At a national meeting of state utility regulators, the head of the group recently said that the Clean Power Plan was basically dead, BUT this might not matter because "arguably, you're seeing market-based decarbonization" due to technological changes. Case in point: Texas.

Market trends are pushing Republican-stronghold Texas toward a cleaner grid. <u>ERCOT</u>, which operates nearly all of the state's grid, recently projected that in the next fifteen years, Texas will add almost 20 gigawatts of solar, equivalent to 15-20 new nuclear reactors. In fact, under virtually every scenario ERCOT considered, the only new capacity is solar, with no new fossil fuel plants expected. ERCOT also expects to retire about a third that amount in coal generation along with some older, inefficient natural gas plants. Regulatory changes could nudge these numbers upward or downward. Both the use of renewables and the fossil fuel retirements would just about double with stronger environmental mandates. On the other hand, coal retirements would decrease without federal haze limits that are now in litigation.

You might be wondering why wind power doesn't play a greater role in these projections. The <u>reason</u> is probably that Texas is already #1 in the Nation in terms of wind; in fact, if it were a country, it would be #6 in the world. So there's more potential for growth in the comparatively small solar sector.

Another modeling effort provides a reality check on EPCOT's projections, reaching comparable conclusions. The Brattle Group has done its own projections, with somewhat different assumptions. It assumes that the cost of solar continues to decline as predicted and that natural gas remains under \$4/MMBtu (the current price is about \$3.25). On these assumptions, Brattle found that over the next 20 years, even without new regulations, the economics will favor cleaner power:

**Natural Gas Displaces Older Coal Plants:** Persistently low natural gas prices could cause the retirement of 60% (12 GW) of the current fleet of coal-powered plants by 2022.

**Natural Gas, Wind and Solar PV Will Largely Power the Texas Grid**: By 2035, about 85% of ERCOT power generation will come from natural gas, wind and solar power.

**Wind and Solar PV Will Grow**: Both wind and large-scale solar PV power will see swift, major additions of new generating capacity – 9 GW for wind by 2019 and 13 GW for solar by 2021.

**The Texas Grid Will Get Much Cleaner**: Annual CO2 emissions in ERCOT will drop by an average of 28% below 2005 levels – 61 million tons less of CO2 in every year.

Brattle predicts 12 GW in coal retirements by 2026 and that by 2035, coal will provide only 6% of the state's power. And as a result of these trends, Brattle projects, Texas would hit its target under the Clean Power Plan even if the regulation itself is eliminated.

There are some crucial things to note about all of these projections. All such projections are inherently uncertain. Energy forecasts are notoriously imprecise, with all manner of unexpected developments intervening. One critical assumption is that natural gas prices continue to be low, making coal less appealing. That may be too optimistic, although Trump's enthusiasm about fracking should if anything push gas prices lower.

Even if these market projections prove out, they by no means disprove the importance of regulations. A rollback from current air pollution regulations would slow these trends, while more aggressive regulation would accelerate them. So, too, could technological advances in renewables or energy efficiency. Even if Trump is able to boost coal production temporarily, it would take a very bold company to invest in a plant with a 30 to 50 year lifespan based on a short-term easing of regulations. So it's unlikely that Texas coal use will increase much in any event; the real question is how much it will take for it to come down.

Texas is the state with the highest carbon emissions today, with about twice California's emissions. Given the gloomy scenario for federal climate policy in the next few years, it's some consolation that market forces are working to lower emissions there. Better yet, the same market forces are also operating elsewhere in the <u>nation</u>.

Moreover, although the state government has zero interest in addressing climate change, that's not true at the city level. For instance, <u>Dallas</u> – which used to be a conservative Republican stronghold – has worked hard to cut its own carbon footprint and is trying to promote green building and use of public transportation. And state-level politics may also shift. Hispanics are predicted to become the largest demographic group sometime in the next seven years, which will impact the political balance of power.

So, even in Texas, change is coming - regardless of what happens in D.C.