



**TO:** Monterey County Alternative  
Energy and Environment Committee

**FROM:** Brent R. Heberlee

**DATE:** December 22, 2016

**RE:** Monterey Bay Community Power Authority

---

The County Administrative Office requested that I prepare a memo to discuss whether changes to federal energy and environmental policies likely to be made by President-elect Trump and the incoming Congress will have a negative effect on renewable energy development.

### Summary

After eight years of steadfast support from the Obama administration, President-elect Trump and the Republican-led Congress appear eager to reduce or wholly eliminate various federal climate change policies. This will negatively impact renewable energy (RE) development, but key support mechanisms will remain in place. Regardless, under the new administration, state-level incentives will emerge as the primary drivers of RE development, with the State of California remaining at the forefront of this effort.

### Discussion

From the beginning of his first term, President Obama made the development of RE one of the cornerstones of his administration. After the defeat of the American Clean Energy & Security Act (i.e., cap and trade) in 2009 and the subsequent Republican ascent in Congress, the President opted to lean heavily on executive agencies, most notably the Department of Energy and Environmental Protection Agency, to accelerate deployment of RE resources to address the threat of climate change.

President Obama's largest and farthest-reaching effort, the Clean Power Plan (CPP), is likely to be an early casualty under the incoming Trump administration. The CPP is currently undergoing review at the DC Circuit Court but the Court's decision, once hotly anticipated, is now moot. Trump has long-promised to eliminate the CPP and as President, will have multiple means by which to do so. It is nearly impossible to envision a scenario in which the CPP survives a Trump presidency.

Similarly, the U.S. is likely to exit the Paris Climate Agreement, which Secretary of State John Kerry signed in April 2016. As with the CPP, the Paris Agreement does not mandate the deployment of RE -- it is focused on carbon emission reductions, specifically a 26% reduction from 2005 levels by 2025. Rapid adoption of RE was seen as the clearest compliance

mechanism and as a result, the Paris Agreement, combined with the CPP, were set to be major drivers of RE growth.

The exact manner by which the U.S. exits the agreement is uncertain, as some of the obligations are technically binding under international law and there could be legitimate geopolitical ramifications for doing so. However, given the deep antipathy for the deal among Republicans and Trump, such consequences are likely to give little pause to the effort to abandon the U.S.' emission reduction commitments. As the U.S. exits, other major countries are likely to limit their participation, as well.

The Investment Tax Credit (ITC) and Production Tax Credit (PTC) are less at risk. Both have been critical drivers of RE development, namely wind (PTC) and solar PV (ITC). Congress extended the credits at the end of 2015 and they are now scheduled to phase-out over the next five years. Congress, not the Trump administration, would be responsible for repealing the credits. Their interest in doing so is unclear, as the original legislation passed with considerable Republican support. This was primarily because the legislation also included lifting the oil export ban, but was also driven by the support of Republican senators from wind states, such as Iowa and Texas, who have seen the job-creation benefits of widespread wind development.

The elimination of the tax credits would have a dramatic and immediate impact on the pace of RE development and thereby largely eliminate those benefits. For that reason, the ITC and PTC are likely to persist as currently designed. At the very least, their repeal will be low on Congress' priority list. However, what little hope the credits had of receiving further extensions has been virtually eliminated.

The new administration's pivot away from decarbonization efforts will not reverse the trend of strong RE growth. State-level support has long been an equally, if not more important driver of RE development. Twenty-nine states plus the District of Columbia have established binding Renewable Portfolio Standards (RPS), which require a certain percentage of net retail electricity sales to be sourced from qualifying renewable sources. RPS programs and the associated Renewable Energy Credits have been just as vital to RE development as any amount of federal support, especially in states with lower quality wind/solar resources.

In fact, the primary trend among states has been to expand and extend their RPS objectives (e.g., CA, NY, OR, VT), and the programs remain popular even in states with Republican governors. State governments, sensing declining prospects for federal support, may push further RPS expansions going forward.

Finally, the Trump presidency may provide some upside to RE development. As a candidate, he promised a large surge in infrastructure investment as a means to drive job creation and economic growth. While the primary focus of these investments is likely to be roads, bridges and airports, it could also include energy infrastructure such as large power transmission projects or even RE development, though the overall impact is likely to be minor.

Costs for wind and solar PV have fallen dramatically over the past several years and are approaching true parity with traditional sources in a few regions of the country. Between 2009 and 2015, wind electricity capacity grew by more than 100 percent nationally, and solar capacity grew by more than 900 percent, according to the U.S. Energy Information Agency. Google and Amazon each purchase more than one gigawatt of renewable energy every year with Microsoft, Facebook, and Walmart following closely behind. Based on these corporate trends and the growth of wind and solar, most industry observers believe the renewable energy industry remains a wise investment, despite concerns in this political climate.

As the RE industry has expanded the employment impacts have also become more apparent. The U.S. wind and solar industries support more than 300,000 jobs, a political constituency roughly five times larger than that of coal. Energy efficiency accounts for nearly 1.9 million U.S. jobs – 10 times more than oil and gas drilling and 30 times more than coal mining.

Given this momentum and continued support at the state level, the election of Donald Trump, along with a strong Republican congressional majority, may have only a modest impact for RE development in the United States, and even less so in California.