

<b>DOCKETED</b>	
<b>Docket Number:</b>	21-ESR-01
<b>Project Title:</b>	Energy System Reliability
<b>TN #:</b>	243176
<b>Document Title:</b>	Presentation - SEIA Auxin Solar Petition Impacts
<b>Description:</b>	N/A
<b>Filer:</b>	Courtney Wagner
<b>Organization:</b>	California Energy Commission
<b>Submitter Role:</b>	Commission Staff
<b>Submission Date:</b>	5/20/2022 8:22:08 AM
<b>Docketed Date:</b>	5/20/2022

# Auxin Solar Petition Impacts

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May 20, 2022



*Powering the Solar+ Decade*



# About SEIA

*Building a strong solar industry to power America*



Federal, State &  
Local Policy



Climate &  
Equity



Managing  
Growth



Trade, Technology  
& Manufacturing

# Solar Plays a Central Role in CA's Energy Mix

## Key Figures

### Total Solar Installed

**34,950.05 MW**

3,640.00 MW in 2020

### National Ranking

**1st**

Ranks 2nd in 2020

### Solar Jobs<sup>1</sup>

**68,677**

Ranks 1st in 2020

### Growth Projection

**19,500.94 MW over the next 5 years**

Ranks 2nd



Enough solar installed to power:  
**10,312,387 homes**















Percentage of state's electricity from solar:<sup>2</sup>  
**25.64%**



Price decline over the last five years:  
**4%**

# Solar+Storage Key to Meeting State Goals

	Existing Resources		Projected New Resources	
	2019*	2030**	2030**	2045**
 Solar (Utility-Scale)	12.5 GW	16.9 GW	69.4 GW	
 Solar (Customer)	8.0 GW	12.5 GW	28.2 GW	
 Storage (Battery)	0.2 GW	9.5 GW	48.8 GW	
 Storage (Long Duration)	3.7 GW	0.9 GW	4.0 GW	
 Wind (Onshore)	6.0 GW	8.2 GW	12.6 GW	
 Wind (Offshore)	0 GW	0 GW	10.0 GW	
 Geothermal	2.7 GW	0 GW	0.1 GW	
 Biomass	1.3 GW	0 GW	0 GW	
 Hydrogen Fuel Cells	0 GW	0 GW	0 GW	
 Hydro (Large)	12.3 GW	N/A†	N/A†	
 Hydro (Small)	1.8 GW	N/A†	N/A†	
 Nuclear	2.4 GW	N/A†	N/A†	

# The Auxin Circumvention Case

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- **Auxin petition**
  - 150 MW manufacturer (~3% of domestic c-Si manufacturing)
  - Alleges cell manufacturing in Thailand, Malaysia, Vietnam, and Cambodia is a minor and insignificant process
  - Wants China AD/CVD duties to be grafted to imports from the countries
  - No support from other c-Si module manufacturers
- **Cell manufacturing is far from “minor and insignificant”**
  - Capital expenditures
  - IP and steps involved
  - Government rulings
  - Auxin’s own statements elsewhere
- **Secretary of Commerce has final say/discretion over the decision**

# The Auxin Circumvention Case

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- **Case exposes imports to retroactive tariffs up to 250%**
  - Commerce's precedent/practice make this a reality
  - Note: company specific rates vary widely despite claims that they're only 10-20%
- **Commerce Memo Issued May 2, 2022**
  - Attempt to provide clarity about the scope, but introduces many more questions
    - Rates
    - Scope of products covered and future cases
    - Certification process
- **Bipartisan Opposition to Auxin Petition**
  - Bipartisan group of 22 Senators
  - 85 Democratic Representatives
  - Bipartisan group of 19 Governors

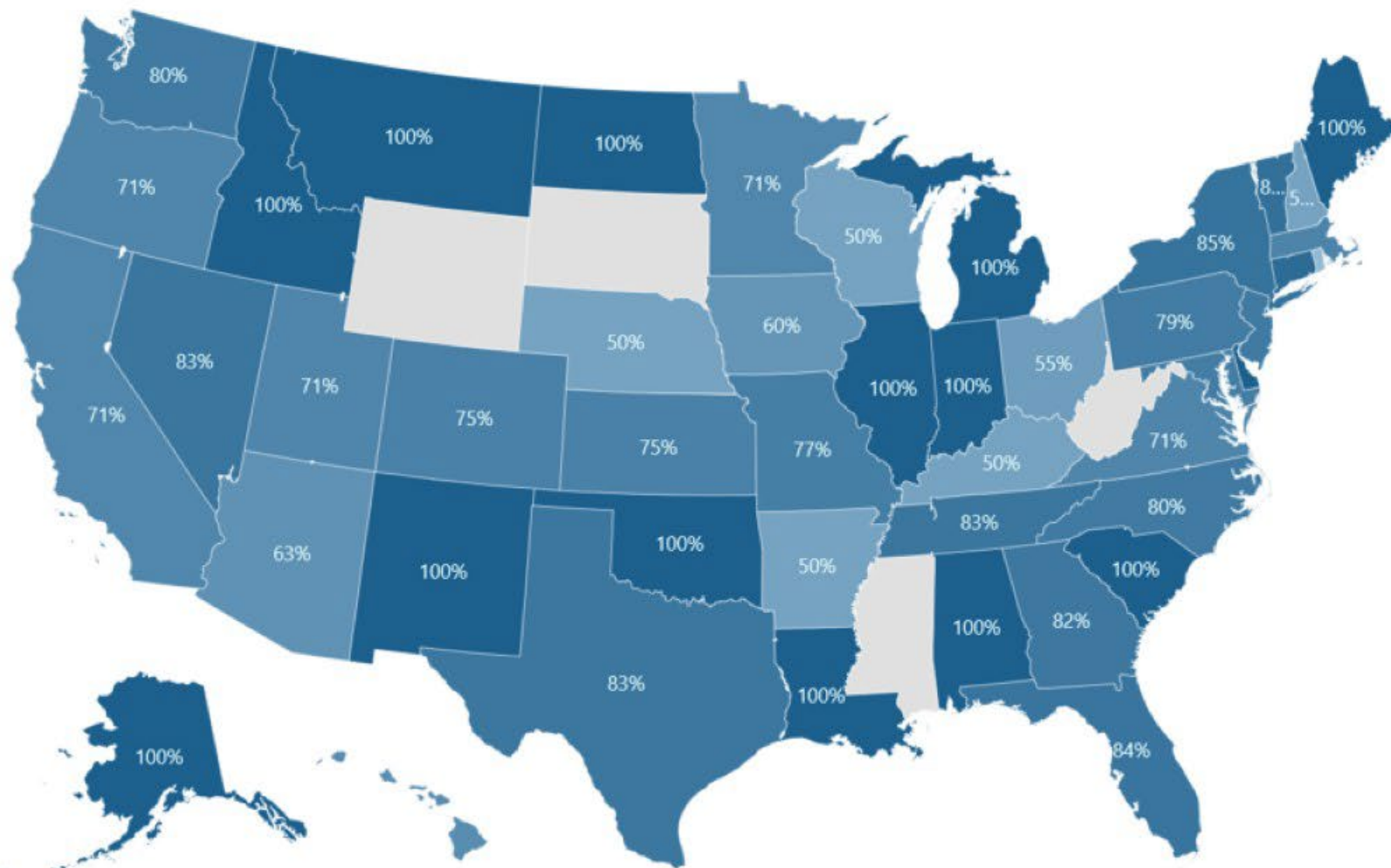
# Timeline

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- Feb. 8: Auxin file complaint alleging “minor and insignificant” processing
- April 1: DOC initiates the case based solely on Auxin’s word
- May 2: Interested parties filed comments rebutting Auxin’s claims
- May 16: Auxin files its replies
- May 19: Comments to Commerce’s May 2 Memo
- August 29: Preliminary determination due date
- Q1 2023: Final determination



# Percent of Respondents Reporting Delayed or Canceled Module Supply



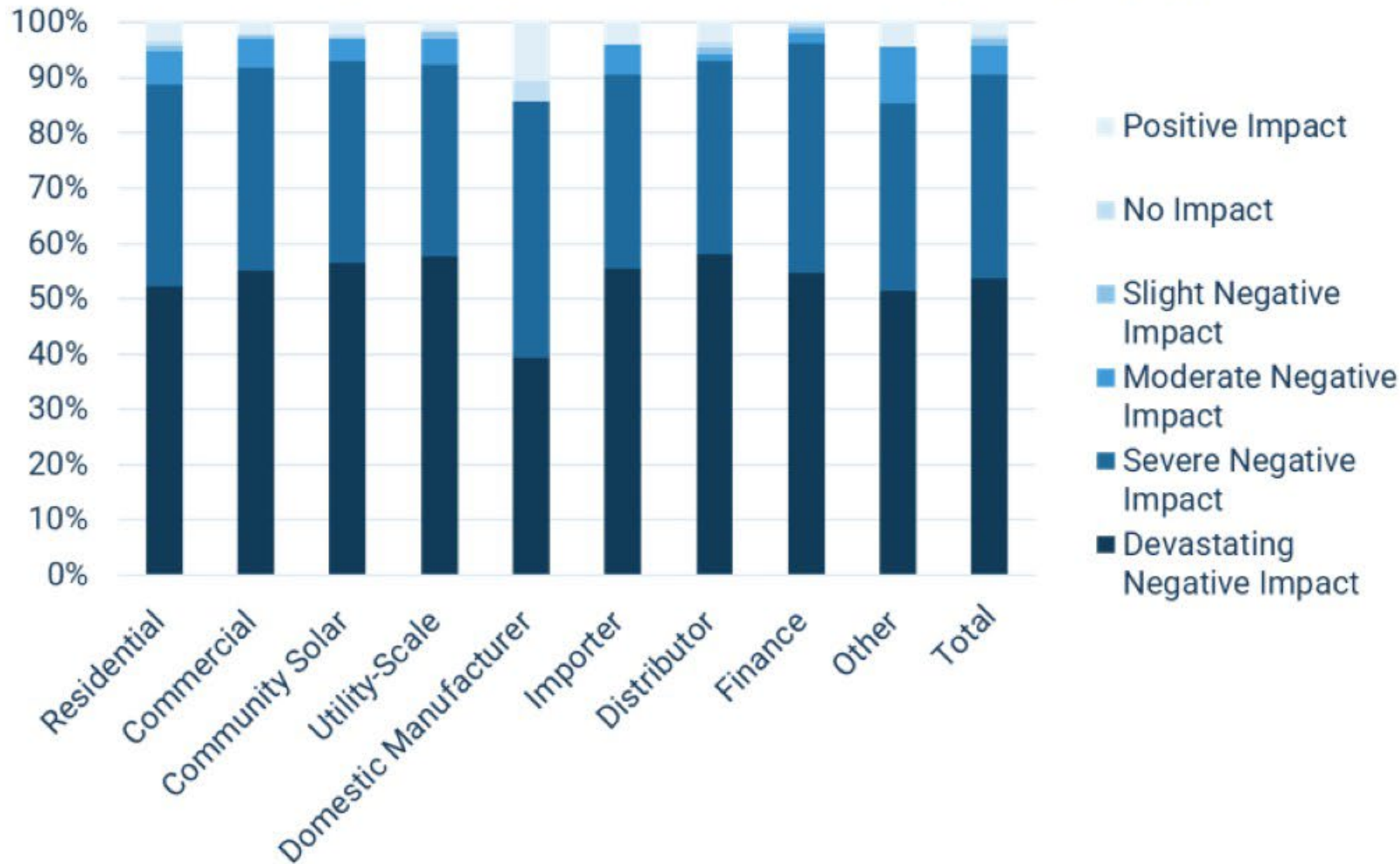
**83% of respondents report module supply cancellation or delay**

Canceled or Delayed



# How do you expect this investigation into imports from Cambodia, Malaysia, Thailand and Vietnam to impact your U.S. business in 2022?

Expected Impact on Solar Business by Company Type



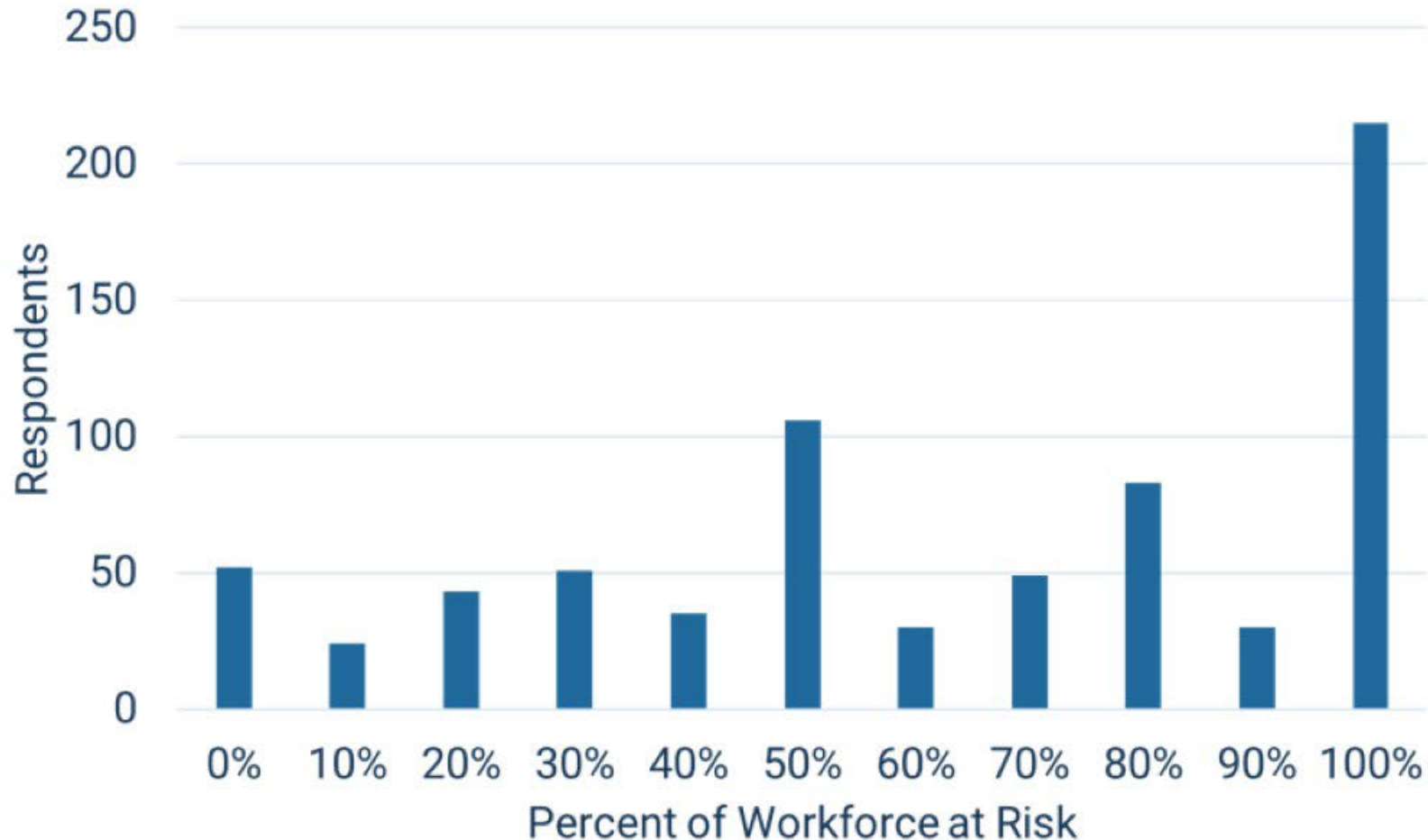
Companies expect damage across the value chain.

**80% of domestic manufacturers**

responding to the survey expect severe or devastating impacts.

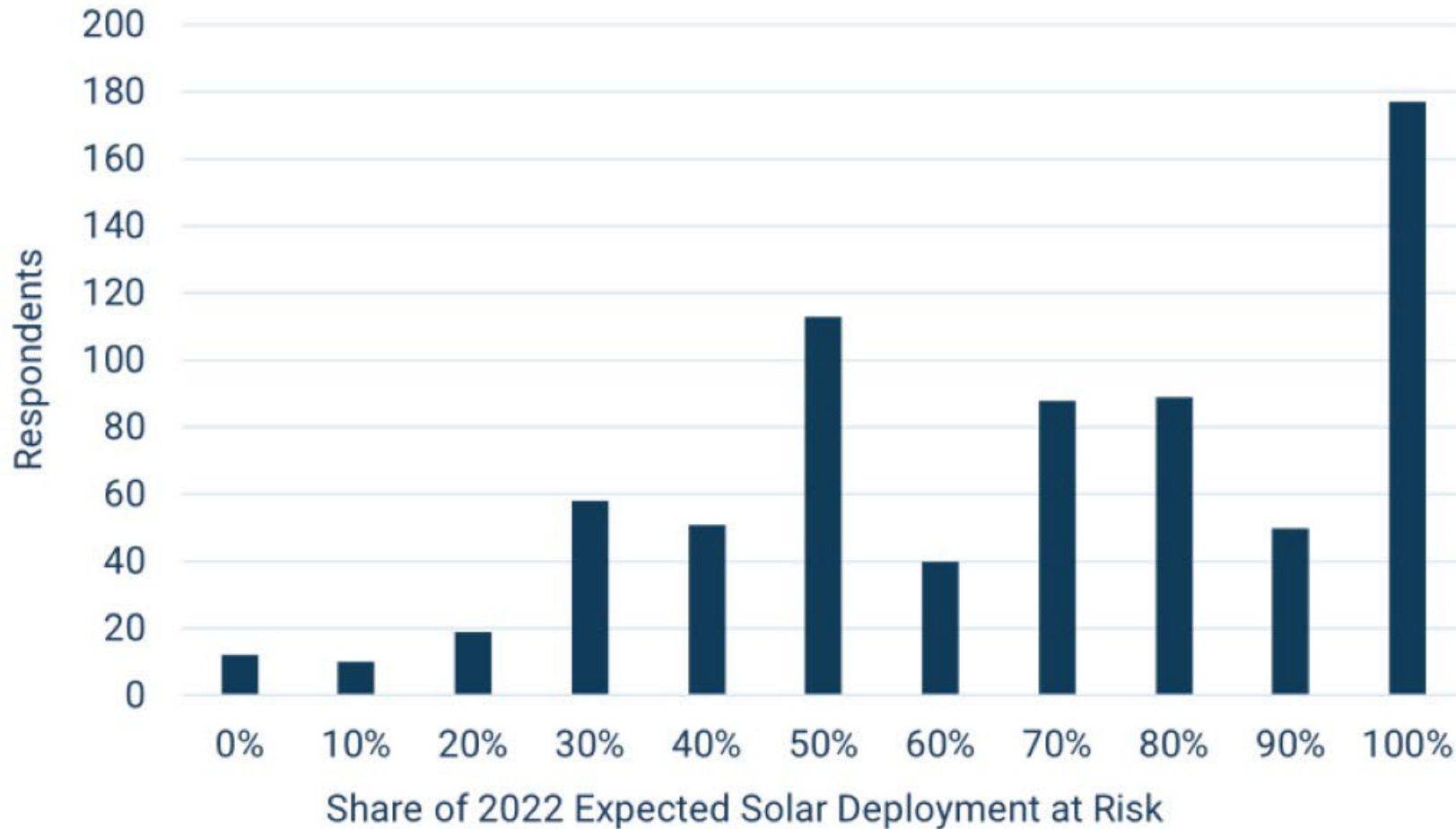


# What percent of your company's U.S. solar and storage workforce is at risk due to this tariff investigation?



- 70% of respondents report that **at least half** of their solar and storage workforce is at risk
- Over 200 respondents, report that their **entire** solar and storage workforce is at risk

# What percent of that business volume is now at risk?



**4/5 of respondents** report at least half of their current-year solar pipeline at risk.

Many report larger risk to their 2023 pipeline.



# Utility-Scale Project Developers Reporting Massive Disruption



## Projects reporting:

- Delays
- Layoffs
- Hiring freezes
- Massive cost increases (often untenable)
- Project cancellations
- Projects with complete racking but no modules
- Projects with only some of the modules needed to finish
- Extreme uncertainty
- New project development on hold

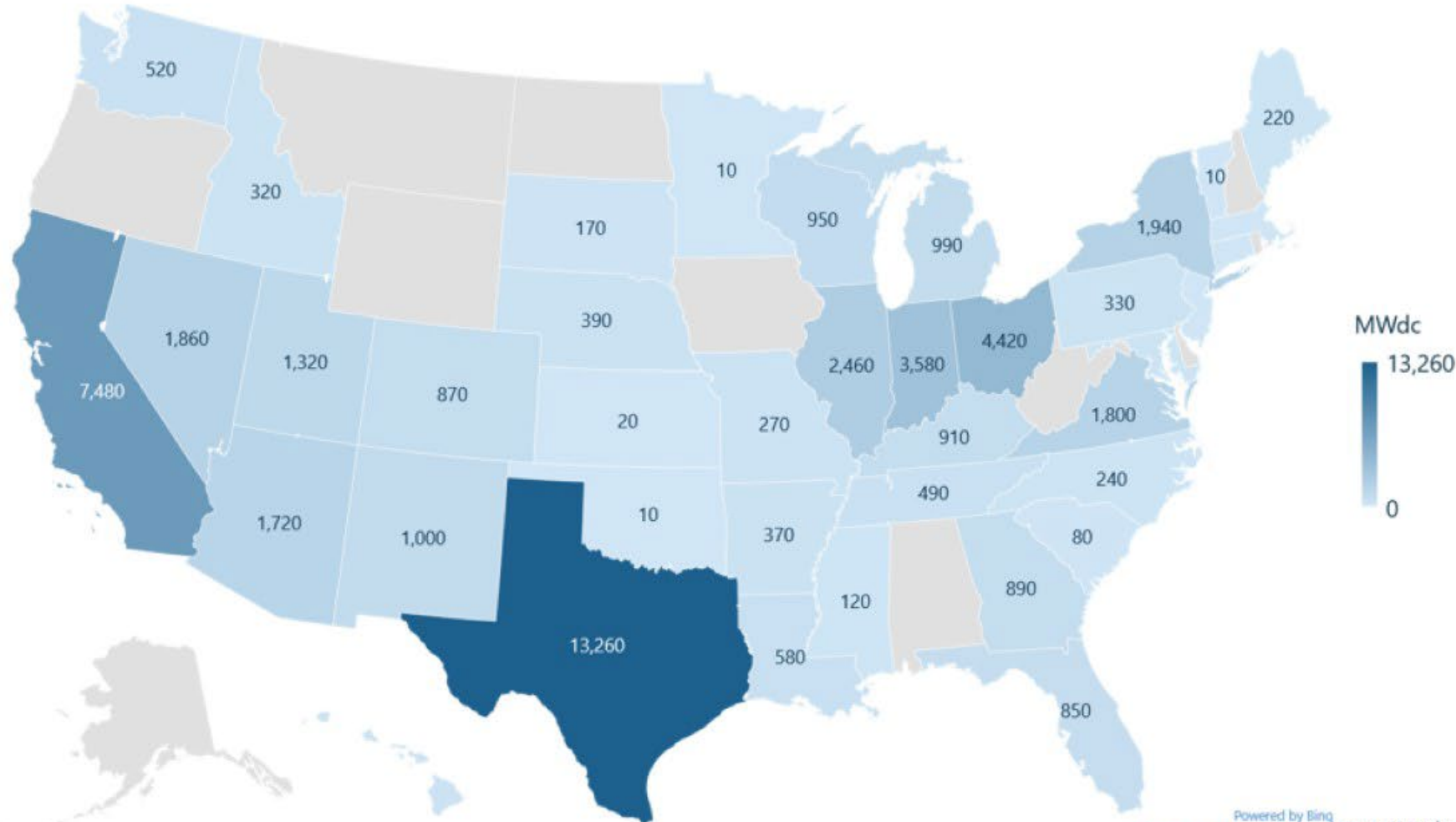


## Blurry distinction between delayed and canceled:

- Developers don't know when they might be able to get modules and some delays may drag on to the point of project failure.
- Projects pushed to later years eat into what is possible from new projects.
- Brain drain from industry as those laid off seek employment elsewhere, abandoning project development potential.



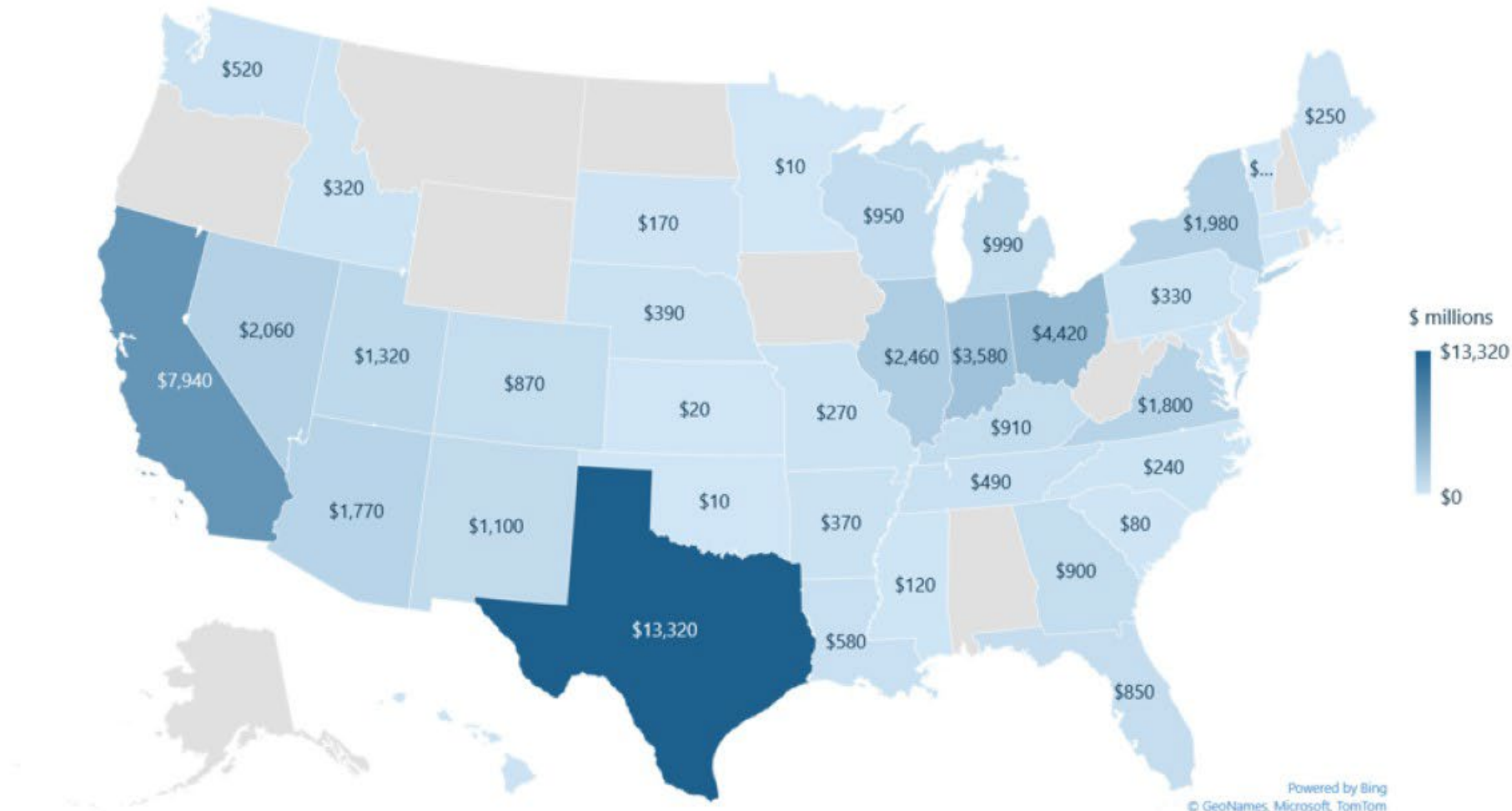
# Currently Reported Impacts (Canceled or Delayed) on Utility-Scale Solar Projects: Solar Capacity Impacted (Megawatts-direct current, MWdc)



- 318 projects
- 50,800 MWdc of solar
- 5,800 MWh of attached battery storage
- Represents only a fraction of likely impacts.

\*State figures rounded to 10 MWdc to help ensure anonymity.

# Currently Reported Impacts on Utility-Scale Solar Projects: Solar and Storage Investment at Risk (\$ millions)



- \$52 billion utility-scale investment at risk
- 318 projects
- 50,800 MWdc of solar
- 5,800 MWh of attached battery storage
- Represents only a fraction of likely impacts.

\*State figures rounded to \$10 million to help ensure anonymity.

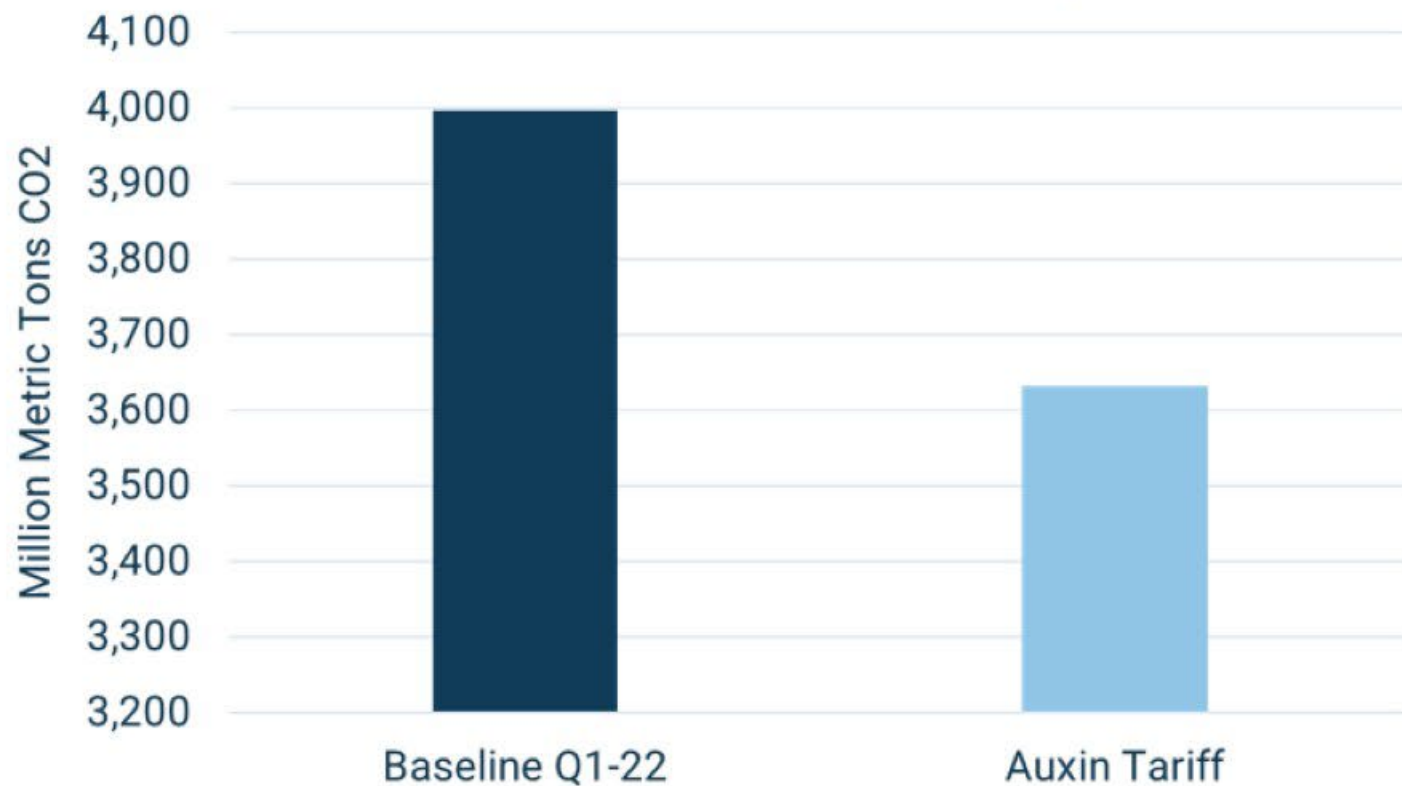
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# Proceeding with the Auxin petition will mean an increase of 364 million metric tons of CO<sub>2</sub>



### 2020-2035 CO<sub>2</sub> Emissions Avoided by Solar



**364 million metric tons of CO<sub>2</sub> emissions is equivalent to the annual emissions of 97 coal plants**

**The difference between the Auxin Scenario and Biden goal is equivalent to two full years of electricity-sector emissions**



# Bringing Supply Chain to the U.S. Would Take Years

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- Even siting and permitting a U.S. plant could take a year or more.
  - Construction and production ramp could take an additional 2-3 years.
- Interim devastation to the downstream industry would reduce the domestic customer base for prospective domestic manufactures.
  - As experienced workforce leaves the industry, recovery could take years.
- Without manufacturing incentives and the right policy environment, these tariffs (like tariffs before them) are not enough to draw billions of investment in new domestic manufacturing. It is simply still too risky for many manufacturers.



# SEIA's Manufacturing Work

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- **Tariffs have been ineffective at driving real expansion of manufacturing**
- In its manufacturing whitepaper, SEIA called for significant, **long-term federal investment in solar manufacturing**
  - Demand drivers and direct support for domestic manufacturers
- Whitepaper was the catalyst for the tax incentives in the reconciliation bill
  - **Production-linked credits for making key products (e.g., cells and inverters)**
  - **ITC bonus for hitting domestic content targets**
  - See significant interest in onshoring if incentives pass
- A few other efforts on manufacturing
  - Manufacturing division and summits at SEIA
  - Collaborate with state/local economic development offices
  - Tariff relief for inputs and equipment used by domestic manufacturers

# State Actions for Consideration

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- Helping deploy standalone storage ahead of PV plant construction
- Adding storage to existing projects
- Flexibility for current projects in the pipeline
- State backstop to mitigate unanticipated cost overages
- Supporting demand side measures that help customers manage load



# Questions?

