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New York recently adopted groundbreaking targets to decarbonize the state"s ...

As the nation moves toward decarbonization, it will be challenging to ...

Climate politics and policy are often characterized by symbolic goals and unattainable carbon reduction targets. This is nothing new in environmental policy. The 1972 Federal Water Pollution Control Act promised zero discharges of pollutants into our waterways in the act"s lofty statement of goals and then detailed the process for obtaining effluent discharge permits buried in the law"s fine print. Zero discharge was a dream. Still, the water is cleaner today than it was a half-century ago, and I suspect our carbon footprint will be lower in 2072 than in 2022. But it will take a long time to get there, and the question will always be: Is the glass half empty or half full?

In January of 2022, Colin Kinniburgh published a superb analysis inCity & Statemagazine of New York State"s current methods of power generation entitled "Smokestacks Loom Over New York"s Clean Energy Plan." According toKinniburgh:

The $15 billion annual cost ofdecarbonizationwould be paid by consumers and subsidized by federal and state government taxpayers. In the short run, the capital costs will be a strain as both capital and annual expenses increase while we both build new infrastructure and continue to pay for the fossil fuels used during the transition period. Ultimately, the end of fuel payments (the sun and wind are free of charge) should eventually reduce energy costs for New Yorkers. The devil will be in the details and the rate of transition. The transition must be carefully managed to ensure that energy supplies are not disrupted and costs are kept under control. That will likely mean that some goals, particularly the 2040 goal, might not be reached.

But they might. Because the wild card over the next two decades will be the development of new technology. If solar arrays become cheaper, smaller, and able to be deployed by people living in apartments, and if batteries become smaller and lower cost as well, many folks just might reduce or even eliminate their use of the electric grid. You might be skeptical, but there are plenty of recent examples of technological displacement. Many young people have never had a landline for their telephone. Many have cut connections with cable TV, and some no longer bother with wired connections to the internet. Electricity is more complicated, but it is easy to imagine breakthroughs that reduce demand on the grid.

Increased energy efficiency might also reduce power demand. The use ofheat pumps, increased insulation, more energy-efficient appliances, and more efficient light bulbs could impact our energy use. All of this could more than make up for increasing power requirements for electric vehicles, heat, and cooking.

The overall reality of decarbonization must be characterized as unpredictable. Still, there are some elements

we can predict. Our daily use of energy will continue and it has become a vital daily necessity to modern lifestyles. The energy supply must be consistent and reliable, so we cannot decommission a fossil fuel plant until and unless we can replace its power with a renewable source. We can also predict that the capital cost of the energy transition will be high, but the operation and maintenance costs should go down as expensive fossil fuels are replaced by zero-cost renewable resources.

The symbolic politics of goals and targets have a value here but cannot be permitted to impair operational reality. Advocates need to be careful to ensure that energy supplies are not disrupted to meet carbon reduction goals. Ideological insistence on decommissioning power plants, while they are still needed, could undermine the entire effort to modernize the energy system.

While there is some danger of moving too fast, there is an equal danger of moving too slow. One effort being pushed by some utility players is to convert fossil-fuel-fired power plants to power plants fueled by biofuels or zero-emissions generators due to carbon capture and storage systems. If the capital cost of a gas-fired power plant has still not been fully recovered, or if a utility does not want to invest in solar or wind power, they might attempt to push this approach. A quiet attempt in the New York State legislature to redefine zero emissions was reported byColin Kinniburghin aCity & Statepiece last March, where he observed that the power industry proposed:

"...to define "zero-emissions energy systems" as ones that do not result in a "net increase in greenhouse gas emissions into the atmosphere at any time in the process of generating electricity... The technologies most likely to benefit from the bill all involve burning some kind of fuel, whether hydrogen, "renewable" natural gas, or simply fossil gas paired with carbon capture and storage."

This type of approach by utilities causes advocates to question their commitment to decarbonization. What both utilities and environmentalists need to do is to work harder to build consensus and trust, to avoid symbolism by environmentalists and sneaky indirection by industry, and work together on a realistic path to decarbonization. The process of reducing greenhouse gases and modernizing New York"s energy system will be difficult enough without a reflexive retreat to "we-they" politics. Let"s save that nonsense for the federal government and keep New York focused on a pragmatic, realistic path to reducing greenhouse gas pollution.