## **VIEWPOINT**

## Try and elevate the climate change discourse

By Colin Polsky

My knowledge is limited. In some debates, my eyes just glaze over. If the discussion becomes heated, then I also tune out. So I get why the climate change debate is caught in such a logjam.

When speaking publicly, I find most people genuinely openminded and curious. They really want to know whether or not climate change is real, humanmade, and problematic. But their eyes soon glaze over, and then they tune out. The reason is simple: the discourse is not only complex but also full of fear and vitriol.

Let's resolve in 2018 to break this logjam together. The public discourse needs to advance. Here are three climate questions I find many people are genuinely openminded and curious about:

1. "How can CO2 control climate if there's so little to begin with?" It's true that CO2 only composes 0.04 percent of the atmosphere. But even that small fraction warms the planet a lot. Earth would be frozen without even this level. The supporting science dates from before the Civil War. So our atmosphere has just enough CO2 to make our planet

livable (through radiative forcing), and alive (through photosynthesis). For those reasons, CO2 is awesome. But it also stands to reason that increasing CO2 levels will increase average temperatures, to potentially problematic levels.

- 2. "If Earth was warmer before industrialization, how can our emissions cause our current higher temperatures?" It's true that the Earth was warmer than today. There were once palm trees in Wyoming. Those ancient conditions were not caused by humans. But the reasons for the ancient warmth do not explain our current warming. Incidentally, our ancient warmth was accompanied by higher ocean levels, hundreds of feet higher than today.
- 3. "It's freezing outside, so how can global warming be true?" It is cold these days. But increasing greenhouse gas levels won't eliminate winter. Instead, we simply expect global average annual temperatures to rise.

Colin Polsky, Ph.D., is director of the Florida Center for Environmental Studies, and professor of Geosciences at Florida Atlantic University.