Politics of climate change belief

Donald Trump's actions during the election and his first weeks as US president-elect send a strong message about his belief in climate change, or lack thereof. However, these actions may reflect polarization of climate change beliefs, not climate mitigation behaviour.

Earlier this year, Donald Trump appointed Myron Ebell, a known climate science denier, to oversee the US Environmental Protection Agency transition (he later chose another sceptic, Scott Pruitt, to run the agency), and said that he would 'cancel' the Paris climate agreement. By the end of his second week as president-elect, it was announced that under Trump funds from NASA's Earth Science Division would be redirected to deep space exploration projects, effectively eliminating a worldrenowned centre for climate change research (see ref. 1 for a complete overview of Trump's actions). This is notable given that, as discussed in our November News Feature², climate change was not central to the US presidential campaigns, and is not an issue that motivates electoral decisions. Moreover, it is not clear how such actions speak to the concerns that motivated Trump voters. Instead, these actions reinforce and provide a striking example of the political polarization of climate change. Indeed, the justification given for defunding climate change research at NASA is to abolish "politicized science".

A meta-analysis published in this journal last year showed that ideology and political orientation were among the strongest predictors of climate change belief³. However, there is a stark contrast between the politics of climate change belief and the politics of climate mitigation behaviour. For example, Florida went to Trump, but also voted to allow the expansion of solar power. The disconnect between political polarization on climate change and support for clean energy cannot be attributed to unusual voter behaviour in an unconventional election cycle. The states that produce the greatest proportion of their electricity from wind4, and the top windenergy producing congressional districts⁵, are all led by Republicans. In fact, many Republicans support policies that promote development of clean and renewable energy not because they reduce greenhouse gas emissions, but because of potential economic benefits. This begs the question of whether the success of climate change communication is actually hampered by mentioning climate change at all.



"Climate change" was said exactly once in each of the three presidential debates. In each case, Hillary Clinton was discussing the economic benefits of growing clean energy, and then gave what were arguably 'shout outs' to climate change as another reason clean energy policies are important. (The closest any question came to referring to climate change was a question about energy policy and remaining "environmentally friendly".) When asked directly about the Paris agreement in an interview with The New York Times in late November. Trump quickly pivoted from whether or not he believes in human-caused climate change to the importance of ensuring that American companies are competitive, essentially saying his belief in climate change depends on the corporate cost of such a belief. On the one hand, climate change sceptics respond more positively when addressing climate change is framed in terms of economic and technological development⁶, consistent with Clinton's strategy; on the other hand, conservative white males, who are significantly more likely to report climate change scepticism, are more likely to favour protection of the current economic system7, consistent with

Trump's strategy. However, it seems more likely that Clinton's explicit references to climate change were designed to reach young voters² who are already concerned about the environmental impacts of climate change, rather than those who need to be persuaded by economic arguments. One could even speculate that merely saying "climate change" highlighted the political divide between these latter voters and Clinton, something that this issue has come to symbolize.

There is no doubt value in determining how to better educate the public about climate science. However, interventions based on the assumption that informing the public about environmental consequences will inspire pro-environmental behaviour are not effective, particularly if people do not already value environmental protection8. More troublingly, belief in climate change has only a small to moderate effect on whether people choose to act in environmentally friendly ways3. In fact, communicating co-benefits of addressing climate change — such as economic development — motivates action to a similar degree as believing that climate change is important9. When it comes to addressing the urgency of climate change mitigation, we need to ask whether it is necessary to change people's beliefs about anthropogenic climate change, or whether it is more important to convince people to engage in and support pro-climate behaviours and policies, irrespective of their beliefs.

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