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Research Brief:

Climate Science and Policy Advocacy: Values, Practices, and Strategies for Success

Any effective measures to address the risks presented by climate change will involve input from scientists. However, scientists are not elected decision-makers who form policy in a democratic society. Indeed, it is widely valued that scientists should remain politically neutral and independent. Therefore, climate change scientists have to negotiate communicating uncertain science to policy-makers in providing policy advice, whilst making sure that scientific explanations do not veer into policy advocacy. To do so may threaten the trust society puts in scientists to remain independent from politics.

Similarly, communicating with the lay public is something that many people argue publically funded scientists are duty bound to do (Shrader-Fréchette, 1994; Lackey, 2007). However, there appears to be a difference between just communicating the conclusions from scientific research to the public and communicating in order to affect action; for example, how scientists think their research may affect the formation of a policy over another. To discuss personal policy preferences with the public or policy makers may 'colour the science' (Lackey, 2007) and therefore threaten scientific integrity.

To add to this, climate change is a particularly difficult subject matter to communicate and engage with due to effects such as psychological distancing (Moser, 2010) or differences in risk perception (Slovic, 2000). Climate scientists therefore need to find a way of overcoming these difficulties. However, this more than likely means that the expert has to make a decision about how to explain these concepts to laity, which communication frames to use, and which aspects to simplify to aid comprehension. These judgements create the potential for policy advocacy.

Policy advocacy has the potential to undermine public trust and damage the integrity of scientists' work by being at odds with what society values about science. However, Nelson and Vucetich (2009) argue that "advocacy [in science] is nearly unavoidable" and therefore justified because the "dichotomy between facts and values is false". Given that scientists are supposed to remain politically neutral, and maintain their independence, how are they to navigate potential advocacy (accidental or otherwise), as raised by Nelson and Vucetich?

On the other hand, should it be permissible for climate change scientists to advocate, given that climate change is such an urgent and wicked problem? Some argue that scientists are justified in advocating for specific policy action as "the graver the threat, all things being equal, the more justified is a partisan position against it" (Shrader-Fréchette, 1994; p187). Ironically, however, the people most qualified to reason if the threat is serious enough to condone advocacy are the scientists themselves (Lay, 1993; Shrader-Fréchette, 1994). However, even if there was a perfect understanding by the public and policy-makers about climate science, there are a plethora of causes vying for attention. Therefore, opinions about scientists engaging in policy advocacy depend upon views as to the role of scientists in a democracy, how scientists are to negotiate that role and their role as a citizen, and how the science community informs and is influenced by policy-making and engaging with the public.

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