



THEME OF THE MONTH
DECEMBER 2021

CLIMATE CHANGE



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Climate change refers to long-term shifts in temperatures and weather patterns. These shifts may be natural, such as through variations in the solar cycle. However since the 1800s, human activities have been the leading cause of climate change, largely due to burning fossil fuels like coal, oil and gas.

Burning fossil fuels generates greenhouse gas emissions that act like a blanket wrapped around the Earth, trapping the sun's heat and raising temperatures.

HOW DOES CLIMATE CHANGE AFFECT US?

Climate change can affect our health, ability to grow food, housing, safety and work. Some people may be more vulnerable to climate impacts, such as those living in small island nations and other developing countries. Conditions like sea-level rise and saltwater intrusion have developed to the point where whole communities have been forced to relocate, and protracted droughts have put people at risk of famine. In the future, the number of climate refugees is expected to rise.



GREENHOUSE GAS CONCENTRATIONS ARE AT THEIR HIGHEST LEVELS IN 2 MILLION YEARS

Emissions continue to rise and as a result the Earth is now about 1.1°C warmer than it was in the late 1800s. The last decade (2011-2020) was the warmest on record.

Many people think climate change mainly means warmer temperatures. But this is not the case. The Earth is a system, where everything is connected, which means changes in one area can influence changes in all others.

The consequences of climate change now include, intense droughts, water scarcity, severe fires, rising sea levels, flooding, melting polar ice, catastrophic storms and declining biodiversity.

In a 2018 UN 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 based on current national climate plans, global warming will reach 2.7°C by the end of the century.

HELP FIGHT CLIMATE CHANGE

Simple steps such as carpooling to work or using public transport can help reduce your carbon footprint. To reduce your emissions further and to better prepare for climate change, here are some ideas:

EAT LESS (AND BETTER) MEAT AND DAIRY

You may be surprised to learn that farming animals is one of the biggest contributors to climate change. Meat and dairy production is the cause of 14.5% of planet-warming gases.

BUY LESS STUFF

We are hardwired to feel good about buying new things. Retailers use this weakness, tempting our pleasure receptors with upgrades and sales. The rising demands for raw materials to make these things – like oil, metals and water – are damaging the environment.

LEARN MORE ABOUT YOUR CARBON EMISSIONS

There is much more you can do to reduce your household carbon emissions. Find out more about your emissions and where you can best reduce them by using an online carbon calculator.

COMMUTE BY CARPOOLING OR USING PUBLIC TRANSPORT

More than a quarter of the vehicle-miles travelled by households are due to commuting to and from work, this is usually with one person in the vehicle. Carpooling and public transport are great options that offer big reductions in carbon emissions.

PLAN AND COMBINE TRIPS

A lot of driving involves frequent trips, for example, to go shopping or run errands. It is a good idea to plan and combine trips to reduce the miles you need to travel. Better yet, take someone with you so they can leave their car behind.

DRIVE MORE EFFICIENTLY

In particular, observe speed limits and avoid rapid acceleration and excessive breaking. Don't drive aggressively.

SWITCH TO “GREEN POWER”

Switch to electricity generated by energy sources with low—or no—routine emissions of carbon dioxide. Contact your electricity provider to find out about the “green power” options available to you.



THE CLIMATE DISASTER

The enormous, unprecedented pain and turmoil caused by the climate crisis is often discussed alongside what can seem like surprisingly small temperature increases – 1.5C or 2C hotter than it was in the era just before the car replaced the horse and cart.

These temperature thresholds were the focus of recent UN climate talks at the COP26 summit in Scotland as countries variously dawdle or scramble to avert climate catastrophe. But the single digit numbers obscure huge ramifications at stake. “We have built a civilization based on a world that doesn’t exist anymore,” as Katharine Hayhoe, a climate scientist at Texas Tech University and chief scientist at the Nature Conservancy, puts it.

The world has already heated up by around 1.2C, on average, since the preindustrial era, pushing humanity beyond almost all historical boundaries. Cranking up the temperature of the entire globe this much within little more than a century is, in fact, extraordinary, with the oceans alone absorbing the heat equivalent of five Hiroshima atomic bombs dropping into the water every second.

(<https://www.theguardian.com>)

- Climate change is the single biggest health threat facing humanity. The impacts are already harming health through air pollution, disease, extreme weather events, forced displacement, food insecurity and pressures on mental health. Every year, environmental factors take the lives of around 13 million people.
- Over 90 per cent of people breathe unhealthy levels of air pollution, largely resulting from burning fossil fuels driving climate change. In 2018, air pollution from fossil fuels caused \$2.9 trillion in health and economic costs, about \$8 billion a day.
- With global warming of 1.5°C to 2°C, the majority of terrestrial species ranges are projected to shrink dramatically. Changes in ranges can adversely affect species conservation, greatly increase local species turnover and substantially increase the risk of global extinctions.

(<https://www.un.org>)



CLIMATE CHANGE: THE FACTS

- The concentration of carbon dioxide (CO₂) in our atmosphere, as of July 2021, is the highest it has been in human history.
- Analysis by NOAA shows that average global temperatures in 2020 were 1.76 degrees F (0.98 degrees C) warmer than the 20th century average — making it the second-hottest year on record. In fact, the seven warmest years in the 1880-2020 record have all occurred since 2014.
- Eleven percent of all global greenhouse gas emissions caused by humans are due to deforestation — comparable to the emissions from all of the passenger vehicles on the planet.
- Tropical forests are incredibly effective at storing carbon, providing at least a third of the mitigation action needed to prevent the worst climate change scenarios. Yet nature-based solutions receive only 3% of all climate funding.
- According to NOAA, global temperatures in July 2021 were higher than any other July on record — making it likely the hottest month the world has seen since records began in 1880.
- Eleven percent of the world's population is currently vulnerable to climate change impacts 11 such as droughts, floods, heat waves, extreme weather events and sea-level rise.
- Conserving ecosystems is often more cost-effective than human-made interventions.



ACT NOW

Our lifestyles and choices have a huge impact on our planet. Around two-thirds of global greenhouse gas emissions are linked to private households. The food, energy, and transport sectors each contribute around 20% of lifestyle emissions. From the electricity we use, to the food we eat and the way we travel, we can make a difference together.

You can start with these ten actions:

- Save energy at home
- Walk, bike or take public transport
- Eat more vegetables
- Consider your travel
- Throw away less food
- Reduce, reuse, repair, recycle
- Change your home's source of energy
- Switch to an electric vehicle
- Choose eco-friendly products
- Speak up!

HELP BY DONATING TO WWF

All funds raised will go towards Climate Crisis Fund Projects, such as:

- Protecting the Amazon
- Restoring forests and habitats
- Safeguarding polar worlds
- Advocacy

£15 could buy 100 seedlings to plant trees

£30 could help buy the equipment needed to replant sea grass

£50 could help fund training for communities in the Amazon

DONATE HERE!





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