



## Clean Power Without the Clean Power Plan

Ned Mamula and Patrick J. Michaels

February 19, 2016

A month ago [we stated in these pages](#) that, despite what is being spun by the EPA regarding the Clean Power Plan, renewables are years away from their solo debut. Worse, the CPP actually discouraged the use of natural gas — which is far cleaner than coal — as a bridge to a renewable future.

Therefore, renewable-energy proponents should be pleased by the recent Supreme Court decision to stay the CPP. Beyond the legal details and the emotional jolt of halting CPP, there are five compelling reasons the court's decision was correct.

First, the technical expectations that EPA had placed on renewables were way too ambitious. Everyone knows that solar and wind power fluctuate — the sun doesn't always shine; the wind doesn't always blow. All renewables, including hydropower, are more beholden to geography than are fossil fuels. Even with government subsidies and other favoritism, renewables will not be able to power the grid in the near-term.

Secondly, the marketplace indicates that natural gas is, at present, the fuel best positioned to provide power generation for as long as it takes until renewables are ready to take over. U.S. natural-gas production is at a record high, while prices are continuing to drop and supplies are abundant and reliable. This means that renewable energy will, without the CPP, have more time to grow and mature in the marketplace prior to the switchover to solar and wind. More time for the growth of renewables is good because there is no evidence that solar and wind can replace natural gas near-term, let alone coal, which still supplies an incredible 40 percent of U.S. power generation.

Third, with regard to the environment, CO<sub>2</sub> emissions are cut in half at each U.S. power plant that converts from coal to gas. Simply put, there is no other fuel that will steadily reduce carbon emissions and keep fuel costs under control until power generation can be taken over by renewables.

Fourth, in the geopolitical arena, the shale-energy revolution has changed the world oil and gas marketplace for the foreseeable future. Shale producers have more flexibility than conventional oil and gas producers to increase or decrease production as prices change. This is what will enable natural gas to efficiently fill peak power requirements alongside renewables — directly

and speedily modulating world energy pricing. Given that most countries have no provision for mineral-rights ownership, and most of those governments are loath to grant approval on state land, it remains to be seen if significant shale production could be achieved outside the U.S. and Canada. If not, there could be an incredible opportunity for the U.S. to export oil, natural gas, and shale production technology.

Fifth, according to geoscientists, a surge of oilfield technology, including never-before-used hardware and computer software applications, have been developed and leveraged over the past ten years. These technologies eventually drove energy exploration and production to record levels, creating the shale revolution from scratch. In today's oilfields, dry holes are seldom drilled, and natural-gas production from vast shale deposits across the U.S. began to spike over the past five years, pushing production to their current highs. Oil and natural-gas production show no signs of abating despite steadily falling energy prices. Given the vast amount of shale deposits in the U.S., the nation has never been on a more straightforward pathway towards energy independence.

Solar and wind are just now beginning to make a contribution by producing power in tandem with, but in lesser amounts than, natural gas, coal, and nuclear. Although the CPP is on hold and may be history, people still want renewables to succeed, this time driven by the marketplace, not regulations. At present, solar and wind are technically and economically incapable of producing the seamless energy that Americans take for granted. However, in time the U.S. could see a renewable-energy revolution modeled after (and occurring side-by-side with) the shale revolution. If so, renewable-energy advocates should be thankful for the support role played by natural gas.

*Ned Mamula and Patrick J. Michaels are with the Center for the Study of Science at the Cato Institute.*