There seems to be an emerging scientific consensus that the rate of global warming is rising. After screening out the effects of natural factors like El Niño, scientists have concluded that the pace of warming has roughly doubled since the 1970s. What does this tell us about policy? Some of the implications are more obvious than others, and at least one implication may be unsettling for some climate advocates. We're unlikely to obtain complete success with any one of these efforts,

Prioritizing CO2 emission cuts. Most obviously, we need to accelerate our efforts to carbon emissions. We will be closing in on possible tipping points faster than expected. Climate impacts that we might have expected twenty years from now could hit in half that time. We could well hit the 1.5 ° C target of the Paris Agreement by the end of the decade, not as a one-off annual temperature but as a long-term state. Given what Trump is doing both domestically and to the international order, this couldn't have happened at a worse time. But that doesn't change the policy imperative.

Reducing methane. One way we can buy time is to cut the levels of short-term warming agents like methane (natural gas). Methane is a much more powerful warming agent than CO2 but doesn't stay in the atmosphere nearly as long. For that reason, methane reductions aren't by themselves a long-term solution, but they would allow us to partially offset the acceleration in warming.

Climate adaptation. Because the planet is warming more quickly, climate risks are also going to come more quickly. We have known about the risks of extreme weather, increasing the likelihood of floods, droughts, heatwaves, and wildfires. We now know that we have less time than we thought to prepare, which means that we have to act more quickly on flood control projects, wildfire control, drought planning, and expanded disaster response capabilities.

Geoengineering. Because of the acceleration in warming, we need to take geoengineering more seriously as a solution for two reasons. One is simply that we have less time than we thought for emission cuts (and we were falling behind anyway). The other is more subtle. We don't know why warming is accelerating. The most popular theory is that it's due to the decrease aerosols such as sulfur dioxide in the upper atmosphere, which is a cooling agent. That in turn is due to successful efforts to reduce air pollution in the lower atmosphere where we all live. Injecting sulfur dioxide in the atmosphere can be seen as a form of restoration therapy for the plant, simply restoring the status quo of earlier decades. Doing that would be less risky that forms of geoengineering that involve doing something

unprecedented to the atmosphere such as using orbital shades to cool the earth. Opponents of geoengineering may not be happy about this idea.

Research. We need more research to confirm the acceleration and a better grasp on what is causing it (and thus on future trends). That seems like a no-brainer, but of course the money for that research isn't going to come from the federal government anytime soon. That means that other funders need to bump this up on their priority lists.

Really, the last thing we need right now is more bad news. But forewarned is forearmed. A variety of policy responses are called for, and we need to get working on them.