

# What if Green Energy Isn't the Future?

By Mark P. Mills

**W**hat's Warren Buffett doing with a \$10 billion bet on the future of oil and gas, helping old-school Occidental Petroleum buy Anadarko, a U.S. shale leader? For pundits promoting the all-green future, this looks like betting on horse farms circa 1919.

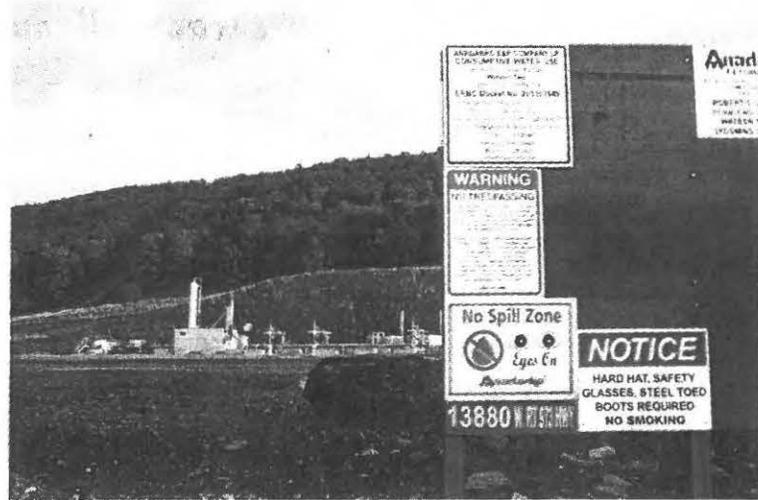
Meanwhile, broad market sentiment is decidedly bearish on hydrocarbons. The oil and gas share of the S&P 500 is at a 40-year low, and the first quarter of 2019 saw the Nasdaq Clean Edge Green Energy Index and "clean tech" exchange-traded funds outperform the S&P.

A week doesn't pass without a mayor, governor or policy maker joining the headlong rush to pledge or demand a green energy future. Some 100 U.S. cities have made such promises. Hydrocarbons may be the source of 80% of America's and the world's energy, but to say they are currently out of favor is a dramatic understatement.

## There's a reason Warren Buffett decided to bet \$10 billion on the future of oil and natural gas.

Yet it's both reasonable and, for contrarian investors, potentially lucrative to ask: What happens if renewables fail to deliver?

The prevailing wisdom has wind and solar, paired with batteries, adding 250% more energy to the world over the next two decades than American shale has added over the past 15 years. Is that realistic? The shale revolution has been the single biggest addition to the world energy supply in the past century. And even bullish green scenarios still see global demand for oil and gas rising, if more slowly.



A gas-filtration system atop a well in Pennsylvania managed by Anadarko.

If the favored alternatives fall short of delivering what growing economies need, will markets tolerate energy starvation? Not likely. Nations everywhere will necessarily turn to hydrocarbons. And just how big could the call on oil and natural gas—and coal, for that matter—become if, say, only half as much green-tech energy gets produced as is now forecast? Keep in mind that a 50% "haircut" would still mean unprecedented growth in green-tech.

If the three hydrocarbons were each to supply one-third of such a posited green shortfall, global petroleum output would have to increase by an amount equal to doubling the production of the Permian shale field (Anadarko's home). And the world supply of liquid natural gas would need to increase by an amount equal to twice Qatar's current exports, plus coal would have to almost double what the top global exporter, Australia, now ships.

Green forecasters are likely out over their skis. All the predictions assume that emerging economies—the least wealthy nations—will account for more nearly three-fourths of total new spending on renewables. That won't happen unless the

promised radical cost reductions occur.

For a bellwether reality-check, note that none of the wealthy nations that are parties to the Paris Accord—or any of the poor ones, for that matter—have come close to meeting the green pledges called for. In fact, let's quote the International Energy Agency on what has actually happened: "Energy demand worldwide [in 2018] grew by . . . its fastest pace this decade . . . driven by a robust global economy . . . with fossil fuels meeting nearly 70% of the growth for the second year running."

The reason? Using wind, solar and batteries as the primary sources of a nation's energy supply remains far too expensive. You don't need science or economics to know that. Simply propose taking away subsidies or mandates, and you'll unleash the full fury of the green lobby.

Meanwhile, there are already signs that the green vision is losing luster. Sweden's big shift to wind power has not only created alarm over inadequate electricity supplies; it's depressing economic growth and may imperil that nation's bid for the 2026 Winter Olympics. China, al-

though adept at green virtue-signaling, has quietly restarted massive domestic coal-power construction and is building hundreds of coal plants for emerging economies around the world.

In the U.S., utilities, furiously but without fanfare, have been adding billions of dollars of massive oil- and natural-gas-burning diesel engines to the grid. Over the past two decades, three times as much grid-class reciprocating engine capacity has been added to the U.S. grid as in the entire half-century before. It's the only practical way to produce grid-scale electricity fast enough when the wind dies off. Sweden will doubtless be forced to do the same.

A common response to all of the above: Make more electric cars. But mere arithmetic reveals that even the optimists' 100-fold growth in electric vehicles wouldn't displace more than 5% of global oil demand in two decades. Tepid growth in gasoline demand would be more than offset by growing economies' appetites for air travel and manufactured goods. Goodness knows what would happen if Trump-like economic growth were to take hold in the rest of the developed world. As Mr. Buffett knows, the IEA foresees the U.S. supplying nearly three-fourths of the world's net new demand for oil and gas.

Green advocates can hope to persuade governments—and thus taxpayers—to deploy a huge tax on hydrocarbons to ensure more green construction. But there's no chance that wealthy nations will agree to subsidize expensive green tech for the rest of the world. And we know where the Oracle of Omaha has placed a bet.

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