Politics play an important role in determining the fate of renewable energy in particular places, but so does economics. The Trump Administration is trying to shift the economics, but it seems unlikely they'll be able to have much impact. For now, at least, there are a variety of motivations for states to embrace renewables, as illustrated by two of the Mountain States.

Wyoming and California differ dramatically in their politics and their state economies. But renewable energy has managed to take root in both places. Still, the political differences matter in the way policy unfolds: Colorado cares about climate change, while Wyoming cares only about the potential economic benefits of renewables.

## Colorado.

Colorado has an aggressive renewable energy goal. According to the **Denver Post**, "The legislature has mandated that 30 percent of Colorado's electricity from investor-owned utilities must come from renewable sources by 2020. For utility cooperatives, the goal is 20 percent, and for large municipal utilities, 10 percent."

The state got 18% of its energy from renewables in 2015, but hit 24% last March. The rest of the power in 2018 came from coal (50%) and natural gas (22%). The City of Aspen, in what it says is a demonstration of the potential for renewables, gets all of its energy from wind and hydro.

The state has already experienced the onset of climate change. According to the pre-Trump EPA, average temperatures in the state are up 2°F, and April snowback is down 20-60% in most locations. Moreover, "[i]n the decades to come, rainfall during summer is more likely to decrease than increase in Colorado, and periods without rain are likely to become longer."

These changes could have a big impact on the Colorado - the source of water throughout much of the Southwest. According to a recent study:

"Recently published estimates of Colorado River flow sensitivity to temperature combined with a large number of recent climate model-based temperature projections indicate that continued business-as-usual warming will drive temperature-induced declines in river flow, conservatively -20% by midcentury and -35% by end-century, with support for losses exceeding -30% at midcentury and -55% at end-century."

Fire is an additional problem:

"Higher temperatures and drought are likely to increase the severity, frequency, and extent of wildfires in Colorado, which could harm property, livelihoods, and human health. In 2013, the Black Forest Fire burned 14,000 acres and destroyed over 500 homes. Wildfire smoke can reduce air quality and increase medical visits for chest pains, respiratory problems, and heart problems. The size and number of western forest fires have increased substantially since 1985."

Given these impacts, perhaps it's not surprising that the state is planning to ramp up its efforts. In July, the governor announced that the state was joining the U.S. Climate Alliance. He also set some new targets for the state. From the <u>Denver Post</u> again:

"By 2025, the governor would like to see Colorado reduce its emissions statewide to 26 percent or more below 2005 levels. He also wants the electricity sector to reduce its emissions by more than 35 percent by 2030."

"Other goals in the climate plan include building out a network of electric car charging stations along major highway corridors and reducing energy and water use in public buildings, thereby saving taxpayers money."

These don't seem to be enforceable goals, but hopefully they'll help accelerate the state's carbon transition.

Colorado has divided government, with a Republican Senate (by a narrow majority), Democratic House, and Democratic governor. Over the past 20 years, the state has shifted from strong Republican control to a strong Democratic lean. The state is the poster child for the New West Economy, with extractive industries playing a smaller role while technology and tourism are growing.

## Wyoming.

Wyoming is one of the nation's leading coal producers, and it gets 88% of its power from coal. Yet surprisingly, the Cowboy State<u>leads</u> the nation in wind power per capita, and all of the new capacity from 2016 to 2019 will be wind. Indeed, according to a University of Wyoming study,

"Wyoming's top five large wind projects, including the Chokecherry Sierra Madre project and the Viridis Eolia proposal north of Medicine Bow, would generate

more than \$700 million in tax revenue to local governments, more than \$400 million to the state and more than \$700 million to Wyoming schools, all over a 20vear period."

The politics surrounding renewables in Wyoming are guite interesting. As the Casper Star Tribune explains: "Though industry interest in Wyoming has flourished, the state, though its policies, has maintained a fierce loyalty to fossil fuel industries, which contribute billions of dollars in tax revenue to state and local coffers."

As a measure of the strength of the fossil fuel lobby, Wyoming has actually been considering legislation to raise taxes on renewables and perhaps ban the sale of wind power in the state. Though to be fair, tea party ideology is another part of the mix. In the end, the legislative push seems to have <u>fizzled</u>, at least for now. It's hard to turn away industry that could bring billions of dollars of investment into a state.

The Republican Party has overwhelming control of the state legislature, and Trump carried the state the state by a whopping 50% margin. Still, in the end, it looks like economics may trump Trump.

Wyoming has a little over half the population of San Jose, California. As an odd feature of our governmental system, Wyoming gets two U.S. Senators, a Representative, and three electoral votes. San Jose does not.