

## Support for renewables is wider than you think

**Editor's note:** *The following article, by energy lawyer [Patricia M. French](#), shows that the wind industry has support from across the political spectrum. Yet too often, conservatives are mislabeled as anti-renewable energy when just the opposite is true. This should be greeted as good news because wide support will be a valuable commodity for growing the renewable-energy industry, and the wind industry in particular.*

It is widely claimed that where one finds oil, there is natural gas. It is now also increasingly true that in the same states that hold the greatest reserves for oil and natural gas, there has been significant deployment of solar and large, utility-scale wind generation. Conservatively-lead states continue to dominate the top states for solar capacity installed. Therefore, it could be said now that where there is oil and natural gas — states known for conservative political views — one routinely finds aggressive deployments of wind and solar generation.

Why and whether this trend will continue is an interesting question. The answer appears to be yes, so long as the continued siting of wind and solar bring tangible, calculable, and financial benefits to the power suppliers that ultimately serve energy producers and wildcats.

That observation is not without its counterpoint, however. The installation of wind and solar in states and regions where drilling is not occurring (or cannot occur because of geology) is not typically welcomed by conservatives. For the same reason weekly, monthly, and seasonal river flows are analyzed by natural-gas markets to gauge the offsetting impact of hydro-electric power generation. Wind and solar are a source of effective competition and can act to displace sales of natural gas in real-time.

When one focuses the analysis on capacity installed or even energy produced in each state — not simply the percentage of electric generation from renewables as compared to other sources of electric generation — striking similarities among politically conservative states stand out. Texas, which has a Republican governor, a strong Republican majority in both its house and senate, and boasts the first place in both oil and gas production, has the largest amount of installed wind capacity, or 14,098 MW at the end of 2014, with 7,595 MW more wind generation in construction. The Texas panhandle town of Sweetwater is home to the Cline oil shale play, along with thousands of megawatts of wind turbines. A large purchaser of the energy produced in that region under long-term contracts is CPS Energy, the largest municipal owned gas and electric utility in the United States. CPS boasts that its diversified fuel sources result in the lowest residential and industrial energy bills in the country and enviable financial ratings from public analysts. In addition, larger and more recently constructed turbines have been

placed in service in Texas relying on 20-25% of the revenues off the spot market prices. For instance, approximately 80% of the output of Pattern Energy's Panhandle Wind 2 is contracted under a long-term, energy price hedge, with an affiliate of Morgan Stanley, with the balance paid at ERCOT's spot market prices.

It is routine for wildcats to process the fuels they extract to power their wells. Wind supplies offer another opportunity for a low-cost source of power for those wells. Oklahoma, which has a Republican governor, a strong Republican majority in both its house and senate, and boasts the fourth place in natural gas production (via the Permian and Anadarko Basins) is now fourth in the nation for wind capacity with 3,782 MW of commercial wind generation capacity. Oklahoma boasts numerous wind farms collocated in the same counties as historically significant natural-gas reserves and natural-gas extraction wells. Examples include Blue Canyon Wind Farm in Caddo County and Horizon Wind in Dewey County, Oklahoma. Similarly, North Dakota, which has a Republican governor and a strong Republican majority in its state legislature, is home of the Bakken Shale, an extremely prolific natural gas and petroleum liquids find on and near the Williston Basin. North Dakota is also ranked 11th in the country in installed wind capacity. The counties that support the Bakken Shale play also support highly coveted good-to-excellent wind resources along the western half of the state, according to the U.S. Department of Energy.

Pennsylvania, seat of the natural-gas rich Marcellus Shale, and which just recently replaced a Republican governor but still has a Republican-led house and senate, is 16th in the nation in installed wind production. With Armenia Mountain Wind in Tioga and Bradford Counties, Twin Ridges in Somerset County and numerous other wind facilities, Pennsylvania's western counties accept the collocation of wind energy. Even the Appalachian-basin rich West Virginia rests in the top half at 23rd in the nation for wind capacity installed.

As for solar capacity installed, North Carolina, with its Republican governor and strong majority of Republicans in its state house and senate, is right next to California in the lead spot. Solid red-states Nevada, Arizona, New Jersey, Texas and New Mexico dominate the top ten for installed solar capacity, with Republican lead Tennessee close behind.

Producers in these Republican states may have recognized that accepting the siting of direct-connect renewables close to production areas could provide value (higher profits) to resources extracted through drilling. The incentive would have been even stronger when renewable tax incentives flowed freely and natural-gas basis indices evidenced volatility particularly for deliveries into the northeastern United States.

Producers may have also realized that the price taking effect of renewables, particularly in the winter months, softened peaks in the real time cost of electricity. Producers, as others clearly do, may also accept the competitive value of using renewables as a hedge against volatile energy costs, particularly during winter months.

The political reality may also provide cover to conservatives: the contract path of these resources often heads out-of-state, while the physical benefit of the capacity and energy produced remains in state.

While other parts of the country remain dependent on electricity generated with natural gas, lower in-region electricity prices in energy producing states may also result from the use of renewables without the need to support long-term power purchase agreements. The rate and depth of actual and accepted deployment of renewably-sourced electric generation in energy producing states suggests that this trend will continue.

— *Patricia M. French*