The EcoVoice Project

Climate Action Quick Guide

The most important thing we can do as members of a global community living under the threat of catastrophic climate change is educate ourselves. The facts and figures associated with global climate change can be overwhelming, but the more we know as individuals, the more change we can enact at the local, national, and international levels. We hope to provide you with some of the basics regarding the facts about climate change, resources to help you learn more, and an introduction to the actions we can all take in our daily lives to help combat climate change.

This is a living draft. We welcome comments and resources.

Climate Change Fast Facts (source)

- 1. Climate change can be a natural process where temperature, rainfall, wind, and other elements vary over decades or more. In millions of years, our world has been warmer and colder than it is now. But today we are experiencing rapid warming from human activities, primarily due to burning fossil fuels that generate greenhouse gas emissions.
- 2. Increasing greenhouse gas emissions from human activity act like a blanket wrapped around the earth, trapping the sun's heat and raising temperatures.
- 3. Examples of greenhouse gas emissions that are causing climate change include carbon dioxide and methane. These come from burning fossil fuels such as gasoline for driving a car or coal for heating a building. Clearing land and forests can also release carbon dioxide. Landfills for garbage are another source. Energy, industry, agriculture, and waste disposal are among the major emitters.
- 4. Greenhouse gas concentrations are at their highest levels in 2 million years and continue to rise. As a result, the earth is about 1.1°C warmer than it was in the 1800s. The last decade was the warmest on record.
- 5. Many people think climate change mainly means warmer temperatures. But temperature rise is only the beginning of the story. Because the Earth is a system, where everything is connected, changes in one area can influence changes in all others. The consequences of climate change now include, among others, intense droughts, water scarcity, severe fires, rising sea levels, flooding, melting polar ice, catastrophic storms, and declining biodiversity.
- 6. People are experiencing climate change in diverse ways. It affects our health, ability to grow food, housing, safety, and work. Some of us are already more vulnerable to climate impacts, such as people living in small island developing States. Conditions like sea-level rise and saltwater intrusion have advanced to the point where whole communities have had to relocate. In the future, the number of "climate refugees" is expected to rise.
- 7. Every increase in global warming matters. In a 2018 report, thousands of scientists and government reviewers agreed that limiting global temperature rise to no more than 1.5°C would help us avoid the worst climate impacts and maintain a livable climate. Yet the current path of carbon dioxide emissions could increase global temperature by as much as 4.4°C by the end of the century.
- 8. The emissions that cause climate change come from every part of the world and affect everyone, but some countries produce much more than others. The 100 least-emitting countries generate 3 percent of total emissions. The 10 largest emitters contribute 68 per cent. Everyone must take climate action, but people and countries creating more of the problem have a greater responsibility to act first.
- 9. Climate change is a huge challenge, but we already know many solutions. These can deliver economic benefits while improving our lives and protecting the environment. We also have

global agreements to guide progress, such as the UN Framework Convention on Climate Change and the Paris Agreement. Three broad categories of action are: cut emissions, adapt to climate impacts and finance required adjustments.

- 10. Switching energy systems from fossil fuels to renewables like solar will reduce the emissions driving climate change. But we have to start right now. While a growing coalition of countries is committing to net zero emissions by 2050, about half of emissions cuts must be in place by 2030 to keep warming below 1.5°C. Fossil fuel production must decline by roughly 6 percent per year between 2020 and 2030.
- 11. Adapting to climate consequences protects people, homes, businesses, livelihoods, infrastructure, and natural ecosystems. It covers current impacts and those likely in the future. Adaptation will be required everywhere, but must be prioritized now for the most vulnerable people with the fewest resources to cope with climate hazards. The rate of return can be high. Early warning systems for disasters, for instance, save lives and property, and can deliver benefits up to 10 times the initial cost.
- 12. We can pay the bill now, or pay dearly in the future. Climate action requires significant financial investments by governments and businesses. But climate inaction is vastly more expensive. One critical step is for industrialized countries to fulfill their commitment to provide \$100 billion a year to developing countries so they can adapt and move towards greener economies.

What is climate change and why does it matter?

For more information and ways to take an in-depth dive into the science, here are some reliable, up-to-date sites from national and international research organizations.

Healing Earth

Healing Earth is a free-access online textbook in integral ecology--a method of teaching and learning biodiversity, natural resources, energy, water, food, and global climate change from the perspectives of science, ethics, spirituality, and action. The goal of Healing Earth is to educate the whole person for positive action in the natural and social world. Using real-world examples, learn about biodiversity, natural resources, energy, water, food, and global climate change.

NASA – Global Climate Change: Vital Signs of the Planet

NASA's Global Climate Change website hosts an extensive collection of global warming resources for media, educators, weathercasters and public speakers. Explore the many aspects of climate change including the scientific evidence, causes, effects, scientific consensus, vital signs, and all of your other questions. Keep track of the levels of carbon dioxide, the global temperature, arctic sea ice, ice sheets, sea level, and ocean temperature instantaneously.

National Oceanic and Atmospheric Administration (NOAA)

NOAA's mission to better understand our natural world and help protect its precious resources extends beyond national borders to monitor global weather and climate, and work with partners around the world. Their official Climate division uses the vast resources available to them to map and model data and information to help people understand and prepare for climate variability and change. This site is regularly updated with new and changing information, so make sure to check regularly.

The Nature Conservancy

The Nature Conservancy's mission is to conserve the lands and waters on which all life depends. To achieve this, we must boldly address the biodiversity and climate crises over the next decade. By maximizing our ability to effect change between now and 2030, we can shape a brighter future for people and our planet. Learn the ins and outs of climate change in their easy-to-use FAQs.

UN Sustainable Development Goals: Climate Action

<u>The 2030 Agenda for Sustainable Development</u>, adopted by all United Nations Member States in 2015, provides a shared blueprint for peace and prosperity for people and the planet, now and into the future. At its heart are the 17 Sustainable Development Goals (SDGs), which are an urgent call for action by all countries - developed and developing - in a global partnership. They recognize that ending poverty and other deprivations must go hand-in-hand with strategies

that improve health and education, reduce inequality, and spur economic growth – all while tackling climate change and working to preserve our oceans and forests.

Where can I go to help fight climate change?

Understanding the science of climate change is vital, but it's only the first step. There are thousands of organizations around the world that are doing their part to educate and act against climate change. Learn more about just a few of those organizations here.

Arbor Day
National Wildlife Federation
Natural Resource Defense Council
The Nature Conservancy
Sierra Club
UN Environment Project
UN Sustainable Development Goals
US Fish and Wildlife Service
World Wildlife Fund

How can I make a difference?

Now that we have the facts and figures and know how we can get involved with various organizations, what can we do in our personal lives to take more action? Here are a number of resources that we can use in our daily lives to help stop climate change.

BBC – Ten Simple Ways to Act on Climate Change

Better World Shopper - Where to Shop

National Wildlife Federation – Gardening for Climate Change

Natural Resource Defense Council - How You Can Stop Global Warming

The Nature Conservancy – What is your Carbon Footprint?

NPR - Take on Climate Change at Home

UN Environment Project - 10 Ways You Can Help Fight the Climate Crisis

US EPA - What You Can Do About Climate Change

World Wildlife Fund - What You Can Do to Fight Climate Change