



# Pennsylvania Solar Update

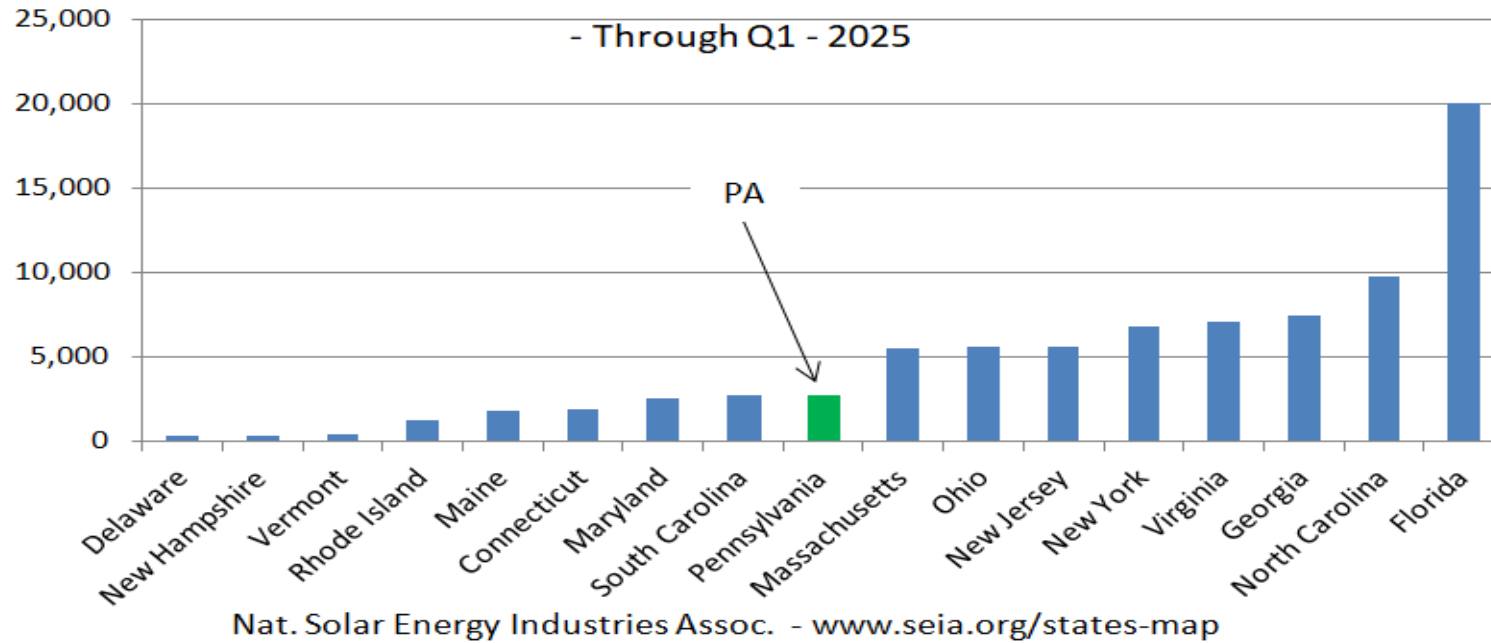
## Lightning Talks

SEF EnergyPath  
July 16, 2025



Ron Celentano – MSSIA - VP for Pennsylvania  
PASSIA - President  
([celentanoR@aol.com](mailto:celentanoR@aol.com))

## Total Solar Capacity (MW) Installed by State on the East Coast

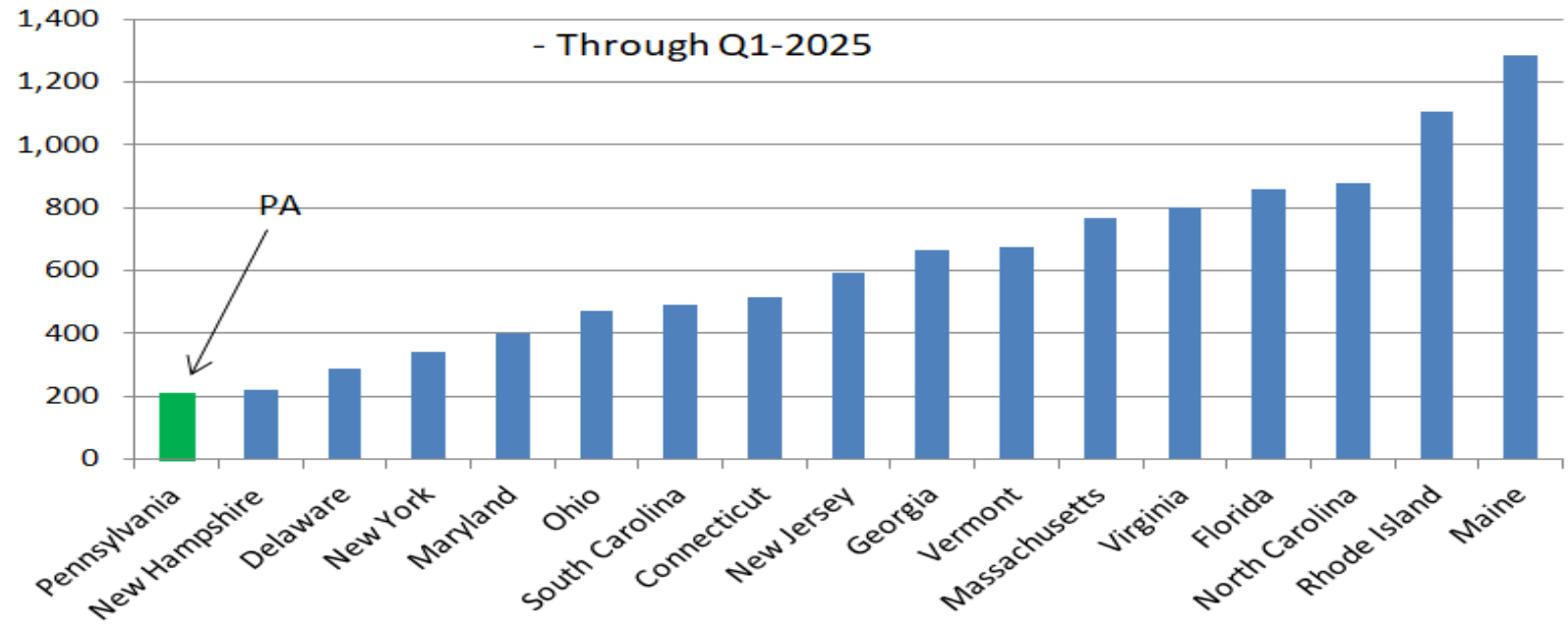


## Solar in Other East Coast States Compared to PA

## Solar in Pennsylvania Ranks 10th in the Nation

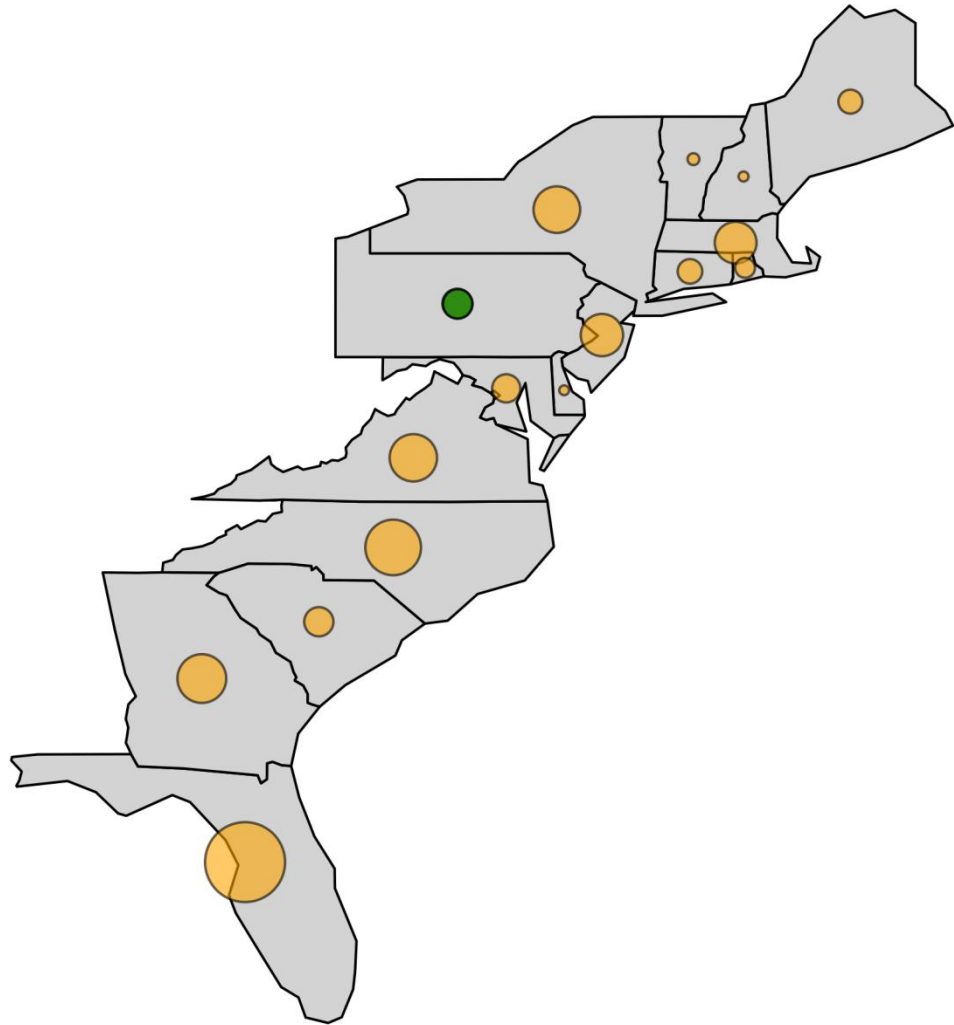
SEIA – Qrt Q1, 2025

## Total Solar PV Installed per Capita (MW/Million)

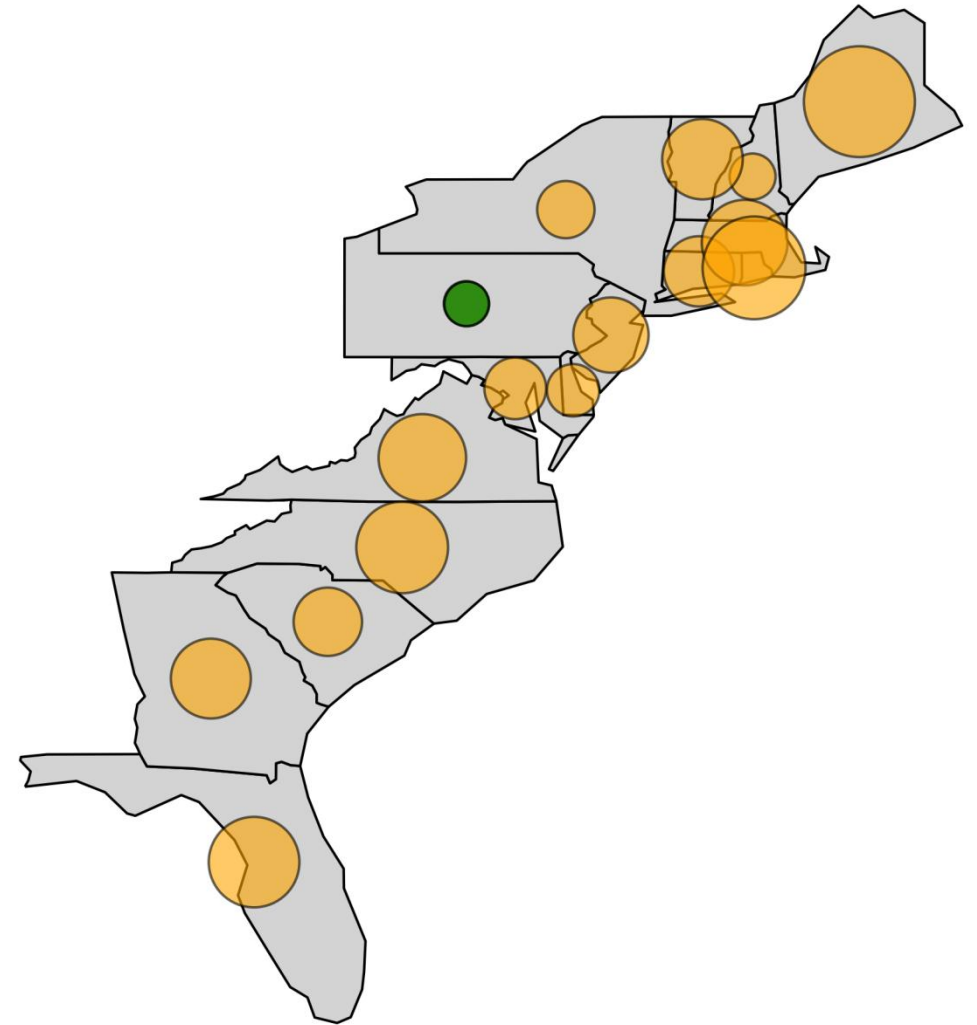


# Solar in Other East Coast States Compared to PA

Solar Installed Capacity (MW) by State - East Coast  
- Through Q1 2025

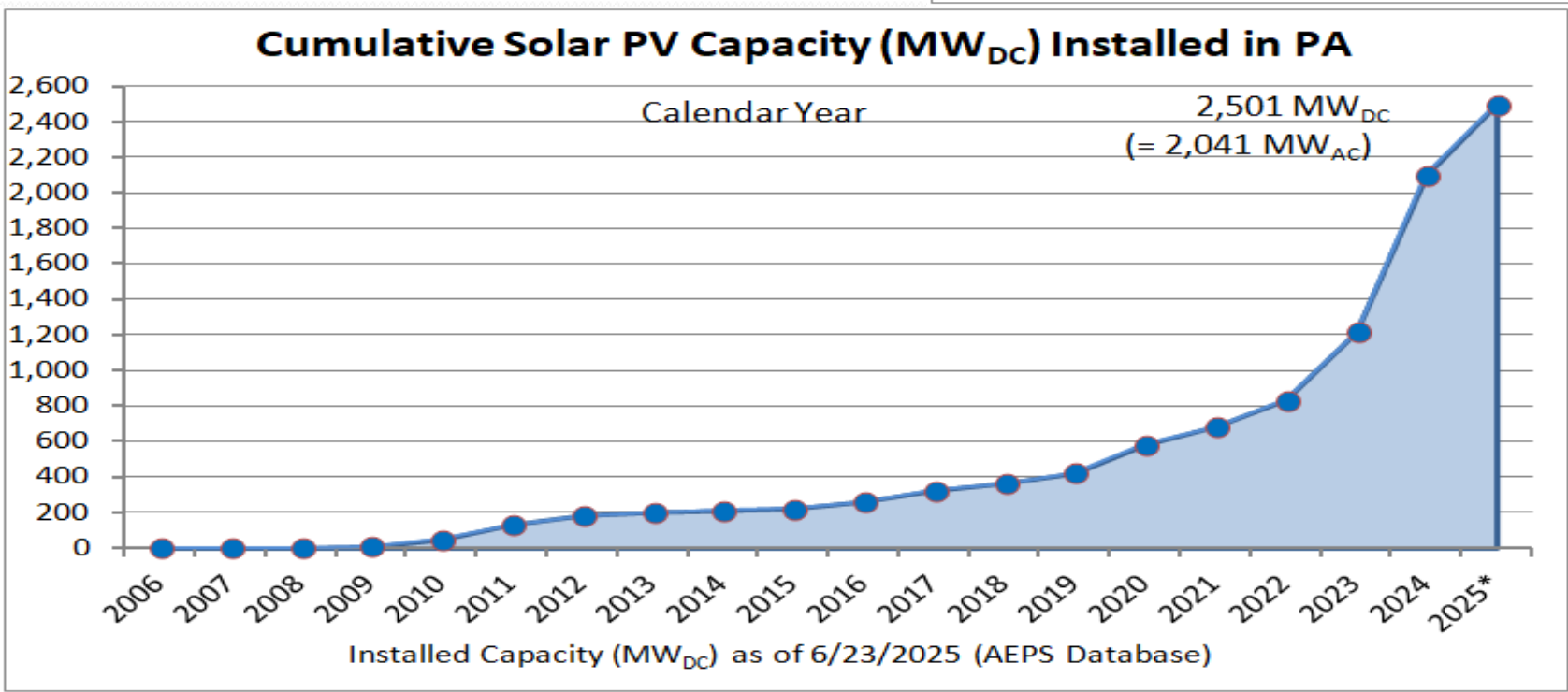
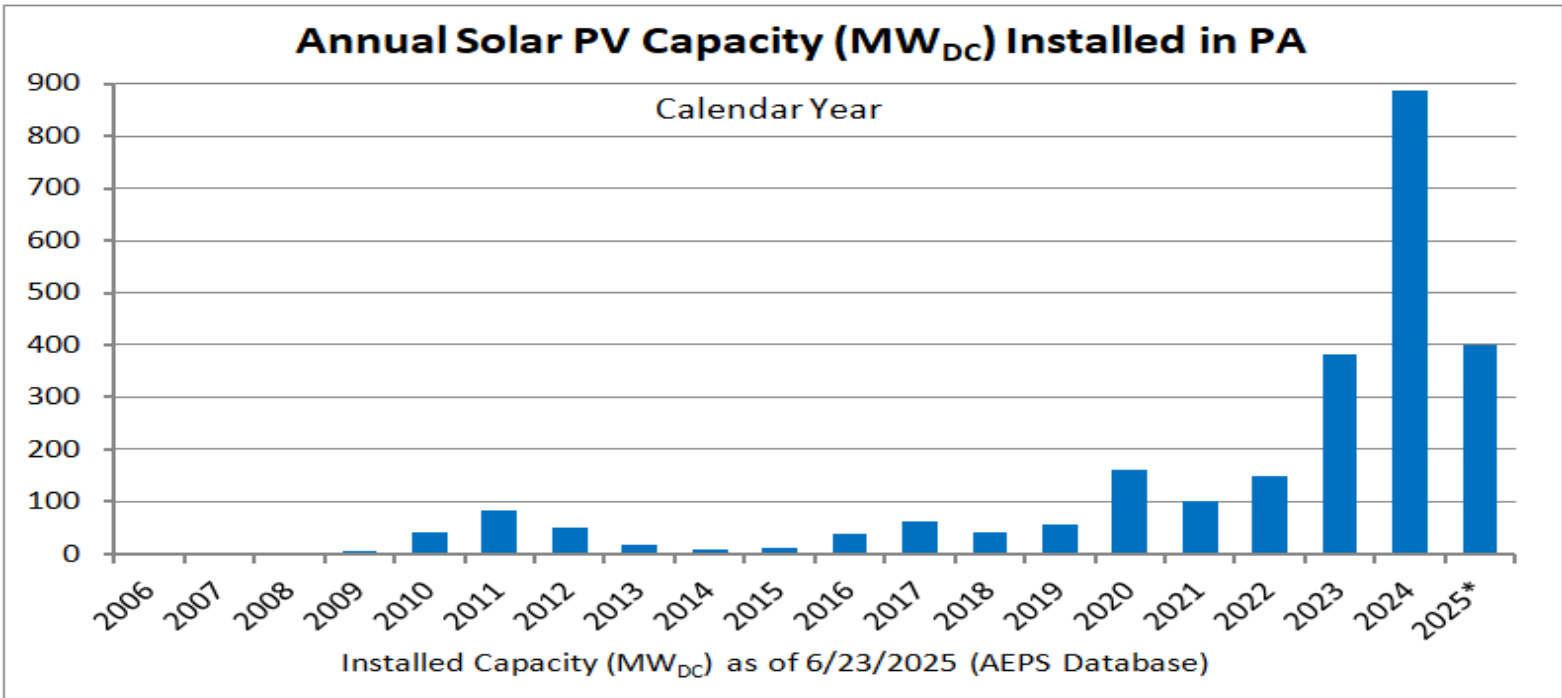


Total Solar PV Installed per Capita (MW/Million)  
- Through Q1 2025



# PV Capacity in PA Annual & Cumulative

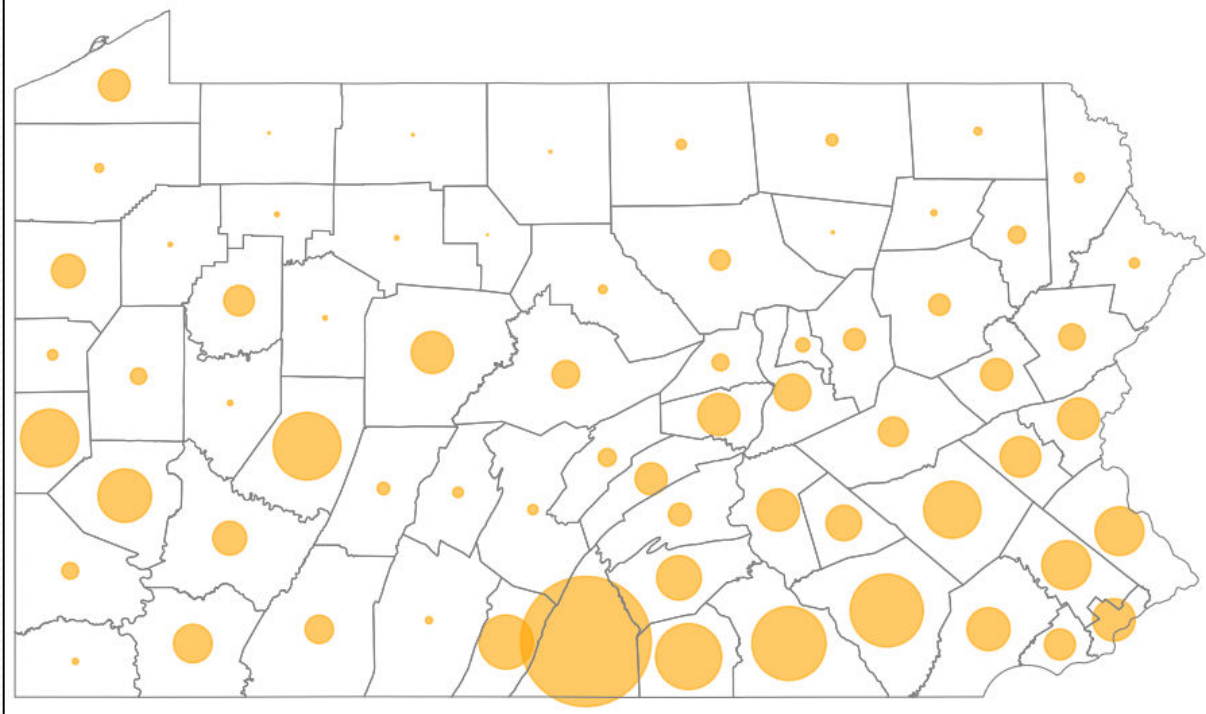
As of 6/23/2025



SEIA reports 2,742 MW installed through Qrt 1-2025

# Solar PV Installations in PA by County

Total Solar PV Capacity (MW in DC) by County in PA as of 06-23-2025

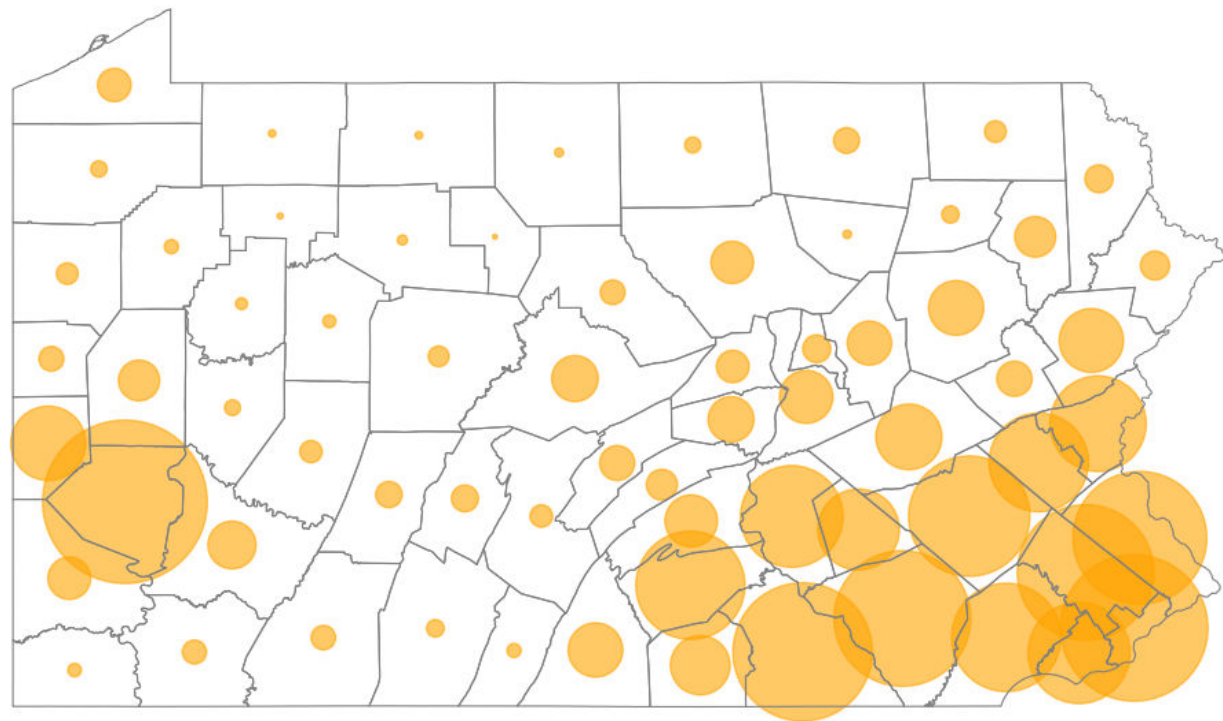


0.5% Solar PV Requirement = 525.0 MW<sub>AC</sub> Solar PV Capacity

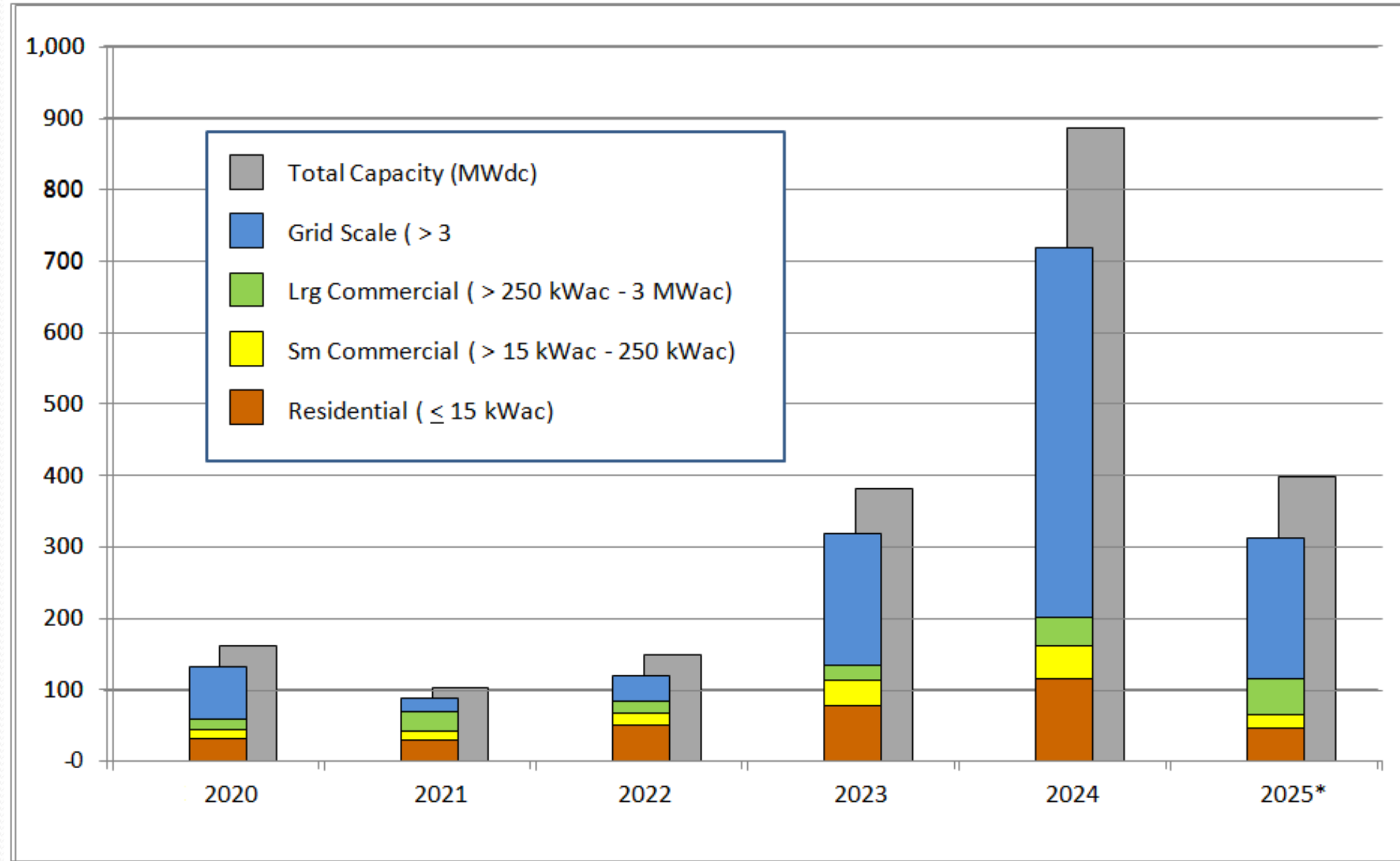
534.4 MW<sub>AC</sub> had been installed in PA by 5/31/2021

Currently, 2,041 MW<sub>AC</sub> is installed (as of 6/23/2025), or the solar share in PA = **1.94%**

Total Number of Solar PV Systems Installed by County in PA as of 06-23-2025



# Annual Solar PV Capacity (MW) Installed in PA: AC vs DC

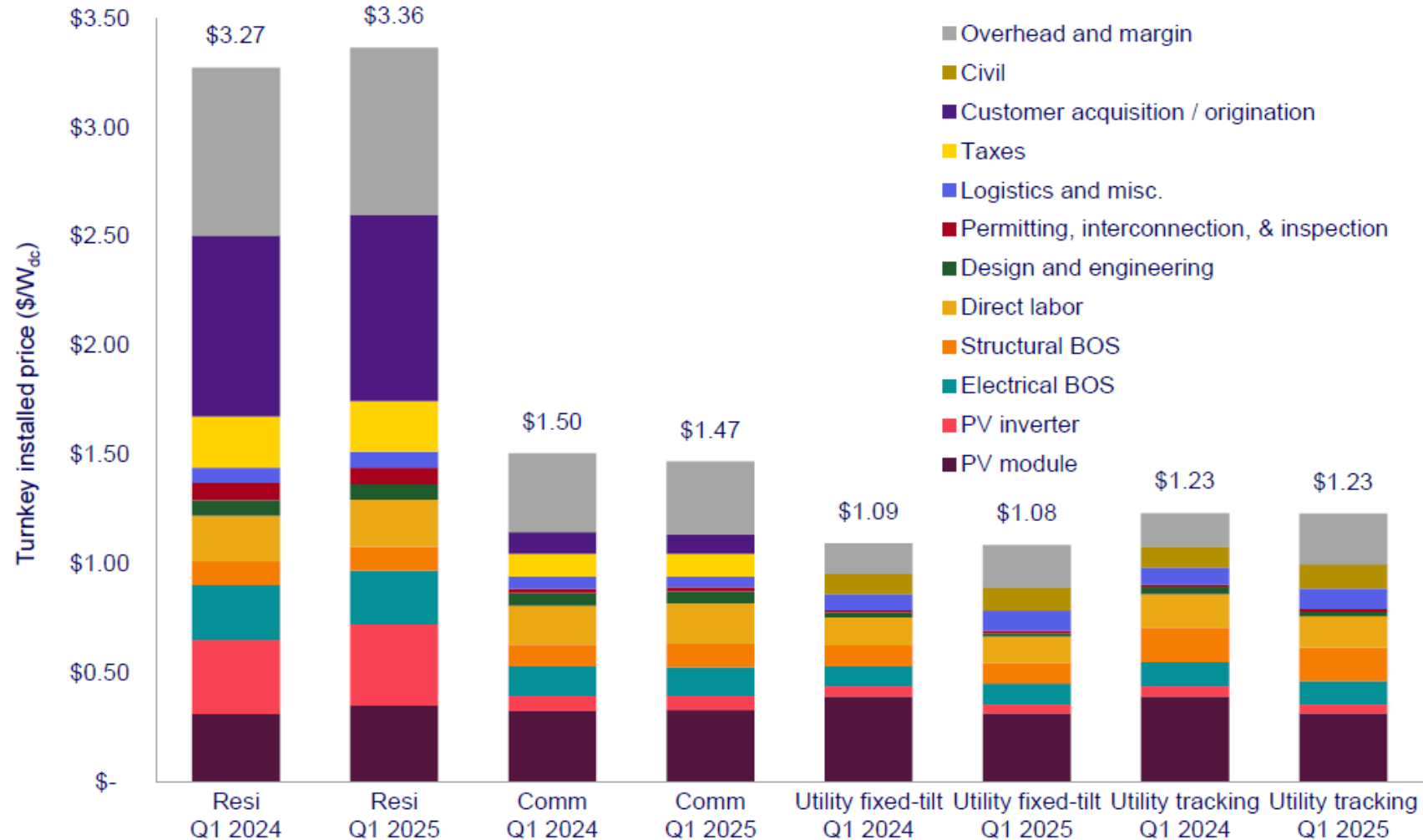


\* as of 6/23/2025 as per PA AEPS (PUC)



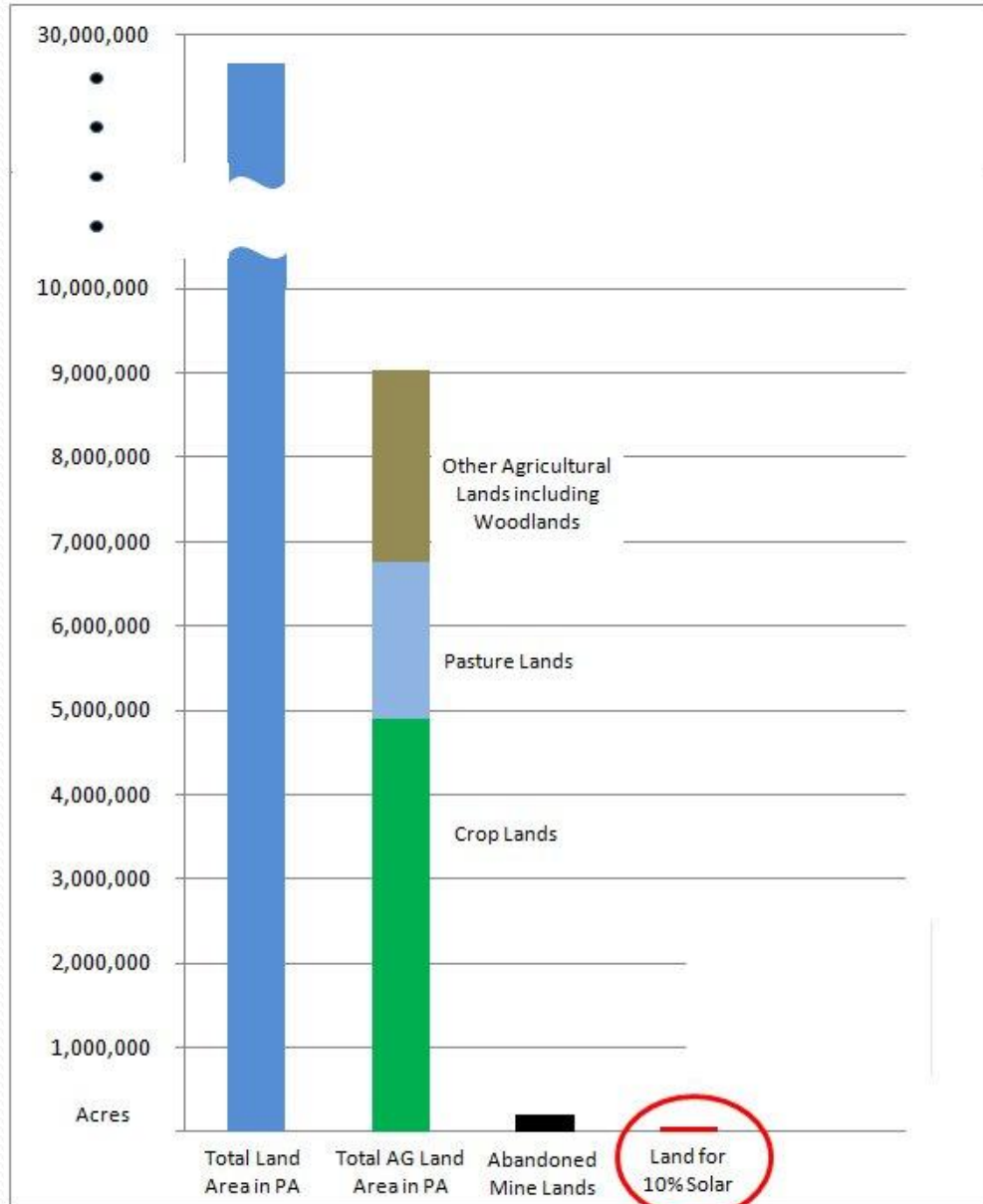
# National Average Installation Costs for Solar PV

Modeled US national average system prices by market segment, Q1 2024 and Q1 2025



Source: Wood Mackenzie

# Great Myth – Solar Farms Will Reduce Crop Yields



## Some Advancements

PV Module Efficiency

Battery Storage – Grid scale, distribution scale at substations and BTM applications

Micro-grid applications

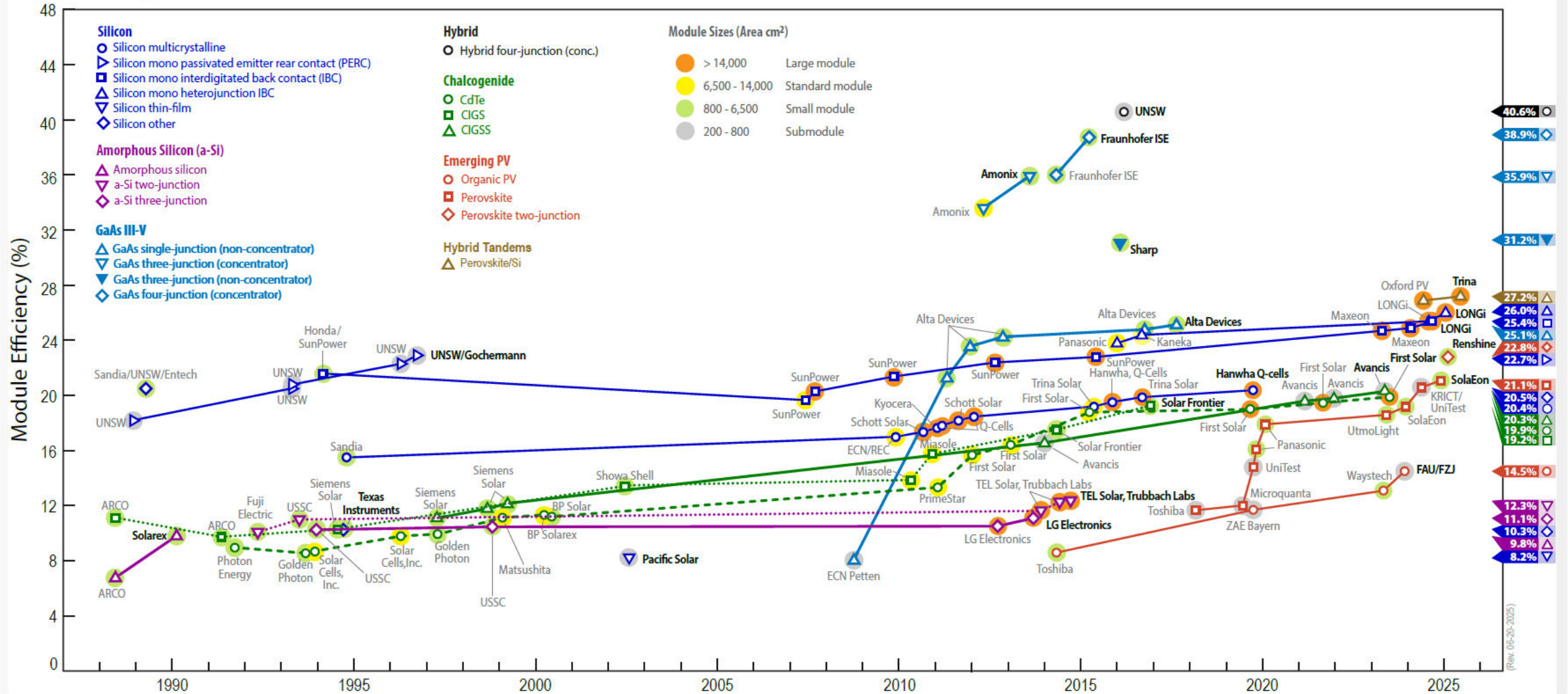
Virtual Power Plant (VPP) applications

Agrivoltaics / Aquavoltaics



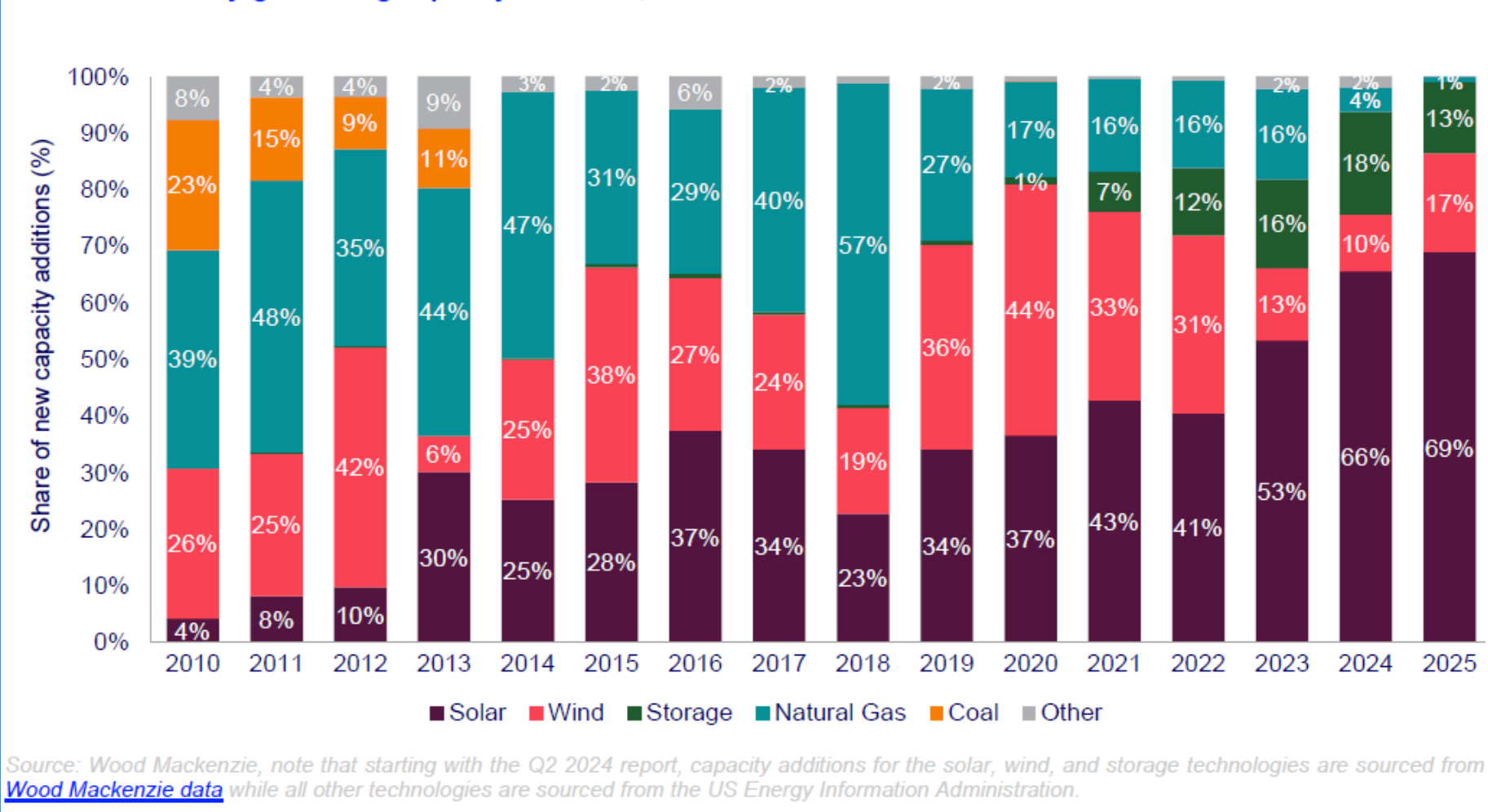
# Solar PV Module Efficiencies

## Champion Module Efficiencies



# Solar PV Continues Dominate and Grow – New Electric Generating Capacity

New US electricity-generating capacity additions, 2010 – Q1 2025



Thank You!!