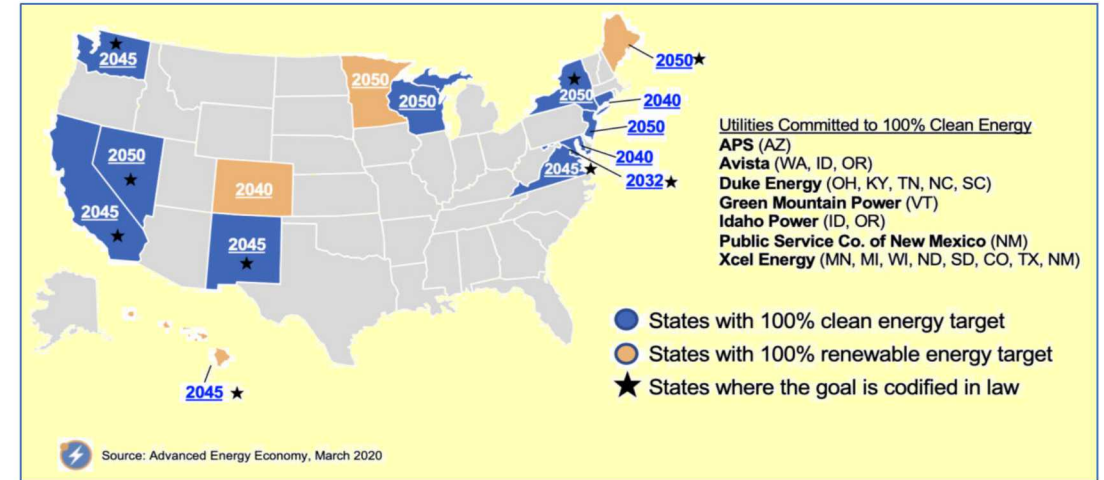


Optimal PV, wind, and energy storage capacity required for meeting NM's 100% carbon free goal

	Now	Needed ⁴
Energy Storage	3.75 MW ¹ (0.00375 GW)	5 GW/25 GWh
Solar PV	818 MW ² (0.818 GW)	10 GW
Wind	1,953 MW ³ (1.95 GW)	5 GW

¹ Global Energy Storage Database 2019; ² Solar Energy Industries Association 2019

³ American Wind Energy Assoc. 2019; ⁴ Copp, Nguyen, Thomson, Byrne, Chalamala, 2019



“Collaborative, stakeholder driven modeling” engages local and regional stakeholders and experts in identifying and describing system dynamics, locations, quantities, costs, prices, technologies, trends . . .

Modeling variables:

- Different mixes of existing and new technologies (coal, NG, nukes, wind, PV, ES, microgrids)
- Projected changes in demand (general economic development plus electrification (e.g., EVs and heat pumps))
- Projected demand profiles (daily and seasonal)
- New transmission and distribution requirements and how to offset them with DERS and ES.
- Retirement rates for existing generation
- Projected technology improvements & adoption rates
- End of life solutions
- Costs, tradeoffs, unintended consequences
- State and federal policies (incentives, procurement mandates, tax credits . . .).