POSİTİON PAPER

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Climate is the average weather in a place over many years. Climate change is a shift in those average conditions.

The rapid climate change we are now seeing is caused by humans using oil, gas and coal for their homes, factories and transport.

When these fossil fuels burn, they release greenhouse gases - mostly carbon dioxide (CO2). These gases trap the Sun's heat and cause the planet's temperature to rise.

For example the world is now about 1.5 and The Netherlands is 1.7 celcius warmer than it was in the 19th Century and the amount of CarbonDioxide in the atmosphere has risen by 50%.

THE IMPACTS

Extreme weather events are already more intense, threatening lives and livelihoods.

With further warming, some regions could become uninhabitable, as [farmland turns into desert](https://www.bbc.co.uk/bitesize/guides/zpnq6fr/revision/4). In other regions, the opposite is happening, with extreme rainfall causing historic flooding - as seen recently in China, Germany, Belgium and the Netherlands.

People in poorer countries will suffer the most as they do not have the money to adapt to climate change. Many farms in developing countries already have to endure climates that are too hot and this will only get worse.

Our oceans and its habitats are also under threat. The Great Barrier Reef in Australia, for example, has already [lost half of its corals since 1995](https://www.bbc.co.uk/news/world-australia-54533971) due to warmer seas driven by climate change.

ENERGY CRISIS

The energy crisis is the concern that the world's demands on the limited natural resources that are used to power industrial society are diminishing as the demand rises. These natural resources are in limited supply. While they do occur naturally, it can take hundreds of thousands of years to replenish the stores.

CAUSES OF CLIMATE CHANGE

-Cutting down forests

Cutting down forests to create farms or pastures, or for other reasons, causes emissions, since trees, when they are cut, release the carbon they have been storing. Each year near 12 million hectares of forest are destroyed. Since forests absorb carbon dioxide, destroying them also limits nature’s ability to keep emissions out of the atmosphere.

\*\*By not cutting down the forests we can control the amount of carbondioxide in the atmosphere and reduce the effects of climate change

-Generating Power

Generating electricity and heat by burning fossil fuels causes a large chunk of global emissions. Most electricity is still generated by burning coal, oil, or gas, which produces carbon dioxide and nitrous oxide which are greenhouse gases that blanket the Earth and trap the sun's heat.

\*\*But there is also other ways to generate power by not using fossil fuels like using sustainable energy like wind,solar power,biomass and such systems.

-Using Transportation

Most cars, trucks, ships, and planes run on fossil fuels. That makes transportation a major contributor of greenhouse gases, especially carbon-dioxide emissions. Transport accounts for nearly one quarter of global energy-related carbon-dioxide emissions.

\*\*Even if we can`t live without transportation The Netherlands suggests to use public transportation as much as we can because it reduces greenhose gas emissions according to the private vehicle usage.

- Consuming Too Much

Your home and use of power, how you move around, what you eat and how much you throw away all contribute to greenhouse gas emissions. So does the consumption of goods such as clothing, electronics, and plastics.

\*\*Of course we can`t lower the amount that we consume to zero but we can use recyclable products and recycle some of the energy that we use.

-Powering Buildings

Globally, residential and commercial buildings consume over half of all electricity. As they continue to draw on coal, oil, and natural gas for heating and cooling, they emit significant quantities of greenhouse gas emissions. Growing energy demand for heating and cooling, with rising air-conditioner ownership, as well as increased electricity consumption for lighting, appliances, and connected devices, has contributed to a rise in energy-related carbon-dioxide emissions from buildings in recent years.

\*\*But to efford the energy and electricity demand we shouldn`t use fossil fuels. The Netherlands suggests to use solar power,wind power,hydropower and geothermal energy to efford the energy requirement.

-Manufacturing Goods

Manufacturing and industry produce emissions, mostly from burning fossil fuels to produce energy for making things like cement, iron, steel, electronics, plastics, clothes, and other goods. Mining and other industrial processes also release gases, as does the construction industry. Machines used in the manufacturing process often run on coal, oil, or gas

\*\*But we have to reduce the emission of the greenhouse gases. For that The Netherlands suggests to end the usage of the fossil fuels and start to use renewable energy such as biomass,nuclear and geothermal energy

EFFECTS OF CLIMATE CHANGE

-Oceans

The ocean soaks up most of the heat from global warming. The rate at which the ocean is warming strongly increased over the past two decades, across all depths of the ocean. As the ocean warms, its volume increases since water expands as it gets warmer. Melting ice sheets also cause sea levels to rise, threatening coastal and island communities. In addition, the ocean absorbs carbon dioxide, keeping it from the atmosphere. But more carbon dioxide makes the ocean more acidic, which endangers marine life and coral reefs.

\*\*26% of the Netherlands is below the sea level and Netherlands sea level is increasing by 3 mm every year because of the climate change. But for that we have made one of the biggest barriers in the World.

The barrier consists of six dams and four storm surge barriers, which makes it the Netherlands largest flood defence. The American Society of Civil Engineers recognized the Delta Works as one of the Seven Wonders of the Modern World. But even with these barriers scientists are predicting that the Netherlands will sink in the next 100 years

-Hotter temperatures

As greenhouse gas concentrations rise, so does the global surface temperature. The last decade, 2013-2022, is the warmest on record. Since the 1980s, each decade has been warmer than the previous one. Nearly all land areas are seeing more hot days and heat waves. Higher temperatures increase heat-related illnesses and make working outdoors more difficult. Wildfires start more easily and spread more rapidly when conditions are hotter. Temperatures in the Arctic have warmed at least twice as fast as the global average.

\*\*Nature in The Netherlands is relatively sparse and scattered making it more vulnerable to climate change, particularly drought. So The Netherlands suggests to use sustainable energy sources such as biomass energy, wind energy, geothermal energy instead of using fossil fuels like coal and oil.

-Loss off species

Climate change poses risks to the survival of species on land and in the ocean. These risks increase as temperatures climb. Exacerbated by climate change, the world is losing species at a rate 1,000 times greater than at any other time in recorded human history. One million species are at risk of becoming extinct within the next few decades. Forest fires, extreme weather, and invasive pests and diseases are among many threats related to climate change. Some species will be able to relocate and survive, but others will not.

\*\*To turn the tide of biodiversity loss, the Netherlands has drafted various plans and set targets for biodiversity and have been taken measures since 1990. A lot of progress has been made by the measures taken

-Increased drought

Climate change is changing water availability, making it scarcer in more regions. Global warming exacerbates water shortages in already water-stressed regions and is leading to an increased risk of agricultural droughts affecting crops, and ecological droughts increasing the vulnerability of ecosystems. Droughts can also stir destructive sand and dust storms that can move billions of tons of sand across continents. Deserts are expanding, reducing land for growing food. Many people now face the threat of not having enough water on a regular basis.

\*\*Probably the most pressing water-related problem that the Netherlands is currently facing, is drought. The year 2022 has already been the fifth consecutive year of drought, with several negative effects on (ground)water, ecosystems and soil as a result. So Netherlands wants to enlighten people about the usage of sustainable energy for the drought to not to pollute the water resources.

-Not enough food

Changes in the climate and increases in extreme weather events are among the reasons behind a global rise in hunger and poor nutrition. With the ocean becoming more acidic, marine resources that feed billions of people are at risk. Heat stress can diminish water and grasslands for grazing, causing declining crop yields and affecting livestock.

\*\* Even if food shortages haven`t been a major problem in the Netherlands recently, it has become and also becoming a big problem in other countries One of the best ways to help the global food supply is by buying certified sustainable foods. If we dont go on with methods like this our food supplements will be finished soon.

-Poverty

Climate change increases the factors that put and keep people in poverty. Floods may sweep away urban slums, destroying homes and livelihoods. Heat can make it difficult to work in outdoor jobs. Water scarcity may affect crops. Over the past thirteen years weather-related events displaced an estimated 23.1 million people on average each year, leaving many more vulnerable to poverty. Most refugees come from countries that are most vulnerable and least ready to adapt to the impacts of climate change.

\*\*To avoid these kind of climate conditions we need to go on with sustainable energy sources such as:Wind power,biomass energy,solar power,hydropower,geothermal energy and nuclear energy.

-Health Risks

Climate change is the single biggest health threat facing humanity. Climate impacts are already harming health, through air pollution, disease,greenhouse gases, extreme weather events, forced displacement, pressures on mental health, and increased hunger and poor nutrition in places where people cannot grow or find sufficient food. Every year, environmental factors take the lives of around 13 million people. Changing weather patterns are expanding diseases, and extreme weather events increase deaths and make it difficult for health care systems to keep up.

\*\* In The Netherlands pollution is not such a big problem it just have several effects on rivers but fot the other parts of world The Netherlands suggests to stop the usage of non-renewable energy and and start using sustainable energy.

Netherland produces 11.6% of it`s total energy from renewables

Netherland produces nearly 2% of it`s total energy from solar panels

About 10% of the electricity used in the Netherlands comes from nuclear energy

Netherland produces nearly 0.5% of it`s total energy from geothermal energy

About 5% of the electricity used in the Netherlands comes from wind power

All Sollutions:

--Using sustainable energy such as;biomass,nuclear,solar power,geothermal,hydropower and wind power

--Using recyclable products

--Switch to sustainable transport

--Protect oceans and forests

--Reduce consumption

--Reduce plastic

--Cutting fossil fuels(carbon)

--Using public transport

--Eating greens,vegetables...(vegetarian diet)

--Don`t waste energy and supplies

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