Global Warming and Climate Change

Global warming leads to rising temperatures of the oceans and the Earth’s surface causing the melting of polar ice caps, rise in sea levels, and also in the natural patterns of precipitation such as flash floods, excessive snow, or desertification.

According to Lauren Bradshaw, an [assignment writer](https://www.customwritings.com/assignments.html%22%20%5Ct%20%22_blank), global warming and its solutions come first on the list of environmental problems and solutions because of the attention it has gathered and the implications of not controlling it, global warming is currently the most prominent environmental problem.

Climate change like global warming is an environmental problem resulting from human practices like the emission of greenhouse gases.

Solutions to Global Warming

Some of the solutions to this environmental problem are as follows:

1. Use of Renewable Energies

The first way to prevent climate change is to move away from fossil fuels. Renewable energies like solar, wind, biomass, and geothermal are better alternatives that help reduce global warming.

2. Energy & Water Efficiency

Producing clean energy is essential, but reducing our consumption of energy and water by using more efficient devices (e.g. LED light bulbs, and innovative shower systems) is less costly and equally important.

3. Sustainable Transportation

Promoting public transportation, and carpooling, but also electric and hydrogen mobility can definitely help reduce CO2 emissions and thus fight global warming. Also, using efficient engines can help reduce CO2 emissions.

4. Sustainable Infrastructure

In order to reduce the CO2 emissions from buildings – caused by heating, air conditioning, hot water, or lighting – it is necessary both to build new low-energy buildings and to renovate the existing constructions.

5. Sustainable Agriculture

Encouraging better use of natural resources, stopping massive deforestation as well as making agriculture greener and more efficient should also be a priority.

6. Responsible Consumption & Recycling

Adopting responsible consumption habits is crucial, be it regarding food (particularly meat), clothing, cosmetics, or cleaning products. Last but not least, recycling is an absolute necessity for dealing with waste.

Overpopulation

The population of the planet is reaching unsustainable levels as it faces shortages of resources like water and fuel.

Food population explosion is an [environmental problem](https://unity.edu/sustainability/ways-to-solve-environmental-problems/%22%20%5Ct%20%22_blank) that is straining the already scarce resources, intensive agriculture practices to produce food for the large population damage the environment through the use of chemical fertilizers, pesticides, and insecticides.

Solutions to the Problem of Over Population

Some of the solutions to this environmental problem are as follows:

1. Women Empowerment

Studies show that women with access to reproductive health services find it easier to break out of poverty, while those who work are more likely to use birth control.

2. Promote Family Planning

Simply educating men and women about contraception can have a big impact. When Iran introduced a national family planning program in 1989, its fertility rate fell from 5.6 births per woman to 2.6 in a decade.

3. Government Incentives

Those at UK charity Population Matters believe there should be a senior government official responsible for addressing population-related issues.

They urge governments to promote “responsible parenthood” and say subsidies should be limited to the first two children unless the family is living in poverty.

4. One-child Legislation

During China’s high controversial one-child policy, fertility fell from six births per woman in the 1960s to 1.5 in 2014. However, Amnesty International reports that the policy led to coerced or forced abortions and sterilizations.

It also disrupted traditional support structures for the elderly and led to a gender imbalance

Natural Resource Depletion

Natural Resource Depletion is another crucial current environmental problem.

Fossil fuel consumption results in the emission of greenhouse gases which is responsible for global warming and climate change.

Globally, people are taking efforts to shift to renewable sources of energy like solar, wind, biogas and geothermal energy

Solutions to Depletion of Natural Resources

Some of the solutions to this environmental problem are as follows:

1. Use of Renewable Energy

About 63% of our electricity comes from fossil fuels, which are natural resources that only replenish over an extremely long time. Renewable energy replenishes itself, cutting down on our need to harvest new resources.

2. Promotion of Sustainable Fishing Rules

Reduced fish populations can change the whole ecosystem and hurt coastal economies that depend on fishing.

Introducing new laws — and ensuring existing ones stay in place — that protect at-risk fish populations and ecosystems is crucial to preventing these problems.

3. Avoid Single-Use Plastics

Reducing our plastic use helps us avoid the use of the resources needed to make plastic and prevents plastic waste from harming the natural environment. Substituting single-use plastics like plastic grocery bags, utensils, and straws with durable items can help.

4. Recycle More And Improve Recycling Systems

In addition to switching away from single-use plastics, we can also recycle more to help with the plastic problem. Check with your local government or recycling company to see what you can recycle curbside where you live.

For other items, you may be able to find a business in your community that can help recycle items.

5. Use Sustainable Agriculture Practices

Rotating crops and planting cover crops help to keep soil healthy. Using fewer chemicals and integrating biological pest control and natural fertilizers can help, as well.

Precision agriculture, which uses technology to optimize resource use, can help farmers use less fertilizer, pesticides, water, and other inputs.

6. Reduce Food Waste

Approximately a third of the food produced for human consumption every year gets wasted or lost.

Keeping track of the food you have, planning meals and shopping trips ahead of time and properly storing food can help reduce food waste at home.

7. Planting of Trees And Going Paperless

Going paperless is one of the solutions to managing the environmental problem of the incessant felling of trees.

There are many opportunities in your daily life to use less paper, from using more cloth towels and fewer paper towels to switching to an online-only subscription to your favorite newspaper.

This would encourage less need for cutting down trees.

Poor Waste Management Practices

The overconsumption of resources and the creation of plastics are creating a global crisis of waste disposal. Surely you can’t talk about the environmental problems and solutions without talking about poor waste management.

Developed countries are notorious for producing an excessive amount of waste or garbage and dumping their waste in the ocean and less developed countries.

Nuclear waste disposal has tremendous health hazards associated with it. Plastics, fast food, packaging, and cheap electronic wastes threaten the well-being of humans creating an environmental problem.

Solutions to Poor Waste Management

Some of the solutions to this environmental problem are as follows:

1. Eco-product Responsibility – *“*Reduce, Re-use, Recycle”

Eco-product responsibility pertains to the three Rs mantra of Reuse, Reduce and Recycle. Local communities, authorities, and states need to put more effort towards the education of waste management.

With the implementation and consistent practice of the three Rs, communities and local authorities, as well as states, will not only be able to manage waste but also move in the direction of achieving zero waste.

2. Effective Waste Disposal and Management

An effective strategy for municipal waste disposal and management can offer improved solutions for the various problems associated with waste materials.

This can be achieved through the implementation of a waste disposal plan which must include proper monitoring and regulation of municipal solid and food waste, livestock waste, sewage sludge, clinical waste, and construction waste.

3. Control And Monitoring of Land Filling and Fly-Tipping Activities

With the control and monitoring of landfilling and fly-tipping activities in the area of public works, construction and demolition materials can be resourcefully reclaimed, reused, or recycled in other projects such as landscaping, village houses, recreation facilities or car parks, or roads.

By applying these techniques, the construction and demolition materials that sometimes go into landfills which further worsen the management of solid waste can easily be managed.

4. Polluter-Pays Principle and Eco-Product Responsibility

The polluter-pays principle is where the law requires polluters to pay for the impact caused to the environment.

When it comes to waste management, the principle will require those who generate waste to pay for the suitable disposal of non-reclaimable materials.

Loss of Biodiversity

Human activity is leading to the extinction of species and habitats and a loss of biodiversity.

Ecosystems that took millions of years to perfect are in danger when any species population is decimated. Balance of natural processes like pollination is crucial to the survival of the ecosystem.

Solutions to the Loss of Biodiversity

Some of the solutions to this environmental problem are as follows:

1. Biodiversity Conservation

This is the first and foremost important solution to prevent biodiversity loss. Conserving biodiversity that is at risk of extinction can be protected with adequate conservation strategies.

2. Controlling Threats to Biodiversity

The problems and threats faced by biodiversity must be monitored and controlled by the government and private agencies.

3. Prevent Introduction of Invasive Species

one of the ways of control biodiversity depletion is to ensure that no invasive species find their place in native habitats.

4. Reliance on Natural Products

Biodiversity is used for raw materials. Humans should utilize natural products and use recycling techniques.

5. Use Eco-friendly Products

Plastic waste is responsible for biodiversity loss. It is recommended that humans should use eco-friendly products.

6. Habitat Restoration

Biodiversity loss can be prevented or reduced by restoring natural habitats.

Deforestation

Our forests are our natural sinks of carbon dioxide and produce fresh oxygen as well as helps in regulating temperature and rainfall.

At present, forests cover 30% of the land but, every year tree cover is lost due to increasing urbanization, growing population demand for more food, shelter, and clothing.

Deforestation is an environmental problem that simply means the clearing of green cover and makes that land available for residential, industrial, or commercial purposes This is caused by the disappearance of crops, felling of trees, pollution, and forest fires.

Solutions to Deforestation

Some of the solutions to this environmental problem are as follows:

1. Law and Regulations

Stopping deforestation and preserving natural vegetations demands rules, laws, and regulations from organizations and governments to aid in enforcing forest preservation policies.

State laws on timber, wood fuel, farming, and land use among other forest resources must be advanced and enforced to limit deforestation.

2. Reforestation

Reforestation is the restoration or replanting of forests that have been reduced by fire or felling. It requires an ongoing process and should not be viewed as a one-time thing.

People, communities, schools, governments, and organizations can be active actors which could help replanting and reforestation.

3. Sensitization and Educative Campaigns

Sensitization and educative campaigns can be a simple but more workable solution. Initiating awareness creation champagnes makes it easy for people to detect the causes, effects, and ways of counteracting deforestation.

Thus, making conscious efforts to share information with people including family, friends, colleagues, and the entire community on deforestation and its effects is an appropriate measure of standing up in unison to combat the clearing of forests.

4. Reduce Consumption of Paper

Your daily consumption of paper includes printing paper, notebooks, napkins, toilet paper, etc. Try to reduce consumption, reduce waste of paper and also opt for recycled paper products.

Make life simple such as going paperless, printing/writing on both sides of the paper, using less toilet paper, avoiding paper plates, and napkins and wherever possible, go paperless.

Ocean Acidification

It is the direct impact of excessive production of CO2. 25% of CO2 is produced by humans. The ocean acidity has increased by the last 250 years but by 2100, it may shoot up by 150%. the main impact is on shellfish and plankton in the same way as human osteoporosis.

Solutions to ocean acidification

Some of the solutions to this environmental problem are as follows:

1. Strict and Relevant Regulations

Human actions are best guarded by the policies of the land. The first step towards the fight against ocean acidification can be commenced through the ratification of legislation that can ensure that waste handling, among other pollution-risk activities, is controlled.

Such regulations would spread to the fisheries department to ensure that safety is maintained in food consumption.

2. Civil Education

Governments and international organizations can come up with some platforms where they educate or sensitize the common citizens on the risks posed by climate change and ocean acidification.

Such initiatives can instill some self-triggered discipline that acts as guidance for the quest for environmental conservation.

3. Consuming Only the “Right fish”

In any case, an increase in acidity would make fish consumption a risky affair. This is why the authorities would be tasked with the responsibility of ensuring that only the less harmless fish find their way into the market.

This can be very helpful in reducing the chances of having food poisoning and carbon gas circulation in the environment.

4. Reducing the Consumption of Carbon-oriented Energy Sources

The presence of a high concentration of carbon in the atmosphere can be attributed to various human activities, which can be controlled to some extent. Carbon emitted from fossil fuels can be reduced through the minimization of the use of such fuels.

Adopting the use of alternative/renewable energy sources can be the best available option. Diversification of energy sources such as the use of solar and wind as alternative energy sources can significantly pay off.

5. Use of Alternative Water Sources

Because of the need to ensure that there is safety, skepticism may pay off. Such can be through the use of alternative water sources such as the use of boreholes, wells, or tapped rainwater instead of ocean water domestically.

This can help in minimizing possible ocean water pollution.

6. Eating Less Meat

By reducing our meat consumption, we would reduce the demand for meat. This, in turn, would result in lesser rearing and raising of livestock.

As a result of the same, we would be effectively reducing the number of greenhouse gases being released into the atmosphere.

Water Pollution

Clean drinking water is becoming a rare commodity. Water is becoming an economic and political issue. The economic and political issue as the human population fights for this resource.

Solutions to Water Pollution

Some of the solutions to this environmental problem are as follows:

1. Wastewater Treatment

One of the effective ways of reducing water pollution is by treating wastewater before it’s reintroduced into the waterways. Sewage will be taken through several chambers of the facility to slowly reduce its toxicity levels.

2. Plastic Waste Reduction

It’s believed that around 9-12 million tons of plastic reach the ocean every year, which is a number that needs to be reduced substantially to make sure that the quality of ocean water doesn’t worsen even more.

3. Use of Septic Tanks

Septic tanks are useful pieces of equipment that are able to treat sewage by efficiently separating the liquids from the solids.

These tanks will use various biological processes to properly degrade the solid substances before the liquids flow directly into a land drainage system.

Septic tanks limit water pollution by effectively getting rid of the pollution that is already in the water.

4. Stormwater Management

When stormwater flows along sidewalks, streets, and lawns, it picks up harmful pollutants that are then pushed into storm drains, streams, and rivers.

Stormwater can be treated and managed through a variety of different processes, which include everything from sand filtration and electro-coagulation to reverse osmosis and advanced oxidation.

5. Green Agriculture

Agriculture is the primary cause of water pollution. Whenever it rains, the pesticides and fertilizers wash away with the stormwater, which takes viruses and bacteria into the waterways. It’s possible, however, for agriculture to be more friendly to the environment.

6. Denitrification

Denitrification is a simple ecological process that’s designed to convert nitrates directly into nitrogen gas, which helps to prevent nitrate from being taken into the soil and contaminating the groundwater.

7. Contain Spills

It is extremely important to absorb or contain those spills to keep them from entering the watershed as harmful pollutants. Secondary containment berms and basins help catch and contain hazmat leaks and spills for proper disposal.

Urban Sprawl

Urban Sprawl refers to the migration of the population from high-density urban areas to low-density rural areas which results in the spreading of the city over more and more rural land.

Urban sprawl results in land degradation, increased traffic, environmental issues, and health issues. The ever-growing demand for land displaces the natural environment consisting of flora and fauna instead of being replaced.

Solutions to Urban Sprawl

Some of the solutions to this environmental problem are as follows:

1. Education

One of the biggest problems concerning urban sprawl is the lack of education. If communities are educated about the negative impacts of urban sprawl they are more likely to take action to prevent irresponsible development.

Communities need to understand the drawbacks, including increased traffic due to an increased number of commuters and lack of public transportation resulting in increased pollution. Once the community is educated, it is more likely to act.

2. Community Action

The community can be a solution to urban sprawl through involvement and action. The community can challenge local project lobby councilors to vote in favor of more sustainable development methods.

Investors can purchase land that is in the pathway for sprawl, while local media can play a part in drawing attention to the downside and effects of urban sprawl.

3. Smart Growth

Smart growth is designed to combat urban sprawl by developing in a way that does not jeopardize the land or community.

Planners and architects who promote smart growth seek to develop a stronger sense of place through a more compact way of development, also known as mixed-use.

Mixed-use development combines residential areas with places of employment and commerce instead of isolating individual areas, allowing for more pedestrians and public transit as opposed to traffic and pollution.

Public Health Issues

The current environmental problems pose a lot of risks to the health of humans and animals. Dirty water is the biggest health risk of the world and poses threat to the quality of life and public health.

Inadequate public health facilities are among the environmental problems and solutions which affects the world.

Pollutants cause respiratory diseases like asthma and cardiovascular problems.