

State Policy Efforts to Support Advanced Reactors

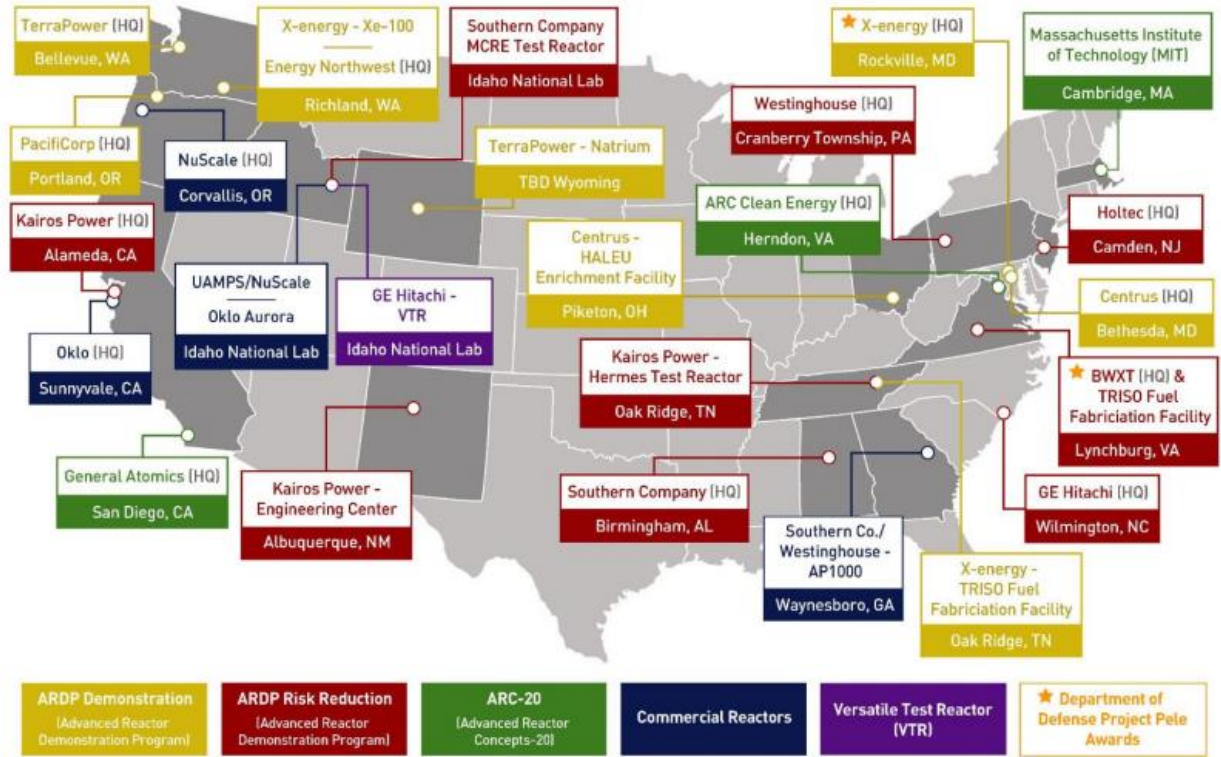
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Advanced Reactor Landscape



CLEARPATH

Motivations for State Action

Decarbonization

- State drivers
- Utility commitments
- Customer demand



Jobs & Workforce

- Maintain jobs and a skilled workforce



Changing Energy Mix

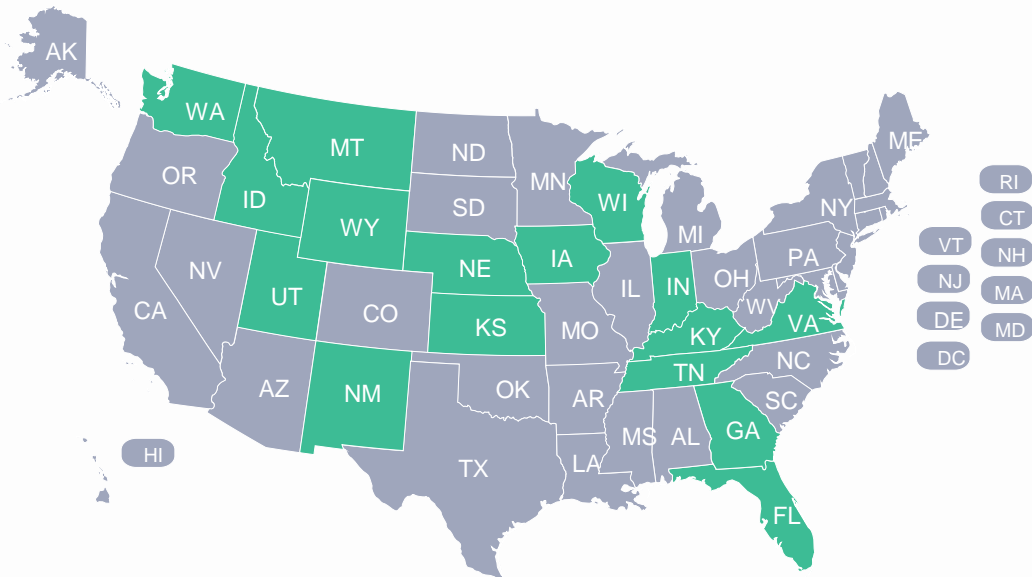
- Ensuring in-state, reliable electricity generation



State Legislative Policies

Policies range from tax incentives or exemptions, removing bans on the construction of new nuclear facilities, encouraging nuclear energy research and economic opportunities, among others

- At least 16 states have enacted bills since 2008 supporting the development of advanced reactor technologies.
- 13 states have prohibitions on new nuclear facility construction. However, these state restrictions are quickly changing.
- Many states have required studies of the economic and environmental benefits of advanced reactors.



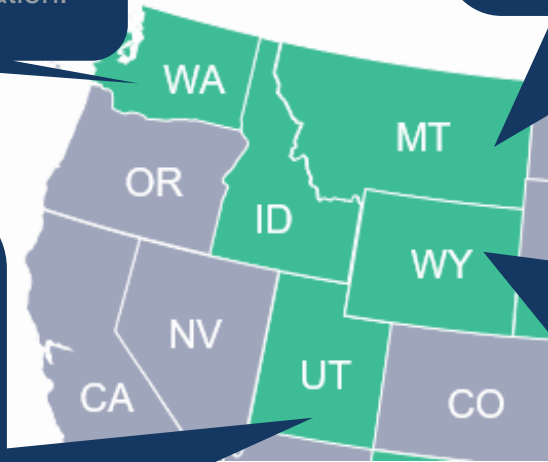
**Not comprehensive. Additional states have enacted policies that indirectly support advanced nuclear.*

Regional State Policies

HB 5116 (2019) supports non-emitting generation sources and transition to “clean, affordable, and reliable energy” by requiring that the state phase out coal generation. 100% carbon-free by 2045.

HB 273 (2021) removes a provision requiring the public to approve any proposed nuclear facilities.

SJR 3 (2021) requires a study, including the economic feasibility of replacing closing coal facilities with advanced nuclear reactors.



SJR 16 (2009) encourages new nuclear plant development in the state.

SCR 6 (2019) supports the development and integration of advanced nuclear technology recognizing the economic and environmental benefits of advanced nuclear facilities built in the state.

HB 129 (2011) creates a task force to study ways to encourage nuclear power in Wyoming including tax incentives, water rights, public-private partnerships, state laws, storage and reprocessing technologies, and higher education.

HB 74 (2020) authorizes the permitting of SMRs at retired coal or natural gas facilities of equal or greater capacity.

Other Policy Examples

- **Florida** permits cost recovery for transmission lines for new nuclear plants
- **Indiana** requires a study focused on costs of advanced reactors as well as the economic impact, potential job creation, cost savings for electricity consumers, and technical, design, and regulatory questions
- **Nebraska** adds nuclear energy to the qualifying renewable energy sources eligible for a business tax incentives
- **New Mexico** directs the state energy department to evaluate the feasibility and economic benefits of constructing & operating an SMR
- **Virginia Nuclear Energy Consortium Authority**
 - Develop plan for the role of nuclear energy
 - Encourage research & economic development
- **Wisconsin** changes the state's energy priorities to incorporate advanced nuclear

State Policy Options

Valuing Zero-Carbon Electricity

Fairly valuing nuclear's emission-free assets

Financing & Tax Incentives

Ways in which states are driving investments

Transmission Infrastructure

What is needed to support new generation

Markets

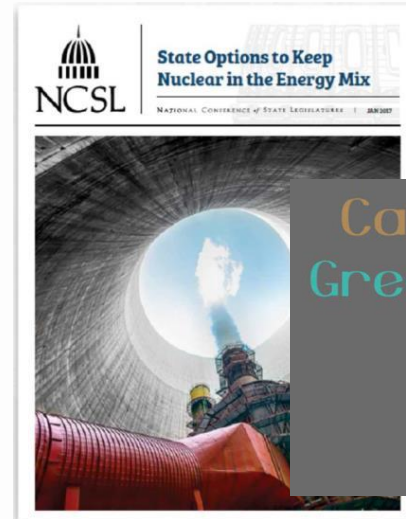
How market designs & state policies impact nuclear generation

Workforce

Efforts to maintain jobs and skilled workforce

Valuing Zero-Carbon Electricity

- Zero-Emission Credit Programs
- Clean Energy Standards
 - Does it include nuclear?
 - 9 states, DC and Puerto Rico with mandatory targets; 9 additional states with non-binding targets
- Carbon Tax or Cap-and-Trade



Carbon-neutral
Alternative
Greenhouse-gas-neutral
Zero-carbon
Renewable
Zero-emissions
Carbon-free



Financing & Tax Incentives



- Advanced cost recovery or CWIP
- Other cost recovery
- Tax incentives
- Public-Private Partnerships
- Loan guarantees or innovation grants

Policy Options

Transmission Infrastructure

- Infrastructure needed to support new generation
 - Federal/State Task Force
- Permitting and siting
- Incentives for transmission

Markets

- Value of nuclear
- How state policies and regulations impact regional markets

Workforce

- Training and education
 - Energy transition
 - Career pathways
- Studies
 - Feasibility & necessary regulatory framework
 - Prohibitions on new facility construction
 - Economic impact & job creation
- Policies that signal support



Wrap Up

- State policies are driving advanced reactor progress
- Motivations for action vary
- Electric sector is rapidly changing
- Bipartisan support

“Legislative changes in the Pacific Northwest (PNW), notably in Washington State, are driving the electricity sector to be carbon neutral by 2030 and ultimately carbon free by 2045. The legislative changes have renewed interest in nuclear power as a sustainable, carbon-free source of baseload electricity.” –PNNL

“...with numerous projects underway and multiple policies recently enacted to support advanced reactor development, the U.S. is well-positioned to be a global leader...”
–Third Way



Contact & Resources

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- [State Legislation and Regulations Supporting Nuclear Energy](#), [NEI](#)
- [Nuclear Energy Publications](#), [NCSL](#)
 - [State Policy Options to Keep Nuclear In the Mix](#)
 - [State Restrictions on New Nuclear Power Facility Construction](#)
- [Nuclear Energy Resources](#), [NARUC](#)
- [Clear Path to a Clean Energy Future 2021](#), [ClearPath](#)