

# Climate Change



# Carbon Dioxide (CO<sub>2</sub>)

**The Earth's atmosphere is changing. Human activity particularly the burning of fossil fuels for energy, industrial processes, and deforestation, releases significant amounts of greenhouse gases into the Earth's atmosphere, primarily carbon dioxide (CO<sub>2</sub>). These gases act as a blanket, trapping heat from the sun's rays and leading to an overall warming of the Earth's atmosphere, a phenomenon commonly referred to as global warming or climate change.**

Every year, around 30-40 billion tonnes of CO<sub>2</sub> are released into the atmosphere globally to produce all the energy humans use.

In 2022 the aviation industry was responsible for around 800 million tonnes of CO<sub>2</sub> emissions.

The global production of cement produces around 2.2 billion tonnes of CO<sub>2</sub> into earth's atmosphere each year.

The global shipping fleet produced around 767 million tonnes of CO<sub>2</sub> in 2022.

Vehicles which run on fossil fuels produce about 3.5 billion globally every year.

Around 7 billion tonnes of CO<sub>2</sub> is produced every year from burning natural gas.

Each year, approximately 64 million acres of deforestation occurs, that's roughly the size of the UK. Plants and trees reduce the amount of CO<sub>2</sub> in the atmosphere by absorbing it and releasing oxygen.

