



## **Dear Delegates,**

It is a pleasure to welcome you to the 2014 Montessori Model United Nations Conference.

The following pages intend to guide you in the research of the topics that will be debated at MMUN 2014 in committee sessions. Please note this guide only provides the basis for your investigation. It is your responsibility to find as much information necessary on the topics and how they relate to the country you represent. Such information should help you write your Position Paper, where you need to cite the references in the text and finally list all references in the Modern Language Association (MLA) format.

The more information and understanding you acquire on the two topics, the more you will be able to influence the Resolution writing process through debates [formal and informal caucuses], and the MMUN experience as a whole. Please feel free to contact us if and when you face challenges in your research or formatting your Position Papers.

We encourage you to learn all you can about your topics first and then study your country with regard to the two selected topics. Please remember that both committee members need to be well versed and ready to debate both topics.

Enjoy researching and writing your Position Papers.

We look forward to seeing you at the Conference!

MMUN Secretariat Team  
[info@montessori-mun.org](mailto:info@montessori-mun.org)



## **United Nations Environment Programme**

---

UNEP, established in 1972, is the voice for the environment within the United Nations system. UNEP acts as a catalyst, advocate, educator and facilitator to promote the wise use and sustainable development of the global environment. To accomplish this, UNEP works with a wide range of partners, including United Nations entities, international organizations, national governments, non-governmental organizations, the private sector and civil society.

UNEP work encompasses:

- Assessing global, regional and national environmental conditions and trends
- Developing international and national environmental instruments
- Strengthening institutions for the wise management of the environment
- Facilitating the transfer of knowledge and technology for sustainable development
- Encouraging new partnerships and mind-sets within civil society and the private sector.

UNEP's global and cross-sectoral outlook is reflected in its organizational structure, its activities and its personnel. Being based in Africa gives UNEP a clear advantage in understanding the environmental issues facing the world's developing countries.

Source: <http://www.unep.org/Documents.Multilingual/Default.asp?DocumentID=43&ArticleID=3301&I=en>

# Climate Change

## Topic Background

---



One of the biggest challenges facing the international community today is the issue of climate change and its effects. Climate change is occurring as a result of certain gases building up in the Earth's atmosphere. According to the United States Environmental Protection Agency (USEPA), the recent accumulations in the Earth's atmosphere of heat-trapping "greenhouse gases" have been caused by a number of factors, but the two factors most at fault are the burning of fossil fuels such as coal and oil, and widespread deforestation. These gases prevent heat from escaping to space, somewhat like the glass panels of a greenhouse.

Greenhouse gases are necessary to life as we know it because they keep the planet's surface at an optimal temperature to sustain human life. However, as the concentrations of these gases continue to increase in the atmosphere, the Earth's temperature rises above normal levels. According to data from the United States National Oceanic and Atmospheric Administration (NOAA) and the National Aeronautics and Space Agency (NASA), the Earth's average surface temperature has increased by about 1.4°F in the last 100 years. While this doesn't seem like a large increase, it has still had major impacts on the Earth's climate.

The eight warmest years on record since 1850 have all occurred since 1998, with the warmest year being 2005. Most of the warming in recent decades is probably the result of human activities, such as the burning of fossil fuels. Other aspects of the climate are also changing such as rainfall patterns, snow and ice cover, and sea level. If greenhouse gases continue to increase, climate models predict that the average temperature at the Earth's surface could increase from 3.2 to 7.2°F above 1990 levels by the year 2100. Scientists are certain that human activities are changing the composition of the atmosphere, and that increasing the concentration of greenhouse gases will change the planet's climate.

Climate change directly affects human health through increases in average temperature. Rising average temperatures are predicted to increase the frequency of heat waves and hot extremes. Individuals with heart problems, asthma, the elderly, the very young, and the homeless can be especially vulnerable to temperature extremes. These can cause potentially fatal illnesses, such as heat stress or hypothermia, as well as increasing death rates from heart and respiratory diseases. In cities, stagnant weather conditions can trap both warm air and air pollutants, leading to smog episodes with significant health impacts. For example, abnormally high temperatures in Europe in the summer of 2003 were associated with at least 27,000 more deaths than the equivalent period in previous years. In total, from 1990 to 2008, over 600,000 people died directly from over 11,000 extreme weather patterns.

Rising sea levels are also a large issue that stems directly from climate change. Tuvalu, a West Pacific nation whose highest point is just five meters above sea level, could be completely submerged within fifty years. A similar timeline is also appropriate for the Maldives, the Marshall Islands, Kiribati, and Tokelau. According to NASA, scientists now know that the average global rate of sea level rise has increased 50% during the last 12 years. The average rate is up to 3 millimeters per year from a 50-year annual average of 2 millimeters per year. Experts attribute rising sea level to ocean warming, which causes water to expand, and glacial melting, which is

©Montessori Model United Nations. All rights reserved.

Website: [www.montessori-mun.org](http://www.montessori-mun.org)  
Email: [info@montessori-mun.org](mailto:info@montessori-mun.org)

discharging increasing amounts of freshwater directly into the sea. These two factors are directly linked to being caused by climate change, and they are constantly threatening the welfare of small island nations.



## Past Actions

---

The United Nations Environmental Programme (UNEP) was founded in 1972 as a result of the United Nations Conference on the Human Environment. UNEP has been one of the leading international institutions working to combat climate change for many years. The organization acts as a guide for nations regarding drafting and implementing policies regarding climate change, and helps governments work to reduce carbon emissions and deforestation rates. Working on adaptation and mitigation policies, UNEP is an essential organization in the fight to curb the effects of global warming.

At its 40th Session in 1988, the World Meteorological Organization's (WMO) Executive Council established the Intergovernmental Panel on Climate Change (IPCC). The IPCC's main objectives are to further our knowledge of climate change, as well as prepare a plan of action to implement solutions. The IPCC also releases topic-specific assessment reports to share knowledge of solutions that have worked thus far to combat climate change.

In June of 1992, the United Nations Conference on Environment and Development (UNCED) created the United Nations Framework Convention on Climate Change (UNFCCC) in order to implement concrete solutions to reduce the effects of climate change. The Kyoto Protocol, an international agreement linked to the UNFCCC, was adopted in Kyoto, Japan on December 11, 1997, and it officially entered into force on February 16, 2005. The Kyoto Protocol set legally binding targets for 37 industrialized countries and the European Union for reducing greenhouse gas emissions.

In 2000, the United Nations established the Millennium Development Goals (MDGs) based on mechanisms discussed at the Millennium Summit in New York City that year. The goals range from eradicating poverty, to promoting gender equality, to combating infectious diseases; the hope is for all goals to be accomplished by the year 2015. Goal 7 of the MDGs is about ensuring environmental sustainability around the globe, including offsetting the effects of global warming, reducing carbon emissions and energy use, and decreasing rates of deforestation.

In 2012, the United Nations Conference on Sustainable Development (UNCSD) was held in Rio de Janeiro, Brazil. The conference was nicknamed Rio + 20 in honor of the twentieth anniversary of the United Nations Conference on Environment and Development (UNCED) which was held in Rio de Janeiro in 1992. The goal of Rio + 20 was to encourage governments to adopt practical measures to further sustainable development in their own nations, based off of successful solutions from the past twenty years. Although the conference only resulted in non-binding goals for nations around the world, it furthered necessary discussion on sustainable development measures.

## Possible Solutions

---



Climate change is one of the most pressing issues of this era, and it is up to the international community to come together in order to implement short-term and long-term solutions to mitigate the effects of climate change. Only through cooperation and innovation will the international community be able to solve this important problem.

One of the most comprehensive frameworks to combat climate change is still the Kyoto Protocol, despite ongoing difficulties with its ratification. The Protocol outlines three specific mechanisms that signatory nations must comply with in order to mitigate the effects of climate change:

- **Emissions Trading:** This mechanism allows nations with excess carbon credits to sell those credits to nations who have not yet met their emissions targets. While the so-called carbon market is indeed a valuable and innovative approach toward reducing greenhouse gas emissions, there are still issues with the mechanism that must be solved.
- **Clean Development:** This mechanism involves the creation of emissions-reduction projects in developing countries, which can earn certified emission reduction (CER) credits. These CER credits can then be used on the carbon market.
- **Joint Implementation:** This mechanism allows countries to work together in order to create sustainable projects in return for emission reduction units. Together, these three mechanisms of the Kyoto Protocol have allowed most nations to cut carbon emissions by a total average of 5%.

These three mechanisms represent three areas in which the United Nations and the international community can come together to develop possible solutions.

## Further Research

---

### *Guiding Questions*

- How does climate change affect your country?
- Does your government have any programs that address the effects of climate change?
- Has your country signed or ratified the Kyoto Protocol? Does it participate in any of the Kyoto Protocol mechanisms?
- Did your government participate in Rio+20? Did your government make any statements about climate change?

### *Research Sources*

- United Nations Framework Convention on Climate Change: <http://unfccc.int/2860.php>
- Intergovernmental Panel on Climate Change: <http://www.ipcc.ch/>
- UN Gateway to Climate Change: <http://www.un.org/wcm/content/site/climatechange/gateway/>

©Montessori Model United Nations. All rights reserved.

Website: [www.montessori-mun.org](http://www.montessori-mun.org)  
Email: [info@montessori-mun.org](mailto:info@montessori-mun.org)