

10 Myths About Climate Change

<https://earth.org/myths-about-climate-change/>



Source: Calva

Climate change is the biggest existential threat human civilization has faced in its thousands of years of existence. As a result, there is an inexhaustible amount of information surrounding it—and with it, lots of false information and many myths. Here are 10 myths you may encounter most frequently about climate change, and why they are incorrect.

Myth #1: “Earth’s climate has always been changing. This is no different.”

In a sense, the first part is true. Earth’s climate has always been in a continuous state of change. However, this change was cyclical and occurred in regular, predictable intervals as described by [Milankovitch cycles](#). These cycles explain how slight changes in Earth’s tilt, rotation and orbit affect its surface temperature, and subsequently the concentration of greenhouse gases in the atmosphere. What’s happening now is entirely different. Whereas Milankovitch cycles describe periods of hundreds of millennia, we’re seeing temperatures and CO₂ concentrations rise to unprecedented levels in the space of just a couple hundred years.

Myth #2: “It’s cold outside so global warming isn’t real.”

This argument is based on the false assumption that everywhere will be impacted equally by climate change. In reality, some regions such as Earth’s poles will see average temperatures rise much more sharply than those nearer to the equator. There will still be cold days and nights, of course- this has never been disputed. However, *on average*, temperatures will rise all across the world. Furthermore, the problem isn’t just that it is going to get hotter. Scientists often use the term “climate change” as opposed to just “global warming” because it more accurately takes into account the far-reaching effects that a warming climate will have on our planet.

Myth #3: “The sun is responsible for global warming.”

While it’s true that in the 1970’s some scientists attributed global warming to increased solar activity, the truth is that for the past 35 years the amount of energy from the sun striking the Earth has been decreasing while temperatures have still been rising. This means other factors must be at play, namely an enhanced greenhouse effect induced by human activity.

Myth #4: “Humans release an insignificant amount of CO₂. We can’t be the cause of global warming.”

According to the UN IPCC (Intergovernmental Panel on Climate Change), natural processes emit about 750 billion tons of CO₂ each year while humans were only responsible for an additional 35 billion tons in 2018. That’s only about 4.5%, so does that mean we’re not the problem? Not quite. Until as recently as the Industrial

era, Earth's carbon cycle was in balance. Now, however, we are digging up and burning fossil fuels and releasing huge amounts of CO₂ that had been stored for millions of years. This CO₂ is released but is not entirely re-absorbed (only about 85% of it is absorbed, mostly by the world's oceans, leading to destructive ocean acidification), causing the whole system to shift out of balances.

Myth #5: “Not all scientists agree that humans are causing climate change.”

While this isn't strictly false, it is certainly very misleading. There are very few scientific issues with 100% unanimity as there will always be those with differing opinions and ulterior motives. However, as far as a consensus on climate change, it has been shown that roughly 97% of climate experts agree that humans cause global warming. The most comprehensive study on the matter culminated in a definitive report showing that the greater the expertise among those scientists surveyed, the higher the consensus that humans are responsible for global warming.

Myth #6: “So what? Climate change isn't even that bad.”

If rapidly-rising temperatures and sea levels coupled with extreme weather events, mass die-offs and ecological ruin don't sound that bad, then perhaps we should look at some of the indirect consequences of climate change. These include global food shortages and water crises, unprecedented mass migration, huge swaths of uninhabitable zones, more frequent pandemics, drug-resistant superbugs and of course, the need to adapt to all of the above with hugely expensive economic costs, as well as social, political and cultural implications. Regardless of your background or political leanings, this does not sound like a world anyone would want to live in or leave behind for future generations.

Myth #7: “There's nothing we can do about it.”

Actually, there's a lot we can do to prevent further climate change. The solution is simple: we need to reduce our greenhouse gas emissions. This has been stressed by scientists as far back as the 1960's and just as it was true back then, it's still very true today. But by just how much do we need to reduce our emissions? In a 2018 report, the IPCC strongly highlighted the need to reach net zero carbon emissions by 2050. To have any chance at staying below 1.5°C of warming (a best-case scenario), we need to start cutting emissions by roughly 7.6% each year until 2030.

Myth #8: “Renewable Energy is too expensive.”

Renewable energy was once seen as an expensive, impractical alternative to fossil fuels. This is a very outdated belief. In fact, renewable energy today is just as cheap (and often cheaper) than any other form of energy. In a 2019 report, the International Renewable Energy Agency stated that “[in] most parts of the world today, renewables are the lowest-cost source of new power generation.” Furthermore, when you take into account the external costs of the fossil fuel industry and the subsidies used to keep it competitive, the true cost of fossil fuels is far higher than that of renewable energy.

Myth #9: “[Insert country here] is the problem, they should fix it!”

Climate change is a global challenge that will impact all of us. Every nation has had *some* role to play in global warming, and therefore we all share *some* responsibility. While it is true that a country such as China emits more CO₂ than any other country in the world, their *per capita* emissions are far lower than countries such as Australia or the US. The average US citizen emits more than two times as much CO₂ per year than the average Chinese citizen. Nevertheless, finger-pointing only wastes precious time and effort that could be spent enacting policies and driving change across the globe. We must also remember that climate change is not just an environmental issue, but a humanitarian one. Although global warming is mostly fueled by developed nations, it will disproportionately affect those from developing countries who are less capable of coping with it. Simply put, those least responsible for global warming will be those that suffer from it the most.

Myth #10: “It's too late.”

Of all the myths and lies on this list, this is perhaps the most dangerous one. **It is not too late.** If we want to prevent climate change from getting out of hand, we need to act now. We need to make ourselves heard, but we also need to take action ourselves. You don't have to wait for anyone's permission to start living a more sustainable and environmentally-conscious lifestyle. Whether it's through your diet, your travel or your household's energy consumption, there are [numerous steps you can take right now](#) to become a part of the change.