Talking about the Science

As the climate science debate continues to influence the public conversation, it is important to avoid becoming defensive in the face of skepticism and denial. A more effective approach is to remind audiences that life sometimes calls on us to act responsibly without being 100% certain. Climate communicators should use the opportunity to pivot the conversation to the concrete effects that we are already experiencing (such as extreme weather events), the benefits of addressing climate change, and the risks associated with inaction. In the event you are unable to pivot the conversation, here are a few responses to common challenges to climate science:

**CHALLENGE** — The current warming is just a natural cycle.

**RESPONSE** — The global climate does experience some natural cycles and variations. But, climate scientists have rigorously examined this issue and determined that natural causes such as solar variability, volcanic activity, and the urban heat island effect are not the cause of today’s warming.

**CHALLENGE** — Recent winters have been exceptionally cold and snowy which shows that average U.S. temperatures are going down, not up.

**RESPONSE** — Recent winters have been exceptionally cold in some places and exceptionally warm in others. Scientists look at the role of carbon and other greenhouse gases in climate by looking at variations over large areas and long periods of time.

**CHALLENGE** — Annual mean temperatures in the U.S. have fluctuated for decades and the primary cause is changing solar activity levels and ocean temperatures, not CO2.

**RESPONSE** — The mean temperature over the U.S. or any other region does fluctuate from year to year. Nevertheless, the average temperature over all major regions and oceans, including the U.S., has warmed too much over the past century to attribute to purely random changes.

**CHALLENGE** — Global warming is a hoax created by environmental extremists/liberals/those who want to control others (or regulate industry, create big government, undermine economic growth, redistribute wealth, etc.)

**RESPONSE** — Every major international scientific institution dealing with climate, ocean, and/or atmosphere agrees that the climate is warming rapidly beyond natural variability and the primary cause is human-induced carbon emissions. The different social cultures and political systems these organizations operate within make it hard to see how they would all be environmental extremists.

Another critical issue in framing the climate science debate is the choice of messengers. Climate scientists have been the main voices defending climate science yet this often emphasizes that the science is the problem, rather than political, economic, or moral questions involved. At the same time, climate scientists still have an important role to play in reinforcing the threat posed by global warming. Their voices, however, need to be joined by a range of influential thought leaders and experts.

View the Climate Access collection of climate science messages resources for additional information and recommendations: [www.climateaccess.org/climate-science-messaging-resources](http://www.climateaccess.org/climate-science-messaging-resources)