



Climate after Trump

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On the Monday before the U.S. presidential election, climate negotiators gathered in Marrakesh, Morocco, to begin the long, hard process of implementing the Paris Climate Agreement. All eyes were on the United States. The news that Donald Trump had won the election hit Marrakesh early Wednesday morning. It was not well received.

Under U.S. President Barack Obama, the United States had forged an important alliance with China, putting forth more ambitious climate policies and [moving](#) the world toward signing the momentous Paris Agreement last year. That comity was still on display in Marrakesh, but little else of consequence has happened so far, other than a strategizing of how to respond to the U.S. election results.

The political uncertainty of what a Trump administration might bring added confusion to a task that was already extraordinarily difficult. Global warming is a near-perfect example of the tragedy of the commons, as it is a problem that no individual action, no single country can resolve on its own. On the one hand, this suggests a great danger to a Trump presidency: his reversal of climate change policies could bring about a global knock-on effect, pushing the world toward harsh nationalism and reduced international cooperation. On the other hand, there is a veiled hope that the negative impacts of U.S. climate policy—or lack thereof—under Trump will be limited by the current momentum in technological advancement and other factors.

The United States under Obama had taken a number of positive but preliminary steps toward getting the world to collectively cut greenhouse-gas emissions. Any form of global cooperation involving the United States is now in doubt. Of course, the scenario of unraveling global alliances, especially in the climate realm, is far from certain. In fact, early moves, now evident in Marrakesh, indicate the opposite: others, especially [China](#), are seeking to take the climate leadership mantle from the United States under a Trump presidency. On November 14, [China’s Vice Foreign Minister Liu Zhenmin](#), directly addressed Trump’s claim that climate change is a Chinese hoax designed to hurt U.S. competitiveness by stating in Marrakesh, “If you look at the history of climate change negotiations, actually it was initiated by the IPCC [Intergovernmental Panel on Climate Change] with the support of the Republicans during the Reagan and senior Bush administration during the late 1980s.”

The leaders gathered at Marrakesh certainly have a right to worry. If Trump were to follow through on his campaign promises, he would [slash and renege](#) on a number of key climate and

environmental protections. The list is [long](#), and includes everything from Corporate Average Fuel Economy (CAFE), which sets ambitious new mileage standards for carmakers, to local pollution safeguards. Such moves would increase U.S. emissions and [set back](#) federal clean energy and climate policy by a decade or more.

This, of course, is bad news. But how bad? Perhaps not as terrible as many fear, for two reasons: significant climate and energy policies in place at the U.S. state level and fundamental technological trends pointing to lower-carbon pathways.

None of this is to diminish the role of federal policy. The three key drivers of recent emissions reductions in the U.S. were the switch from coal to natural gas, rapid deployment of low-carbon sources of energy, and reductions in energy demand in the first place. All three required policy action. For example, the coal-to-gas switch was the direct result of [earlier investment](#) in basic research and development of fracking technologies that laid the foundation for the resurgence of natural gas. Further policies are needed. For example, regulating the leak of methane, a potent greenhouse gas and a possible byproduct of natural gas extraction and use, can help ensure that the coal-to-gas switch does indeed help the climate. Prices of solar photovoltaic panels have famously [dropped over 80 percent](#) within half a decade, also, in part, thanks to [ambitious policy](#) choices, such as supply subsidies in China and demand subsidies in Germany. Continued learning-by-doing subsidies are important: the more solar panels one has installed, the lower the cost per panel.

[Advancing nuclear technology](#) provides a similar ray of hope, allowing the world to meet ambitious climate goals while meeting rising energy needs. But here, too, policy is needed both to maintain the current nuclear fleet and to help develop advanced modular reactors, which could be deployed much more cheaply and safely than current technologies. Support for allowing this type of development to move forward is broadly bipartisan and ought to be able to proceed under a Trump regime.

Although no government can completely stop the momentum toward cleaner and more efficient technologies, a pullback in policy support could slow deployment of such technologies. A pullback in research funding could prove more harmful because of the U.S. leadership in energy innovation, and because rapid innovation is required to provide new technologies that allow the world to accelerate the drive towards zero emissions.

Some of the policies backing clean energy development and deployment, such as those aimed at advancing nuclear technologies, are best handled at the federal level. Still, much can be done—and is being done—at the state level. Every state has some type of [policies and incentives](#) for clean energy within their borders.

Some states have done so to prepare for impending federal rules, such as the Clean Power Plan, which asks them to meet certain greenhouse-gas emissions reduction goals. Since there is now less of a chance that such federal rules will be implemented, there may be some rollback at the

state level. However, there is a lot of inertia, and, perhaps more importantly, much political interest in retaining these state-level policies, which are often seen as engines for growth and employment. Although some new state-level climate policies on the ballot this November did not pass—most notably a carbon tax proposal in Washington State—some did. Florida, while it voted for Trump, rejected a proposal to reduce support for solar power within the state.

States cannot make up for all federal rollbacks. But in many domains, state and local policies set the tone for broader action to come. Even if the global nature of the climate problem necessitates broader action than any one state can provide, state-level actions can be a template and bellwether for U.S. federal action under a Trump presidency.

On the other hand, even if the impacts of a Trump slump in U.S. domestic climate action are manageable, the impact on global policy may not be. The concern here is not immediate support for new coal plants, or the immediate risk of conflict; it is the way a weakening of international institutions might initiate a negative feedback loop played out over many years and decades.

A lot then depends on how other nations react. After all, how Europe, China, and many others—especially [India](#)—respond to the United States does have important implications on the long-term trajectory of emissions. If China or even the EU were to take the U.S. election as a license to gut their own climate laws and regulations, the knock-on effects could be dramatic. Atmospheric greenhouse-gas concentrations could rise noticeably as a result.

If China, instead, were to press ahead with its plans for a cap on domestic carbon emissions, continue to invest in low-carbon sources of energy, and generally use any U.S. pullback as an opportunity to take the mantle of global climate leadership, overall impacts would be relatively small. If the European Union and its key member states, too, were to maintain and strengthen their policies, re-asserting themselves as a climate leader, overall effects could even be positive for the world, if not for the United States. There are no guarantees, but if Marrakesh is any guide for how the wider world will react to a Trump presidency, there is some reason for optimism that climate policies will not weaken much. The catch is, of course, that they need to get stronger.