



GREASE Lightning

A playbook for investment-led,
state-driven electro-industrial
economies

Aaron Brickman
Lachlan Carey
Jon Ekberg
Ben Feshbach
Allie Jobe

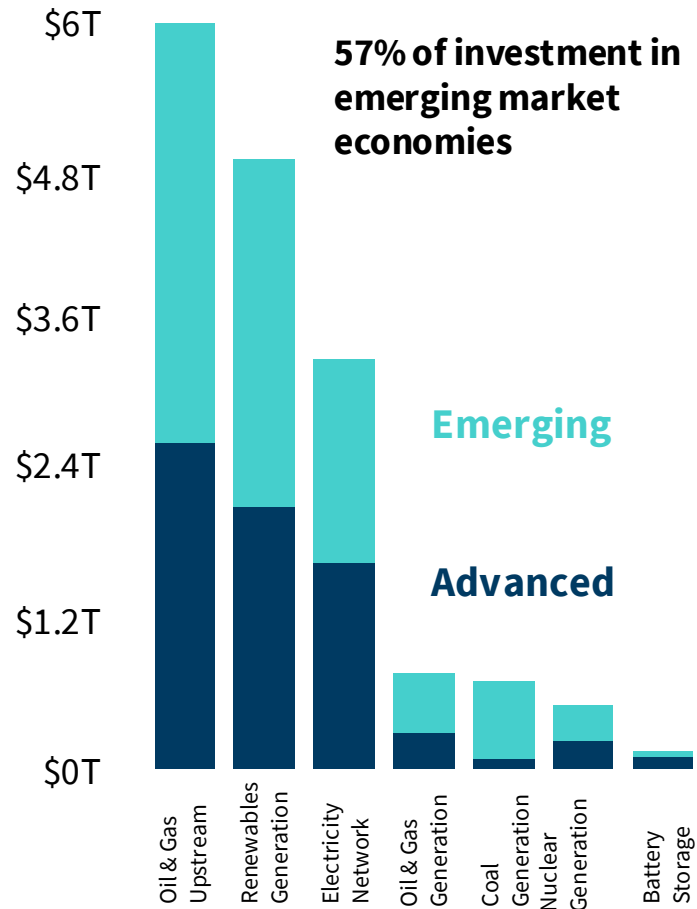
March 2026



Record investment in energy markets driven by electrification

The "three Ds" are driving historic energy demand, particularly in clean electricity and emerging markets.

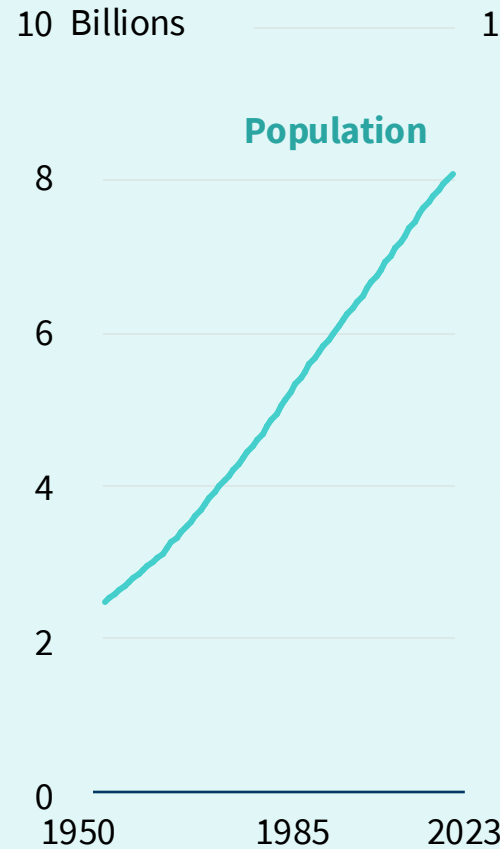
Cumulative Global Energy Investment



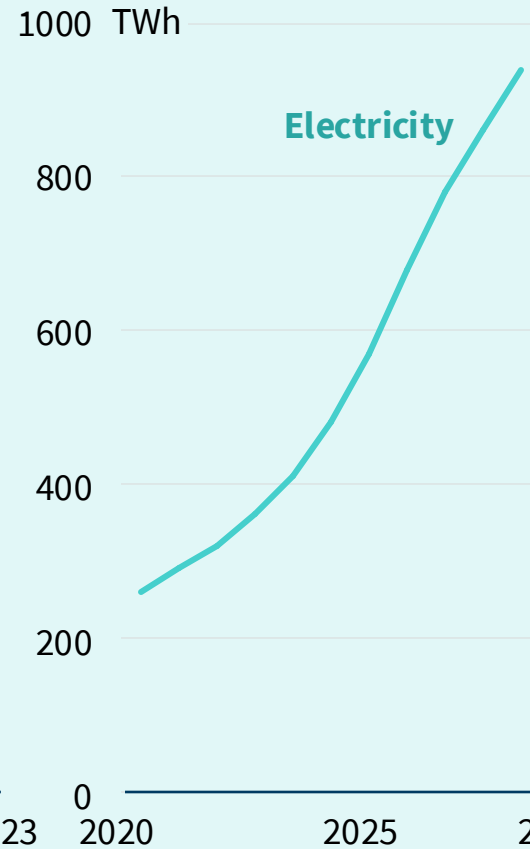
Note: Investment Since 2015

Driven by the Three Ds: Demographics, Digitalization, Decarbonization

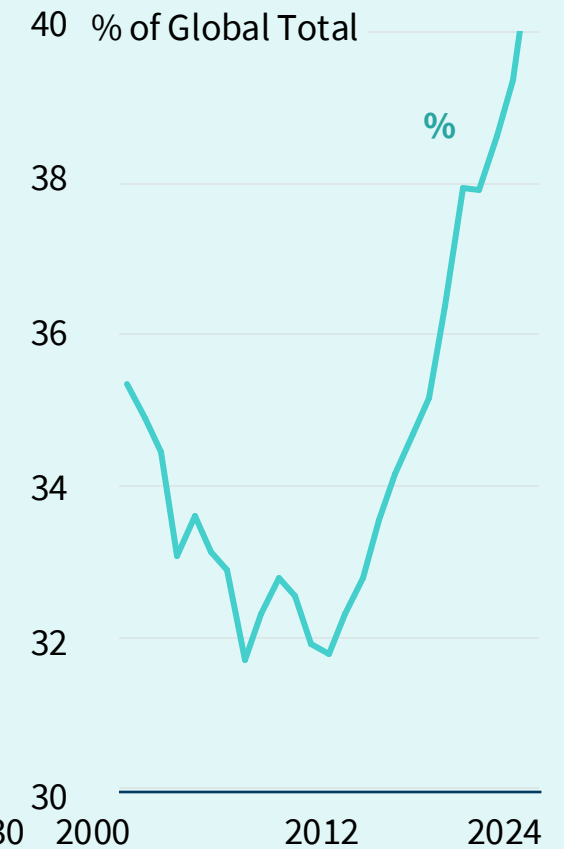
Global Population



Data Center Consumption



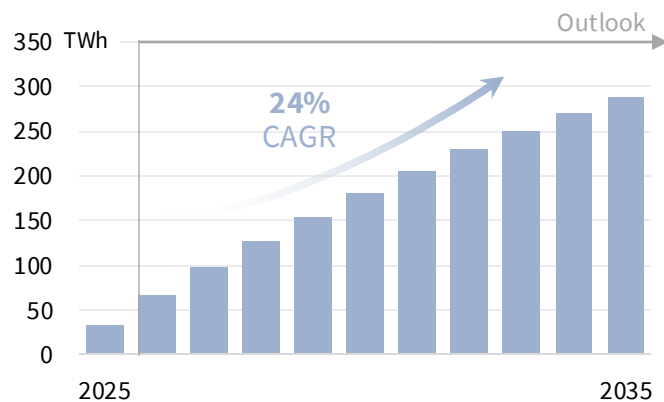
Clean Electricity Generation



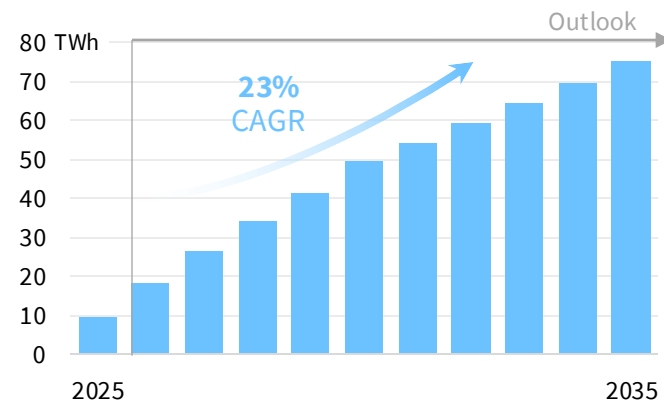
Electricity demand growth is especially high in the United States

Data center build for AI and electrification across the economy are driving this demand

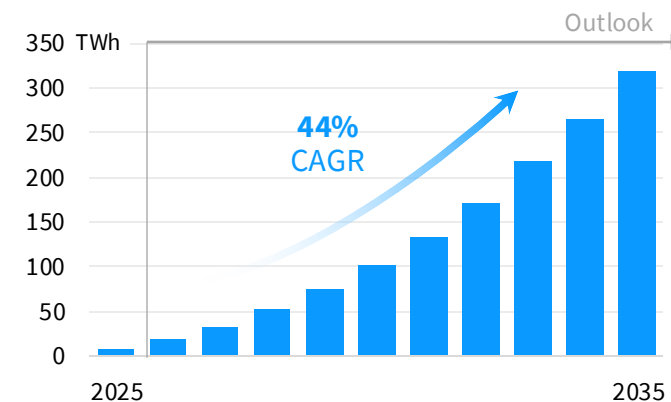
Data Centers



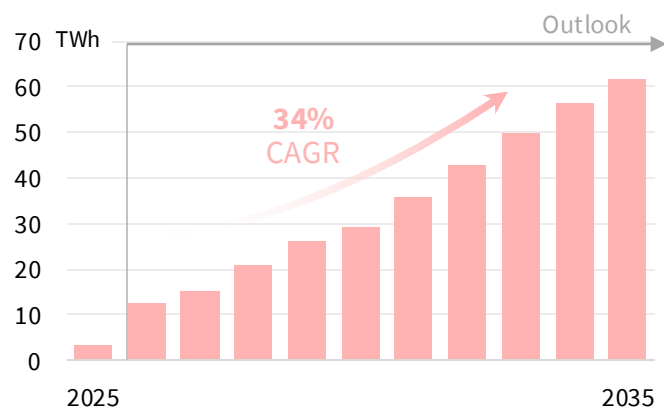
Heat Pumps



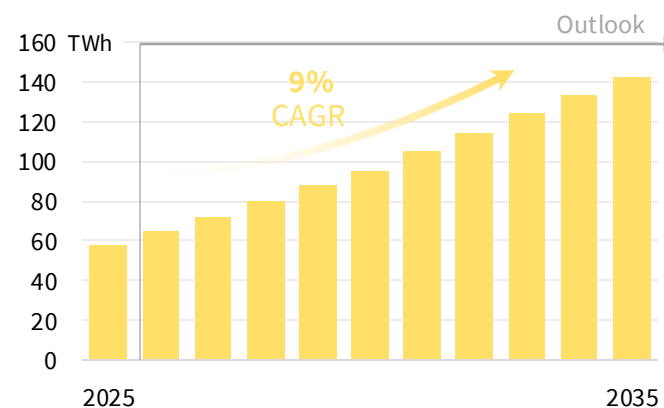
Electric Vehicles



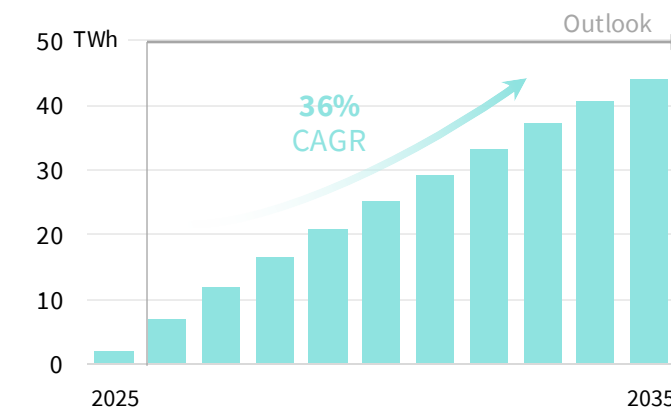
Industry



Other Building Appliances



Other Sectors

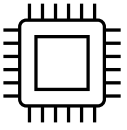


Three structural pivots are reshaping the map

Changes in technology, geography, and policy are ushering in the electro-industrial era

Three structural pivots

Technology



Electrified, digitally controlled systems are converging into a single electro-industrial stack that scales like manufacturing while improving like software.

Geography



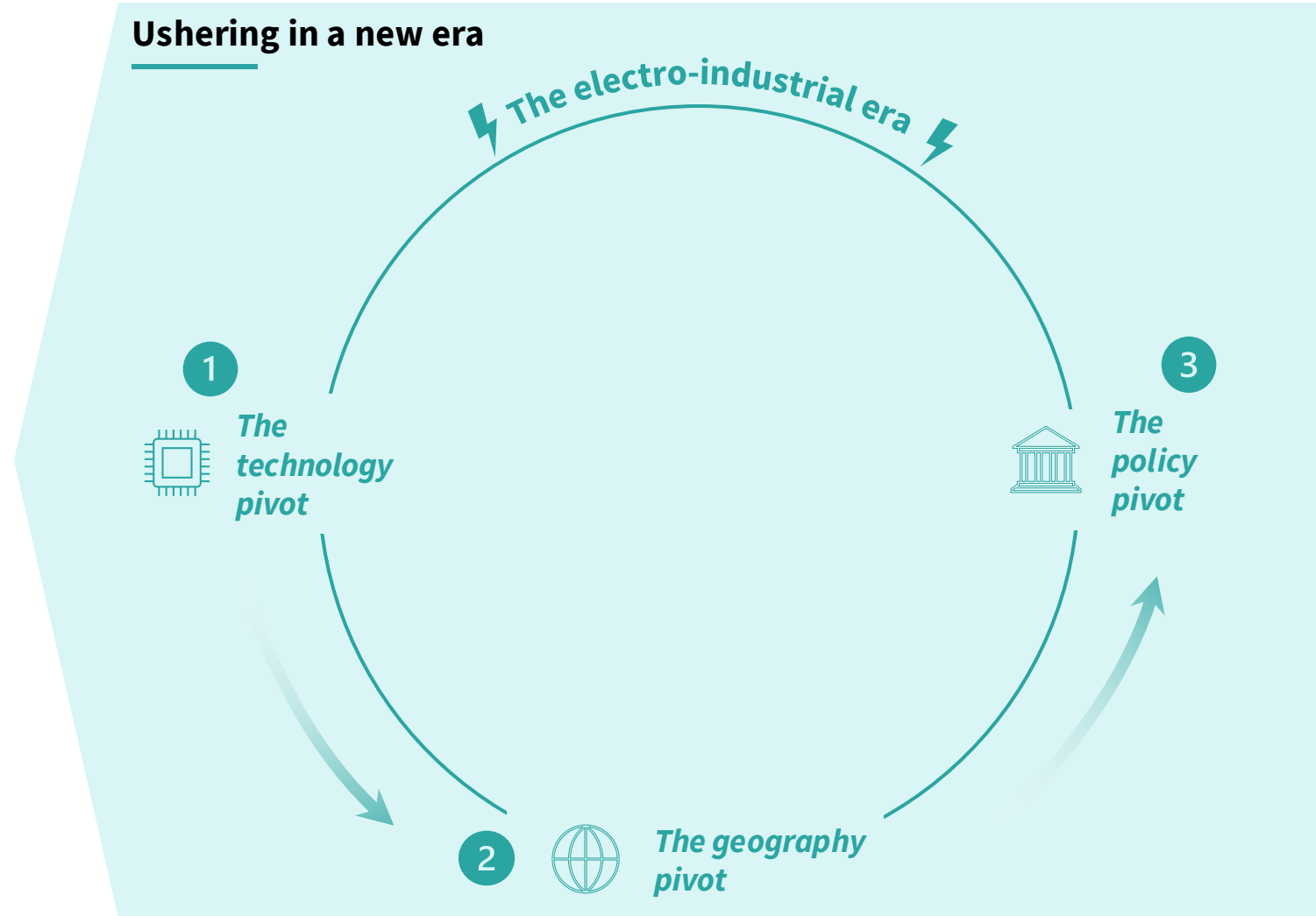
Investment is concentrating in regions where power, prepared sites, workforce, and policy align, enabling faster deployment and durable industrial clusters.

Policy



Industrial policy has returned as an active tool, with governments increasingly shaping markets to crowd in private capital and accelerate project delivery.

Ushering in a new era



Technology is shifting to the electro-industrial stack

Three features define the electro-industrial stack

Efficiency

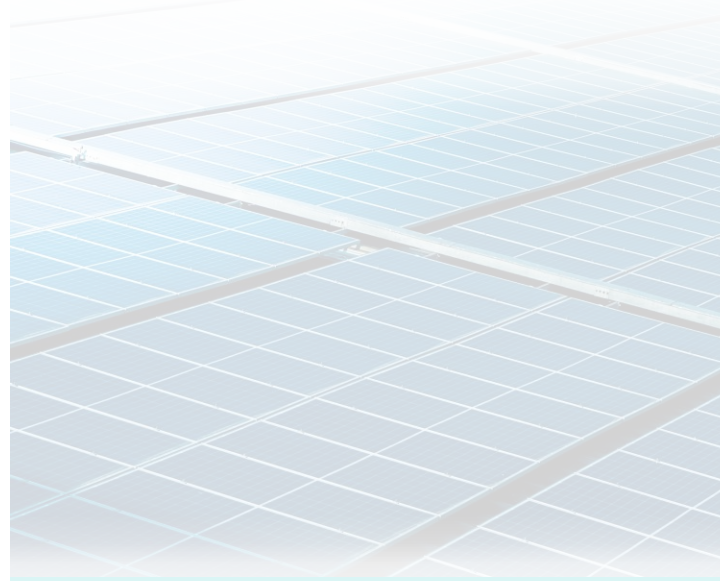
Machines avoid combustion losses and deliver precise, real-time control.



Thermal batteries: Converts low-cost electricity into long-duration, high-temperature heat with 90-99% efficiency.

Scalable Manufacturability

Components ride predictable experience curves (Wright's Law), so costs fall as production volumes rise.



Solar photovoltaic: Solar module prices dropped 90% between 2010-2020 while installed capacity rose by 1600% from 40 to 710 GW

Hardware as software

Once electrified, performance is increasingly software-defined and upgradable.

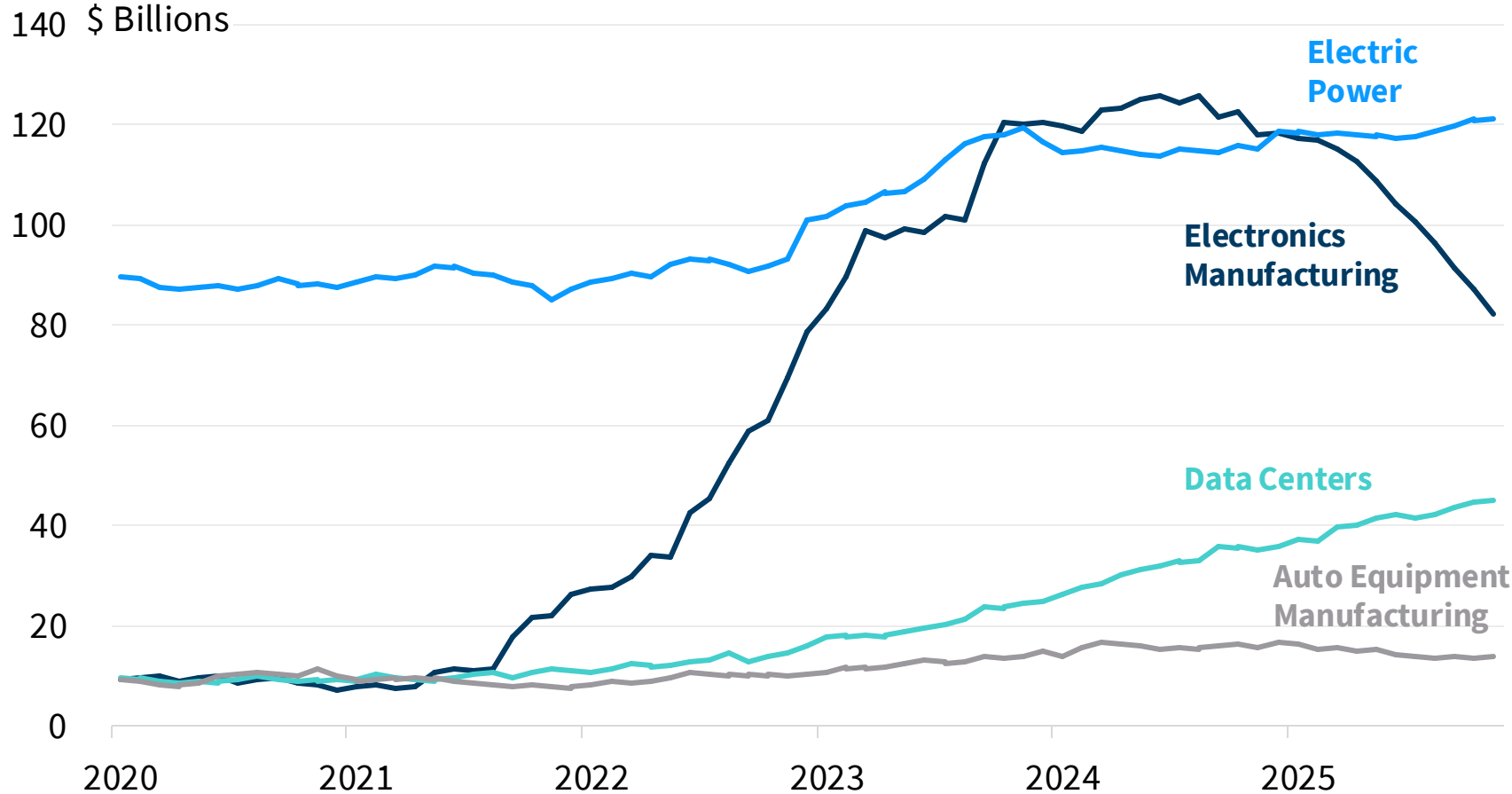


Heat pumps: In September 2025, Quilt announced that a single software/firmware update increased the heating and cooling performance of installed units by over 20%.

Investment is up in the electro-industrial stack

Some of the fastest growing construction has been in electro-industrial sectors

Electro-industrial stack construction spending



Spending Growth

Electric Power

1.3x

Growth from 2020 to 2025

Electronics Mfg

11.4x

Growth from 2020 to 2025

Data Centers

4.4x

Growth from 2020 to 2025

Auto Equipment Mfg

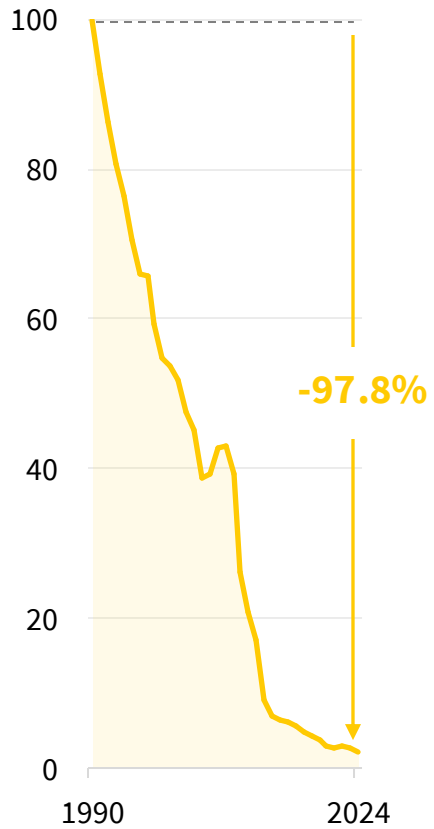
1.5x

Growth from 2020 to 2025

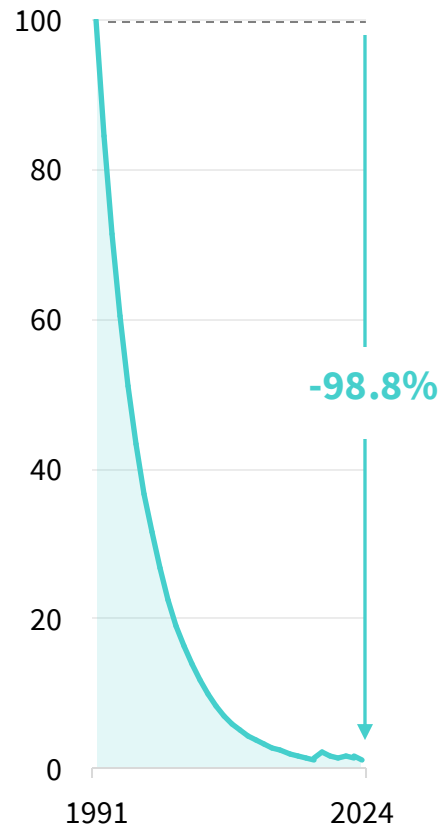
Costs are declining exponentially in the electro-industrial stack

Costs have fallen by well over 90% for key electro-industrial technologies

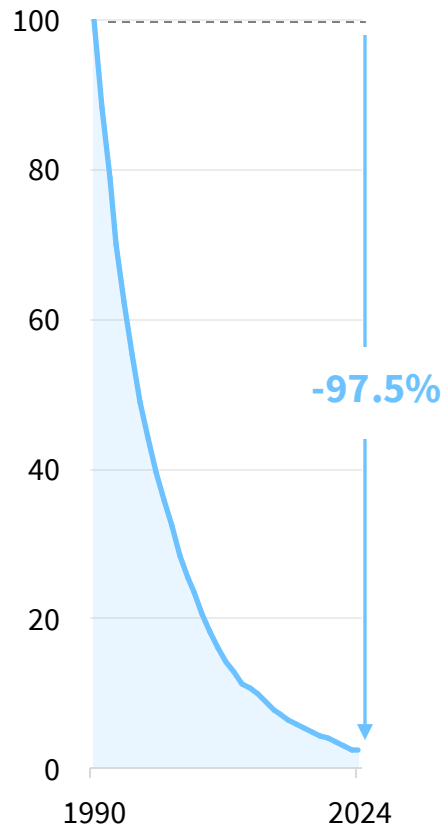
Solar PV (\$/W)



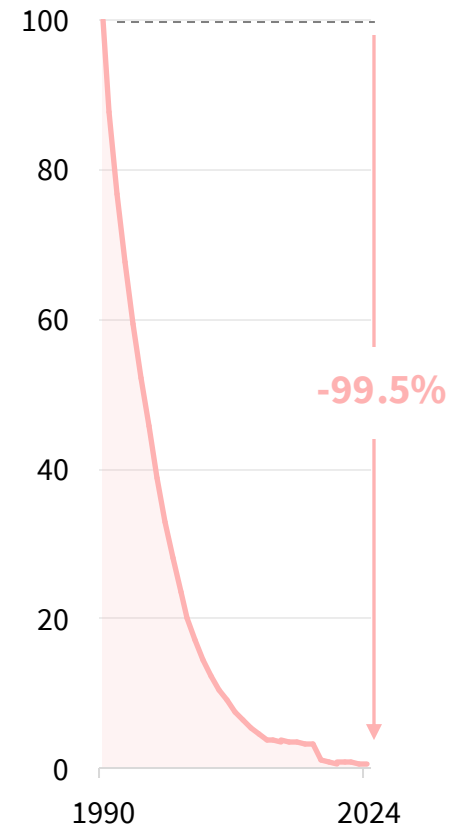
Batteries (\$/kWh)



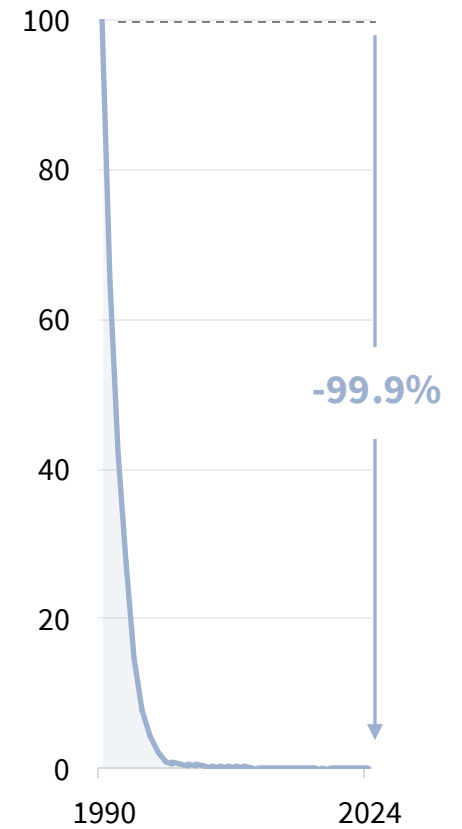
Motors (\$/kW)



Power elec. (\$/kW)



Compute (\$/DMIPS)



Why place matters: compounding advantages

Regions that can deliver projects fast track anchors

What creates delivery advantage

Levers

Make it buildable

- ① Physical infrastructure: power, interconnection, and site readiness
- ② Regulatory certainty: fast and predictable permitting

Make it bankable

- ① Policy ambition: durable commitments (not one-offs)
- ② Economic capacity: de-risking tools and co-investment capacity

Make it repeatable

- ① Technology deployment: delivery track record and ability to scale
- ② Cluster formation: workforce and vendor/services ecosystem

How clusters self-reinforce



6. Workforce and vendor ecosystem

1. Infrastructure ready (power & sites)

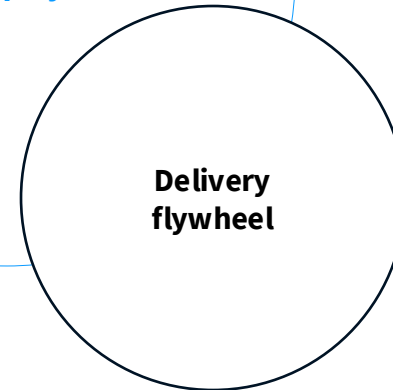


Momentum compounds

Anchor projects



5. Delivery track record



2. Fast, predictable permitting



3. Durable policy signals



4. De-risking & co-investment



This growth and investment is not spreading evenly, it finds the places with the right mix of a handful of ingredients

Readiness Map

AZ's readiness is boosted by high deployment scores across cleantech and semiconductors, as well as EV sales

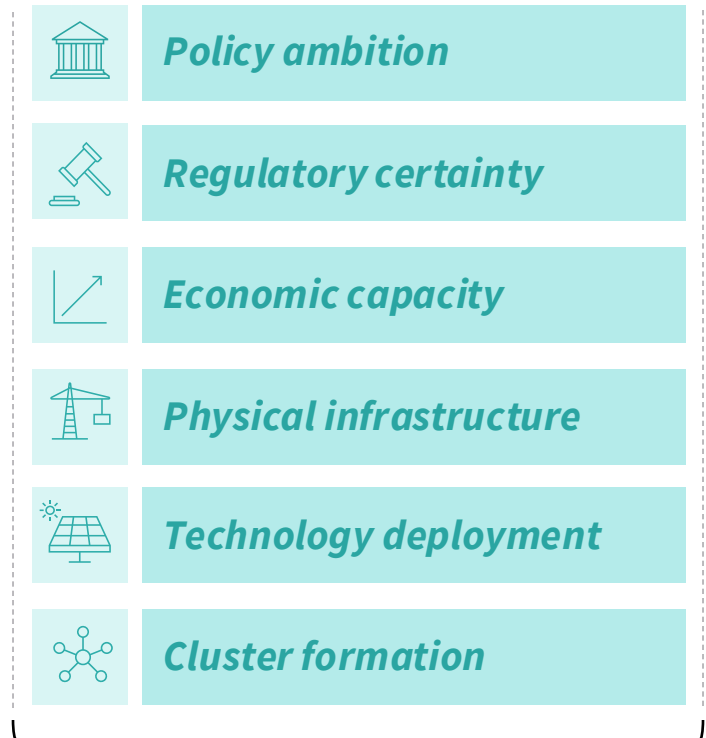
VA's high data center investment and strong incentive programs are driving its high readiness score

TX earns a high readiness score due to its deployment and infrastructure scores: the state boasts the largest renewable capacity in the nation

Readiness Index

- Very low
- Low
- Medium
- High
- Very high

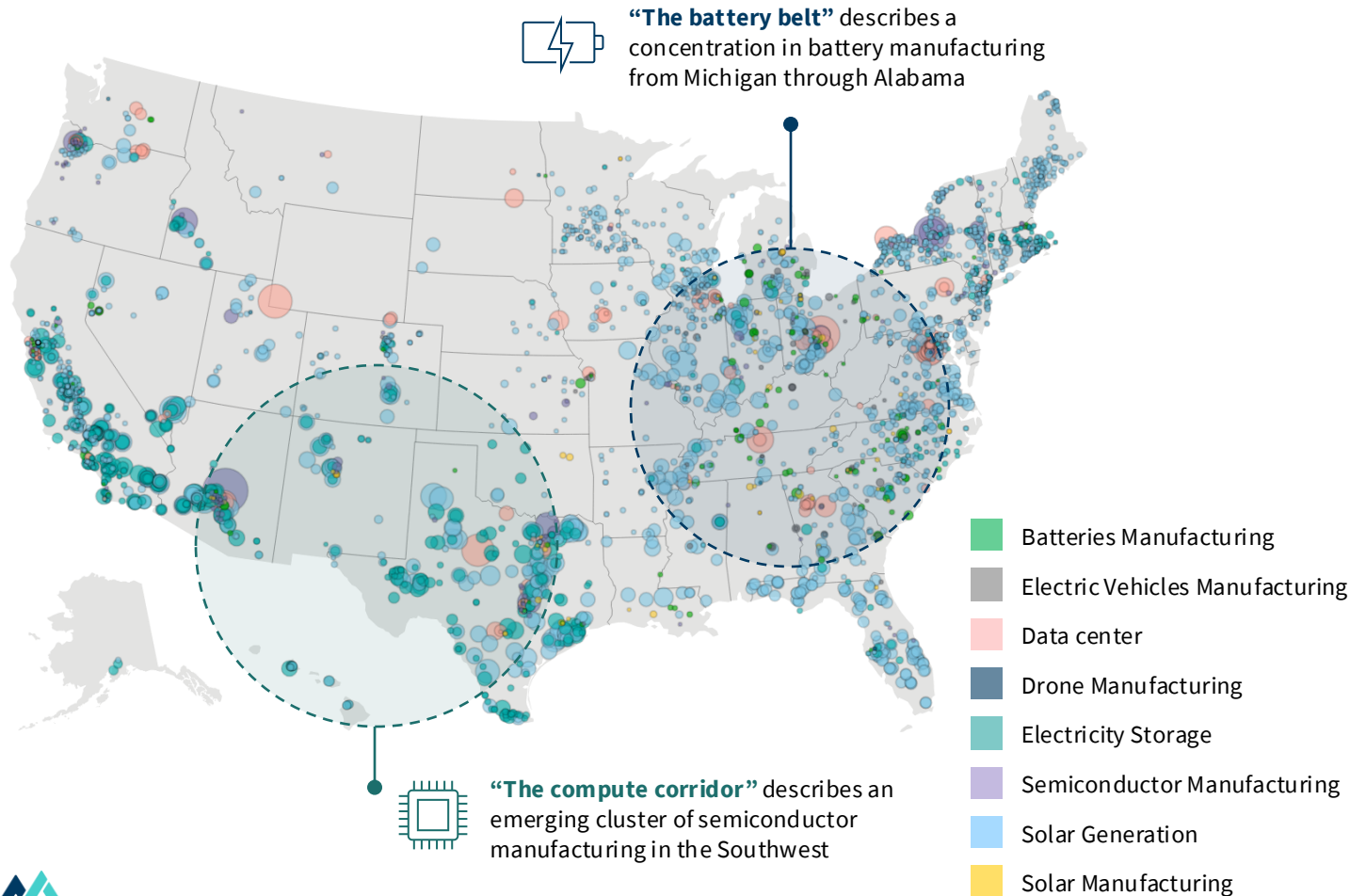
Key ingredients



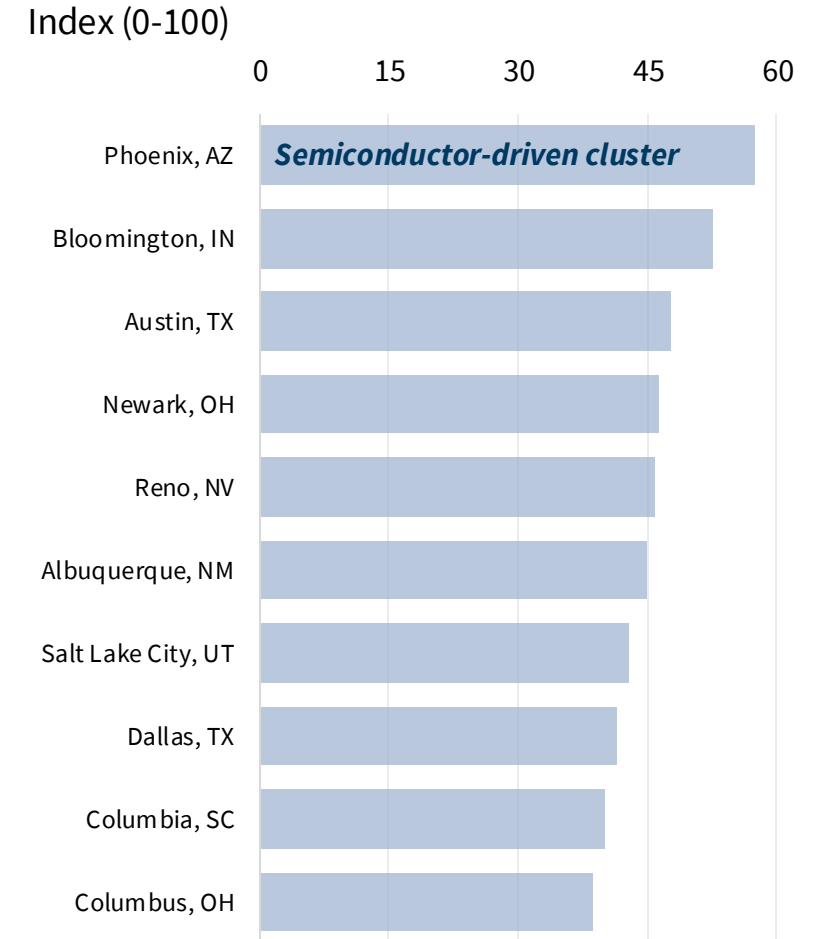
Optimal bundle

Deployment is highest in the places that align these elements and form clusters

US Electro-Industrial Deployment Since 2022



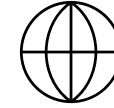
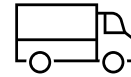
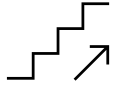
Leading Economic Areas by Deployment



Policy pivot: industrial policy is back and shifting to states

Four high level rules to design best practice industrial policy for states

A Primer On Industrial Policy



4 rules for best practice industrial policy

1. Set direction

- Pick a few sector-specific build goals
- Track real milestones: interconnections, facilities, etc.
- Build evaluation from day one

2. Use the tools

- Pair supply-side support (grants, tax incentives) with demand
- Design so projects can raise finance and move quickly
- Use faster, outcome-based contracting when possible

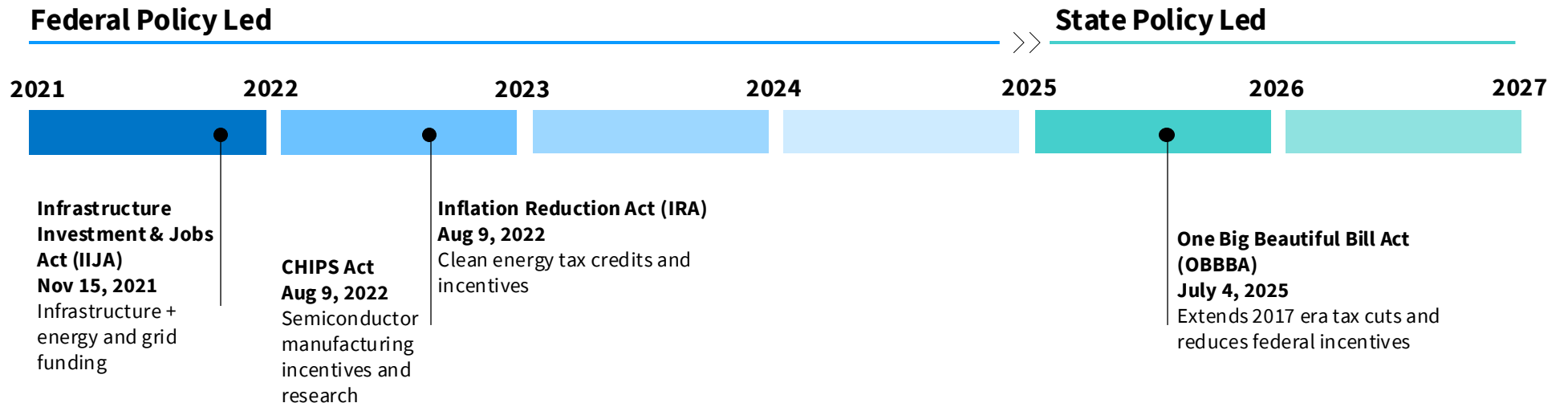
3. Build delivery

- Give a small team authority to say “yes” fast
- Create a single front door and publish simple rules
- Track monthly progress

4. Be place based

- Don't try to manufacture clusters; reinforce strengths
- Convene and cofinance the missing pieces
- Use discretionary, outcome-linked deals

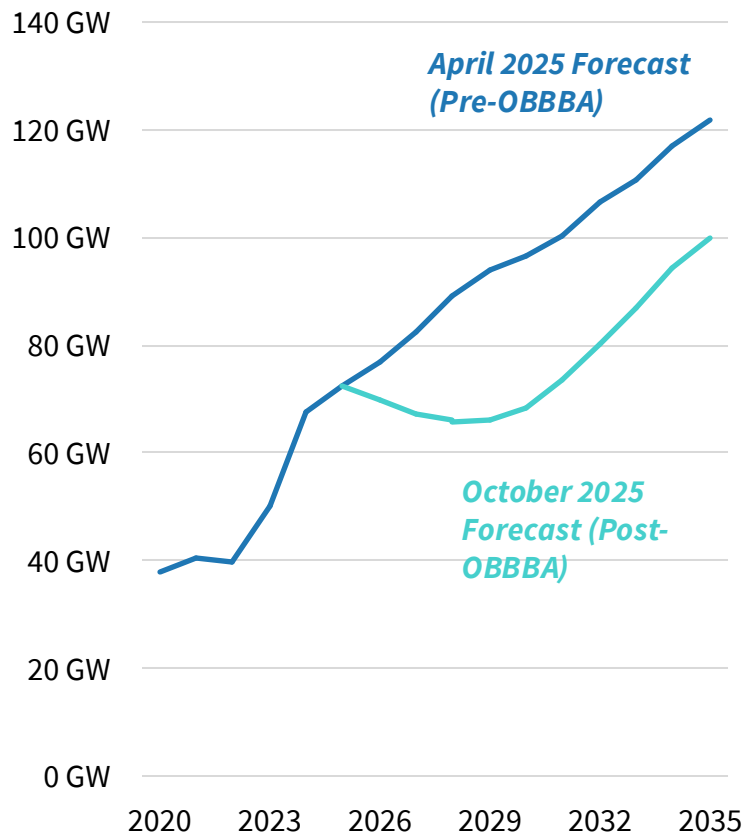
Evolution of industrial policy



Industrial policy is being rolled back at the federal level

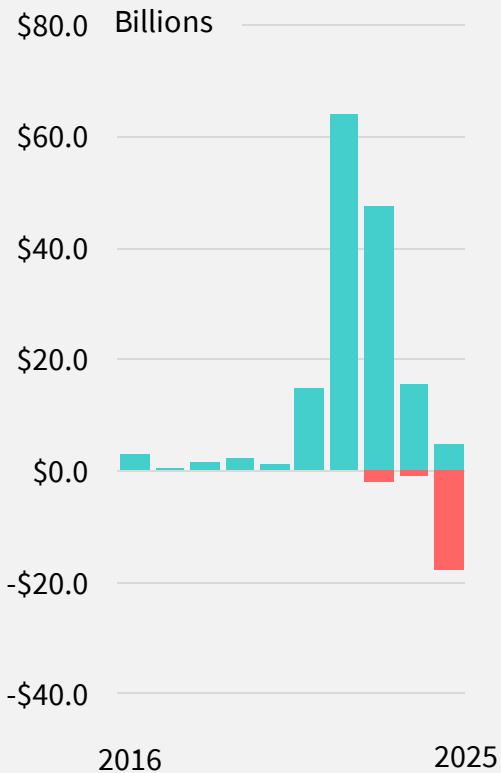
Recent shifts are downgrading clean deployment forecasts and contributing to manufacturing rollbacks

OBBBA passage has hurt clean deployment

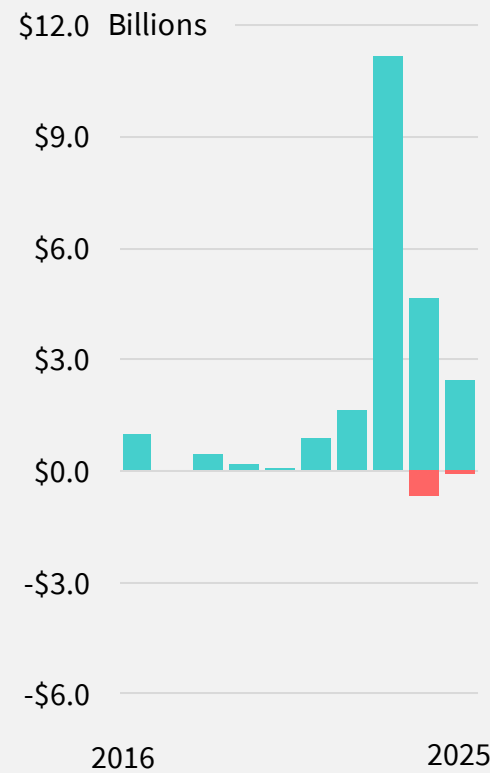


And led to rollbacks in manufacturing investment

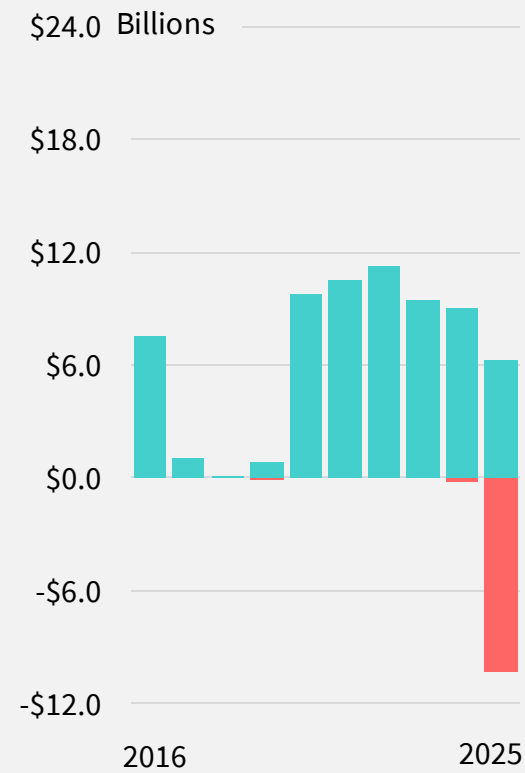
Batteries



Solar









Electric Vehicles



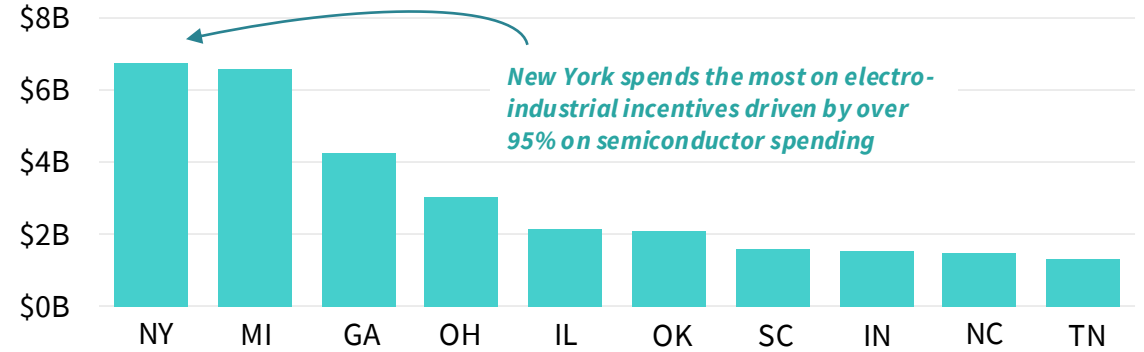
States play a key role in filling these federal policy retreats

Investment incentives are on this rise across the US

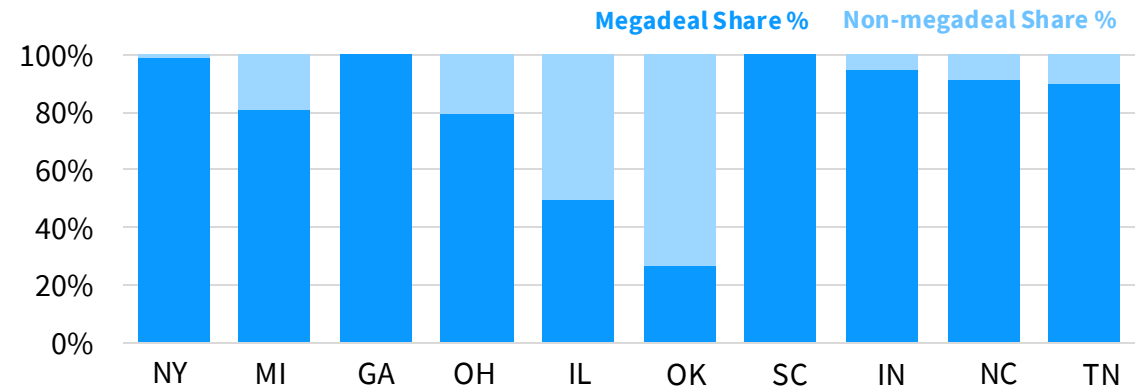
More states developing econ dev strategies

	Key States	Example
 Semiconductors and power electronics	AZ, NY, OR, OH, NC, TX	AZ Commerce Authority Strategic Plan (2025-2029)
 Batteries and battery materials	GA, NC, KY, SC, TN, MI	Team Kentucky EV/Battery strategy
 Rare earth magnets and processing	OK, TX	OK Commerce + OCAST Science & Innovation Plan
 Grid and transmission equipment	VA, PA, NC, AL	VA VEDP Strategic Plan + sites program
 High efficiency motors and drives	TN, AR	TN ECD targeted industries
 Solar and storage manufacturing	LA, TX, CA, WV, FL	LA LED Comprehensive Statewide Strategic Plan (2025)
 Clean-firm power for generation	WY, TN, VA, UT, NV, CA, HI	WY Nuclear Energy Strategic Framework

States are spending billions on electro-industrial incentives



Most of these incentives are going towards megadeals



States can capitalize on these pivots by utilizing GREASE

The GREASE Framework creates a state operating guide and spells out principles for good policy design

RMI's Methodology for Assessing Policy Strength

Buckets

	Description
G Governance	Clear owner, clear budget. A named office or task-force has legal authority to run the program end-to-end.
R Regional Targeting	Places that need it most. Incentives target distressed communities or strategic industry clusters
E Environmental Impact	Climate results. The policy hard-codes measurable GHG-reduction or clean-energy deployment targets.
A Accountability	Show your work. Outcomes (jobs created, \$ spent) are tracked, published, and tied to milestone checks.
S Sector Alignment	Fits the industry. Instrument explicitly favors the state's target industry and its supply-chain gaps.
E Expanse	Big enough to matter. Magnitude of policy meets a material threshold or beats the peer-state median

Policy Evaluation

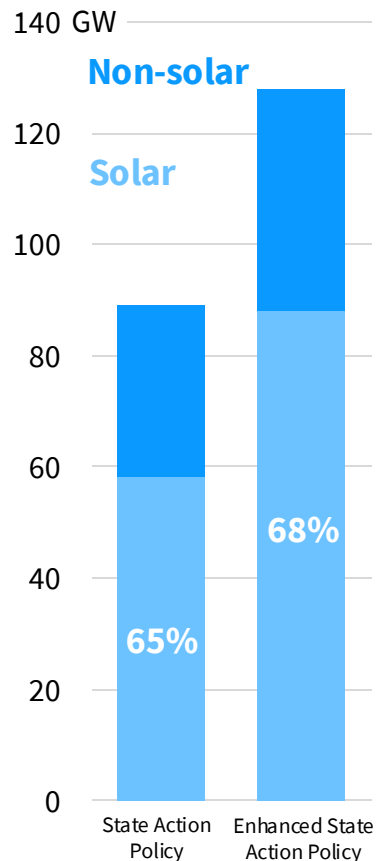
Scoring

GREASE can also be used to assess policy strength. Each policy can be scored based on each component in the GREASE framework. Policies that have all components in the GREASE framework are considered "strong" policies.

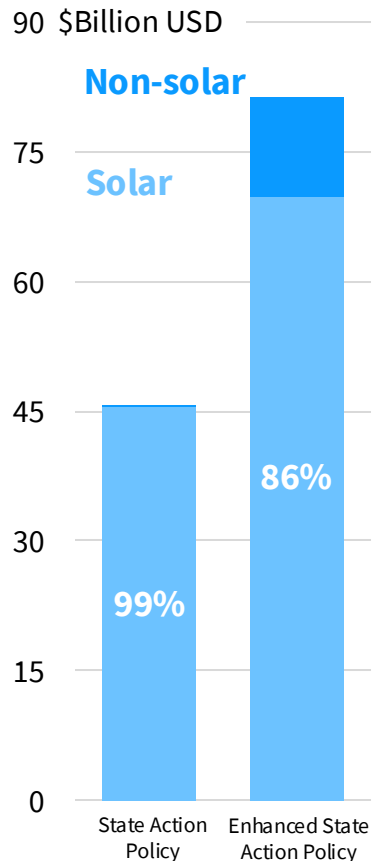
State policy drives grid and economic gains in the Southeast

Rhodium modeling results: more capacity, more investment, more jobs

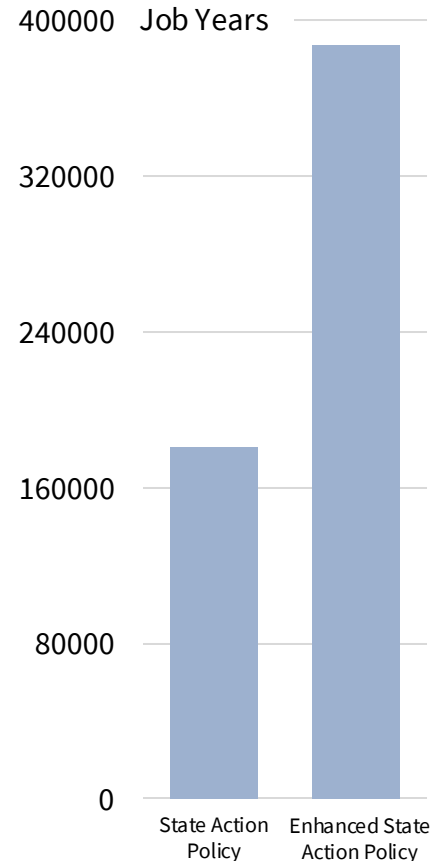
Capacity Additions



Private Investment



Jobs



Modeling policy scenarios

State Action Policy

Electricity supply

Clean electricity tax credit: 10% ITC or \$10/MWh PTC

Manufacturing

Manufacturing production tax credit

Enhanced State Action Policy

Electricity supply

Clean electricity tax credit: 20% ITC or \$20/MWh PTC; 10% domestic content bonus credit; 10% energy community bonus credit

Manufacturing

Manufacturing production tax credit

Manufacturing/supply

State revolving loan fund, tax credit transferability

Places: transmission as industrial policy

Texas’s Competitive Renewable Energy Zones (CREZ) builds the grid highway needed for large loads

GREASE Scoring Matrix

G-R-E-A-S-E

Scoring Key		High	Med	Low							
Scoring level	Scoring Description	 Governance	 Regional targeting	 Expansive ambition	 Accountability	 Sector strategies	 Environmental co-benefits				
Three scores	High	The policy strongly meets the GREASE criterion (well evidenced strength) and earns 1 point	<ul style="list-style-type: none"> Clear PUCT-ERCOT roles 	<ul style="list-style-type: none"> Zone based routing to wind rich regions 	<ul style="list-style-type: none"> \$7B buildout sized to roughly 18.5 GW deliverability 		<ul style="list-style-type: none"> Transmission strategy built to unlock renewables 	<ul style="list-style-type: none"> Large-scale renewables enabled; curtailment reduced 			
	Medium	The policy partially meets the criterion (some elements present) and earns 0.5 points				<ul style="list-style-type: none"> Biennial reporting on costs and reliability; limited KPIs 			+		
	Low	The policy does not meaningfully meet the criterion (weak evidence) and earns 0 points.							+		

Overall Score = **5.5/6 points**

People: building optimal workforce strategies

Georgia Quick Start delivers free workforce training by coordinating an EV ecosystem via partnerships

GREASE Scoring Matrix

G-R-E-A-S-E

Scoring Key		High	Med	Low							
Scoring level	Scoring Description	Governance	Regional targeting	Expansive ambition	Accountability	Sector strategies	Environmental co-benefits				
Three scores	High The policy strongly meets the GREASE criterion (well evidenced strength) and earns 1 point	<ul style="list-style-type: none"> Strong institutional capacity and interagency alignment 	<ul style="list-style-type: none"> Resources are deliberately steered to EV manufacturing corridors 	<ul style="list-style-type: none"> Sustained EV and battery focus with statewide reach 	<ul style="list-style-type: none"> Clear program metrics and deliverables tied to training outcomes 	<ul style="list-style-type: none"> Company specific training infrastructure 					
	Medium The policy partially meets the criterion (some elements present) and earns 0.5 points						<ul style="list-style-type: none"> Included but not embedded in training metrics 				
	Low The policy does not meaningfully meet the criterion (weak evidence) and earns 0 points.										







Overall Score = **5.5/6 points**

Capital: crowding in the private dollars to make an impact

Alabama Energy Infrastructure Bank deploys public capital to accelerate energy infrastructure

GREASE Scoring Matrix

G-R-E-A-S-E

Scoring Key		High	Med	Low						
Scoring level		Scoring Description								
			Governance	Regional targeting	Expansive ambition	Accountability	Sector strategies	Environmental co-benefits		
Three scores	High	The policy strongly meets the GREASE criterion (well evidenced strength) and earns 1 point	<ul style="list-style-type: none"> Clear statutory owner and financing authorities 	<ul style="list-style-type: none"> > 40% annual capacity reserved for rural projects 	<ul style="list-style-type: none"> Up to \$1B bond authority; long-lead procurement 		<ul style="list-style-type: none"> Purpose-build for site power and industrial recruitment 			
	Medium	The policy partially meets the criterion (some elements present) and earns 0.5 points				<ul style="list-style-type: none"> Annual reporting and progress reports; limited public KPIs 				
	Low	The policy does not meaningfully meet the criterion (weak evidence) and earns 0 points.							<ul style="list-style-type: none"> No climate/clean-energy targets as a condition 	

Overall Score = **4.5/6 points**

Markets: ensuring stable demand and accessing new offtake

Virginia’s VALET Program helps export-ready firms grow international sales through an accelerator

GREASE Scoring Matrix

G-R-E-A-S-E

Scoring Key		High	Med	Low						
Scoring level		Scoring Description								
Three scores	High	The policy strongly meets the GREASE criterion (well evidenced strength) and earns 1 point	<ul style="list-style-type: none"> Defined program management and partner delivery model 							
	Medium	The policy partially meets the criterion (some elements present) and earns 0.5 points			<ul style="list-style-type: none"> Long running program with meaningful support but limited size 	<ul style="list-style-type: none"> Sales goals tracked, but self-reported outcomes limit rigor 				
	Low	The policy does not meaningfully meet the criterion (weak evidence) and earns 0 points.		<ul style="list-style-type: none"> Firm-based, not place-based or corridor specific 				<ul style="list-style-type: none"> Supports exporters across sectors rather than specifics 	<ul style="list-style-type: none"> Climate outcomes in trade expansion not explicit 	

Overall Score = **2.0/6 points**

About RMI

Rocky Mountain Institute (RMI) is an independent, nonpartisan nonprofit founded in 1982 that transforms global energy systems through market-driven solutions to secure a prosperous, resilient, clean energy future for all. In collaboration with businesses, policymakers, funders, communities, and other partners, RMI drives investment to scale clean energy solutions, reduce energy waste, and boost access to affordable clean energy in ways that enhance security, strengthen the economy, and improve people's livelihoods. RMI is active in over 50 countries.

Authors

Aaron Brickman

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