

U.S. State Strategies for Clean Energy and Economic Opportunity

Morgan Higman – CSIS Energy Security and Climate Change Program
mhigman@csis.org

June 23, 2022

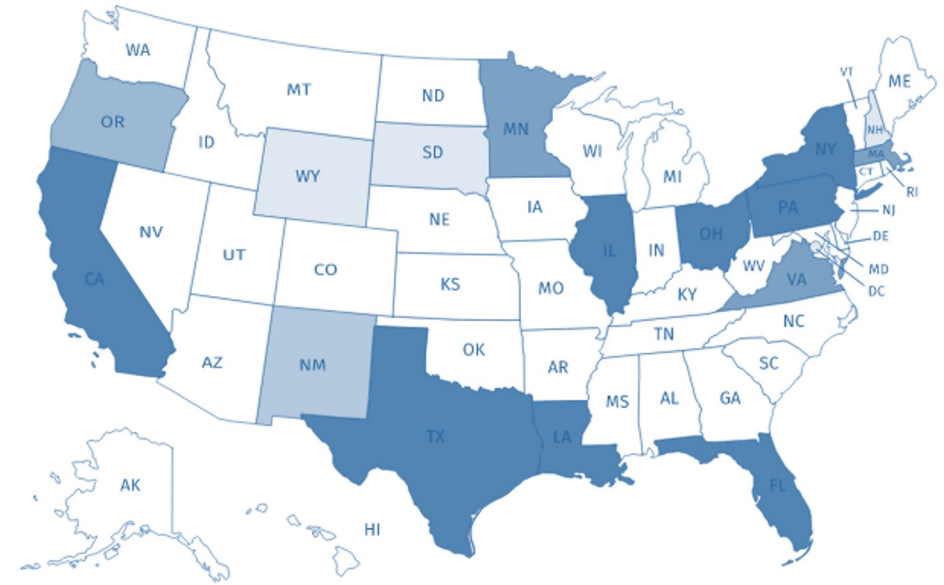
Clean Resilient States Initiative

Examining state strategies to

- Reduce emissions,
- Promote economic opportunity, and
- Enhance resilience

Preliminary observations

1. Comprehensive energy and climate policy is rare.
2. Climate is partisan; resilience and economic opportunity less so.
3. Judging success, rather than ambition, is a persistent challenge.



Overview of CRSI Reports

1. Emissions progress is highly variable.

- Ambitious policies often coincide with a lower emissions baseline.
- Market forces (not policy) were a main driver of historic reductions.
- Policy designs that support resource diversity and inclusive participation are an important driver of renewable energy.

2. Every state is focused on economic opportunity.

- Successful strategies align resource endowments, existing industrial strengths, and emerging technologies.
- Big bureaucracies are not prerequisite.
- Economic benefits do not seem to support bolder climate policies.

3. Resilience is slowly transcending reliability.

- Resilience is pursued with broad goals and inconsistent definitions.
- Resources do not connect hazard projections with strategies to assess and select mitigation investments.
- Resilience institutions are not grid-focused.

Clean energy and economic development

Research motivations

1. Are states looking to clean energy technologies as a core pillar of economic development, investment, innovation, and jobs strategies?
2. Are economic opportunities in clean energy helping rectify environmental and social injustice by promoting jobs and investment among historically excluded groups and communities?
3. Does framing decarbonization as part of a broader economic vision make it easier for states to take ambitious climate action?

States are vying to build regional clean energy clusters or hubs

“Anchor institutions” help promote, attract, and retain clean energy industries.

Resource endowments and legacy industries shape targeted technologies and retention of value-added activities.

Key institutional attributes:

1. Express mandates to focus on clean energy technologies, and
2. Engagement of experts, public officials, and private stakeholders.

Five institutional models

Large, bureaucratic anchor institutions

- e.g., MassCEC

Competitive, cost-sharing grants

- e.g., SD’s commercialization program

Consulting services

- e.g., GA’s Centers of Innovation

Resource-based anchors

- e.g., WY’s Integrated Test Center

Outsourcing

- e.g., MN’s energy accelerator

Clean energy is increasingly linked to broader socioeconomic objectives

Shared priorities for justice, equity and inclusion

- Energy affordability
- Workforce development
- Job creation and prevailing wage
- Access to new clean energy technologies

Divergent strategies for industrial competitiveness

'Business-friendly'

- Regulation as a market barrier.
- Emphasis on low cost of doing business.
- Co-benefits target rural communities and just transitions.

'Hands on'

- Regulation as a market lever.
- Emphasis on organized labor, worker protections.
- Co-benefits target diverse groups, emphasize historic exclusion, disproportionate burden.

Are states successful?

Few states systematically evaluate economic development strategies

- Data is sparse, not transparent
- Some report education and/or employment figures
- Innovation and equity are difficult to measure
- Evidence of success is often case-based.

Opportunities for more meaningful measurement

- To the greatest extent possible, states should narrowly define intended goals and outcomes.
- Think about economic development, decarbonization, and resilience together.
- Seek input from industry to help shape regulatory and policy support for emerging technologies.

Key Takeaways

- Efforts to promote clean energy are not always connected to climate ambition.
- States are building on what they have—strategies reflect existing industries and resources.
- Anchor institutions, guided by clear mandates and expertise, help organize and refine industrial priorities.
- Clean energy development is increasingly linked to broader socioeconomic objectives.
- For now, evidence of success is more descriptive than empirical.