

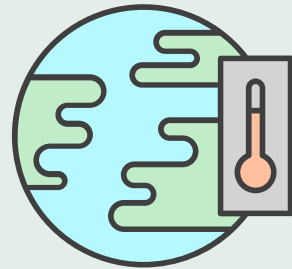
CLIMATE CHANGE

Climate change encompasses both global warming caused by human-caused greenhouse gas pollution and the subsequent large-scale weather pattern changes. Though there have been past cycles of climatic change, humans have had an unparalleled effect on Earth's climate system and induced global change since the mid-twentieth century.

THE WORST IMPACTS OF CLIMATE CHANGE WILL BE IRREVERSIBLE BY 2030



WARMEST DECADE



2010s

Earth's global average surface temperature in 2020 tied with 2016 as the warmest year on record. The average temperature has risen more than 2 degrees Fahrenheit since the late 19th century, as the analysis conducted by NASA states. This is more than enough to cause major changes on Earth.

GREENHOUSE EFFECT



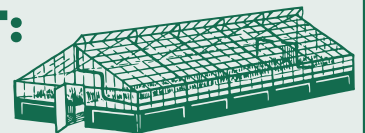
The energy that powers life on Earth comes from the Sun. Approximately half of the light that reaches the Earth's atmosphere travels through the air and clouds to the surface, where it is absorbed and then radiated upward as infrared heat. The greenhouse gases absorb about 90% of this heat, which is then radiated out to the surface.

FACTORS ENHANCING THE GREENHOUSE EFFECT:

- **fossil fuels** – their increased use in power manufacturing and industry increases the concentration of greenhouse gases in the atmosphere
- **deforestation** – a process that annually takes away 15 billion trees, that absorb and store carbon dioxide

CALCULATE YOUR CARBON FOOTPRINT:

www.footprintcalculator.org



WEBSITES AND ORGANIZATIONS

Check out these websites:

- www.350.org
- www.climatealliance.org
- www.citizensclimatelobby.org
- www.climatenetwork.org
- www.fridaysforfuture.org
- www.greenpeace.org



CONSEQUENCES

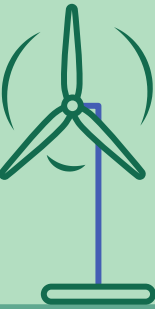
- GLOBAL TEMPERATURE VARIATIONS AND HEATWAVES
- MELTING OF ICE CAPS AND GLACIERS
- DECLINING CROP YIELD, CHANGES OF IN AGRICULTURAL PATTERNS
- RELOCATIONS OF WHOLE TOWNS
- IMPACT ON WILDLIFE, EXTINCTION OF WILDLIFE
- LOSS OF THE CAPACITY TO WORK DUE TO THE HEAT



RESPONSES

- **Mitigation** - reducing our impact upon the causes of climate change.
- **Adaptation** - adapting to the changes that are already, or will occur.

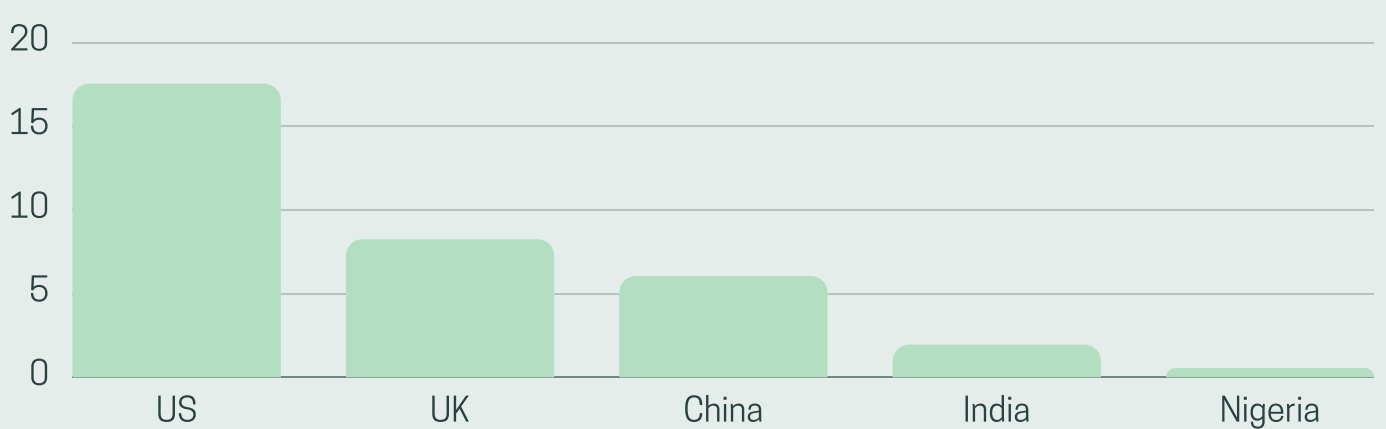
- **PUTTING A PRICE ON CARBON** - it sends signals to companies to encourage them to reduce polluting behaviours and to invest in clearer energy choices and to low-carbon inventions.
- **INCREASING USE OF RENEWABLE ENERGY** - renewable sources can be cheaper than fossil fuel plants and they are much better for the environment (cause less pollution)
- **POPULARISING USE OF SUSTAINABLE TRANSPORT** - countries invest in fast reliable public transport that consists of zero-emission vehicles that create less pollution
- **TRADITIONAL REGULATIONS** - such as fuel efficiency and emission standards for car and trucks. They require companies to increase energy efficiency and reduce emissions in their own operations or in the goods they produce.



TAKING ACTION

- **SPEAK UP** - spread awareness of the issue of climate change and let others know what they can do
- **POWER YOUR HOME WITH RENEWABLE ENERGY** - if you can, make sure that the power you are using comes from renewable sources, such as sun, wind and water
- **REDUCE WATER WASTE** - saving water reduces carbon emissions, because it takes a lot of energy to pump, heat, and treat your water.
- **BUY THE FOOD YOU EAT** - reducing the amount of wasted food and limiting meat consumption can cut down the energy usage and CO2 emissions
- **BUY ECO-FRIENDLY BULBS** - energy-efficient bulbs save energy like no others
- **PULL THE PLUGS** - try not to leave fully charged devices plugged into the outlets, unplug rarely used devices or switch them into energy-saving mode
- **THINK ABOUT YOUR TRANSPORT** - choose bus instead of lonely drive through the city, walk more and ride your bike, not only will you prevent climate change but also stay in shape

CO2 EMISSIONS PER PERSON IN 2017



CO2 consumption emissions per person

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