



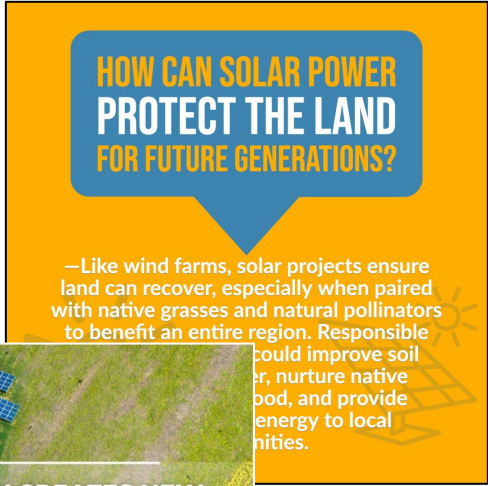
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— TRANSMISSION LINES TRANSPORT VITAL ELECTRICITY FROM AREAS OF HIGH ENERGY PRODUCTION TO AREAS OF HIGH DEMAND. INVESTING IN TRANSMISSION INFRASTRUCTURE WOULD ALLOW MORE AMERICANS TO ENJOY THE BENEFITS OF LOW-COST, RELIABLE ELECTRICITY. —

Advanced Power ALLIANCE



HOW CAN SOLAR POWER PROTECT THE LAND FOR FUTURE GENERATIONS?

—Like wind farms, solar projects ensure land can recover, especially when paired with native grasses and natural pollinators to benefit an entire region. Responsible solar projects could improve soil health, nurture native pollinators, and provide clean energy to local communities.

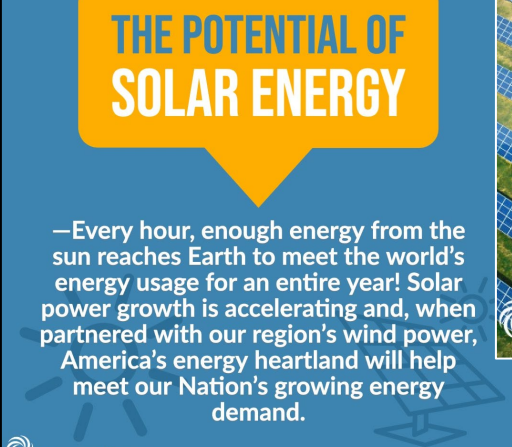


SOLAR ENERGY CREATES NEW ECONOMIC OPPORTUNITIES FOR LANDOWNERS

Advanced Power ALLIANCE



DYNAMIC DECADE
A PODCAST FOCUSED ON THE ECONOMY, ENERGY AND INNOVATION



THE POTENTIAL OF SOLAR ENERGY

—Every hour, enough energy from the sun reaches Earth to meet the world's energy usage for an entire year! Solar power growth is accelerating and, when partnered with our region's wind power, America's energy heartland will help meet our Nation's growing energy demand.



Expand renewable and natural gas infrastructure to advance clean energy leadership

BY AMY ANDRYSZAK AND JEFF CLARK, OPINION CONTRIBUTORS — 04/22/21 02:30 PM EDT
THE VIEWS EXPRESSED BY CONTRIBUTORS ARE THEIR OWN AND NOT THE VIEW OF THE HILL

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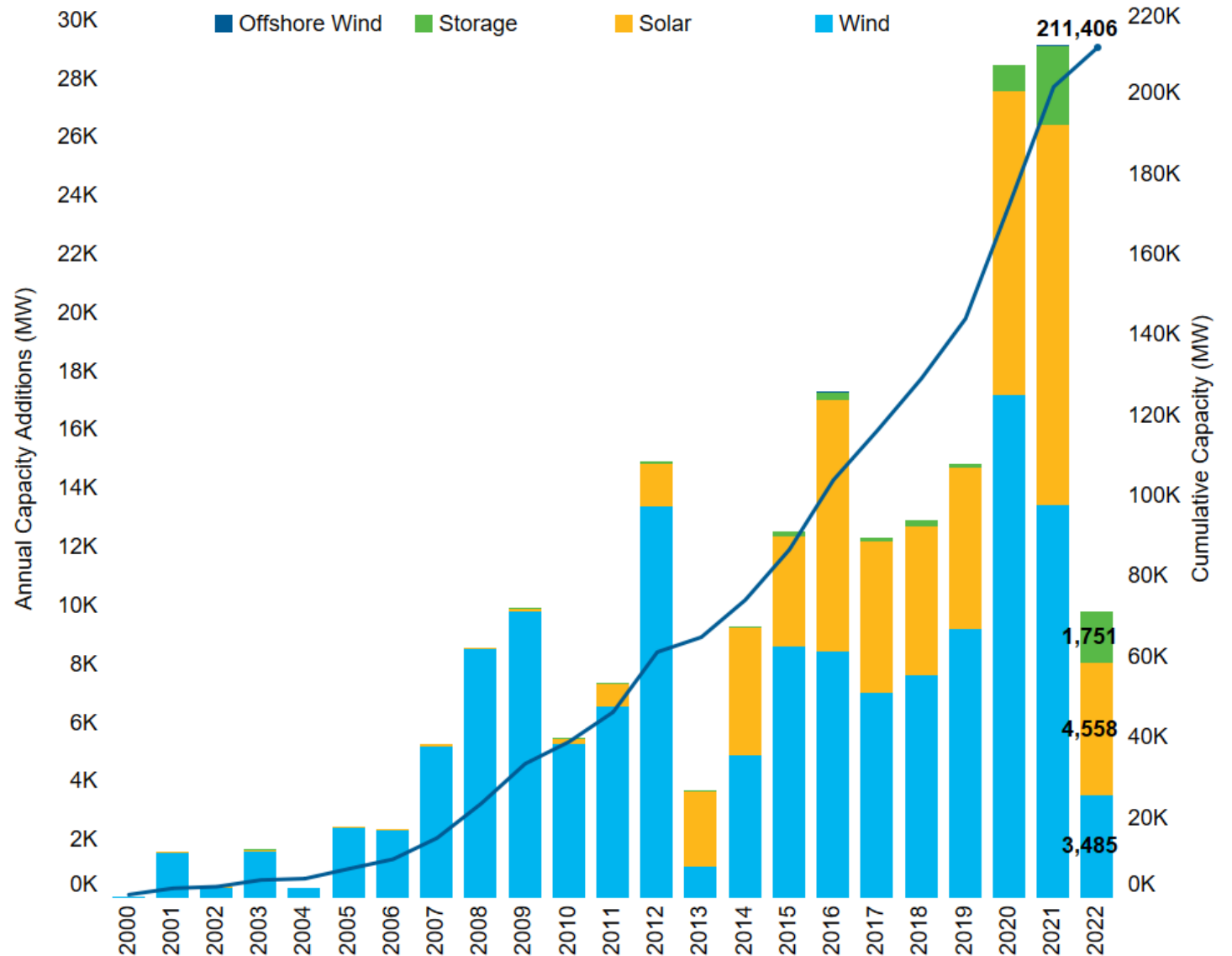
- No one energy resource can deliver every attribute the world requires.
- Leveraged together, we can extend the economic life of all energy resources.
- Markets and customers are changing.
- In this dangerous world, Energy is a weapon.
- Democracies make better energy.
- America: Quality producer and reliable ally.



Over 211 GW now operating in U.S.

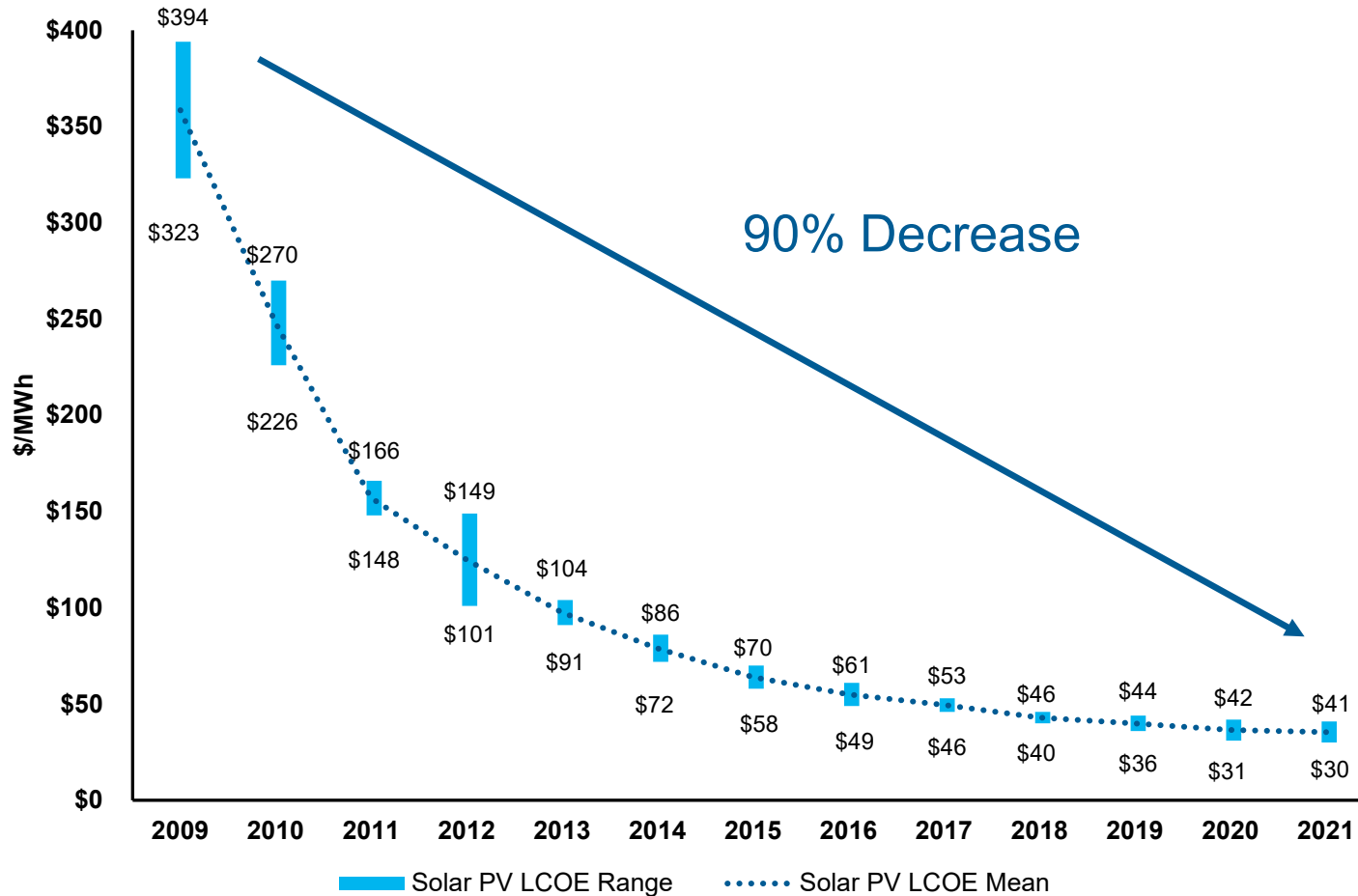
2022 additions push total
clean power installations
to 211,406 MW

- Nearly 9.8 GW of clean power capacity was installed in the first quarter of 2022
 - 4,558 MW of solar
 - 3,485 MW of wind
 - 1,751 MW of battery storage
- Installations in Q2 2022 were at their lowest levels since 2019



Cost Reductions in Solar

Unsubsidized Solar LCOE



PV solar costs have decreased 90% since 2009 to an unsubsidized cost of \$36/MWh

- **Falling costs have led to strong solar capacity expansion**
- **Mean LCOE in 2021 estimated at just \$36/MWh, compared to \$157/MWh in 2011**
- **Solar costs have declined \$120/MWh in the last decade**

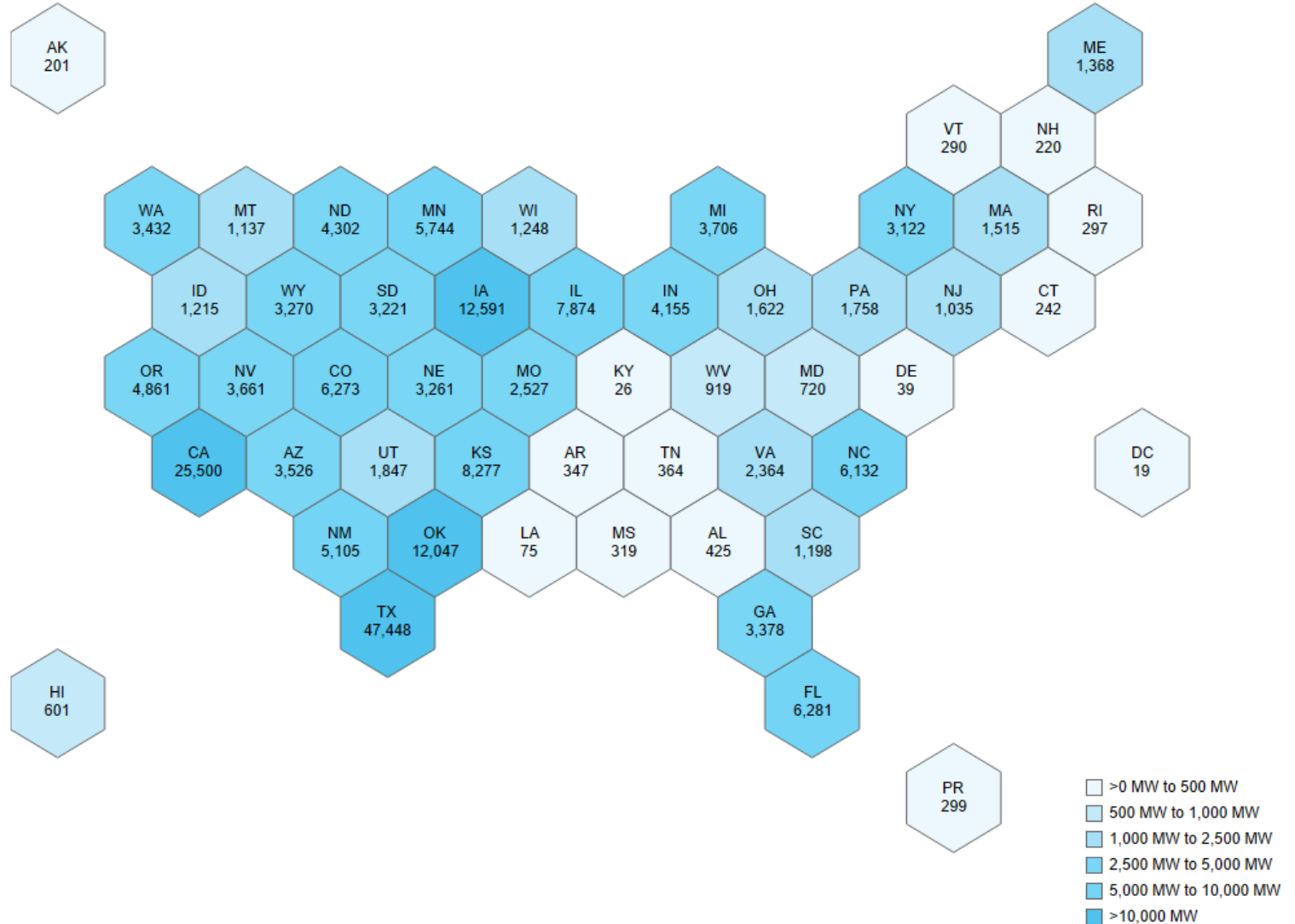


Clean Power Capacity

Georgia is a leader in Southeastern renewable energy but has taken a measured approach to solar procurement.

GA has 3.378GW of existing Clean Power Capacity and will approach 6GW once all currently contracted GA Power Company solar projects are grid connected.

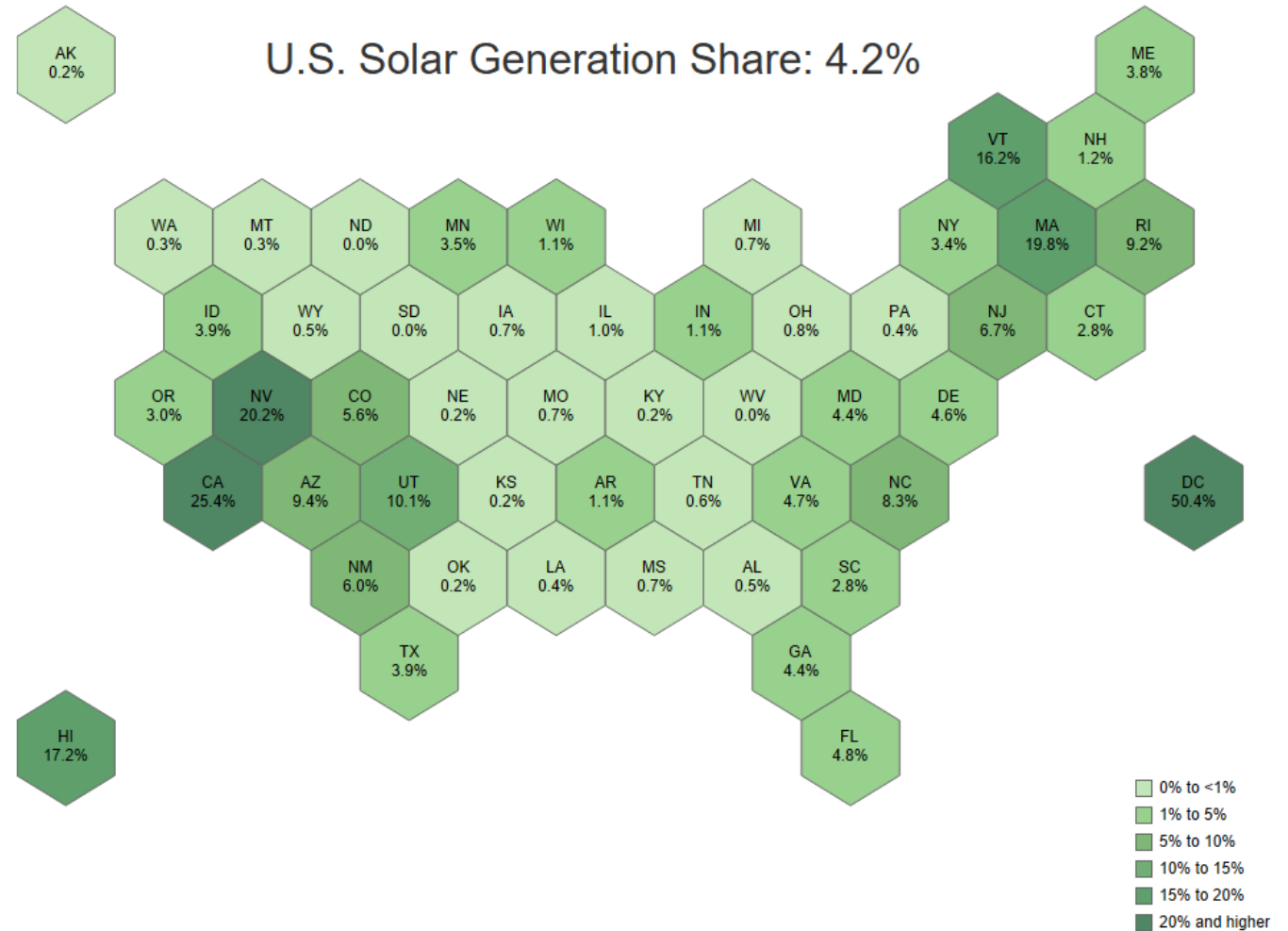
- Eleven states (CA, CO, FL, IA, IL, KS, MN, NC, NM, OK, TX) have a combined clean power capacity of over 5 GW
- Clean power is installed in every state of the union



Solar Generation Shares

Solar energy trails wind energy across the U.S. but solar outperforms wind in Georgia.

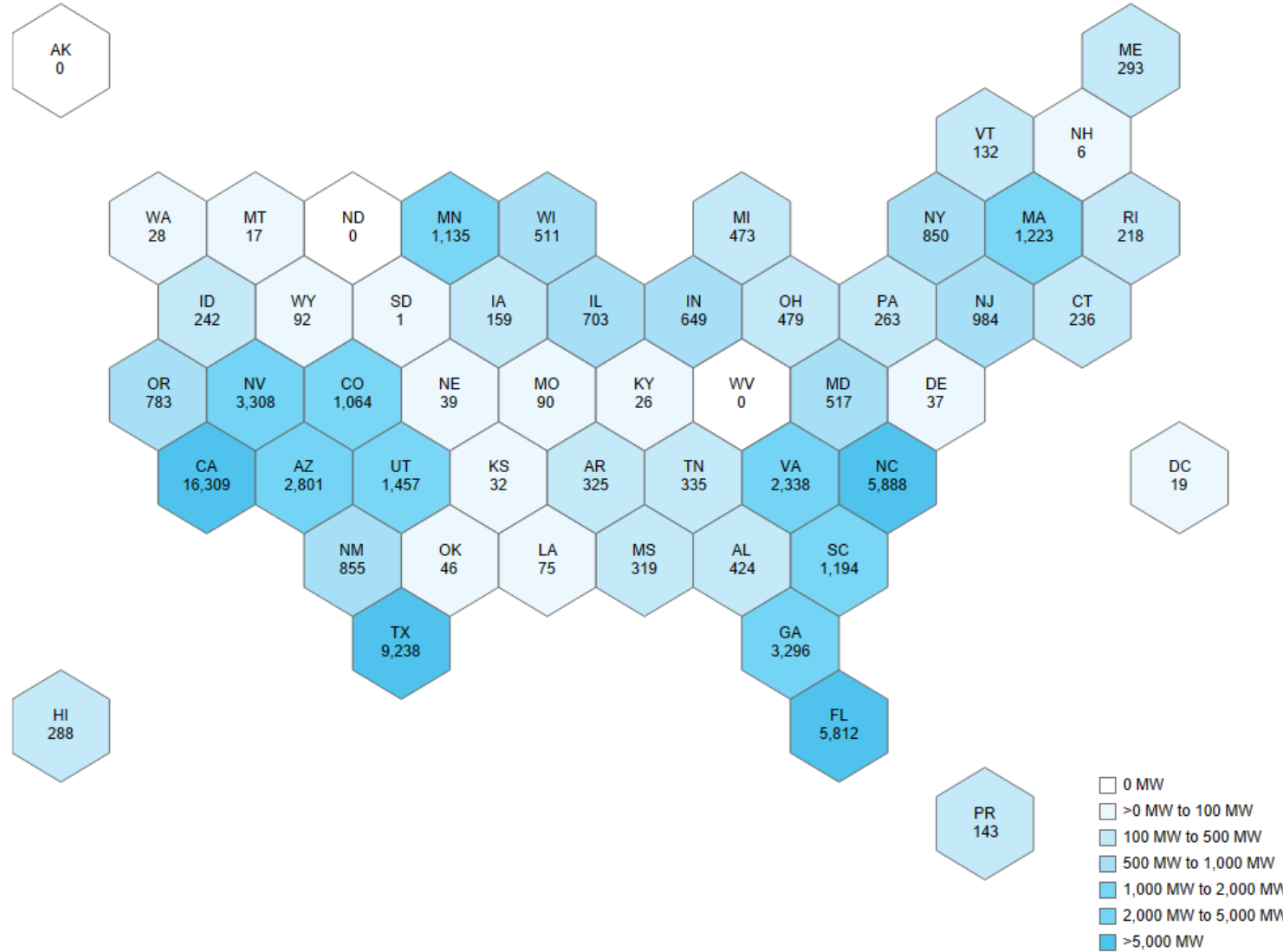
- Georgia’s conservative Public Service Commission has caused GA Power to adopt a steady, measure solar procurement pace.
- Georgia at 4.4%, slightly exceeds the national average.
- Green Power EMC has adopted a similar, moderate procurement pace.
- Human Resource and Transmission Queue constraints also limit the pace of solar procurement.
- Currently, GA Power procures 5-6 utility scale solar projects every 3-5 years.



*Generation shares are based on the last 12 months of available data, currently March 2021 through February 2022



Solar Capacity



Top 10 Solar States	
California	16,309 MW
Texas	9,238 MW
North Carolina	5,888 MW
Florida	5,812 MW
Nevada	3,308 MW
Georgia	3,296 MW
Arizona	2,801 MW
Virginia	2,338 MW
Utah	1,457 MW
Massachusetts	1,223 MW

Georgia's Solar Capacity is nearly identical to its Clean Power Capacity because the State's resource endowment is well-suited for solar.



Why Renewable Energy in Georgia?

- Job Creation.
- Material increase in Ad Valorem and Property Tax revenue to Rural GA Counties.
- Financial Hedge Against Fuel Price Volatility.
- Minimal Water Use or Obligation.
- Economic Opportunity for hard-to-reach Rural Counties and Landowners.
- Low Price Power Generation for Consumers.
- C&I Corporate Demand for solar RECs drives Statewide Economic Development.
- Availability of Solar RECs allow Georgia to compete effectively for new, corporate investment.



3M	Cisco	Gerdau	Lowe's	Salesforce
AB InBev	Citi	Google	Lululemon	Sprint
Akamai	Clorox	Grupo Bimbo	Lyondell Bassell	Starbucks
Technologies	Crown Holdings	Henkel AG & Co.	Mars	Synopsys
Amazon	CyrusOne	KGaA	McDonald's	Sysco
Apple	Danone	The Hershey	Microsoft	T-Mobile
Applied Materials	DaVita	Company	Mondelez	Target
AT&T	Digital Realty	Honda	Nestle	The Home Depot
Baker Hughes	Dow Chemical	HPE	Nike	Trane
Ball Corporation	DSM	IKEA	Novartis	Uber
Bank of America	eBay	Intuit	Nucor Corp	Verizon
BASF Corp.	Ecolab	Iron Mountain	Occidental	Walmart
Best Buy	Energy Transfer	Johnson & Johnson	Owens Corning	Wells Fargo
Bloomberg	Equinix	JPMorgan	Philips	
Bristol Myers	ExxonMobil	Kellogg's	PepsiCo	
Squibb	General Mills	L3Harris	Procter & Gamble	
Charles River	General Motors	Technologies Inc.	QTS	



Minimal impact on Agricultural Farmland

Potential Solar WMs	12 GW
Acres per MW	5
Total solar acres used	60,000
Commercial Timber Land* (acres)	24,400,000
Agricultural Farmland* (acres)	9,620,836
<i>Total Ag & Timber acres</i>	34,020,836
Solar as % of:	
Commercial Timberland	0.25%
Agricultural Farmland	0.62%
Combined Timber & Ag Farmland	0.18%

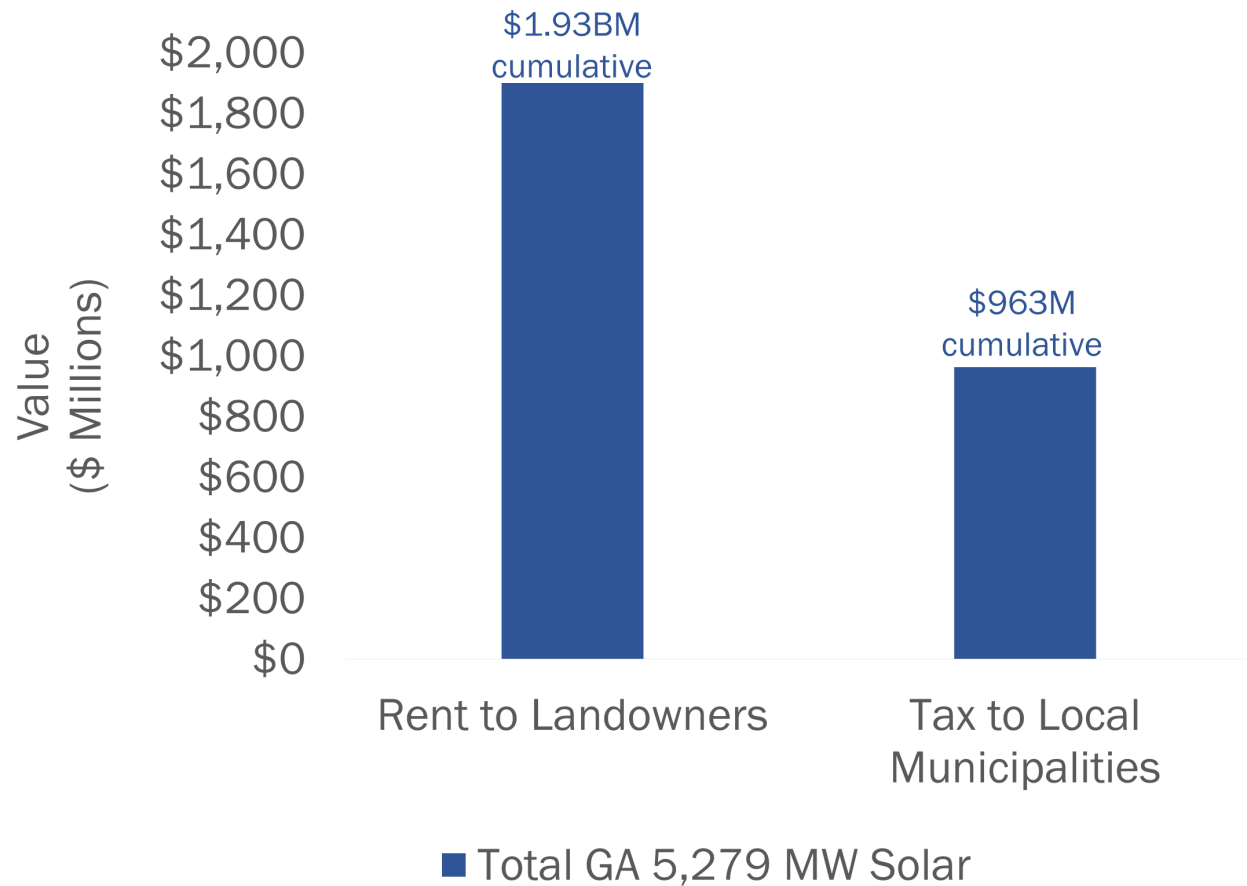
If the existing solar capacity in Georgia *doubled*, solar would displace less than 1% of Agricultural Farmland in Georgia.



*UGA Center for Agribusiness & Economics Development



~\$2.9 Billion in external economic benefit to Georgia landowners and local municipalities for 5,279 MW of GA Power Contracted solar MWs

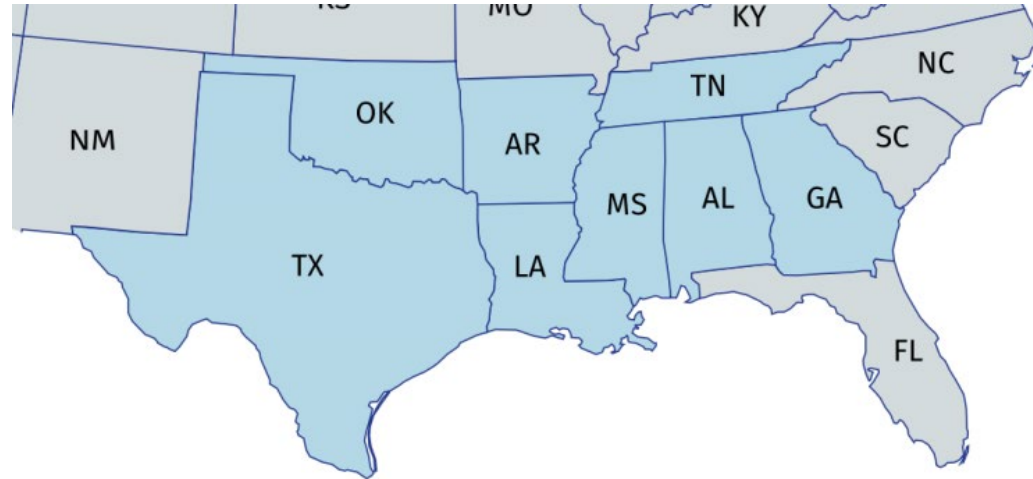


Land Lease and Tax revenues are geographically distributed and impact a broad group of Georgia landowners and rural communities.



Public Support for Renewables Growth

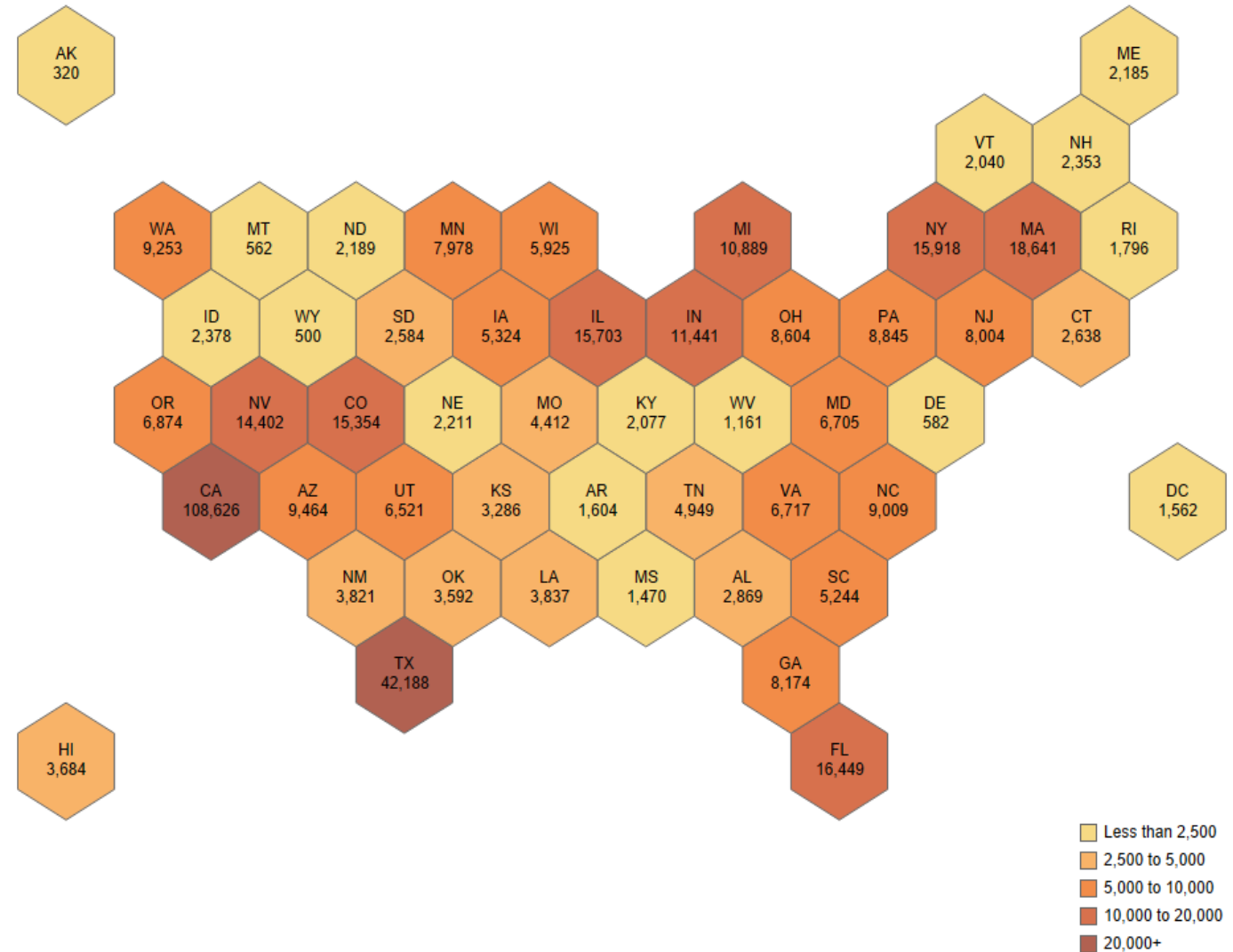
- Alabama 72.7% Support/Probably Support (7.7% Unsure)
- Arkansas 74.7% Support/Probably Support (7.5% Unsure)
- Georgia 76.5% Support/Probably Support (5.5% Unsure)
- Louisiana 71.6% Support/Probably Support (6.0% Unsure)
- Mississippi 69.3% Support/Probably Support (12.2% Unsure)
- Oklahoma 67.0% Support/Probably Support (10.0% Unsure)
- Tennessee 74.8% Support/Probably Support (5.0% Unsure)
- Texas 70.0% Support/Probably Support (10.0% Unsure)



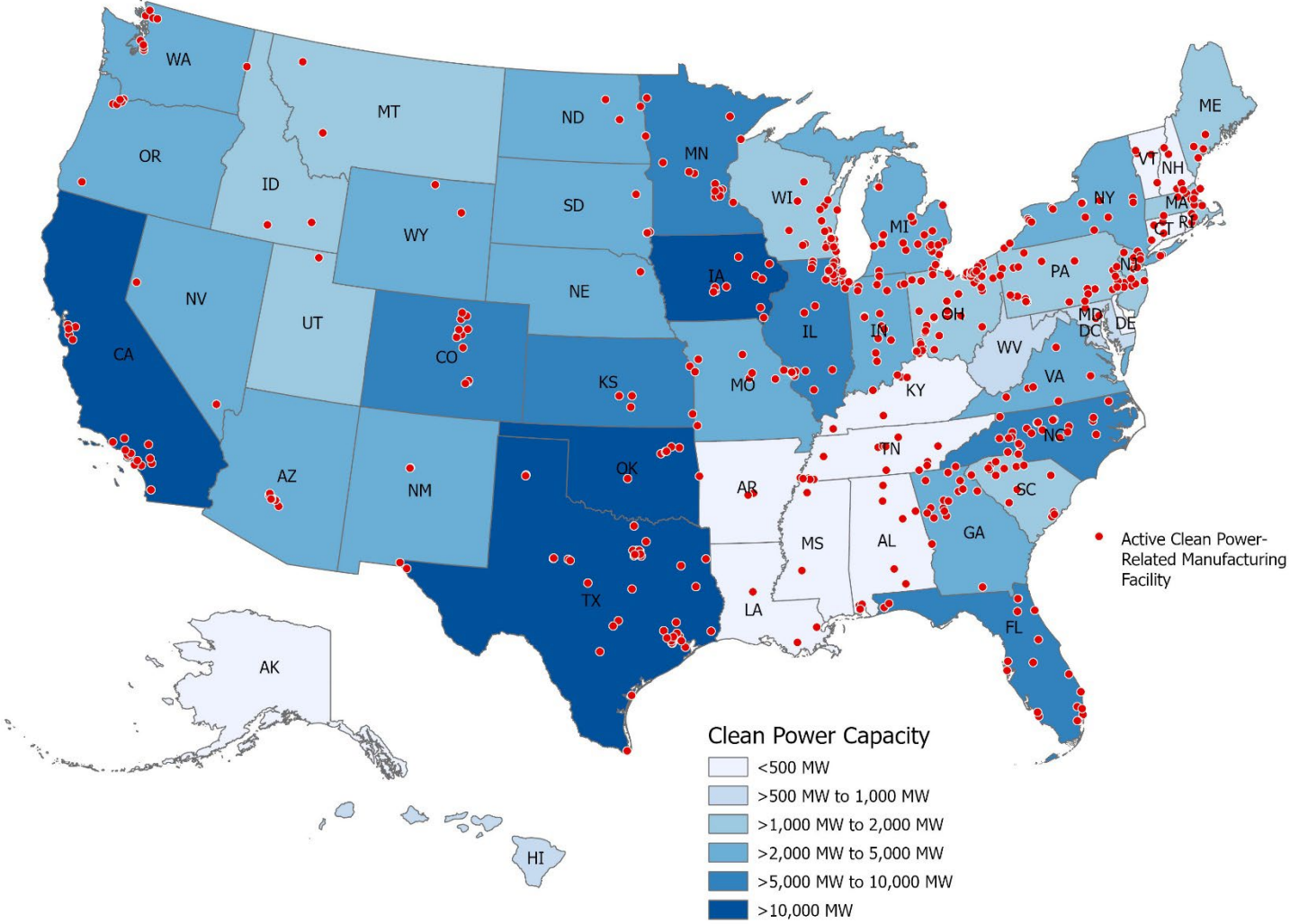
Economic Benefits

Clean power supports nearly 443k jobs across the U.S.

- More than 8,000 jobs in Georgia already.
- Jobs are geographically distributed.
- While concentrated in certain states, clean power jobs are much more evenly spread on a per capita basis



Clean Power Manufacturing



There are over 575 active clean power-related manufacturing facilities across the U.S.

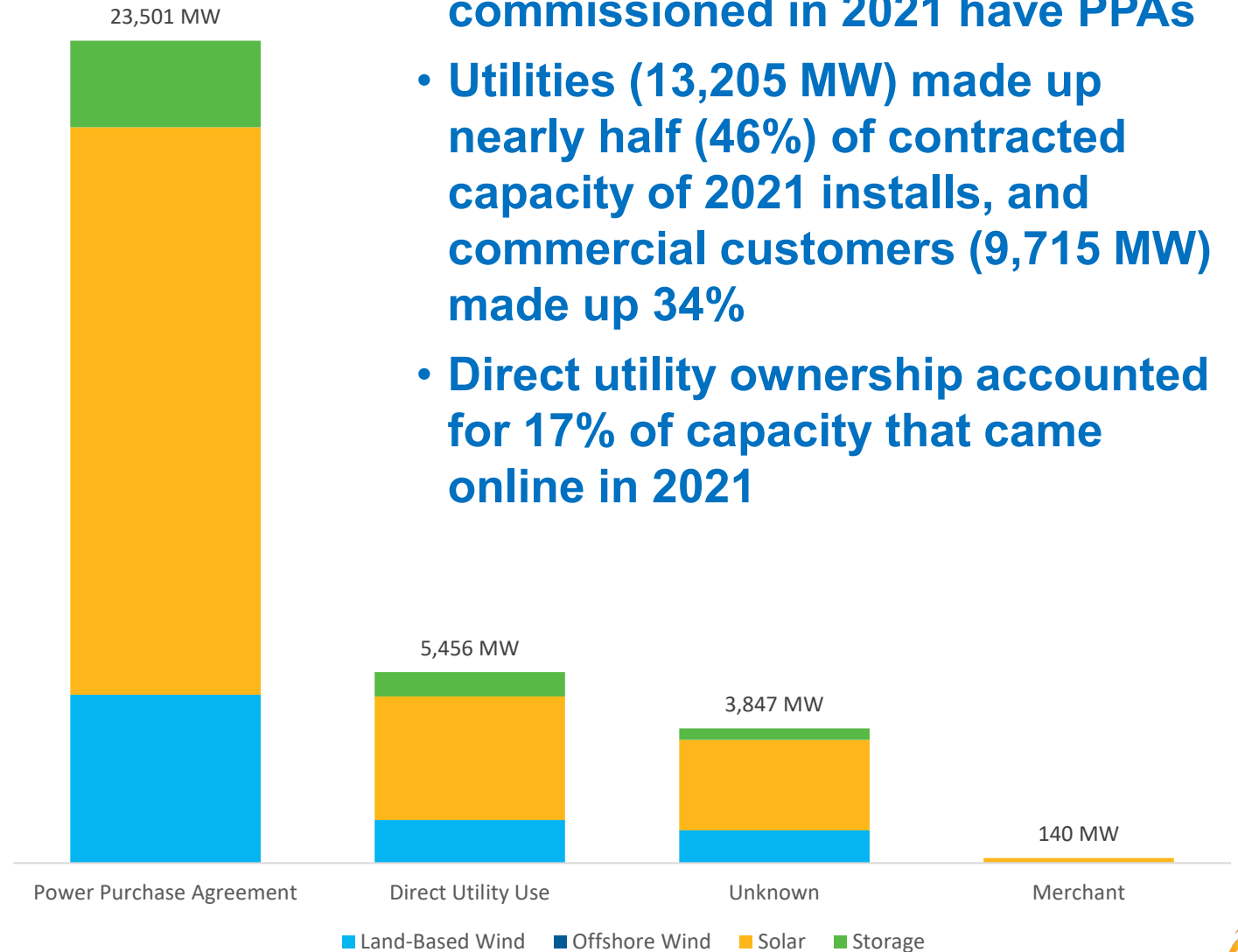
- There are over 500 wind-related manufacturing facilities in the U.S. Aside from providing major components such as blades, towers, and nacelles, there are hundreds of smaller manufacturers providing other components such as coatings, lubricants, power transmission components, and other raw materials to the wind sector.
- There are over 60 utility scale solar-related manufacturing facilities in the U.S. including 11 module manufacturers, 20 racking manufacturers, and dozens more manufacturers of other components. In addition, there are 9 major battery manufacturing facilities across the country.



Clean Power Customers

PPA was the most popular offtake mechanism for projects that came online in 2021

The availability of renewable energy at affordable prices is a tremendous economic development tool. Companies are attracted to long-term, fixed prices to add certainty to planning and seek to meet environmental goals in the state's where they invest.



- 71% of clean power capacity commissioned in 2021 have PPAs
- Utilities (13,205 MW) made up nearly half (46%) of contracted capacity of 2021 installs, and commercial customers (9,715 MW) made up 34%
- Direct utility ownership accounted for 17% of capacity that came online in 2021





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