

U.S. leadership on climate change. There's no other way to spin this election. Myron Ebell, the head of Trump's EPA transition team, thinks that President Obama's Clean Power Plan is illegal, the Paris Agreement unconstitutional and that climate change "is nothing to worry about." Though most of the focus on climate policy in the coming months is likely to be on the U.S. commitment to the Paris Agreement and on the Clean Power Plan, I'm even more worried about what the Trump Administration will do to our policies to cut emissions from the transportation sector. But on all three of these issues, the future is bleak.

The obvious and most immediate shift will be Trump's withdrawal of the U.S. commitment to the Paris Agreement and a significant weakening of requirements on existing and new power plants (the so called Clean Power Plan). These are depressing moves. It's difficult to know exactly how damaging the U.S. withdrawal will be. To be honest, the emissions reductions from our power sector — in many ways the heart of the Paris Agreement — may not make much difference in achieving temperature stabilization in any event. That's because the growth in emissions from developing countries, including China and India, will simply dwarf any U.S. action, making their commitments under the agreement far more important. Moreover, our electricity sector is already shifting to greener fuels, including wind, solar and natural gas and away from coal. I don't think that shift will stop since it's the product of market forces as much any governmental policy (though federal tax policy has surely helped spur renewable energy investments). But the signal the U.S. will send when it withdraws the CPP will be heard around the world.

What is likely to be more devastating is the withdrawal of U.S. leadership from the international process that produced the Paris Agreement. President Obama and his team made the Paris Agreement happen. Without U.S. leadership, the agreement literally would not have come to fruition. The big and unanswered question is whether any other country

can step in to fill the void and to maintain and strengthen other countries' commitments to the Agreement. If, for example, China decides that it will not move forward if the U.S. withdraws, then the whole agreement is doomed. I have a hunch, though, that China will maintain its commitment — it has a lot to gain, both environmentally and economically — from investing in reducing greenhouse gases and becoming a leader in renewable

withdrawal. So the U.S. may stand to lose more from a disinvestment in the clean energy

technologies and manufacturing. It may even see global opportunities from a U.S.

sector than any one else.

It's on transportation policies that Trump could really hurt U.S. and global progress. Transportation emissions just surpassed emissions from electricity as the largest contributor to U.S. greenhouse gases. The most cost-effective way to reduce those emissions is, in Dave Roberts of Vox's words, to "electrify everything." For transportation, that means rapid development and deployment of electric vehicles, combined with an increasingly clean electricity grid to power those vehicles. The principal policy mechanism for spurring electric vehicle manufacturing is through federal policy that requires much more fuel efficient vehicles. By 2025, the standards for passenger cars are supposed to achieve an average of 54.5 miles per gallon. Since manufacturers can use fleet averages, if they sell a high percentage of electric vehicles that use no gasoline, manufacturers can then sell other cars that are less fuel efficient than the average. Yet there's a relatively easy way for the Trump administration to back out of these standards: the rule implementing them provides for a "midterm review" to see if achieving the standards is possible. EPA has issued a draft report suggesting that the standard is, in fact, achievable but the agency need not make a final determination until April, 2018. Auto manufacturers disagree and are already lobbying EPA to loosen the standards. If a Trump EPA wants to do so, it can. California could under special authority the state has to regulate emissions from automobiles- then try to step into fill the void, but it cannot act without a waiver from the Trump EPA. Last time we had a Republican president, his EPA refused to allow California to move forward with the nation's first greenhouse gas standards for cars.

What makes the news about the transportation sector so depressing is that the U.S. drives a significant amount of technological change in the transport sector. That innovation can, in turn, be exported to other countries. So our failure to lead on transportation innovation can, in turn, affect the pace at which the rest of the globe electrifies its vehicle fleet.

There are many reasons to be depressed about a Donald Trump presidency. For me, however, climate change may be at the top of the list, though I recognize that there are many issues that could compete with it. I applaud <u>Dan</u> and <u>Ethan's</u> efforts to suggest a way forward but the reality is that Trump's election is very, very bad for the future of our planet.