

Climate Crisis Fast Facts

“Climate change is a reality that now affects every region of the world. The human implications of currently projected levels of global heating are catastrophic. Storms are rising and tides could submerge entire island nations and coastal cities. Fires rage through our forests, and the ice is melting. We are burning up our future – literally... The world has never seen a threat to human rights of this scope. This is not a situation where any country, any institution, any policy-maker can stand on the sidelines. The economies of all nations; the institutional, political, social and cultural fabric of every State; and the rights of all your people – and future generations – will be impacted.” – Michelle Blanchet, United Nations High Commissioner for Human Rights

What is Climate Change (NASA): The evidence for rapid climate change is compelling:

- **Global Temperature Rise:** The planet’s average surface temperature has risen about 1.62 degrees Fahrenheit (0.9 degrees Celsius) since the late 19th century, a change driven largely by increased carbon dioxide and other human-made emissions into the atmosphere. Most of the warming occurred in the past 35 years, with the five warmest years on record taking place since 2010. Not only was 2016 the warmest year on record, but eight of the 12 months that make up the year — from January through September, with the exception of June — were the warmest on record for those respective months.
- **Warming Oceans:** The oceans have absorbed much of this increased heat, with the top 2,300 feet of ocean showing warming of more than 0.4 degrees Fahrenheit since 1969.
- **Shrinking Ice Sheets:** The Greenland and Antarctic ice sheets have decreased in mass... Greenland lost an average of 286 billion tons of ice per year between 1993 and 2016, while Antarctica lost about 127 billion tons of ice per year during the same time period. The rate of Antarctica ice mass loss has tripled in the last decade.
- **Glacial Retreat:** Glaciers are retreating almost everywhere around the world — including in the Alps, Himalayas, Andes, Rockies, Alaska and Africa.
- **Sea Level Rise:** Global sea level rose about 8 inches in the last century. The rate in the last two decades, however, is nearly double that of the last century and is accelerating slightly every year.

Climate Change in Numbers:

- Between 2030 and 2050, climate change is expected to cause approximately 250,000 additional deaths per year, from malnutrition, malaria, diarrhea and heat stress alone. This includes 38,000 due to heat exposure in elderly people, 48,000 due to diarrhea, 60,000 due to malaria, and 95,000 due to childhood undernutrition. ([WHO](#))
- The direct damage costs to health is estimated to be between \$2-4 billion per year by 2030. ([WHO](#))
- Much of the planet sweltered in unprecedented heat in July 2019, as temperatures soared to new heights in the hottest month ever recorded. The record warmth also shrank Arctic and Antarctic sea ice to historic lows. ([NOAA](#))
- Nine of the 10 hottest Julys have occurred since 2005—with the last five years ranking as the five hottest. ([NOAA](#))
- 91% of the world’s population lives in places where air quality exceeds World Health Organization guideline limits. ([WHO](#))
- 4.2 million deaths every year as a result of exposure to ambient (outdoor) air pollution. ([WHO](#))
- A lack of safe water can compromise hygiene and increase the risk of diarrheal disease, which kills over 500,000 children aged under 5 years, every year. ([WHO](#))
- 3.8 million deaths every year as a result of exposure to smoke from dirty cookstoves and fuels. ([WHO](#))
- The countries emitting the most greenhouse gases by quite a long way are China (26.6%) and the US (13.1%). Together they account for more than 40% of the global total, according to 2017. ([BBC](#))

- Weather catastrophes in the United States have incurred a cost of over \$1 trillion in damages over the past 30 years. ([The Years Project](#))
- On our current path of inaction, sea levels are projected to be as much as 3 to 6 feet higher by century's end... and, eventually, when all the Earth's ice has melted, more than 200 feet higher. ([The Years Project](#))

The Cost of Climate Change ([The Years Project](#))

Climate change is no longer a distant threat. We are living with the reality of it, right here and right now. The impacts of climate disruption in the United States and around the world are clear, costly and widespread. Human action can reduce the toll of climate change, but every year of delay means higher costs and impacts. Some of the impacts include:

- Intense wildfires
- Flooded coastlines
- Extreme heat waves
- Growing threats to human health

Who is Affected by Climate Change (partial list)? ([Amnesty International](#)): These are some of the ways climate change can and is exacerbating inequalities:

- **Between developed and developing nations:** At a national level, those in low-lying, small island states and less developed countries will be and already are among those worst affected. People in the Marshall Islands already regularly experience the devastating flooding and storms that destroy their homes and livelihoods. The 2018 heatwave in the northern hemisphere made headlines across Europe and North America, but some of the worst effects were also felt in places like Pakistan, where more than 60 people died – mostly laborers already working in intense heat – as temperatures soared above 44°C (111.2°F).
- **Between different ethnicities and classes:** The effects of climate change and fossil fuel-related pollution also run along ethnicity and class lines. In North America, it is largely poorer communities of color who are forced to breathe toxic air because their neighborhoods are more likely to be situated next to power plants and refineries. They experience markedly higher rates of respiratory illnesses and cancers, and African Americans are three times more likely to die of airborne pollution than the overall US population.
- **Between genders:** Women and girls are disproportionately affected by climate change, reflecting the fact that they are more likely in many countries to be marginalized and disadvantaged. This means that they are more vulnerable to the impacts of climate-related events as they are less able to protect themselves against it and will find it harder to recover.
- **Between generations:** Future generations will experience the worsening effects unless action is taken now by governments. However, children and young people are already suffering due to their specific metabolism, physiology and developmental needs. This means, for example, that the forced displacement experienced by communities impacting a whole range of rights – from water, sanitation and food to adequate housing, health, education and development – is likely to be particularly harmful to children.
- **Between communities:** Indigenous peoples are among the communities most impacted by climate change. They often live in marginal lands and fragile ecosystems which are particularly sensitive to alterations in the physical environment. They maintain a close connection with nature and their traditional lands on which their livelihoods and cultural identity depend.