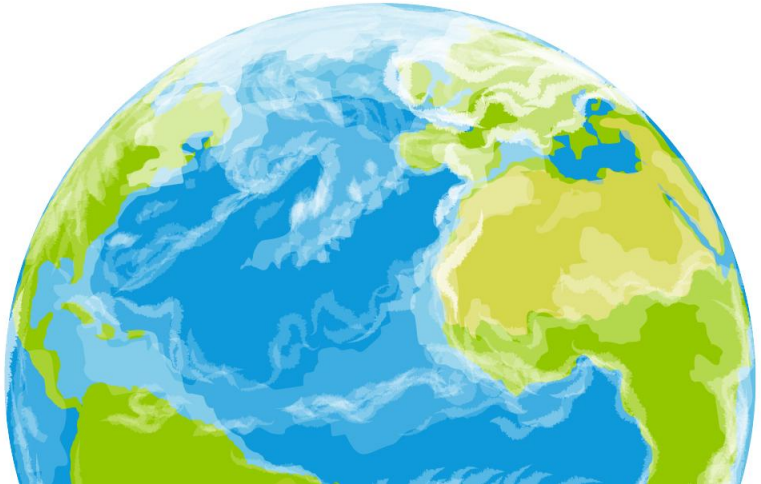
Our Children's Trust

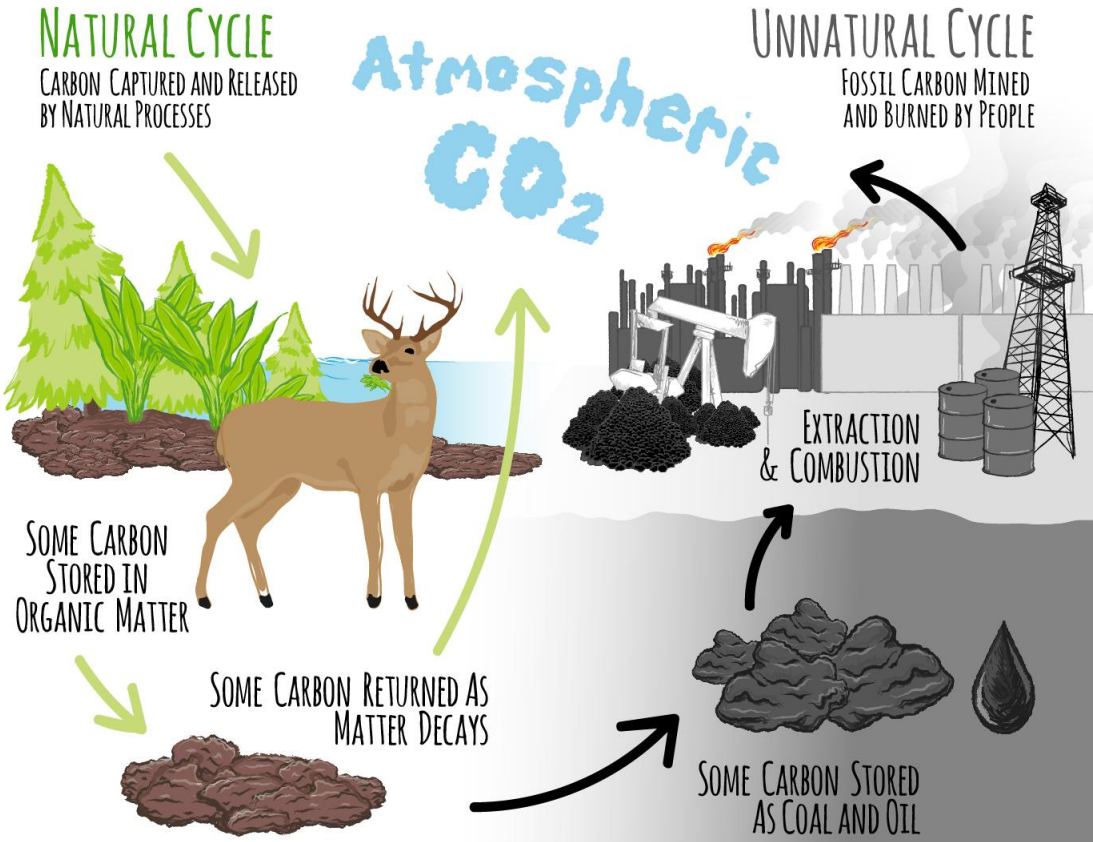
Pathway to Climate Recovery



The Carbon Cycle

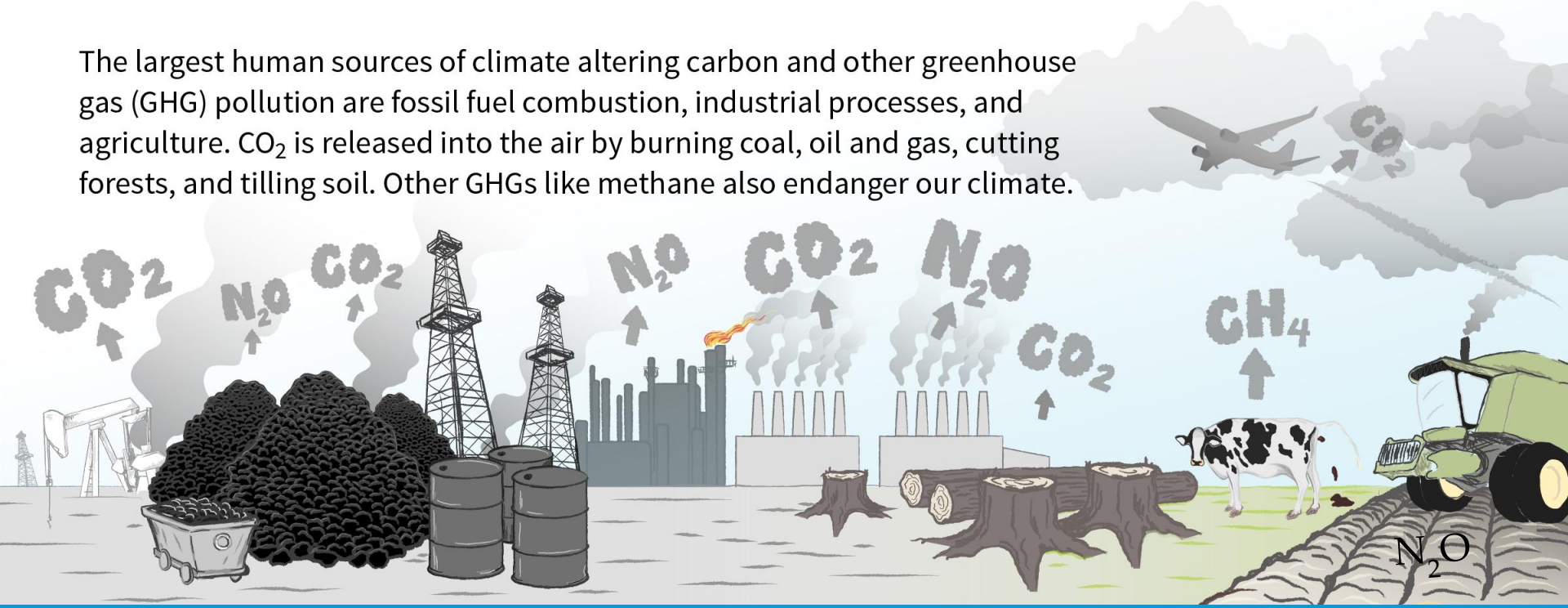
Carbon cycles naturally through all organic matter. As part of this continuous exchange, some carbon is released through geological processes and decay, while other carbon is consumed and stored by plants and oceans.

When coal and oil are mined and burned by people, the carbon they contain is removed from deep storage within the earth and reintroduced into the atmosphere at an unnatural rate. This alters the carbon cycle, and dramatically increases the amount of CO_2 in our atmosphere and oceans to crisis levels.



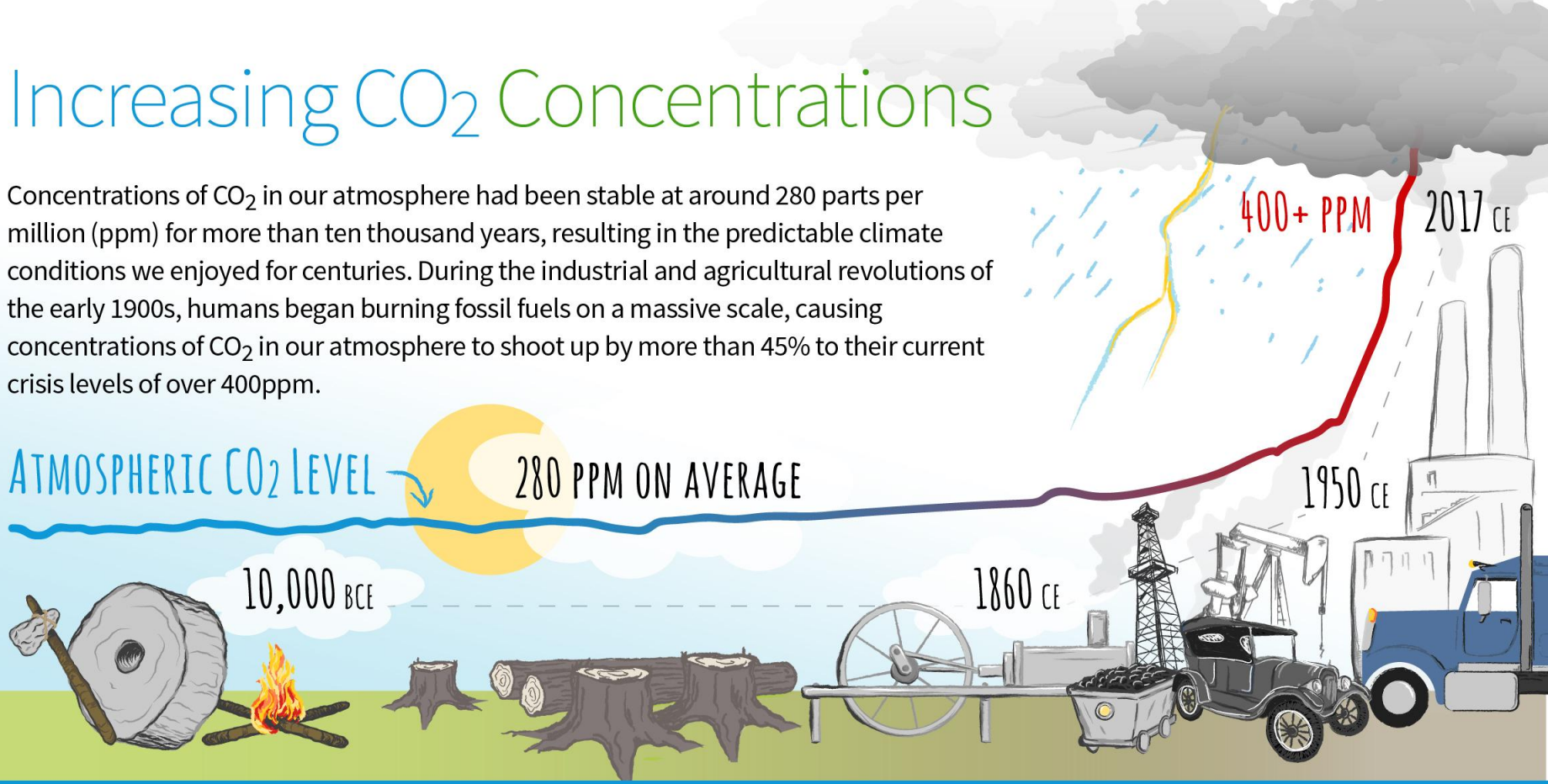
Sources of Greenhouse Gas Pollution

The largest human sources of climate altering carbon and other greenhouse gas (GHG) pollution are fossil fuel combustion, industrial processes, and agriculture. CO_2 is released into the air by burning coal, oil and gas, cutting forests, and tilling soil. Other GHGs like methane also endanger our climate.



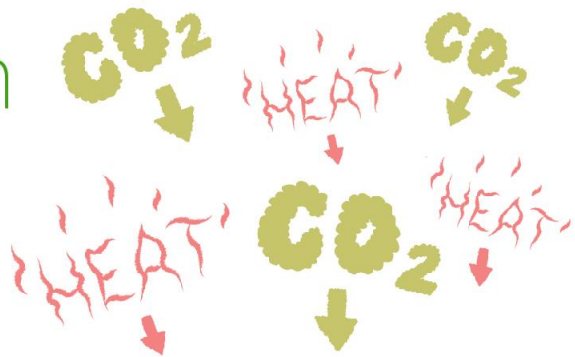
Increasing CO_2 Concentrations

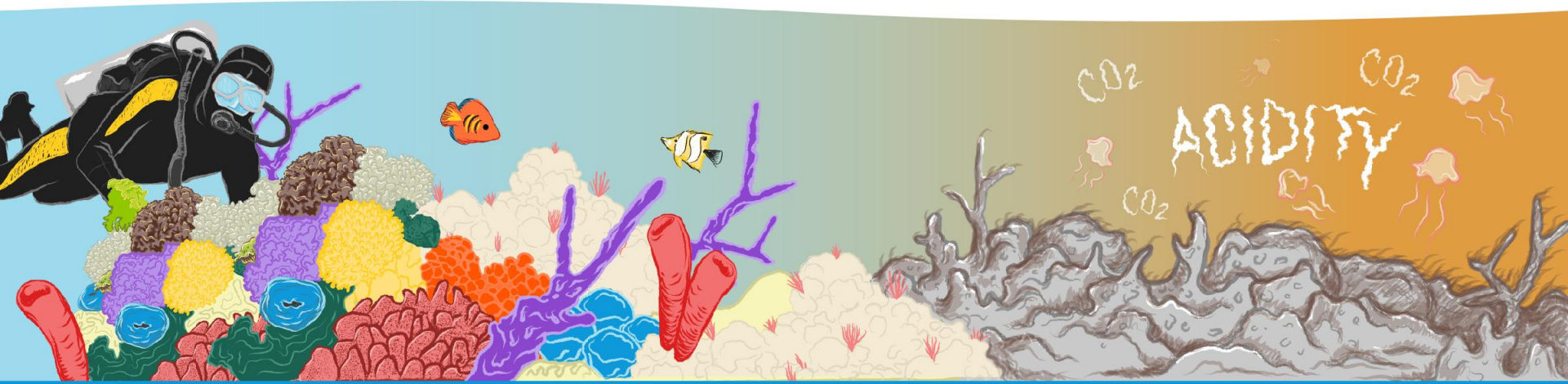
Concentrations of CO_2 in our atmosphere had been stable at around 280 parts per million (ppm) for more than ten thousand years, resulting in the predictable climate conditions we enjoyed for centuries. During the industrial and agricultural revolutions of the early 1900s, humans began burning fossil fuels on a massive scale, causing concentrations of CO_2 in our atmosphere to shoot up by more than 45% to their current crisis levels of over 400ppm.



Consequences of Increasing Atmospheric CO_2:
Ocean Warming and Acidification

More CO_2 in the atmosphere causes global and ocean warming. 94% of this extra heat goes directly into the ocean, and the additional CO_2 makes sea water more acidic. These effects together are disastrous for coral reefs, seafood, and the ocean life that they sustain.





Consequences of Increasing Atmospheric CO_2:

Sea Level Rise

Melting glaciers add water to the oceans making them rise. Water also expands as it warms, causing additional rise. Sea level in Florida is projected to rise between 5 and 30 feet by 2100. Similar increases are predicted for many coastal regions. That presents a massive threat to coastal cities and the people who live and work there. In the US alone, sea level rise may result in 13 million people losing their homes and a mass migration inland by 2100.

Consequences of Increasing Atmospheric CO_2:

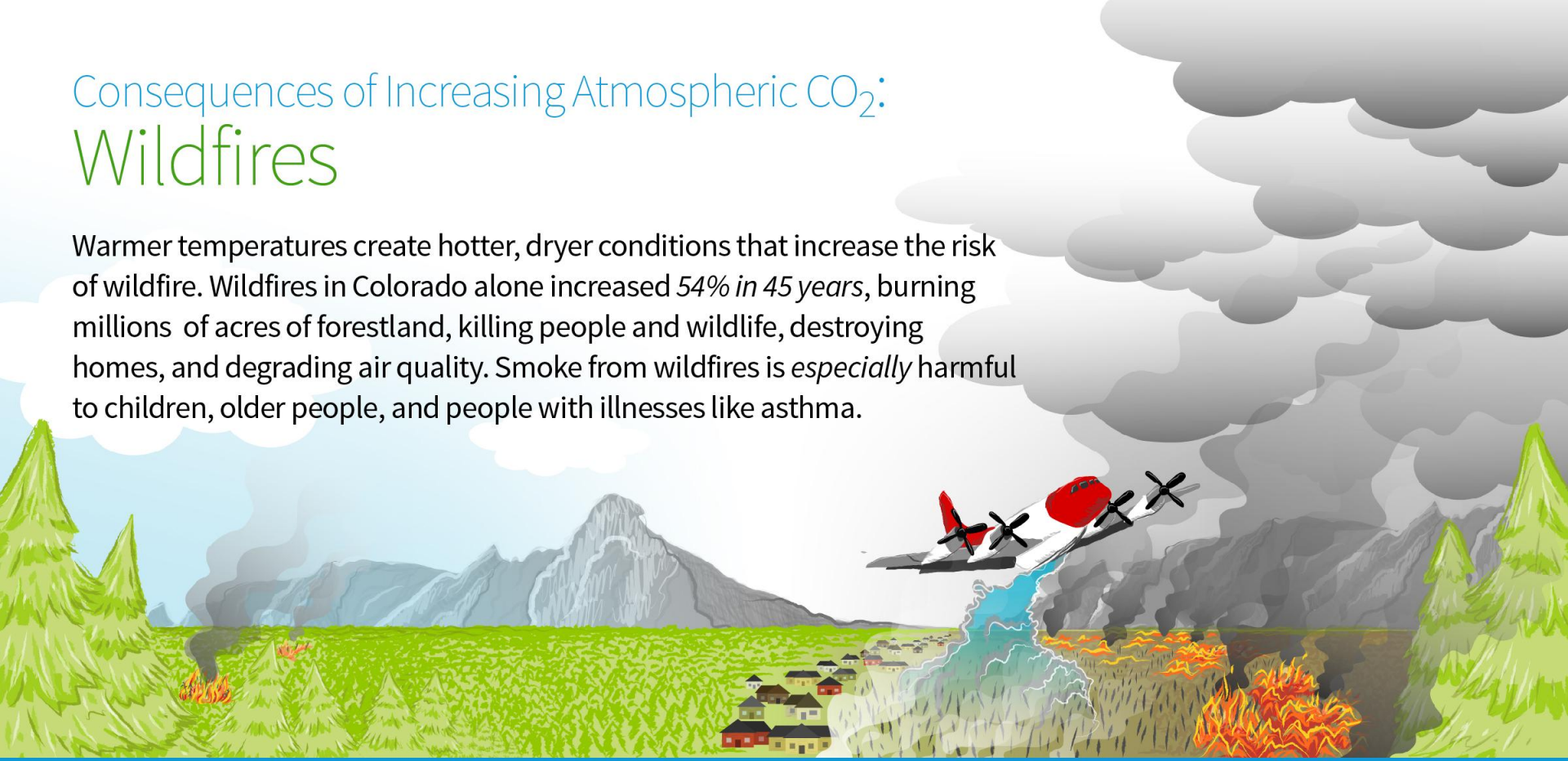
Sea Level Rise

"If climate change isn't stopped our barrier island will be gone, if the sea level rises any more we'll have to move to the mainland from the barrier island. I don't want to move to the mainland. I love our island."

Levi, Florida

Consequences of Increasing Atmospheric CO_2:
Wildfires

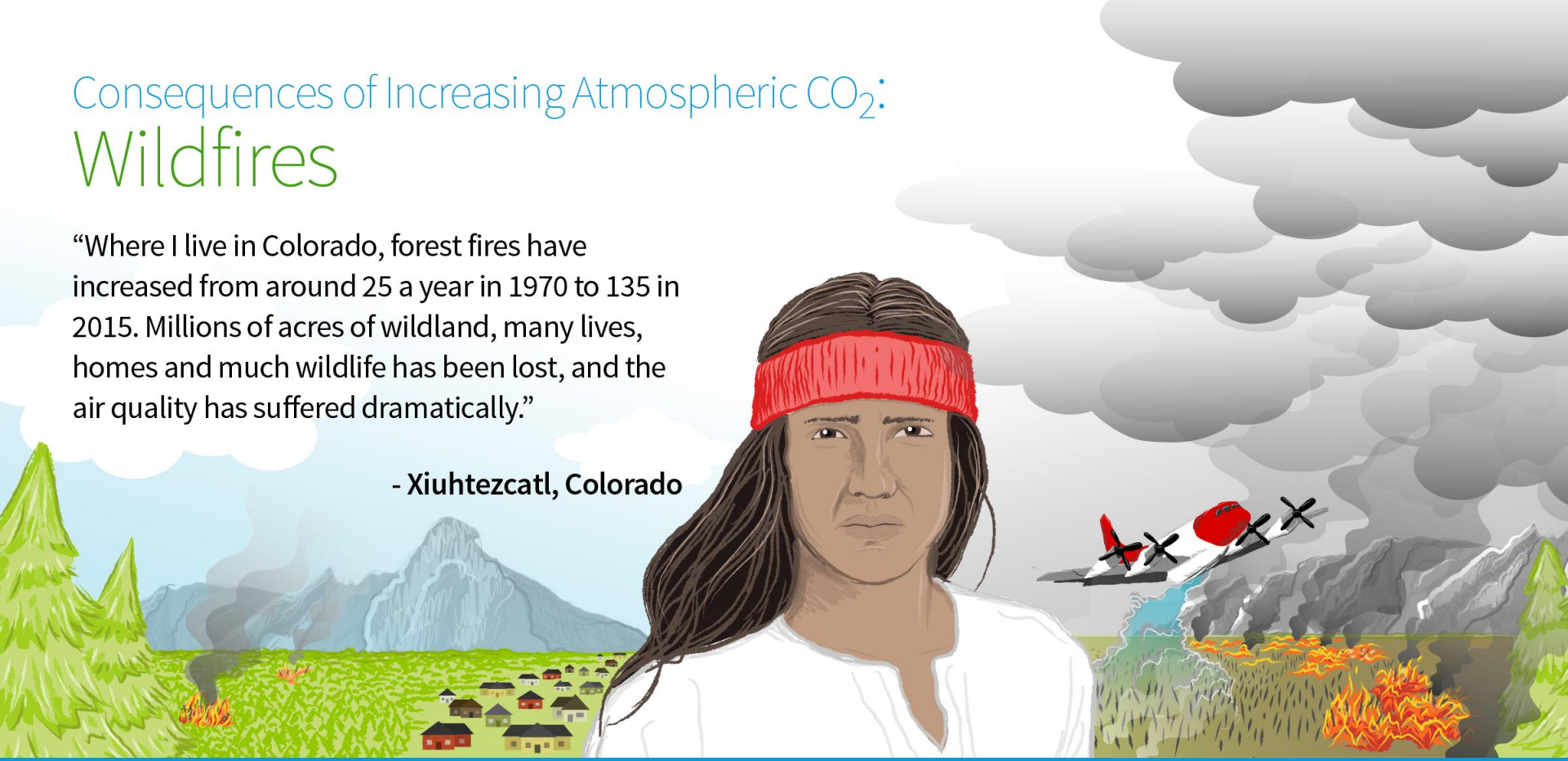
Warmer temperatures create hotter, dryer conditions that increase the risk of wildfire. Wildfires in Colorado alone increased *54% in 45 years*, burning millions of acres of forestland, killing people and wildlife, destroying homes, and degrading air quality. Smoke from wildfires is *especially* harmful to children, older people, and people with illnesses like asthma.



Consequences of Increasing Atmospheric CO_2:
Wildfires

"Where I live in Colorado, forest fires have increased from around 25 a year in 1970 to 135 in 2015. Millions of acres of wildland, many lives, homes and much wildlife has been lost, and the air quality has suffered dramatically."

- Xiuhtezcatl, Colorado

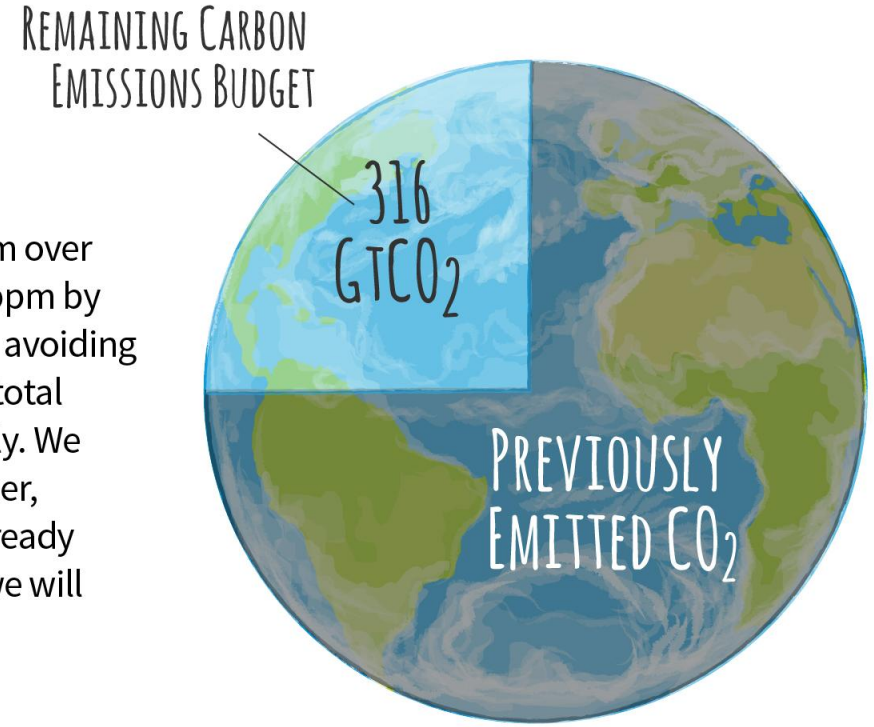


Our Government has Known the Dangers for a Long Time

Solution:

< 350 ppm by 2100

Scientists calculate that by reducing atmospheric CO_2 from over 400 parts per million (ppm) where it is now, to below 350 ppm by 2100 is an essential first step in stabilizing our climate and avoiding the worst dangers of climate change. This means limiting total future CO_2 emissions to no more than 316 gigatons globally. We can meet that challenge by rapidly transitioning to a cleaner, healthier, renewable energy system using technologies already available today. Over the long term, to save ice on earth, we will need to plan for less than 300ppm.

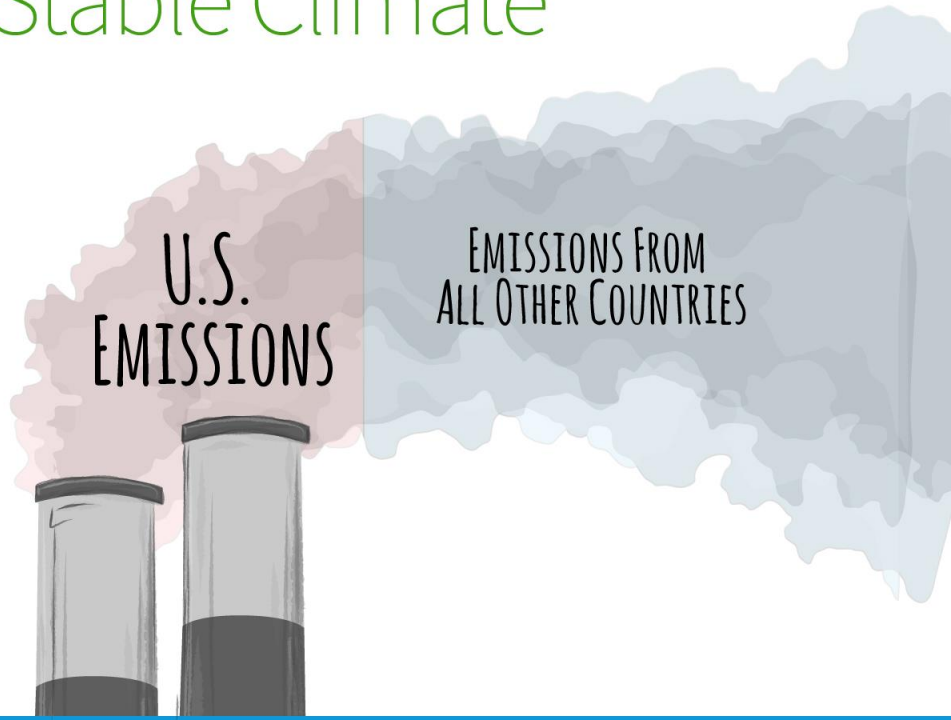


Solution:

US Responsibility for a Stable Climate

The U.S. is responsible for *one quarter of* the total global CO_2 emitted *since the 1850s*. That is more than any other nation on earth, by far! And, the U.S. is still the second largest annual emitter of CO_2.

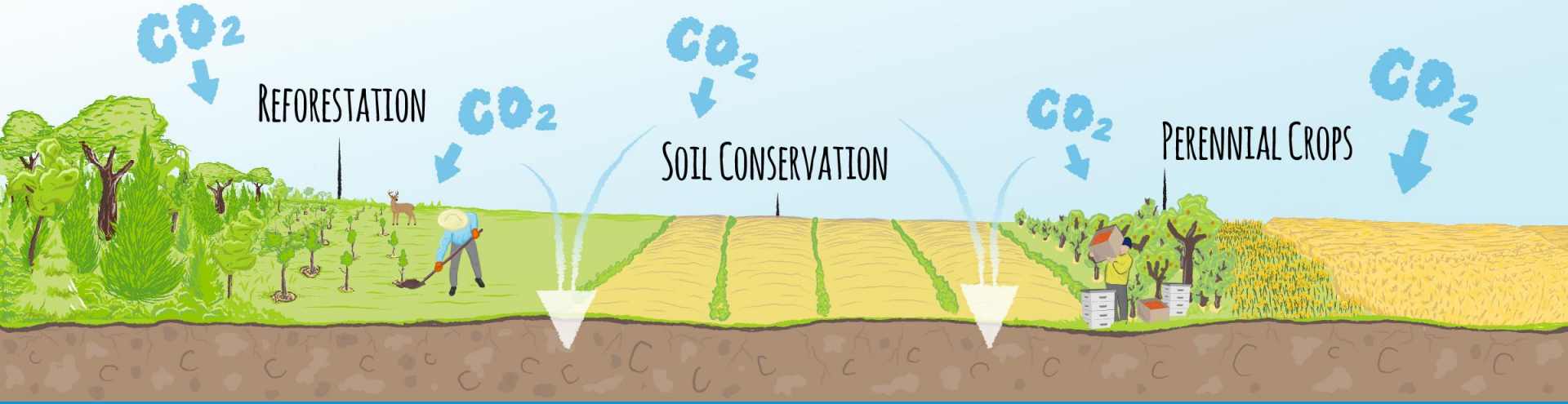
The U.S. thus has the greatest responsibility among nations to reduce its share of the remaining global carbon budget quickly. To stay within the global carbon budget of 316 gigatons, the U.S. must reduce current emissions at least 9.9% each year beginning in 2018.



Solutions to get to 350 ppm by 2100:

100 Gigatons of Carbon Sequestration

In addition to reducing emissions, we must draw down more than 100GT of carbon out of the atmosphere. We can do that by ramping up extensive reforestation, soil conservation and perennial crop agriculture, all of which down large amounts of CO_2 out of the atmosphere and store it as Carbon (C) in plants and soils.



Solutions to get to 350 ppm by 2100:

Reducing Emissions

We can dramatically reduce CO_2 emissions by designing our cities for walking and biking, investing in mass transit, constructing high-performance energy efficient buildings, transitioning to 100% clean energy, shifting to green manufacturing and durable products, and adopting restorative forestry and farming practices.

Solutions to get to 350 ppm by 2100:

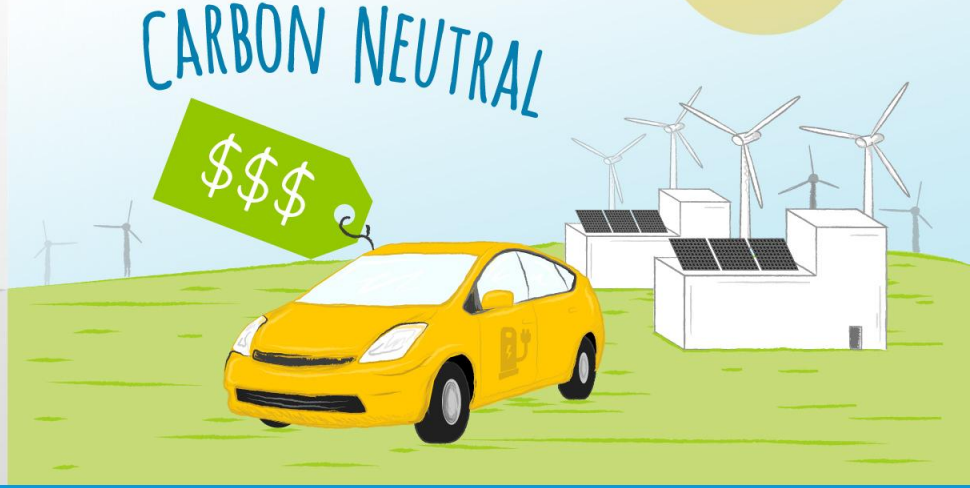
Market and Economic Forces

Fees on carbon pollution make it more expensive for manufacturers to produce goods using fossil fuel energy, thereby increasing the cost of those goods. This incentivizes manufacturers to produce goods with clean energy, and makes clean energy produced goods cheaper for consumers.

Solutions to get to 350 ppm by 2100:

Market and Economic Forces

Fees on carbon pollution make it more expensive for manufacturers to produce goods using fossil fuel energy, thereby increasing the cost of those goods. This incentivizes manufacturers to produce goods with clean energy, and makes clean energy produced goods cheaper for consumers.



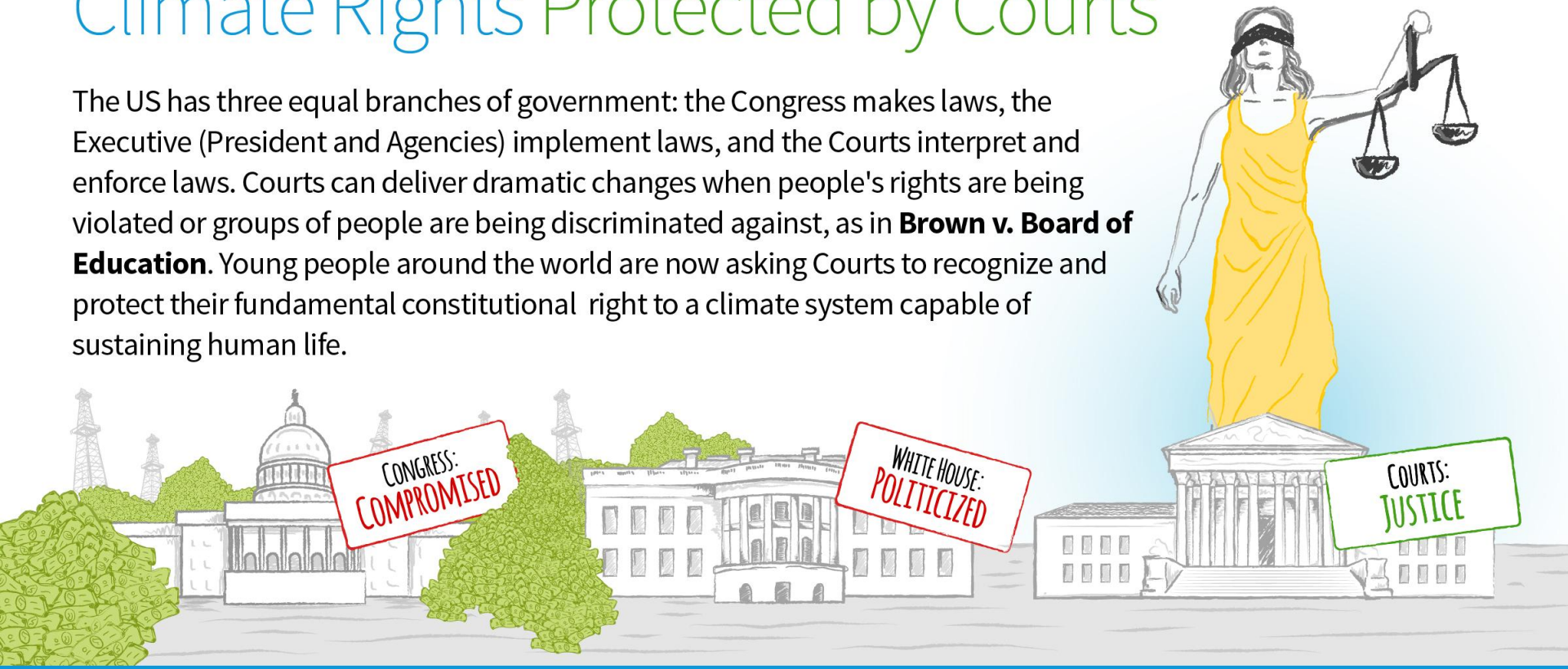
Solutions to get to 350 ppm by 2100:

Stop Federal Fossil Fuel Subsidies

Fossil fuels currently receive billions of dollars in federal subsidies every year, making them artificially cheap and providing them with market advantage. When fossil fuel companies don't account for the cost of their product on society, government and taxpayer dollars foot the bill. Removing subsidies will allow renewable energy industries to compete on a level and fair playing field.

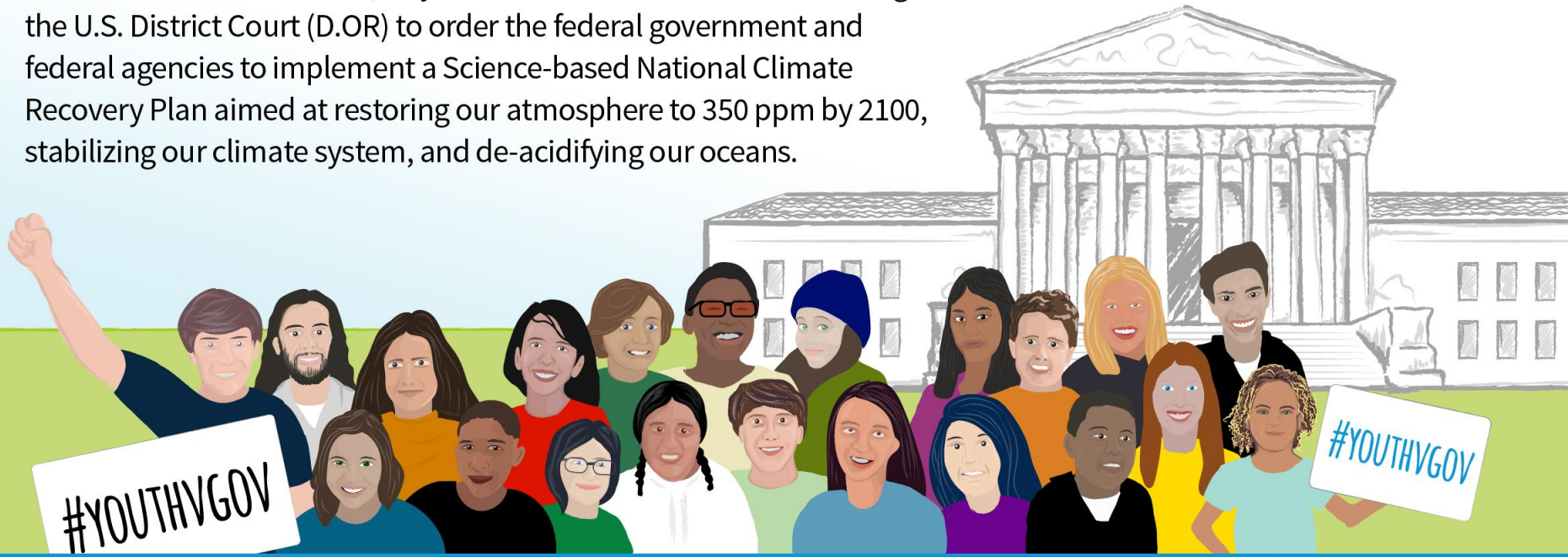
Climate Rights Protected by Courts

The US has three equal branches of government: the Congress makes laws, the Executive (President and Agencies) implement laws, and the Courts interpret and enforce laws. Courts can deliver dramatic changes when people's rights are being violated or groups of people are being discriminated against, as in **Brown v. Board of Education**. Young people around the world are now asking Courts to recognize and protect their fundamental constitutional right to a climate system capable of sustaining human life.



Climate Rights Protected by Courts

In ***Juliana v. United States***, 21 youth from around the U.S. are asking the U.S. District Court (D.OR) to order the federal government and federal agencies to implement a Science-based National Climate Recovery Plan aimed at restoring our atmosphere to 350 ppm by 2100, stabilizing our climate system, and de-acidifying our oceans.



Join the Movement at #Youthvgov

And they're succeeding! The U.S. District Court recently ruled that the U.S. Constitution protects the right to a climate system capable of sustaining human life! During trial, the youth will prove that the U.S. Government continues to violate that right. The youth are confident they will win a court decision that results in a nation powered by clean energy by mid-century and working hard to stabilize the climate system for the health and safety of all future generations. Support these young leaders..... by following this trial and by joining the movement at **youthvgov.org**!