



Texas' evolving energy landscape: Healthier, cleaner, more efficient

Texas' main grid operator projects that installed solar power will increase more than seventy-fold by 2031.

—ERCOT (2016)

NEW DAY FOR TEXAS POWER

Texas may be known as an oil and gas juggernaut, but the state is actually at the forefront of a new frontier: the clean energy economy. The state's competitive electricity market, massive transmission line highway, and plentiful natural resources have built unprecedented momentum toward a cleaner, more efficient energy system. If state leaders don't undermine the progress underway, Texas' clean energy will continue growing jobs and the economy, while safeguarding precious water supplies. Embracing cleaner energy sources now will build a healthier Lone Star State for years to come.

Market-driven change is underway

Texas is already on its way to a clean energy future. Three factors have enabled this transition:

- **The competitive market structure** within the Electric Reliability Council of Texas (ERCOT), which manages the grid for about 90 percent of the state.
- **The identification of Competitive Renewable Energy Zones** and the construction of a transmission line highway to move West Texas wind to cities throughout the state.

- **Texas' clean energy potential**, which far exceeds that of any other state.

The ERCOT market places the lowest-cost power sources on the grid first. Natural gas and renewables have become increasingly cost-effective over the past ten years, accelerating coal's decline and paving the way for more homegrown, affordable resources like natural gas, wind, and solar. Coupled with outstanding transmission infrastructure and clean energy potential, these market forces – not environmental standards – are leading to coal's demise and cleaning up the grid in the Lone Star State.

Embracing Texas' clean energy potential will save energy and water, while creating jobs and cutting harmful pollution.

Texans will reap the rewards

Investing in clean energy is investing in Texas jobs. Just take a look at the state's thriving wind industry, which supports over 24,000 jobs.¹ Moreover, Texas is already the nation's leader in producing natural gas, and increased use in the state and throughout the country will mean more Lone Star jobs.

In addition, water savings await. Traditional power generators require a large amount of water to operate, but wind, solar panels, and energy efficiency need little to none. Large parts of Texas are expected to see longer dry spells and more droughts, so safeguarding scarce water supplies could be life-saving.

Switching to cleaner energy sources will also provide healthier and longer lives for Texans. Weaning ourselves off coal translates to a major reduction in carbon and other forms of air pollution, so generations to come will breathe easier and pay less for associated health costs.



Finally, a recent study shows this transition will occur without increasing electric bills for the next 20 years.² But that study also assumes no technological changes or breakthroughs. As renewable energy costs continue to come down, and energy storage becomes increasingly viable, all signs point to customer costs going down as well.

Opportunities to engage



Solar surge

With the third-fastest growing solar market in the nation, Texas is beginning to tap into solar power's economic potential.³ In fact, the state's solar capacity is projected to increase 70-fold by 2030 under business as usual conditions.⁴ This growth is in part due to dramatically declining costs – solar PV costs have dropped a whopping 85 percent since 2009.⁵ Not only will the state lower its carbon emissions, improve air quality, and save water, but solar growth also translates to thousands of jobs, as it creates nearly twice as many jobs as coal and three times as many as natural gas.⁶



Energy-efficiency momentum

Texas is on a path to increase the most cost-effective energy resource: energy efficiency. Under existing policies and market conditions, energy efficiency is on track to reduce the state's retail electricity sales by 7 percent by 2030. That amount represents massive savings, but it could be much higher if Texas "right-sizes" voltage levels through voltage optimization technology and takes advantage of clean energy finance tools, like the Property Assessed Clean Energy program. Plus, energy efficiency can lower bills: When customers use less energy, they save money.

¹ American Wind Energy Association (January 2017)

² The Brattle Group (May 2016)

³ Greentech Media (Q4 2016)

⁴ ERCOT (October 2015)

⁵ Lazard (December 2016)

⁶ Pollin, Heintz, Garrett-Peltier (June 2009)

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