



How to

**DISCUSS CLIMATE CHANGE
WITH SKEPTICS**

Panda Ambassadors



More than 97% of actively publishing climate scientists agree that climate change is real and is caused primarily by human activity, and yet in the United States there is a significant number of people who don't believe climate change is happening at all; don't believe climate change is caused by human activity; or don't think climate change is a threat.

While we may never be able to change everyone's mind about climate change, there are a few ways to discuss the issue with skeptics in order to keep the conversation productive and educational. With the right approach and the right audience, you may be able to influence opinion on this important issue.

Step 1. Have realistic expectations

Unfortunately, in this case a scientific issue has become entangled in a politicized belief system. The denial of climate change is a part of a political identity—and changing that belief is going to be just as difficult as changing someone’s stance on other culturally controversial issues like LGBTQ rights or abortion.

The good news? According to a March 2018 Yale study¹, 73% of registered voters think climate change is real. This number is not as high as it should be, but it’s still an overwhelming majority. Even among the most conservative Republicans, the study says that 40% accept that climate change is real. For liberal or moderate Republicans, that number jumps to 58%.

The people who don’t believe climate change is happening generally fall on a spectrum. At one end, there are those with a very strong opinion that climate change is a deliberate hoax. At the other end, there are those who just don’t know much about it but haven’t noticed anything worth getting upset over. Do yourself a favor and don’t bother engaging with those at the hoax/conspiracy end of the spectrum. No amount of evidence will ever convince them. But it is worth talking to those who are uninformed or just a little skeptical. You still might not be able to convince them that climate change is real, but you might help them understand the issue and why people around them are so concerned.

It’s always best to start these conversations one-on-one. If it’s you against a group of people, you’ll have a much harder time getting through to anyone.

Step 2. Understand the basic science of climate change

If someone asked you to explain how human activities are causing climate change, could you do it? If so, great! If not, that’s OK too! That’s why we have climate scientists who’ve devoted their whole lives to studying this phenomenon. If these experts say climate change is real, that’s good enough for most people.

But if you want to explain climate science to a skeptic, it’s time to study up on the basic concepts.

THE GREENHOUSE GAS EFFECT

In simple terms, the Earth is like a greenhouse. Our atmosphere creates a barrier that holds in heat from the sun. Without it, Earth would be freezing all the time. The atmosphere is naturally occurring, and is made up mostly of water vapor and naturally occurring carbon dioxide. That’s great—in fact it’s essential for human life.

The problem is that since the industrial revolution humans have been pumping a lot more *unnaturally* occurring stuff into the air: carbon dioxide, methane, and other gases. Just like the naturally occurring gases, this stuff forms part of the atmosphere. Our atmosphere now has more carbon dioxide than it has ever had before—the glass on our metaphorical greenhouse is getting thicker.

¹ Leiserowitz, A., Maibach, E., Roser-Renouf, C., Rosenthal, S., Cutler, M., & Kotcher, J. (2017). *Politics & Global Warming*, March 2018. Yale University and George Mason University. New Haven, CT: Yale Program on Climate Change Communication.

This lets the same amount of solar radiation in, but lets less heat radiation out. That means a hotter atmosphere.

DEFORESTATION

To make matters worse, humans are also destroying forests around the world at an alarming rate. Forests are “carbon sinks”—that is, trees remove carbon dioxide from the atmosphere, which helps negate the greenhouse gas effect. But with fewer forests, we’re stuck with more carbon dioxide in the air.

EXTREME WEATHER

The heating up of the planet affects more than just the temperature. When the planet is warmer, water evaporates into the atmosphere more quickly—just as water will boil more quickly over high heat on your stove. This leaves the ground dryer, more brittle, and unable to absorb moisture and heat from the air—so we get increased heat waves and droughts.

And when the air is warmer, it holds more moisture. Think of how humid it can get on a summer day, and how in winter the air can be so dry you need a humidifier. When the atmosphere is holding onto moisture longer, it rains less often—but that’s not the only problem. When the atmosphere finally does release that water, it’s releasing a lot more than usual, often in a heavy downpour, and on land that is dry and unable to absorb it. Instead of nourishing the land, water just runs across the surface, causing floods.

One important note: If someone asks you a question about climate science and you don’t know the answer, just admit it. Don’t guess at the answer and don’t get defensive. Take it as a learning opportunity for both of you. In fact, saying “that’s a great question—can we look it up on the computer right now and find out?” might just be the best way to get someone interested in learning the science behind climate change.

Step 3. Start from common ground

When approaching the subject of climate change with a skeptic, start with something you can agree on. Maybe that’s the temperature or the more frequent occurrence of extreme weather. Maybe it’s just the fact that humans are polluting a lot more than they were a couple hundred years ago.

You don’t even have to use the words “climate change” or “global warming.” Most people know empirically that climate change is happening, even if they wouldn’t use those words to describe it. If you can get them to agree to basic, undeniable facts, you’ve got a starting point.

Talking about the weather is such a natural entry to conversation—and what better way to approach a conversation about climate change? Here’s an example:

“Did you read about the flood that happened in x part of the world? It’s crazy how this stuff is happening all the time. Did you know that Houston has had three 500-year floods in three years? We should really be doing something about that.”

Step 4. Focus on solutions

Climate change denial can come from a place of fear. If climate change is real, and the impacts are as extreme as they say, it's a genuinely scary concept. It's also uncomfortable to think that your actions are in part responsible for a major threat to life on Earth. Rather than face that discomfort, some people find it easier to deny climate change is happening at all. The best way to reach these people is by focusing on solutions to the problem. Climate change is terrible, but if we start now we can stave off the worst and adapt to the rest.

For example, you can talk about how producing one megawatt of solar power costs about half what producing one megawatt of coal power costs². Wind power is even cheaper. You can talk about how cities around the world are already adapting to and preparing for climate change, becoming more resilient. You can talk about how much you love riding your bike to work, or how a plant-based diet is surprisingly easy and tasty.

Whether they personally believe climate change is real or not, explain to your audience that the solutions are already starting to come together. And those solutions will carry a host of other benefits—economic, social, and health. So why not get on board with the future?

Step 5. Exploit the herd mentality

Most people want to go along with the crowd. Point out that climate change is so widely accepted that it's only a fringe minority who think it's not real. The US military, for example, has an extensive climate change adaptation and mitigation plan. There's no debate—climate change is real and they are preparing as best they can.

Most businesses—in fact just about all of the major brands you interact with on a daily basis—have accepted that climate change is real and are adapting to meet the changing world. Almost half of all Fortune 500 companies have at least one climate or emissions target.

And worldwide, the US is literally the only country to reject the Paris climate agreement. Every other nation on Earth has now agreed that climate change is happening and something needs to be done about it. Even the Pope is concerned about climate change!

Step 6. Be patient

There are a lot of well-worn talking points people use to explain why climate change isn't real. Some people repeat these points without stopping to think about them, and most can be disproven easily. Be patient and explain each point with sincerity. Never talk down to people or laugh at their ignorance—it's the quickest way to get them to stop listening.

² Berke, J. (2018, May 08). One simple chart shows why an energy revolution is coming—and who is likely to come out on top. Retrieved from <http://www.businessinsider.com/solar-power-cost-decrease-2018-5>

Here are some common rebuttals you might hear, and how you can respond:

If there's global warming, why is it freezing outside today?

Climate change is reflected in long-term trends around the planet as a whole. Just because it's cold here doesn't mean it isn't warmer somewhere else.

This is just the Earth's natural cycle of warming and cooling. We're warming out of an ice age.

No natural cycle accounts for the extremely rapid heating we're currently experiencing. In fact, the only thing that does account for it is the greenhouse gas effect.

Humans have been on this planet for a long time so there's no way they are just now responsible for global warming.

The industrial revolution didn't start until the 18th century. Since that time, we've been burning more and more fossil fuels and releasing more carbon dioxide into the atmosphere. As populations have increased and countries have become more affluent, the amount of carbon dioxide released has gone up exponentially.

When nobody was buying "global warming," they changed the name to "climate change"—obviously not real.

Some people prefer the term "climate change" because it paints a more complete picture of what is happening to our atmosphere, but both terms are correct.

The main scientist behind global warming faked his evidence.

While some reconstructions have found slight differences in historical data, the results posed by the original "hockey stick" graph have actually been proven correct—that the last few decades of warming is unprecedented in the past 600 years.

I never even heard of global warming until a few years ago. Back when I was growing up they said we were in global cooling!

The idea of global warming was actually first posed in 1896! In 1961, C.D. Keeling produced data showing carbon dioxide levels in the atmosphere were rising. In 1965, a presidential report warned that these heat-trapping gases were causing the temperature to rise. So global warming isn't a new idea at all. By the 1970s, most climate scientists agreed we were experiencing global warming.

Those are a few of the most common rebuttals to the reality of climate change—but there are many more. Check out Skeptical Science's page on [climate change myths](#), where they debunk almost 200 common climate change myths!

Step 7. Expect a process

You're probably not going to change anyone's mind during one conversation. But unlike when you're debating ideology or personal values, you have facts on your side! With time and patience, you might help someone understand that climate change is not a hoax at all.

Step 8. Share your experience

Log on to the Panda Ambassadors Facebook group and share your experiences of talking to climate skeptics. What has and hasn't worked for you?