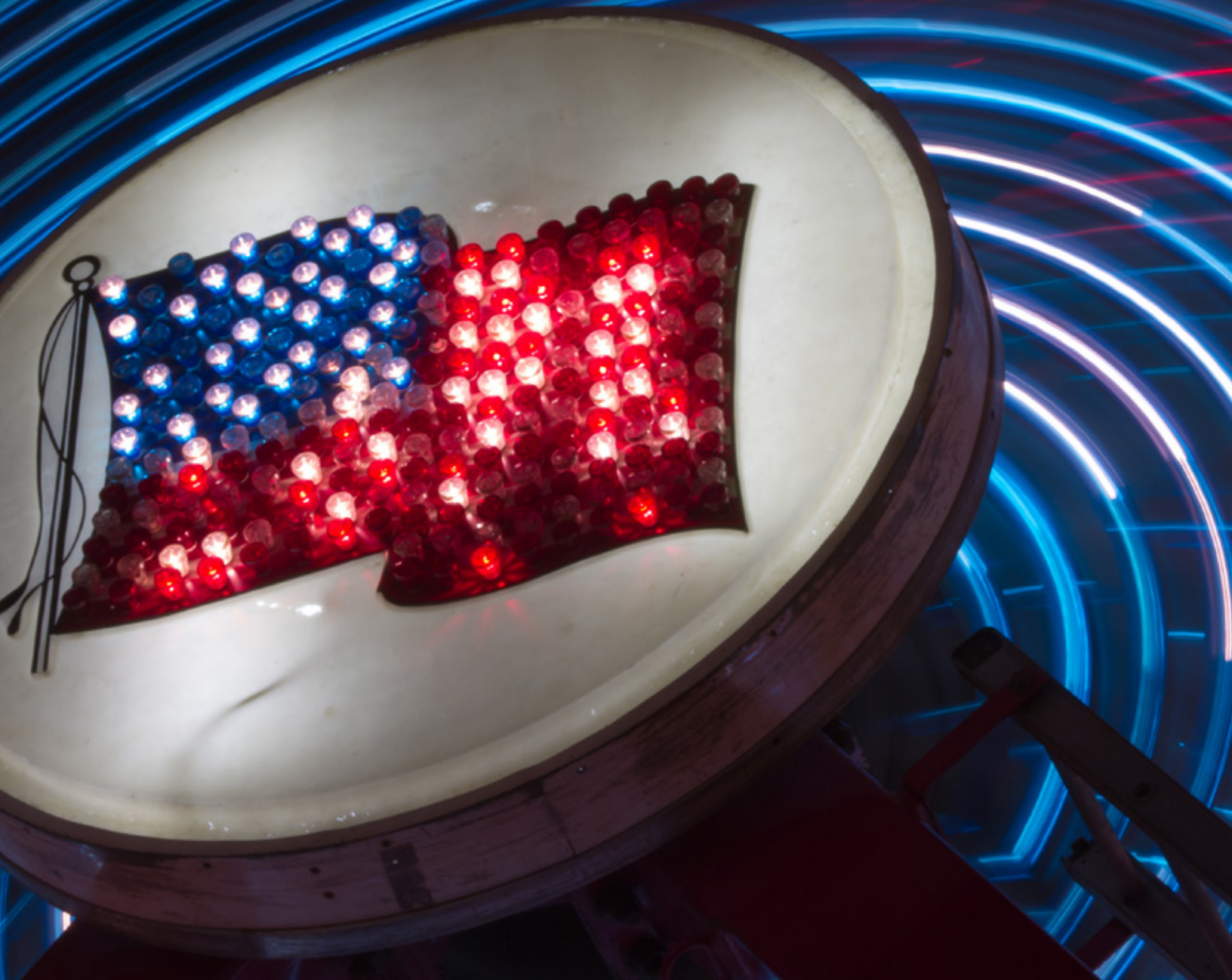


ENERGY AND POLITICS:

A Closer Look



WHITE PAPER

ENERGY IS A HOT TOPIC RIGHT NOW. But as a day-to-day privilege, it's not something we think about very often. The basic functions of our homes and businesses are powered by energy sources that are hundreds of miles away. We just flip a switch, and voila! Light.

The power plants that generate our energy use traditional sources like coal, nuclear, and hydroelectric dams. But in an effort to become more sustainable, electrical utilities have begun to switch over to renewable energy sources like solar, wind, and geothermal heat, which are gaining ground quickly. Electricity generation is the single largest source of greenhouse gas emissions in the U.S. so we're going to have to make changes. How those changes manifest is up to us—and the politicians we elect.

Regardless of which candidate wins the 2016 presidential election, energy will evolve. And regardless of popular partisan opinions, energy costs will shift and affect everyone in our country. That's why it's more critical than ever for people working in the energy field to use accurate data resources like RateAcuity to keep their customers up-to-date and easily calculate the financial impact of solar, electric vehicle, and energy efficiency programs.

In the meantime, it's helpful to take a closer look at the relationship between energy and politics to understand exactly why these changes are happening and where they are coming from.

RENEWABLE ENERGY AND FEDERAL INTERVENTION

When considering the relationship between politics and energy, it's important to look back at the early stages of sustainable energy efforts. You may remember the 1970s energy crisis when many industrialized countries, including the U.S., faced petroleum shortages and elevated prices. This led the U.S. to pass the Public Utility Regulatory Policies Act (PURPA) in an effort to promote energy conservation and greater use of domestic and renewable energy, i.e. reduce demand and increase supply.

PURPA required electric utilities to buy power from independent generators, which created a new industry segment but also opened the door for renewable energy to shake things up. New environmental agencies continued to surface, including the Environmental Protection Agency (1970) and the Department of Energy (1977). These agencies are still very active today.

In 2014 the EPA proposed a new rule that would limit carbon dioxide emissions from existing power plants. The rule threatens to close many coal-fired electricity supplies in the U.S. and also comes at huge cost to American families and businesses. According to the Institute for 21st Century Energy, the rule is estimated to increase electricity bills by a combined \$290 billion by 2030.

How can we adequately address climate change—a real issue backed by evidence from around the world—without breaking the bank? This is something that our future president will inevitably have to address.

TRUMP AND CLINTON ON ENERGY

The electricity industry in the U.S. has been enmeshed with politics from the beginning. Ideally the future of our infrastructure, our electric grid, and our energy sources would be a bipartisan issue. Although U.S. energy policy has largely taken a backseat to other issues in their public discourse, the truth is that Donald Trump and Hillary Clinton take very different stances on the matter.

In the first presidential debate on September 26, 2016, Clinton called out Trump for saying that climate change is a “hoax” perpetuated by the Chinese. He denied this accusation, though he did in fact tweet the claim in 2012. There’s no way to know for sure if he was joking or not—regardless, Trump has referred to climate change as a hoax more than once in the past. While Clinton remains focused on clean energy as a top priority, Trump continues to support the use of fossil fuels and believes renewable energy is too expensive for us to consider at this time.

Clinton continued to talk briefly about energy during the debate, saying, “We can deploy a half a billion more solar panels. We can have enough clean energy to power every home. We can build a new modern electric grid. That’s a lot of jobs; that’s a lot of new economic activity.”

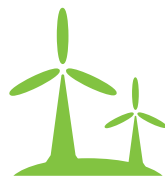
Trump countered this by indirectly referencing Solyndra, a solar panel maker that went bankrupt over five years ago after taking a loan from the federal government. “We invested in a solar company, our country,” he said. “That was a disaster. They lost plenty of money on that one.”

Some say that Solyndra is an outlier in the solar boom. According to *Fortune* writer Katie Fehrenbacher, the U.S. is estimated to install 14 gigawatts of solar energy in 2016—enough to power 2.3 million homes. That’s equal to about 14 large natural gas or coal plants and is 85% more than the amount of solar panels installed in the U.S. in 2015.

Trump did not articulate his energy plan during the debate, but did say that many people are losing their jobs because of our policies and that we’re losing money, although fact checkers found contrary evidence. He also added, “You can’t do what you’re [Clinton] looking to do with \$20 trillion in debt.”

Both candidates have been criticized for failing to indicate exactly where money would come from for their infrastructure proposals.

CLINTON'S STANCE: CLEAN ENERGY ALL THE WAY



Clinton believes that we need an electric grid that can harness new technology, reduce energy costs and increase consumer choice, as well as address the growing threat of [cyberattacks](#). She also plans to increase federal infrastructure funding by \$275 billion over a five-year period, fully paying for these investments through business tax reform. Find more details by visiting [her website](#).

Campaign officials say she's planning to push Congress to act on her plan during the first 100 days of her administration, although Congress has struggled to figure out how to pay for such massive improvements.

Unlike her opponent, Clinton is very enthusiastic about renewable energy, particularly solar. She hopes to increase solar energy 700% by the end of her first term, and produce enough electricity from renewable sources to power every home in the country within ten years of taking office.

Many experts—including Harvard Professor Robert Stavins, quoted in [The Guardian](#)—say that the only way to make such massive strides is to put a price on carbon emissions.

Naturally, boosting renewable energy raises questions about the ability of the grid, which was not built to handle such high levels of variable electricity. [A study](#) conducted by the National Renewable Energy Laboratory estimates that reaching 80% renewable generation would add about 40% to the cost of electricity.

Columnist and researcher [Jesse Jenkins suggests](#) that reaching levels of variable energy above their capacity factor—i.e. the amount of time your source actually spends creating electricity—becomes more and more expensive.

Clinton does have a plan for expediting siting of transmission lines needed to deliver renewable power to the grid, including a White House transmission office that would coordinate permitting on the local state and federal level. This would get pricey, though. Jürgen Weiss, head of climate change at the [Brattle Group](#) consultancy, estimates that preparing the grid for new types of energy—something the Clinton campaign says is a spending priority—could cost as much as \$100 billion over the next 10–15 years, roughly a 5–10% increase on current electricity spending. Clinton has also [been criticized](#) for focusing too narrowly on solar rather than other energy sources, like nuclear.

TRUMP'S STANCE: LESS REGULATION, MORE COAL



Like Clinton, Trump also believes we need to rebuild our infrastructure, which he says would create jobs but cost trillions of dollars. If elected, he plans to lift restrictions on energy production and use part of the resulting tax revenue to finance his infrastructure plan. Trump has also mentioned setting up a fund that would allow private investors to help finance projects. You can find more details on [his website](#).

Unlike Clinton, Trump is quite enthusiastic about fossil fuels. He has heavily criticized the Obama administration for destroying jobs through energy regulations and raising electricity prices—although electricity prices have increased by a [little more than 1 cent](#) per kilowatt hour during Obama's tenure through 2015.

Trump has been [dismissive](#) about climate change and renewable energy, claiming the latter is still too expensive for the U.S. to consider at this time. Trump plans to get rid of the Environmental Protection Agency, [cancel](#) the international Paris climate agreement, undo President Obama's Clean Power Plan—which the [EPA estimated](#) would lower electricity bills by 8% in 2030—and revive as many [coal jobs](#) as possible.

When asked how he would revive coal jobs, Trump said that he would do so by getting rid of regulations. As a big proponent of oil, he also wants to reduce regulations on hydraulic fracking. This has caused many economists [to question](#) his vision since it contains a central contradiction: reviving the coal industry while at the same time boosting the main thing responsible for destroying coal, natural gas.

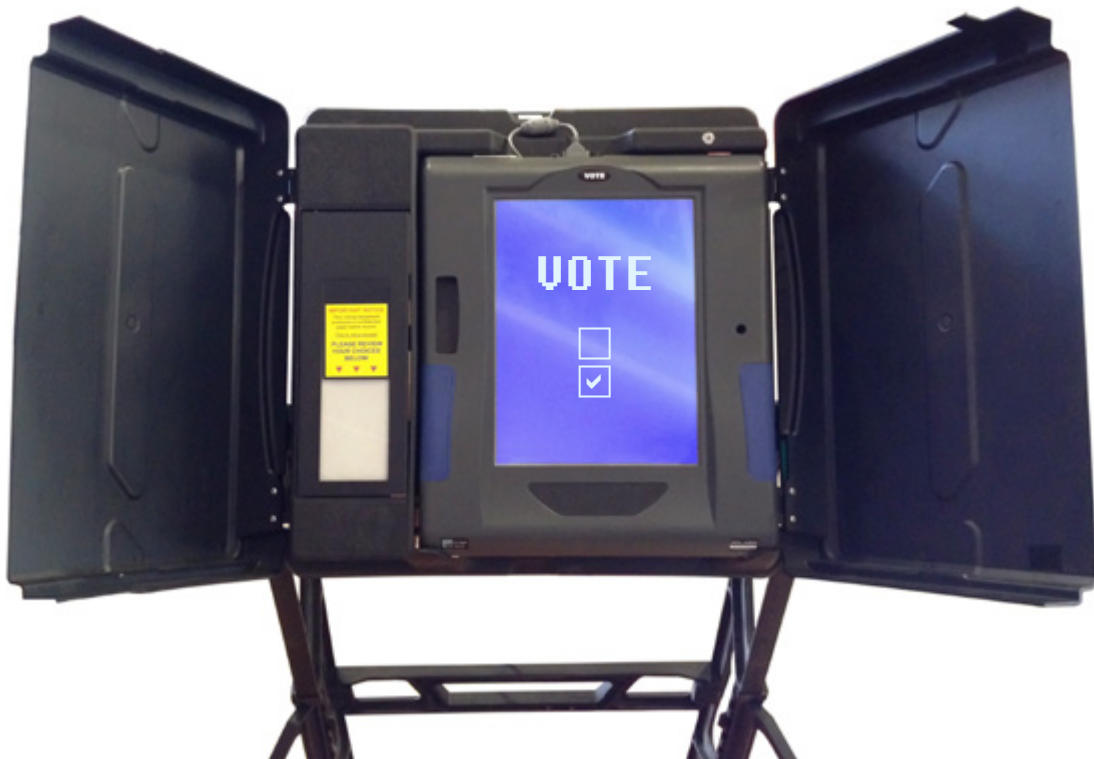
Daniel Kaffine, an associate professor at the University of Colorado, says that banning fracking would make coal more competitive, but removing regulations for natural gas at the same time would put even more downward pressure on coal.

Trump also wants to open up federal lands and offshore areas for oil and gas exploration and production, cancel a moratorium on new coal mining leases on federal land, and remove rules that protect streams from coal mining and waterways and wetlands from the industry in general.

You can find a breakdown of his views on energy issues [here](#).

TIME WILL TELL

As far as who the next president will be and how he/she will affect our energy choices and electricity costs, we'll have to wait and see. In the interim, it's important to stay informed. Luckily there are plenty of resources out there comparing and contrasting the candidates' views on infrastructure and energy, from the [Brookings Institute](#) to [Electric Choice](#). Of course the president does not control every single policy change that affects our energy trajectory, but it's still useful to know where the candidates stand—especially before you cast your vote.



About Rate Acuity

KFR Services RateAcuity™ electricity rate database gives our clients insight into the costs for different tariffs and schedules from electric utilities across the country. We leverage our staff of expert rate analysts and our 40 years of experience in dynamic data environments to monitor tariffs and deliver the most accurate and up-to-date rate databases to the energy and telecommunications industries. RateAcuity includes electric rate information from residential, commercial and industrial, demand response and electric vehicle charging tariffs. Since 1975, KFR Services has produced the highest quality data for telecommunications service providers throughout the country. Experience and expertise earns KFR the reputation as the most accurate telecom database provider in the industry. In fact, the nation's largest service providers use our databases to rate billions of calls each month at *99.999% accuracy (3 year average).