

The Earth is heating up ...

The sun's rays hit the ground and turn into heat that radiates out from the Earth's surface. Greenhouse gases stop this heat radiation from disappearing out into space. When the level of greenhouse gases in the atmosphere increases, more heat gets left behind and the Earth's temperature rises.

Some important greenhouse gases are carbon dioxide (CO₂) and methane gas (CH₄). Additional carbon dioxide is released mainly by cars, coal and oil fires, factories and aircraft. Developed countries in the northern hemisphere produce the most emissions. China also generates a huge amount of carbon dioxide. As the Earth heats up, it affects all countries.

Changing climate

As the Earth heats up, our climate will change. Climate is the weather over a long period of time. For example, it's about how hot it usually is, how much and how often we get rain and perhaps how long and how hot the dry season is normally. A hotter Earth can mean dry seasons get longer, rain might not come every year, or the opposite might happen and it rains more in some places, with more torrential rain and flooding where you live. Perhaps there will also be more storms, and they might be stronger.

Rising sea levels

As the Earth heats up, sea levels rise. Mostly because warmer water expands and takes up more room, but also because glaciers (ice on land) melt and drain into the sea. Greenland and Antarctica have the most land ice. There will be big changes for coastal areas and islands when sea levels rise. People will no longer be able to live in these areas if the seawater covers fields and houses.

It is difficult to say exactly how the climate will change in different places on Earth, but we know for certain that there will be climate change as the Earth heats up. If the Earth heats up a lot, it may be impossible to live in some countries, and in the worst-case scenario the changes could be so great that almost the entire planet becomes uninhabitable! If nothing is done, the Earth will keep on heating up!

Fossil fuels

Fossil fuels are the remains of old plant material that have been stored in the ground for hundreds of millions of years. When people burn coal, oil or natural gas now, we release in just a few years the carbon dioxide that has been absorbed by plants over many millions of years! That's why burning fossil fuels is causing the amount of carbon dioxide in the atmosphere to increase very quickly.

Disappearing forests

When there are major forest fires, it releases a lot of carbon dioxide into the atmosphere. This carbon dioxide can be absorbed again later if the forest grows back. It's a natural cycle that has been happening throughout the history of the Earth. But if forests are cut down, or worse, burned without planting any new forest, the amount of carbon dioxide in the atmosphere increases because the released carbon dioxide is not absorbed and stored in new trees!



CO₂
CO₂
CO₂



Greenhouse gases in the atmosphere stop heat radiation (red arrows) from disappearing out into space.

The sun heats up the Earth

CO₂
CH₄



... If we don't take action

Extreme weather and higher temperatures

Drought, flooding and natural disasters affect everyone on Earth, but children's rights in poor countries are affected the most.

Disease

Malaria and dengue fever, and water-borne diseases such as cholera and diarrhoea increase and spread faster to more areas of the world. More children will become sick and die.

Hunger

The number of hungry and undernourished children is expected to rise by 20–25 million by the year 2050.

War and conflict

Inequalities and poverty increase the risk of violence and war. This affects children, particularly girls, the most.

Economic crisis

Poor children will get sicker and go hungry, and sometimes end up homeless. Children will also be forced to work instead of getting an education. Girls have to quit school first.

Refugee crisis

Many children have to leave their homes when villages and towns become uninhabitable. War and conflict also forces families with children to flee their homes. Children's schooling and health are affected, particularly their mental health.



If we act now!

Reduced hunger and poverty

Harvests will be better and not destroyed by drought or flooding. Children will have enough to eat and will be healthy.

Clean water and hygiene

Children will stay healthy, be able to go to school, play and develop. Access to

clean water will give girls in particular more time for study and play, as they won't have to walk long distances to fetch water.

Safety and security

Greater equality and gender equality reduces the risk of people and countries being drawn into violent conflict over areas of land and natural resources.



Who should act?

Live sustainably

Everyone needs to try and live sustainably. But it is the emissions from and wastage by rich countries over a long period of time that are the biggest causes of the current climate crisis. Rich countries must now support poorer countries where children are suffering the effects of climate change.

Climate-smart

The environmentally harmful way that rich people have long been using resources to live comfortable lives has had catastrophic consequences. We now need more climate-smart alternatives, so that everyone on Earth can live a decent life. Rich countries have a big responsibility here to lead and finance developments.

Children demand action

Today, children across the globe are fighting for their right and the right of future generations to inherit a world where people and the environment are healthy. Children are demanding that adults and decision-makers listen to science and do everything they can to stop climate change and build sustainable societies.

