV industry. PV panels typically consist of glass, aluminum, copper, silver and semiconductor materials that can be successfully recovered and reused. By weight, more than 80 percent of a typical PV panel is glass and aluminum – both common and easy-to-recycle materials. In addition, many solar panels that are decommissioned can be resold and reused for many years to come.

The PA Solar Center recommends that the PA Dept. of Environmental Protection establish a working group to study the appropriate methods of recycling and reuse of PA solar equipment as well as study the economic development potential of helping PA create a regional recycling industry.

Property Assessed Clean Energy for Commercial Properties (C-PACE)

- **SB 635** – Sponsor: Senator John Yudichak; currently, in the Senate Community, Economic, and Recreational Development Committee

This bill would allow the inclusion of multi-family residential buildings that are five or more units to participate in the current C-PACE funding program, which was not previously included when the original bill passed. Currently, the law permits the establishment of C-PACE programs in order to create "low-cost, long-term financing for energy efficiency, water conservation and renewable energy projects." This bill will also expand that to include indoor air quality, and resiliency improvements including "any fixture, product, system, equipment, device, material or interacting group of fixtures, products, systems, equipment, devices or materials intended to increase resiliency or improve the durability of real property, including flood mitigation, wind resistance, energy storage, microgrids and backup power generation or otherwise designated by a local government entity."

For the information on the current C-PACE program and counties that have passed C-PACE programs, visit: https://pennsylvaniacpace.org/

Solar Tax Exemptions

- **SB 218** – Sponsor: Senator Vincent Hughes (D); currently, in the Senate Finance Committee
- **HB 1124** – Sponsor: Ed Neilson (D); currently, in the Senate Finance Committee

These bills would exempt solar energy equipment from taxation at the sale at retail or at the installation, maintenance, or repair of solar energy devices. Currently, solar developers pay this tax when they purchase equipment. Customers don't usually see a line item for this tax, but the developers roll the cost into the total price of the solar projects, so eliminating this would bring down the cost of solar. Many other states have this exemption.

- **HB 1138** - Sponsor: Ed Neilson (D); currently, in the Senate Finance Committee

This bill exempts all solar devices from any PA property taxes. Many states also have this exemption.