



# Climate Change 101

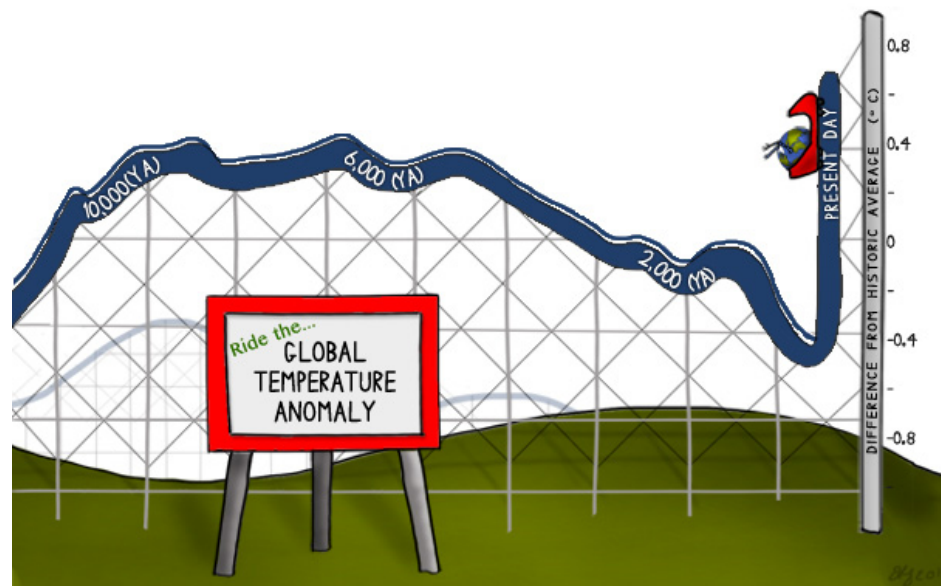
## Climate Change, explained.

As [Dr. Kim Nicholas](#) says during episode 1 of TCTM, climate change can be broken down into a poem or haiku (as long as you don't pay attention to the syllables!). ***It's warming. It's bad. It's us. We're sure. We can fix it.***

Let's break it down a little further.

### It's warming. It's bad.

The concerning part isn't so much that the planet is warming, but the *rate* at which the warming is happening. You see, since the beginning, the earth has experienced periods of ice age and periods of warming. And for the last 10,000 years, the earth's temperature was relatively stable and predictable.



[What's the hottest Earth has been "lately"? | NOAA Climate.gov](#)

But scientists estimate that the planet is now about [1 degrees celsius](#) warmer than it was during the late 18th and early 19th centuries - we are warming *too* quickly. And while that might not seem like a lot, think about the average temperature of the earth like the average temperature of your body. When your body temperature goes up by one degree, you might start to feel a little off and have a fever. When your body temperature goes up by 2 degrees, you're sicker than a dog! And if your temperature goes up 3 degrees, you're in the hospital and the situation just got VERY serious.

With the earth's temperature having risen by one degree, we can already see serious climate change effects - more droughts, floods, heat waves.... The planet has a fever! And if we keep going on our current path, the planet will be heading to the hospital...And it's [the people who have contributed the least to causing the problem that are impacted the most.](#)

### **It's us. We're sure.**

"Are you sure?" you might ask. Yup, we are!



We are burning fossil fuels like coal, oil and gas when we drive or heat our homes. We raise livestock and produce our food in ways that disrupt the balance of earth's natural systems. All of which release carbon dioxide (CO<sub>2</sub>) and other [greenhouse gases](#) like methane (CH<sub>4</sub>) or nitrous oxide (N<sub>2</sub>O) into the atmosphere where they

accumulate and create a [pollution blanket](#) trapping all the heat in. The science behind climate change is concrete and well understood.



So, why is climate change such a disputed topic?

Think about it. How hard is it to get all your friends to agree on what toppings should be on a pizza? Or to agree to which restaurant you should eat at for dinner? Now try to imagine 195 countries trying to agree on climate change. You get the idea!

## **We can fix it.**

But, have hope, my friends! Just like we know WHY climate change is happening, we also know WHAT we need to do to stop the warming. We have to do two main things: one, we need to leave fossil fuels in the ground and switch to cleaner energy sources to grow our food or run our vehicles. Second, we need to all recognize our role in fighting climate change - we ALL have a part to play! Collectively, we need to help the planet "[draw down](#)" carbon with nature-based solutions like healthy forests and oceans and regenerative agriculture.

As individuals, we also have a role to play here! [45%](#) of emissions (greenhouse gases) are under household control. This means that if we collectively make small changes to how we live, we can all make a big difference in [reducing our carbon footprint](#) and turn things around. But as mentioned, this is only part of the story. It's up to governments to make structural changes through policies that work with nature, instead of against it, and we need businesses and the private sector to adopt these new policies and changes.

**"No one can unilaterally choose to live in a low-carbon economy. The goal is not self-purification but structural change" - [Leah Stokes](#)**

Want to learn more about climate change? Check out these links:

1. Read "Under the Sky We Make" by Prof. Kimberly Nicholas at <https://www.kimnicholas.com/>
2. [https://www.huffpost.com/entry/those-who-contribute-the-\\_b\\_835718](https://www.huffpost.com/entry/those-who-contribute-the-_b_835718)
3. <https://www.drawdown.org/>