

GLOBAL WARMING AWARENESS





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Causes of GLOBAL WARMING

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2. Recycling objects is another way.
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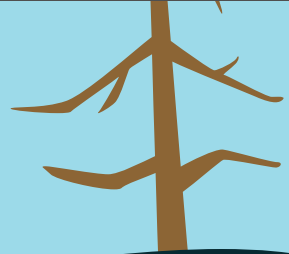
Greenhouse Gases

Global warming begins when sunlight reaches the Earth. The clouds, atmospheric particulates, reflective ground surfaces and surface of oceans then send back about the space, whilst the remaining is absorbed by oceans, air and land. This consequently heats up the surface of the planet and atmosphere, making life feasible. As the Earth warms up, this solar energy is radiated by thermal radiation and infrared rays, propagating directly out to space thereby cooling the Earth. It must be noted that this re-absorption process is actually good as the Earth's average surface temperature would be very cold if there was no existence of greenhouse gases. As of 2004, over 8 billion tons of carbon dioxide was pumped thermal radiation is further hindered by increased levels of greenhouse gases resulting in a phenomenon known as human enhanced global warming effect.



Depletion of ozone layer

Ozone depletion consists of two related events observed since the late 1970s: a steady lowering of about four percent in the total amount of ozone in Earth's atmosphere, and a much larger springtime decrease in stratospheric ozone (the ozone layer) around Earth's polar regions.^[1] The latter phenomenon is referred to as the ozone hole. There are also springtime polar tropospheric ozone depletion events in addition to these stratospheric events. Ozone depletion and the ozone hole have generated worldwide concern over increased cancer risks and other negative effects. The ozone layer prevents harmful wavelengths of ultraviolet (UVB) light from passing through the Earth's atmosphere. These wavelengths cause skin cancer, sunburn, permanent blindness, and cataracts,^[4] which were projected to increase dramatically as a result of thinning ozone, as well as harming plants and animals.



EFFECTS OF GLOBAL WARMING

As global average temperatures warm, weather patterns are changing. An immediate consequence of global warming is extreme weather. These extremes come in a lot of different flavors. Paradoxically, one effect of climate change can be colder-than-normal winters in some areas. Changes in climate can cause the polar jet stream — the boundary between the cold North Pole air and the warm equatorial air — to migrate south, bringing with it cold, Arctic air. This is why some states can have a sudden cold snap or colder-than-normal winter, even during the long-term trend of global warming, Werner explained. What's more, hurricanes of the future will be hitting shorelines that are already prone to flooding due to the sea-level rise caused by climate change. This means that any given storm will likely cause more damage than it would have in a world without global warming. Because high levels of greenhouse gases are likely to remain in the atmosphere for many years, these changes are expected to last for several decades or longer, according to the EPA.



PERCENTAGE given effects by global warming

SEA LEVEL

the volume of the ocean is
expanding as the water
warms



35%

POLLUTION

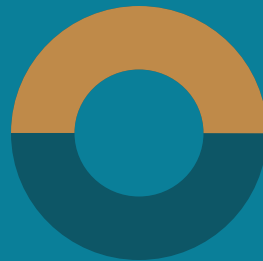
increase warming by
trapping heat in the
atmosphere



60%

GLACIERS

a warming climate is
causing our glaciers
and ice sheets to melt.



50%

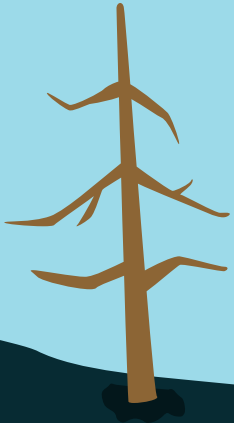
HUMAN BEINGS AND ENDANGERED SPECIES

Roughly 99 percent of threatened species are at risk because of human activities alone. By the early 21st century it could be said that human beings (*Homo sapiens*) are the greatest threat to biodiversity. The principal threats to species in the wild are:

1. Habitat loss and habitat degradation
2. The spread of introduced species (that is, non-native species that negatively affect the ecosystems they become part of)
3. The growing influence of global warming and chemical pollution
4. Unsustainable hunting
5. Disease



AWESOME WORDS





“One of the biggest obstacles to making a start on climate change is that it has become a cliché before it has even been understood”
—Tim Flannery

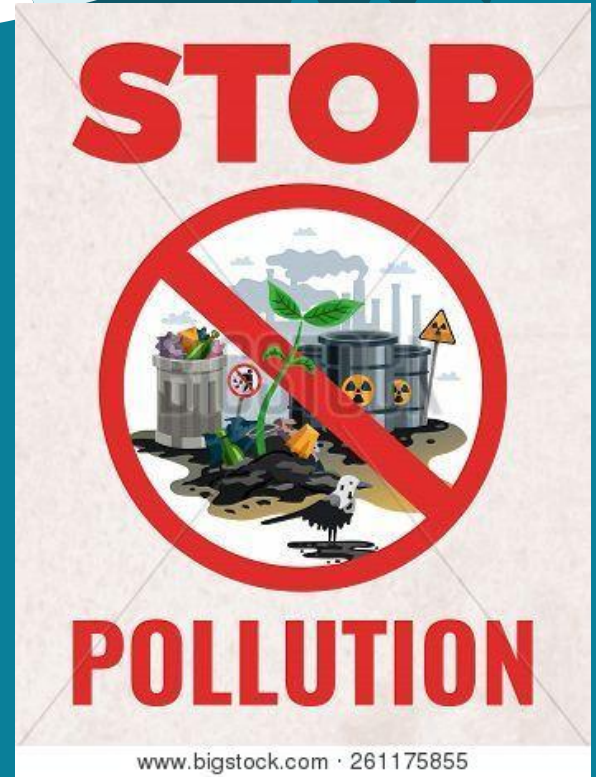
**A PICTURE
IS WORTH A
THOUSANDS
WORDS**





**YOUR HELP
IS VERY
IMPORTANT!**

Prevention of GLOBAL WARMING



PREVENTION FOR GLOBAL WARMING



A. Save energy at home

Much of our electricity and heat are powered by coal, oil, and gas. Use less energy by lowering your heating and cooling, switching to LED light bulbs and energy-efficient electric appliances, washing your laundry with cold water, or hanging things to dry instead of using a dryer. While energy conservation is the practice of trying to use less energy for cost and environmental reasons, energy efficiency means using specific products designed to use less energy. These two concepts are inherently similar but involve different methods. Examples of energy conservation include using smart appliances and energy-saving bulbs in your home.

PREVENTION FOR GLOBAL WARMING



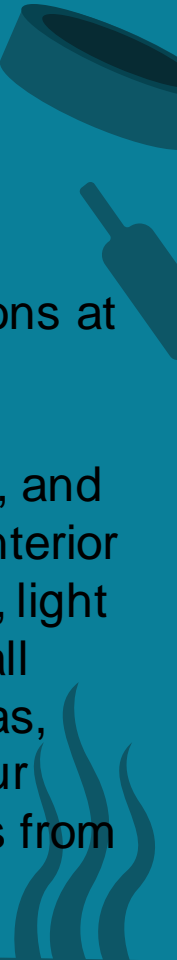
B. **Walk, bike, or take public transport**

The world's roadways are clogged with vehicles, most of them burning diesel or gasoline. Walking or riding a bike instead of driving will reduce greenhouse gas emissions -- and help your health and fitness. For longer distances, consider taking a train or bus. And carpool whenever possible. This allows for more glancing light that produces heat and limits harsh light in the winter. While east and west-facing windows allow for more direct sunlight, they aren't as effective at letting heat in. This allows you to save money and use less energy.

PREVENTION FOR GLOBAL WARMING

C. **Reduce, reuse, repair & recycle**

Electronics, clothes, and other items we buy cause carbon emissions at each point in production, from the extraction of raw materials to manufacturing and transporting goods to market. To protect our climate, buy fewer things, shop second-hand, repair what you can, and recycle. Air leaking out of your home is most often from the home interior into your attic through small openings. Whether it is through ducts, light fixtures, or the attic hatch, hot air will rise and escape through small openings. As the natural flow of heat is from warmer to cooler areas, these small openings can make your heating bill even higher if your attic is not sufficiently insulated. To reap the full amount of savings from weatherization, you should consider fully insulating your home.



****Some facts****



**Curiously
Interesting
Facts**



MARINE ANIMALS AND GARBAGE



- Over **300 million tons of plastic are produced every year** for use in a wide variety of applications.
- At least 14 million tons of plastic end up in the ocean every year, and plastic makes up **80% of all marine debris** found from surface waters to deep-sea sediments.
- Marine species **ingest or are entangled by plastic debris**, which causes severe injuries and death.
- Plastic pollution **threatens food safety and quality, human health, coastal tourism, and contributes to climate change**.
- There is an urgent need to explore new and existing **legally binding agreements** to address marine plastic pollution.

LARGEST DEFORESTED AREAS



Deforestation refers to the decrease in forest areas across the world that are lost for other uses such as agricultural croplands, urbanization, or mining activities. Greatly accelerated by human activities since 1960, deforestation has been negatively affecting natural ecosystems, biodiversity, and the climate. By destroying the forests, human activities are putting entire ecosystems in danger, creating natural imbalances, and putting Life at threat. The natural world is complex, interconnected, and made of thousands of inter-dependencies and among other functions, trees provide shade and colder temperatures for animals and smaller trees or vegetation which may not survive with the heat of direct sunlight. Besides, trees also feeding animals with their fruits while providing them with food and shelter they need to survive.



SOLUTIONS OF GLOBAL WARMING

- The Solar Impulse Label is granted to innovative solutions to global warming that meet high standards of sustainability and profitability.
- **Improvements to energy efficiency and vehicle fuel economy, increases in wind and solar power, biofuels from organic waste, setting a price on carbon, and protecting forests** are all potent ways to reduce the amount of carbon dioxide and other gases trapping heat on the plane.
- **Reduce food-waste. Don't throw out that half-eaten Rs 200 burger just because you can afford to.**

SOLUTIONS BY BRAINLY:

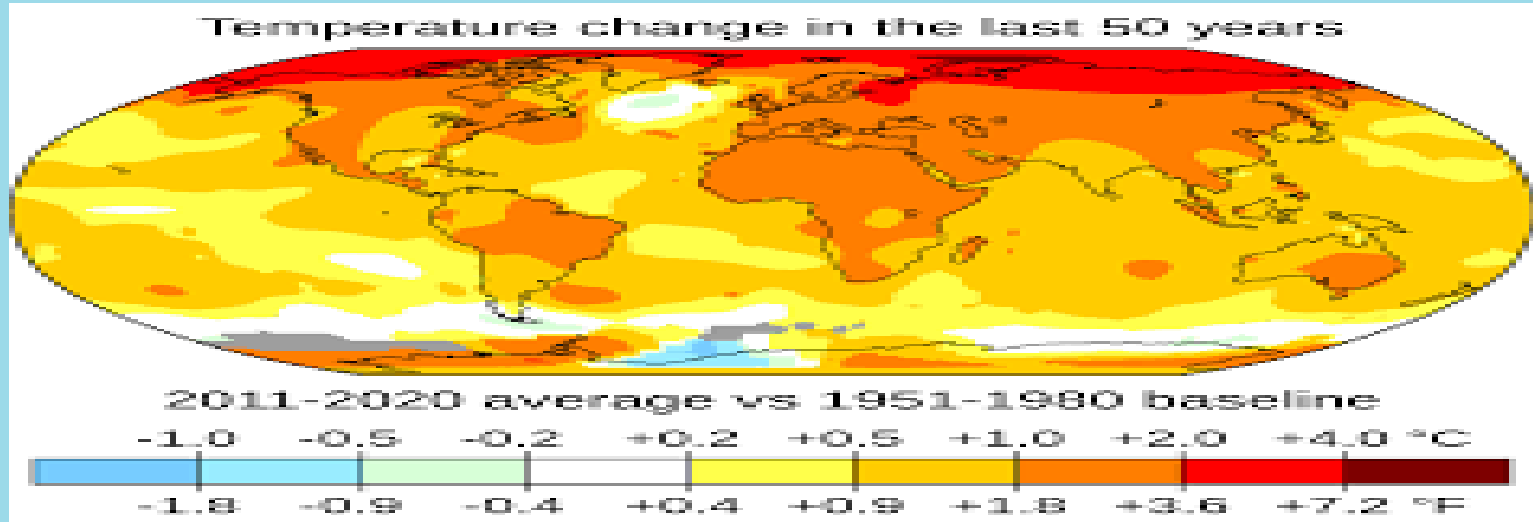
1. Planting trees can reduce the amount of increasing global warming...
2. Recycling objects is another way...
3. Less use of fossil fuels...
4. Reduction in the use of man made machines releasing CFC (Chloro Fluro Carbon)

Electronics industry



Electrical waste contains hazardous but also valuable and scarce materials and up to 60 elements can be found in complex electronics. The United States and China are the world leaders in producing electronic waste, each tossing away about 3 million tons each year. China also remains a major e-waste dumping ground for developed countries. The UNEP estimate that the amount of e-waste being produced - including mobile phones and computers - could rise by as much as 500 percent over the next decade in some developing countries, such as India. Increasing environmental awareness has led to changes in electronics design to reduce or eliminate toxic materials and to reduce energy consumption.

TEMPERATURE TRENDS



The temperature trend is **the average rate of increase or decrease at the grid point over the time period of interest**. It is determined by simple linear regression through the data available for each grid point. They are expressed in degrees Celsius per decade.



HISTORY OF GLOBAL SURFACE TEMPERATURE

- Earth's temperature has risen by 0.14° F (0.08° C) per decade since 1880, and the rate of warming over the past 40 years is more than twice that: 0.32° F (0.18° C) per decade since 1981.
- 2020 was the second-warmest year on record based on NOAA's temperature data, and land areas were record warm.
- Averaged across land and ocean, the 2020 surface temperature was 1.76° F ($0.98^{\circ}\text{ Celsius}$) warmer than the twentieth-century average of 57.0° F (13.9° C) and 2.14° F (1.19° C) warmer than the pre-industrial period (1880-1900).
- Despite a late-year La Niña event that cooled a wide swath of the tropical Pacific Ocean, 2020 came just $0.04^{\circ}\text{ Fahrenheit}$ ($0.02^{\circ}\text{ Celsius}$) shy of tying 2016 for warmest year on record.
- The 10 warmest years on record have occurred since 2005.

GLOBAL ENVIRONMENTAL PROBLEMS

Everything that surrounds or affects an organism during its lifetime is collectively referred to as its environment. It comprises both living (biotic) and nonliving (abiotic) components. Human civilisation and globalisation are the dominant culprits of constant change in the global environment in present scenario. Various processes that can be said to contribute to the global environmental problems include pollution, global warming, ozone depletion, acid rain, depletion of natural resources, overpopulation, waste disposal, deforestation and loss of biodiversity.. The global environmental health impact remains profoundly perturbing. Unsafe water, poor sanitation and hygiene conditions, air pollution and global climate change accounts for nearly a tenth of deaths and disease burden worldwide. Due to above-mentioned environmental issues, our planet is facing severe environmental crisis. Current environmental problems lead to disasters and tragedies now, will also be the reason of casualties in future and require urgent attention from the responsible authorities/nations to frame appropriate laws to overcome these issues and also by making people aware to use natural resources in sustainable manner.



CONCLUSION



Global warming could not be solve easily if people are not very well practice in lowering carbon emission, law and regulation's implementation and effective forests and agriculture management.

The solutions for this issue will be more effective when individuals change their lifestyles. Individuals can contribute to reduce the changes in the global climate through changing their habits. We must try our best to solve the problem and strive as much as possible to reinstate our earth for sake of future generation. The solutions for this issue will be more effective when individuals change their lifestyles. Individuals can contribute to reduce the changes in the global climate through changing their habits. We must try our best to solve the problem and strive as much as possible to reinstate our earth for sake of future generation.

DID YOU KNOW?



- For the last twenty years, sea levels rose at twice their rate during the last century.
- Global temperatures could increase by as much as 10.4 degrees Fahrenheit by 2100.
- Surface ocean waters today are roughly 30 percent more acidic than at the start of the Industrial Revolution.
- In the last decade, the rate of Antarctica's ice mass depletion has tripled.
- Scientists predict that the Arctic Ocean will barely have ice before 2050.

TOP QUESTIONS



1. Why is global warming a social problem?
2. Where does global warming affect polar bears?
3. How does global warming work?



THANKS!

Do you have any questions?

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