Climate and energy issues have been hot topics in the news. Consider yesterday's issues of the *NY Times* and the Washington Post. Of course, both papers have featured coverage of the G20 conference. They emphasized that the U.S. is isolated internationally by its decision to withdraw from the Paris Agreement. Trump was unable to get any other country to support the U.S., despite heavy administration lobbying of Russia, Turkey, and Saudi Arabia. For instance, here's what the *Times* had to say:

> "The strains were most visible here on climate policy and trade. Mr. Trump's withdrawal from the Paris accord was widely condemned, with Ms. Merkel saying she deplored the move, and all the leaders aside from Mr. Trump signing up to language that called the agreement 'irreversible.'"
>
> "'Whatever leadership is,' said one senior French diplomat, who was not authorized to speak by name and insisted on anonymity, 'it is not being outvoted, 19 to 1.'"

In fact, as I pointed out in my Saturday post, the U.S. actually signed onto language admitting the need to control greenhouse gases and to expand renewables.

The *Times* also had another energy-related story. This one was on lobbying efforts by established U.S. utilities and the fossil fuel industry to persuade the states to cut incentives for solar power use. The utilities claim that solar users don't pay their fair share of the fixed costs of maintaining the grid. What they don't point out is that solar provides benefits to other users on exactly the days when the grid most needs electricity – the hottest days of summer. That saves utilities from having to buy power from other states at high prices, use expensive "peaker" generators, or build pricey new power plants.

But the *Times* also had another story about prospects for electric cars. The story highlighted a recent report projecting that battery costs are likely to fall dramatically, leading to much faster expansion of the market for electric cars than previously projected. In fact, if states make it less desirable for solar users to sell electricity back to the grid, they will incentivize users to install their own storage so they can use the power themselves. In fact, people with solar roof tops may find it appealing to disconnect from the grid altogether.

The *Post*'s webpage also featured energy and climate. One story discussed Tesla's plans to build a giant battery installation (100MW/129MWh) for all of South Australia. Besides providing a source of emergency power during blackouts, the installation will also provide grid-balancing services on a constant basis. There's also an op. ed. by climate scientist Ben Santer decrying "trickle-down climate ignorance." He asks the reader to imagine spending a lifetime on the rigorous and onerous work of climate science, only to have *this* happen:

> "After decades of seeking to advance scientific understanding, reality suddenly shifts, and you are back in the cold darkness of ignorance. The ignorance starts at the top, with President Trump. It starts with untruths and alternative facts. The untruth that climate change is a "hoax" engineered by the Chinese. The alternative fact that "nobody really knows" whether climate change is real. … The energy secretary tells us the fairy tale that climate change is primarily due to "ocean waters and this environment that we live in." Ignorance trickles down from the president to members of his administration, eventually filtering into the public's consciousness."

It's a depressing story, though he calls for hope that our society is resilient enough to withstand the campaign of falsehoods.

The *Post* also reported on electric cars. Tesla is about to introduce its first mass-market vehicle. On the other hand, Tesla's total share value has slipped behind GM – though it still seems remarkable that such an upstart company could even come close to rivaling the historic leader of the U.S. car industry. The papers also reported recently that Volvo is set to become the first of the established carmakers to phase out gasoline engines.

Late in the day, the *Post* added another article about energy, entitled "Coal no longer fuels America. But the legacy — and the myth — remain." Oddly, the article appeared in the Style section, as if coal were some kind of retro fashion trend. But perhaps that's a reasonable place for the article, since the point is that coal's symbolic value in American politics exceeds its practical importance as a fuel:

> "Decades past its heyday, and despite the availability of cleaner and more

> widely used energy resources, coal is enjoying its moment in politics, culture and the environmental debate. It has assumed a prominence in our national conversation far greater than its current consumption: . . .It's as though we had revived a discussion about [steam]locomotives. Fracking, recently a constant in the news, has been relegated to the back burner. Oil, too. . . "
>
> "Coal is an idea some Americans can't quit, although it employed fewer than 66,000 miners in 2015. The Kohl's department store chain has more than twice as many workers. . . "

The *Post* is right that reviving coal is more of a symbolic issue for Trump than a genuine policy position. A real revival of coal would require driving up the supply of natural gas, coal's main competitor. But Trump is eager to expand fracking, not restrict it.

As these stories from a single day of news illustrate, energy issues have gone from being small items on the business page to front page news. That's a sign of all the ferment in the area, including some negative news but also a lot of the positive. Even the negative news is a sign that new technologies are rising to the point where incumbent industries see them as a threat.

Change is in the air.