## City Pledges for '100% Renewable Energy' Are 99% Misleading

The power grid is built on fossil fuels, and there's no way to designate certain electrons as guilt free.



By Charles McConnell Aug. 4, 2017 7:17 p.m. ET

Dozens of cities have made a misleading pledge: that they will move to 100% renewable energy so as to power residents' lives without emitting a single puff of carbon. At a meeting of the U.S. Conference of Mayors in late June, leaders unanimously adopted a resolution setting a "community-wide target" of 100% clean power by 2035. Mayors from Portland, Ore., to Los Angeles to Miami Beach have signed on to these goals.

States are getting in the game, too. Two years ago Hawaii pledged that its electricity would be entirely renewable by 2045. The California Senate recently passed a bill setting the same goal, while moving up the state's timeline to get half its electricity from renewables from 2030 to 2025.

Let's not get carried away. Although activists herald these pledges as major environmental accomplishments, they're more of a marketing gimmick. Use my home state of Texas as an example. The Electric Reliability Council of Texas oversees 90% of the state's electricity

generation and distribution. Texas generates more wind and solar power than any other state. Yet more than 71% of the council's total electricity still comes from coal and natural gas.

The trick is that there's no method to designate electrons on the grid as originating from one source or another. Power generated by fossil fuels and wind turbines travels together over poles and underground wires before reaching cities, homes and businesses. No customer can use power from wind and solar farms exclusively.

So how do cities make this 100% renewable claim while still receiving regular electricity from the grid? They pay to generate extra renewable energy that they then sell on the market. If they underwrite enough, they can claim to have offset whatever carbon-generated electricity they use. The proceeds from the sale go back to the city and are put toward its electric bill.

In essence, these cities are buying a "renewable" label to put on the regular power they're using. Developers of wind and solar farms win because they can use mayoral commitments to finance their projects, which probably are already subsidized by taxpayers.

But the game would never work without complete confidence in the reliability of the grid, which is dependent on a strategy of "all of the above," generating power from sources that include coal, natural gas, nuclear, wind and solar.

The mayor of Georgetown, Texas, announced earlier this year that his city had reached its goal of 100% renewable electricity. But in a 2015 article announcing the pledge, he acknowledged what would happen if solar and wind were not able to cover the city's needs: "The Texas grid operator, the Electric Reliability Council of Texas, will ensure generation is available to meet demand."

Two years ago the mayor of Denton, Texas, announced a plan to go 70% renewable, while calling a target of 100% unrealistic. "One of the challenges of renewable energy is that it's so hard to predict," he said. "You don't know exactly when the sun is going to shine or when the wind is going to blow. To maintain that reliable power, you must have backup power."

There is no denying that wind and solar power are important to a balanced energy portfolio. But coal is the bedrock of affordable electricity, and it will remain so, no matter how much wishful thinking by environmental activists. Coal is abundant and reliable. Unlike wind and solar, coal generation can be dialed up and down in response to market conditions and to satisfy demand.

The headline-grabbing 100% renewable pledges intentionally overlook these facts. Fossil fuels are not only the largest and most critical component of the energy portfolio, they are the foundation upon which renewable power must stand. Wind and solar generators ride free into the electric grid on the backs of fossil generators that have installed and paid for the infrastructure on which all Americans depend. The rise of renewable generation is made possible by fossil fuels, not despite them.

We should celebrate the growth of renewables, but not with false and misleading claims. What's needed is transparency and a shared objective to provide consumers with the most reliable, resilient and affordable energy available.

Mr. McConnell, executive director of the Energy and Environment Initiative at Rice University, was an assistant secretary of energy, 2011-13