

# Pennsylvania Update

MSSIA – 1st Qrtly Mtg - 2021



# Solar Update Highlights in PA – 2/18/2021

- Current in-state solar PV capacity in PA is **601 MW**, from a total of 28,518 systems, as of 2/17/2021.
- Largest solar PV system in PA was 11.5 MW (PA Solar Park), installed in 2012; Since March 2020, four larger grid scale projects went online, 27.1 MW in Franklin Co., 12.4 MW in Carbon Co.(PA Solar Park II), 18.2 MW in Franklin Co., and 27.0 MW in Franklin Co., totaling 85 MW.
- PJM Queue for PA – Over 13 GW (350 applications: Active, Engineering/Procurement, and Under Construction-including in partial service); number of applications up 28% since July, 2020.
- Some of the large grid-scale solar projects being built:
  - City of Philadelphia - 80 MW solar PPA project in Adams County, PA
  - Penn State - 70 MW in Franklin County
  - SEPTA - 35 MW solar PPA project in Franklin County, PA
  - Maple Hill solar farm - 150 MW Cambria County
  - Univ. of Penn – 220 MW in Franklin CountyAnd more!
- The total installed solar capacity in PA will far exceed the AEPS 0.5% solar requirement for 2021.
- Heard there is a 300 MW project being built in Clinton County, and a 400 MW prospect in Clearfield County, but these are not showing up in the PJM queue - they are showing up under NYISO, because of the transmission line these systems will interconnect to are under NYISO jurisdiction – Qualify for AEPS? Probably not.....
- Community Solar – Original HB531 and SB705 bills have expired, as we are in a new legislative session. The language for a significantly revised community solar bill has been drafted and continues to be tweaked before it gets introduced in the next month or so. It does not include net metering for the subscribers, but they will receive up to the price to compare credit for the solar generation, based on their share. This proposed bill also includes an extremely rich grid services incentive for the developer equal to \$0.225/watt DC per year for five years, which has raised many significant concerns with some of the solar industry and consumer advocates. This incentive will completely pay for the entire project cost well under 4 years, and continue to pay out up to \$2M for a 5 MW AC facility (max size). This bill as is will very likely compromise the expansion of the AEPS, due to its high ratepayer cost impacts.

# Solar Update Highlights in PA – 2/18/2021

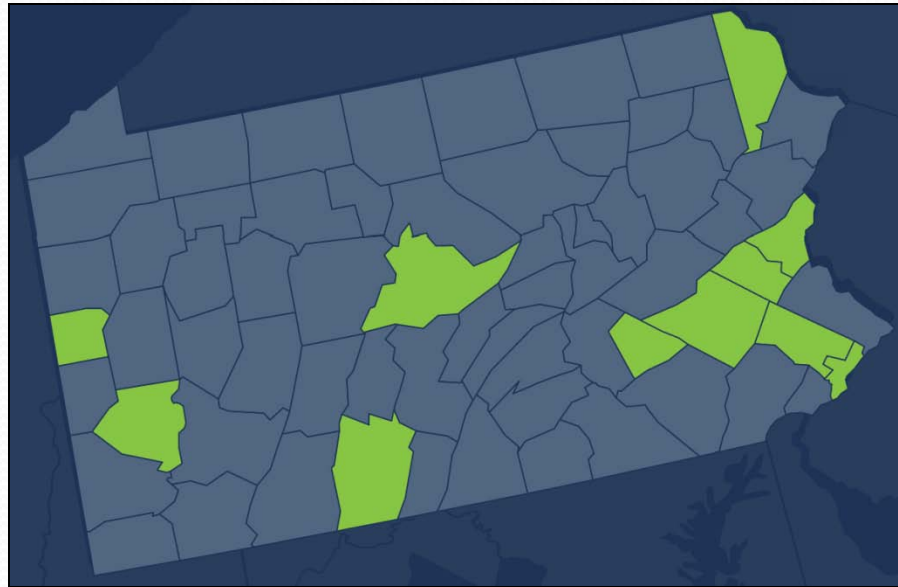
## Continued

- **AEPS-2 – Revised - AGAIN:** The original 18% renewable energy, including 5.5% in-state solar (1.75% DG / 3.75% Grid Scale) by 2025, has been stretched out to 2026 – there has been some concern from the Senator prime co-sponsor (Sen Haywood), as well as hints from the PA PUC that it will be very challenging to meet the new solar requirement in the first and maybe second years (2022 and 2023). So the ramps have been stretched for from 4 to 5 years. Co-sponsor memo should be coming out very soon, followed by the introduction of the bill.
- **Renewables Work for PA (RW4PA)** – Coalition of about 100 renewable energy companies supporting the 18x26 AEPS bill; Versant Strategies lobbying firm has been hired to work with legislators on this bill. MSSIA is the fiscal agent between the RW4PA Coalition and Versant Strategies. Versant Strategies expertise lies in the agricultural and farm owners sector
- **Philadelphia L&I - EZ Solar PV System Standard** - This has been updated to include additional detail on connections and eliminate the requirement for plans. EZ Solar permit applications filed online will be processed within 3 business days and permit applications filed in-person will be processed as you wait. All other permit applications that require plans will be processed within 20 business days.
- **SolarAPP** – Online solar permitting application software - PASSIA teamed up with Philadelphia Solar Energy Assoc, and submitted a proposal for a grant to implement NREL's SolarAPP into at least a handful of PA municipalities in 2021.
- **RGGI in PA** – Expected \$300M/yr in proceeds; Proceeds expected to be allocated for growing the EE and RE markets. DEP is asking for ideas how to use this revenue to support growing these markets. Huge public support for this, but there is also significant opposition from many pro fossil fuel legislators.
- **PPL's DER Management Plan** – On 1/1/2021, PPL launched its pilot tariff regarding its Distributed Energy Resources (DER) Management Plan, intended to monitor and control solar production via a DER management device and adjust smart inverter functionality settings. Only PPL approved inverters are allowed to be in the pilot, but many inverters still need to be approved, most notably Enphase. Many believe the roll out for this pilot was very premature and aggressive. Issues are slowly being resolved.

# Solar Update Highlights in PA – 2/18/2021

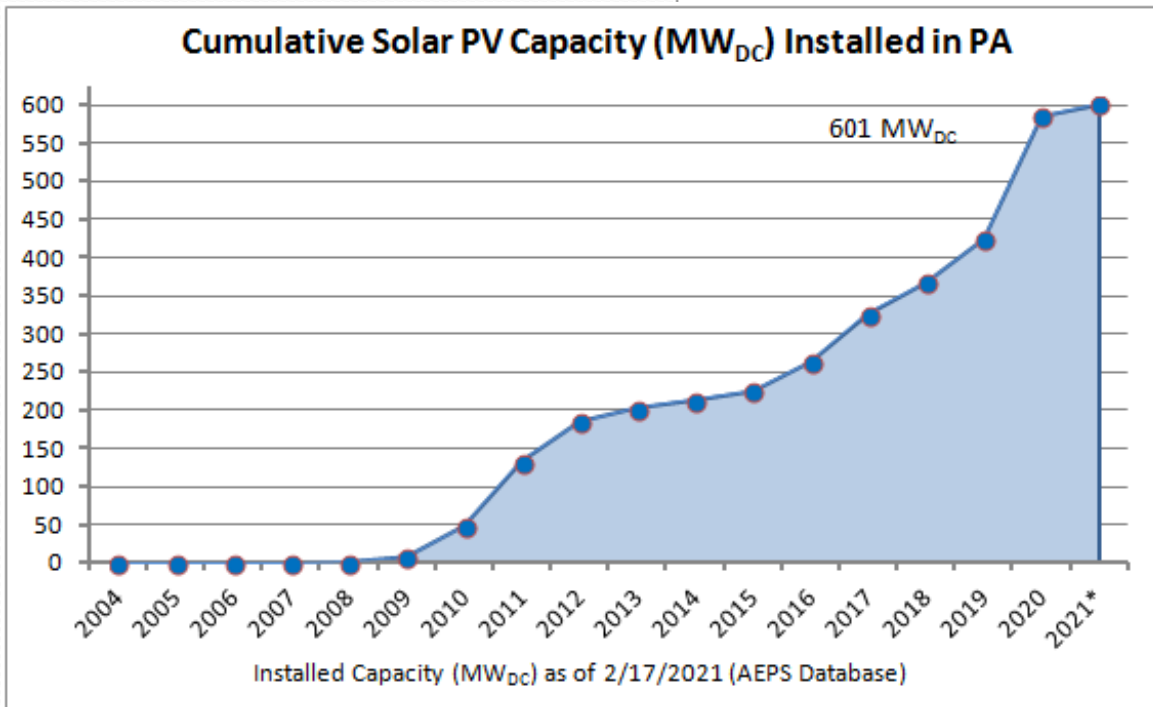
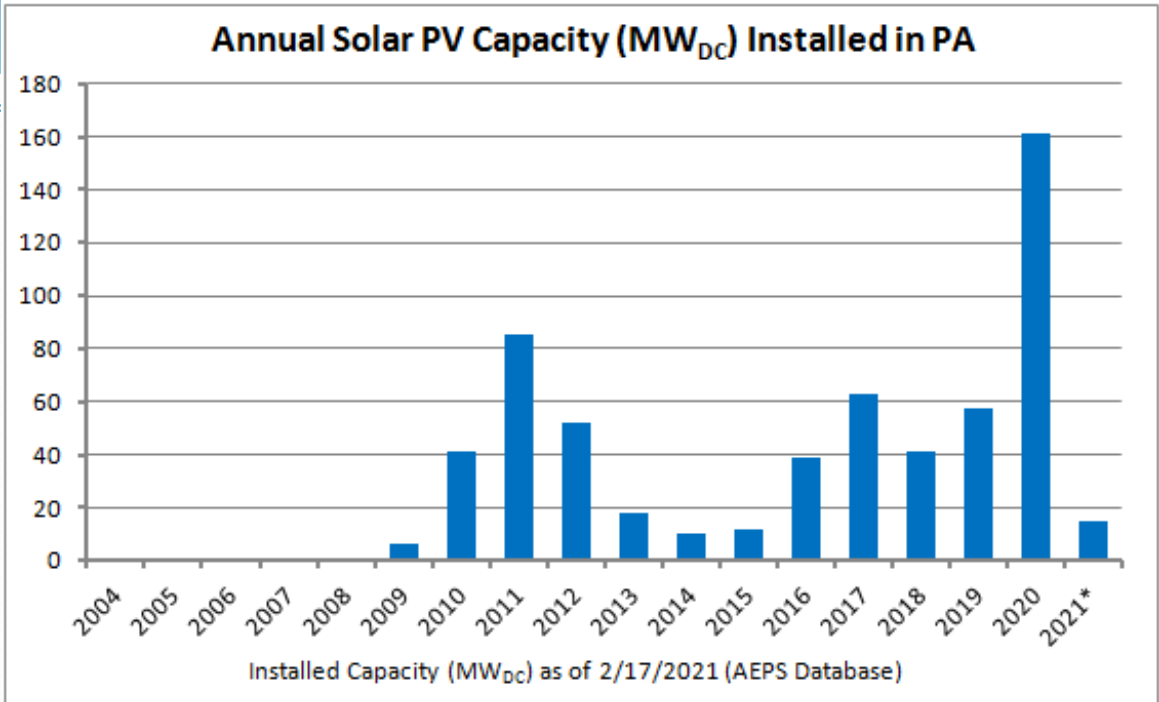
## Continued

- C-PACE (Act 30) – To date, the C-PACE program has been adopted in 13 counties. With several partners, KEEA is leading an effort to introduce legislation that will expand C-PACE to include multi-family projects, which are currently excluded.
- Other topics: PV recycling, Clean Energy Standard bill language, PUC storage questions regarding utilities operating storage, PECO time-of-use rate, and more.....

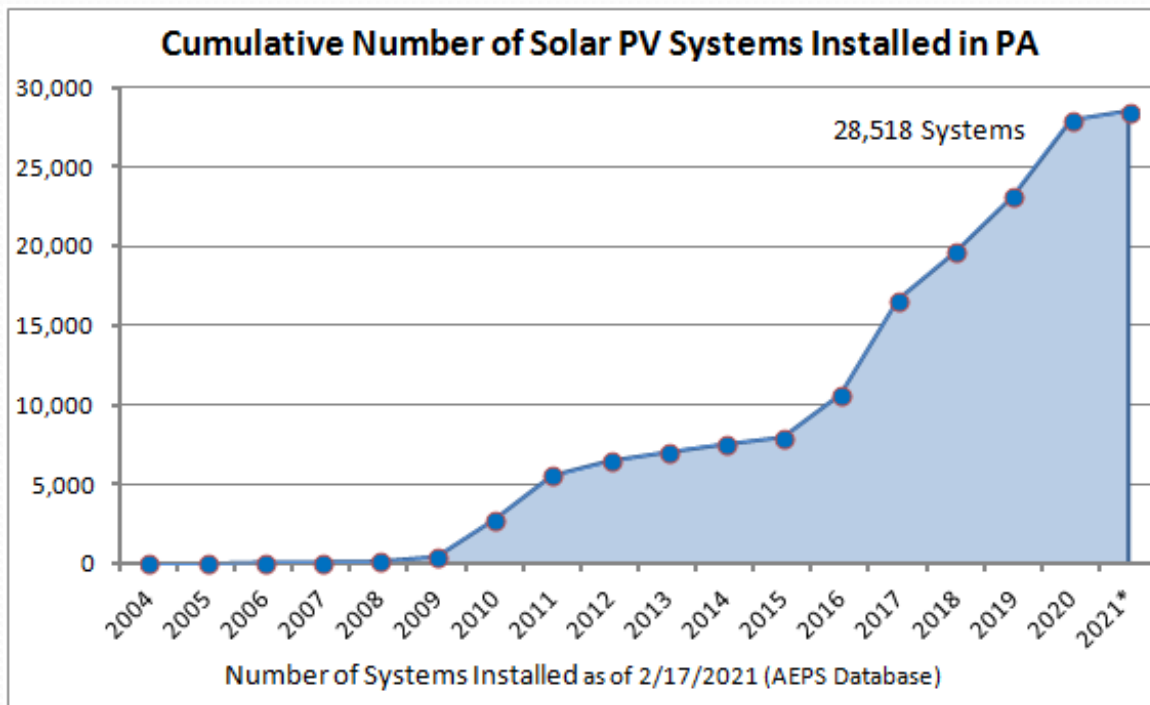
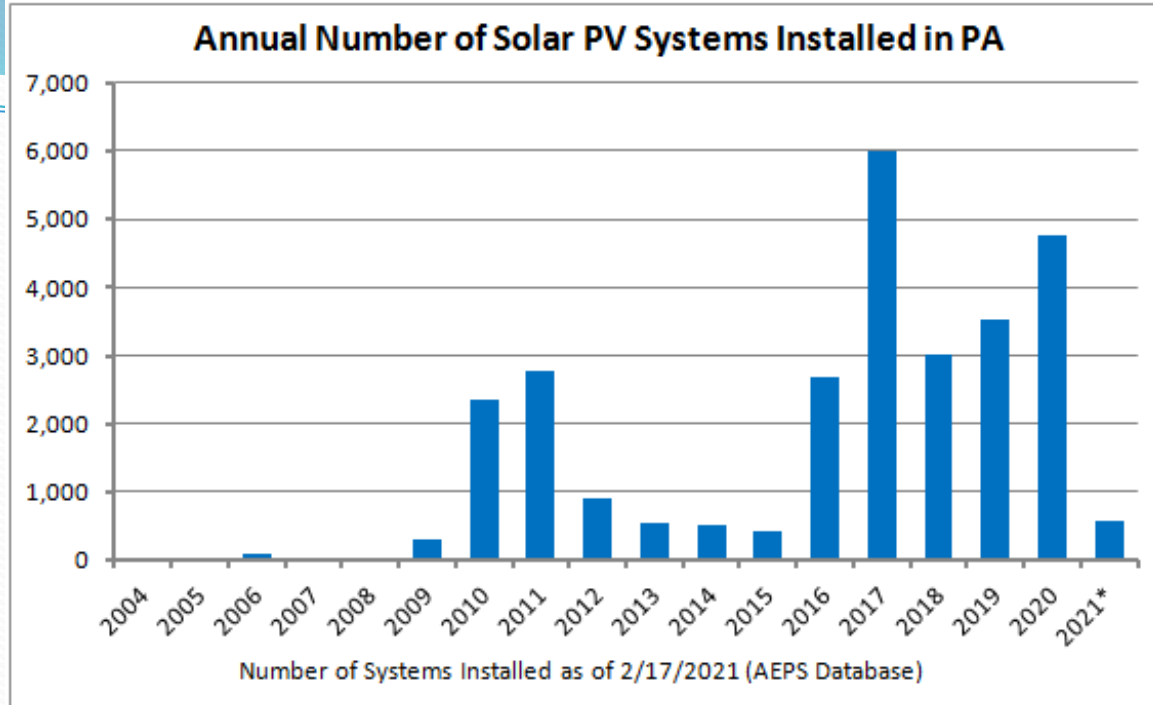


PA Counties That Have Adopted CPACE

# PV Capacity in PA Annual & Cumulative



# Number of PV Systems in PA Annual & Cumulative



# Breakdown Of PV Installations in PA & PJM Queue for PA Solar Applications

Cumulative PV Installed in PA		
Capacity (DC)	# of Systems	Total MW
≤ 15 kW	24,533	193
> 15 kW to ≤ 250 kW	3,770	131
> 250 kW to ≤ 1 MW	157	75
> 1 MW to ≤ 3 MW	43	67
> 3 MW to ≤ 5 MW	9	34
> 5 MW to ≤ 10 MW	1	6
> 10 MW	5	96
<b>Total</b>	<b>28,518</b>	<b>601</b>

\* as of 2/17/2021 as per PA AEPS (PUC)

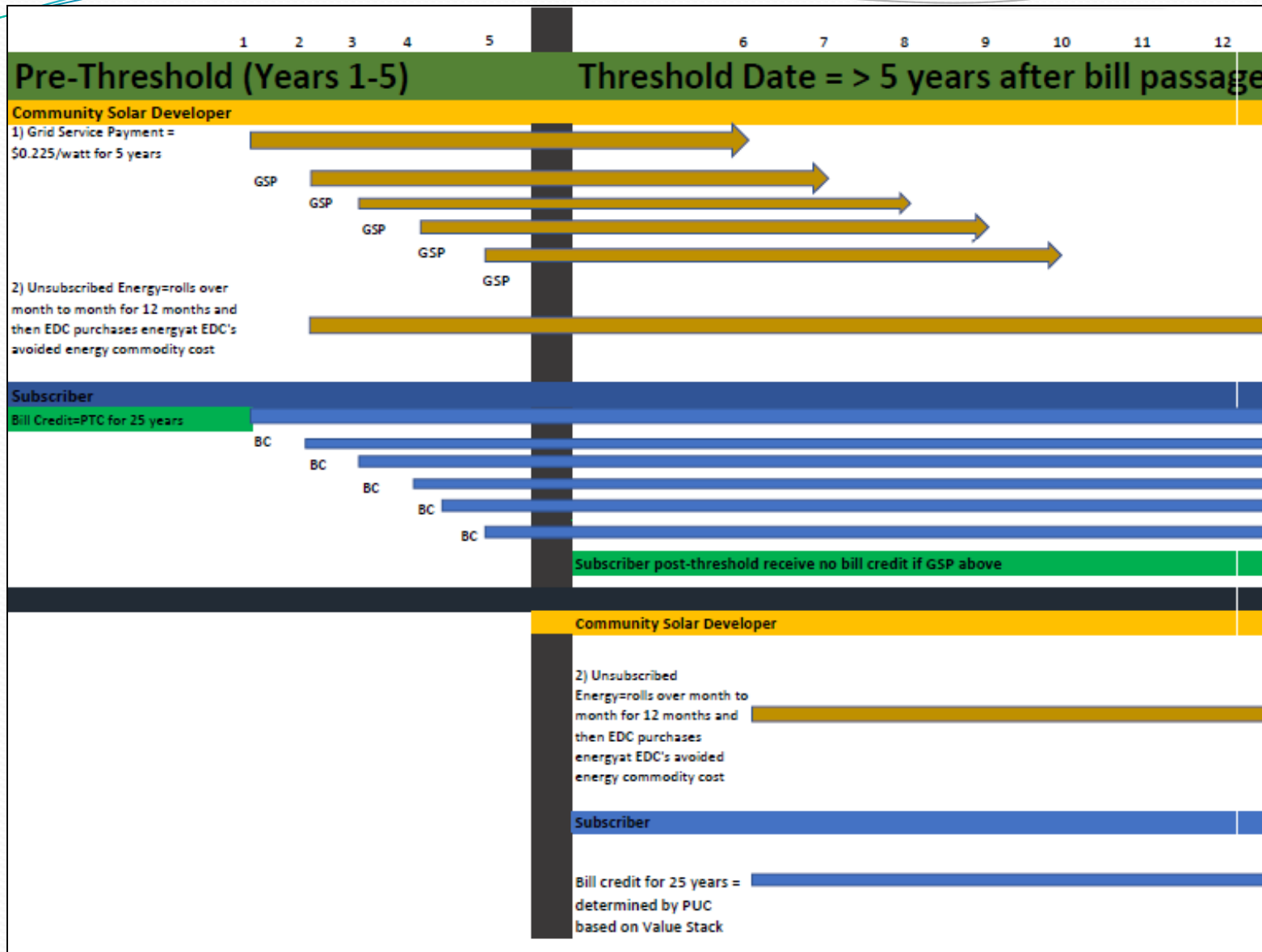
PJM Queue for PA

As of 2/17/2021

Status	# of Apps	Max Facility Output (MFO)			Total Cap IC Queue Position
		Total Cap AC MW	Capacity Range		
			Min	Max	
Active	305	12,813	0.2	401.6	6,517
Engineering/Procurement	44	444	1.2	31.9	218
Under Construction	0	-	-	-	-
Part in Srvc - Under Const	1	11	10.8	10.8	5
<b>Total*</b>	<b>350</b>	<b>13,268</b>			<b>6,739</b>

\* Total Applications categorized as "Solar & Storage" = 66

# 1<sup>st</sup> Cut : Flowchart of Revised Community Solar Process





# 2<sup>nd</sup> Revision of the AEPS Ramps

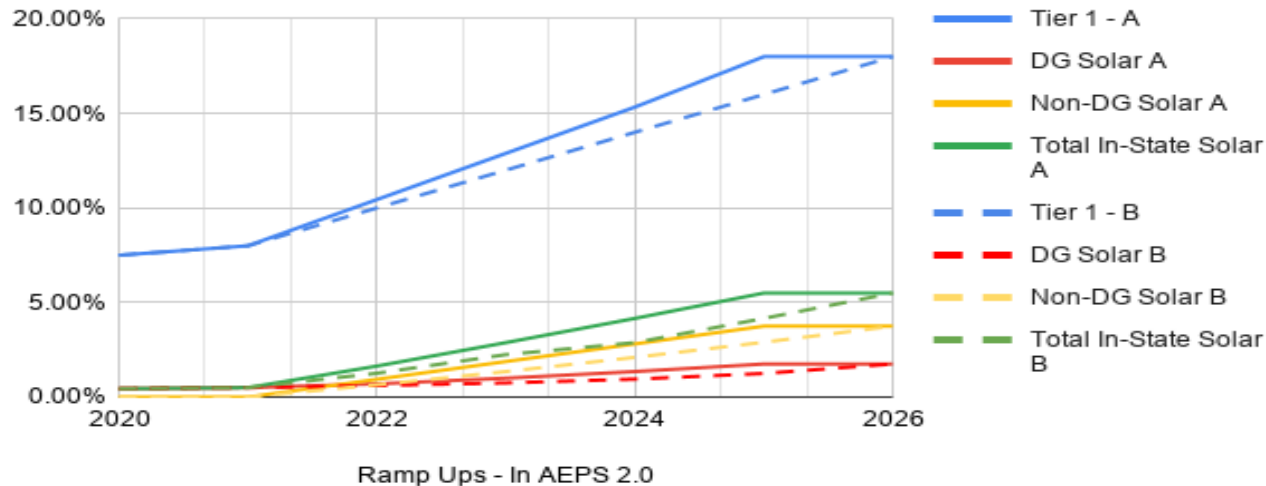
## Original 18x25 Ramps – HB 2855 and SB 1297 from 2019/2020 session

Ramp Ups	2021	2022	2023	2024	2025
Tier 1 - TOTAL	8.000%	10.444%	12.888%	15.332%	18.000%
Customer Generated Solar	0.500%	0.700%	1.000%	1.350%	1.750%
Non-Customer Generated (Utility scale) Solar	N/A	0.940%	1.880%	2.810%	3.750%
Total In-State Solar	0.500%	1.640%	2.880%	4.160%	5.500%

## Revised Ramps for 18% by 2026

Ramp Ups	2021	2022	2023	2024	2025	2026
Tier 1 - TOTAL	8.00%	10.00%	12.00%	14.00%	16.00%	18.00%
Customer Generated Solar	0.50%	0.61%	0.75%	0.95%	1.25%	1.75%
Non-customer generated Solar	N/A	0.65%	1.35%	2.10%	2.90%	3.75%
Total In-State Solar	0.50%	1.26%	2.25%	2.88%	4.16%	5.50%

Tier 1 - A, DG Solar A, Non-DG Solar A, Total In-State Solar A,  
Tier 1 - B...



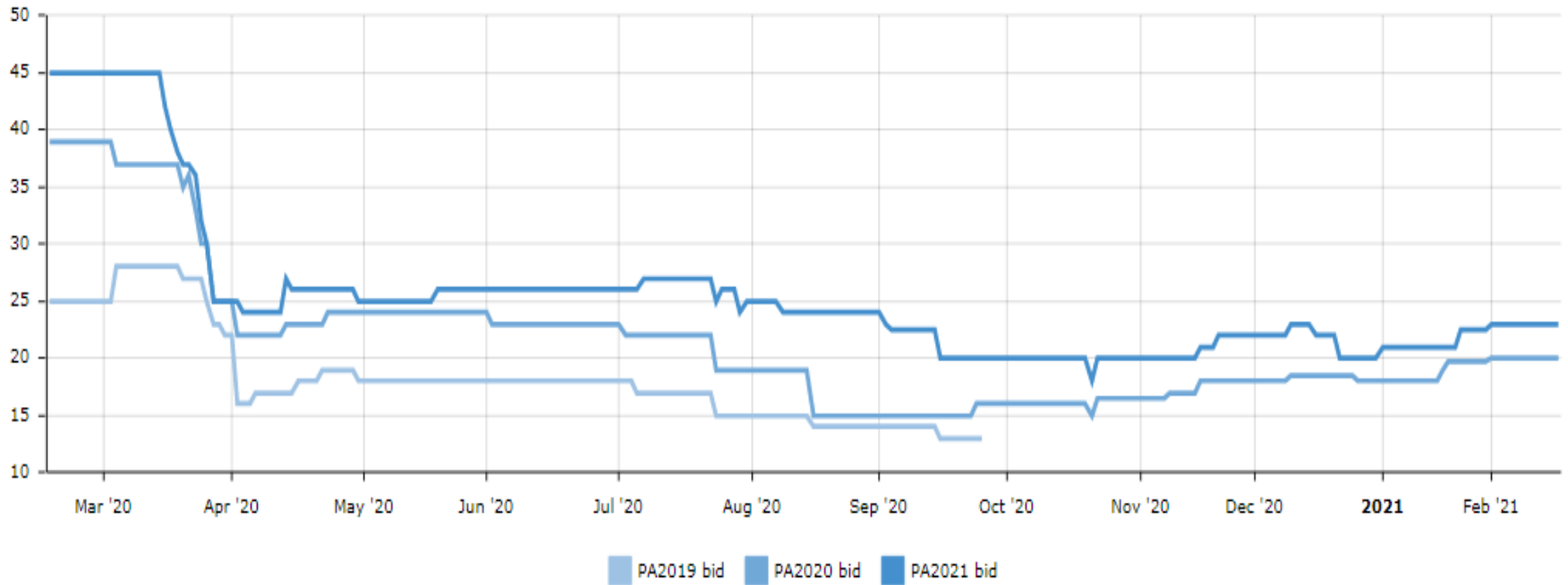
Current PA SACP = \$74.00/SREC

# Current PA SREC Prices

PA

Latest Bid Price: \$23.00

Bid Prices for PA - Last Twelve Months (LTM)



This graph is protected by copyright laws and contains material proprietary to SRECTrade, Inc. All bid pricing and notes included are indicative and subject to change. Please contact us for most current markets. If a market is not quoted herein, please [contact us](#) directly for further information. [Usage policy](#).