Houston Area Model United Nations
Standard Committee

UNSC

Chair | Annie George
Topic A: Climate Change
Houston Area Model United Nations 49
February 1 & 2, 2024

Note to Delegates

Hello Delegates,

My name is Annie George, and I am your United Nations Security Council chair. I am currently a junior at the University of Houston. My major is Computer Information Systems, and my minor is Business Administration. I am a part of a couple of programs, such as Women in Stem and the Council of Cultural Activities. I love volunteering, walking my dog, and reading!

I started Model UN during my first year of high school and was in a mix of Standardized Committees and Crises. I did UNHCR, DISEC, A Crisis, and Security Council. Once I entered college, I was a vice chair at UNOOSA and head chair for UNEP. I joined Model UN because I love researching different topics and debating them. When I learned about Model UN, I was excited because I got to look at such a painful thing as international warfare and think of numerous solutions for the said problem, work with others, and come up with a final answer to the issue at hand. Problems such as the ones that we will be talking about in UNSC.

The United Nations Security Council (UNSC), established in 1945, is a pivotal component of the UN's mission to preserve global peace and security. Comprising 15 member states, including five possessing veto power, the UNSC can sanction military interventions, enforce punitive measures, and facilitate conflict resolution. As you participate in this conference as a delegate, your role entails approaching issues from your nation's perspective and leveraging them as the foundation for your debate arguments and final policy proposals. Consequently, cooperation among countries will be essential in formulating comprehensive solutions to address the two topics.

Throughout our committee sessions, I encourage you to approach problems with an open mind, exploring diverse solutions creatively. Think outside the box and do not hesitate to voice your opinions on relevant issues, fostering engaging discussions. Above all, remember to enjoy the experience. As we embark on this year's conference, I anticipate a truly distinctive and rewarding journey for all of us. Wishing each one of you the very best of luck!

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Background Information

Executive Summary:

Climate change is undeniably one of the most critical challenges facing humanity on a global scale. Its far-reaching impacts are increasingly evident, affecting ecosystems, economies, and societies worldwide. Rising global temperatures, driven largely by human activities such as burning fossil fuels and deforestation, have unleashed a cascade of consequences.

First and foremost, climate change alters our planet's climate patterns, leading to more frequent and severe weather events, from devastating hurricanes to prolonged droughts. These extreme events disrupt agriculture, threaten food security, and displace populations. Rising sea levels are encroaching upon coastal communities, endangering infrastructure and causing the loss of valuable land. Moreover, temperature and precipitation shifts affect ecosystems, leading to species extinction and disrupting delicate ecological balances.

Addressing climate change is not merely an environmental imperative; it is a global responsibility that impacts our economies, threatens our well-being, and underscores the need for collective action to mitigate its effects and build a more sustainable future for all.

Climate Change and Its Global Impacts:

Climate change is a multifaceted global issue with profound implications for the environment, economies, and societies worldwide. In response to this critical challenge, the UNFCCC emerged as a pivotal international treaty. Adopted in 1992, it marked a significant milestone in acknowledging the importance of global cooperation to combat climate change. The treaty's universal significance is underscored by its ratification by 198 countries.

One of the fundamental objectives of the UNFCCC is to stabilize greenhouse gas concentrations in the atmosphere at levels that prevent dangerous anthropogenic interference with the climate system. This overarching goal emphasizes the urgent need to mitigate the adverse impacts of climate change, ranging from the increasing frequency of extreme weather events to the inexorable rise in sea levels.

Building upon the foundation laid by the UNFCCC, the Paris Agreement, adopted in 2015, further solidified the international effort to combat climate change. This landmark agreement has garnered ratification by 193 countries, demonstrating the global consensus on the urgency of addressing this issue. The Paris Agreement sets ambitious targets for limiting global warming, with the primary objective of keeping the increase in global average temperature well below 2 degrees Celsius above pre-industrial levels. It also aims for a more aspirational goal: limiting the increase to 1.5 degrees Celsius, recognizing the dire consequences of a warmer world.

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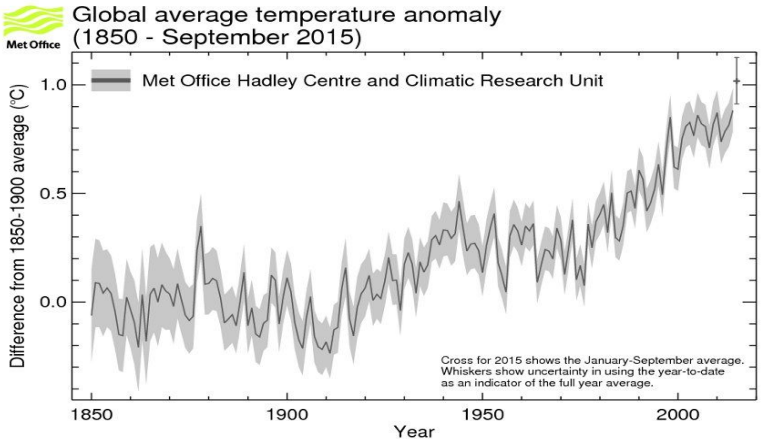
Now, let's explore the dire consequences of allowing climate change to continue unchecked.

The Earth's average temperature has surged by approximately 1 degree Celsius since the pre-industrial era. This warming, primarily driven by the accumulation of greenhouse gases in the atmosphere, has unleashed a host of repercussions. These include prolonged and more frequent heatwaves, shifts in precipitation patterns, and the alarming melting of ice, which contributes to the ominous rise in sea levels.



As global temperatures persist in their upward trajectory, the polar ice caps and glaciers continue their alarming meltdown, resulting in rising sea levels. This surge poses an acute threat to coastal communities, particularly those situated in low-lying regions. The mounting frequency of coastal flooding and the infiltration of saltwater into freshwater sources are already stark realities.

Climate change is exacerbating the frequency and intensity of extreme weather events. Hurricanes, cyclones, floods, droughts, and heatwaves have become increasingly severe and unpredictable. **These events disrupt communities, strain already limited resources, and result in widespread damage to infrastructure and agriculture.**

The profound impacts of climate change are also reverberating through ecosystems across the globe. **As temperatures shift and precipitation patterns evolve, species are struggling to adapt. This disruption often leads to habitat loss and poses a significant threat to biodiversity.** The loss of species can trigger cascading effects throughout ecosystems, imperiling human well-being in the form of food security and the availability of critical natural resources.

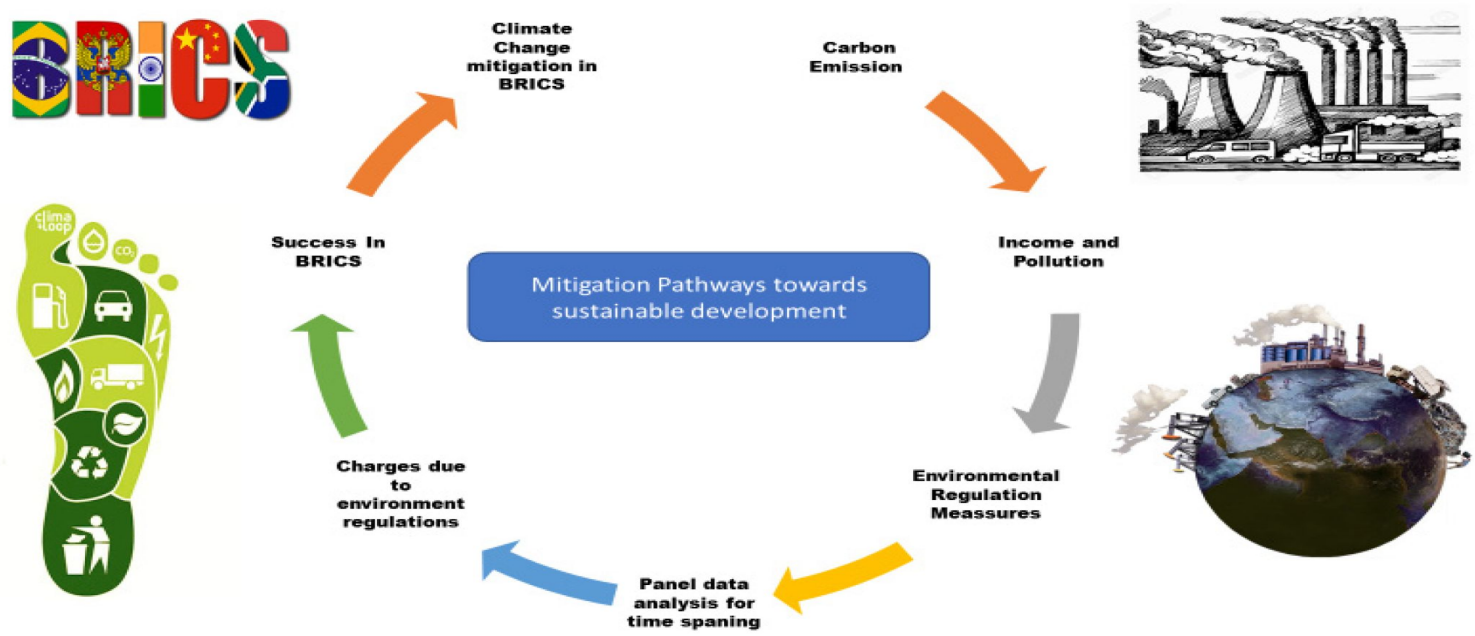
The economic ramifications of climate change are undeniably substantial. **Extreme weather events bring about severe financial losses and disrupt intricate global supply chains. The imperative for infrastructure resilience and disaster recovery consumes significant financial resources. Additionally, the transition to a low-carbon economy, while indispensable, can induce disruptions in certain industries while concurrently fostering new opportunities in green sectors.** The implications are clear: addressing climate change is not only an environmental necessity but also an economic imperative.

The United Nations has taken a leading role in the global response to climate change. The UNFCCC and the Paris Agreement are among its most significant initiatives. The UNFCCC, with its nearly universal membership, exemplifies international cooperation to address the issue. The UN supports nations in developing policies and strategies to reduce emissions and adapt to the impacts of climate change.

Climate change is a global challenge with far-reaching impacts. No country is entirely shielded from its effects, and addressing the issue necessitates international collaboration. **Developing countries, in particular, often bear a disproportionate burden, as they may lack the resources to cope with the consequences of climate change.** These countries require support, both financially and technically, to build resilience and implement sustainable practices.

Tackling climate change is a multifaceted endeavor that involves various stakeholders:

National governments must set and adhere to ambitious targets for reducing greenhouse gas emissions. Investing in renewable energy sources, implementing carbon pricing mechanisms, and enforcing environmental regulations are critical steps in mitigating climate change.



Developed nations have a vital role to play in assisting developing countries. Financial aid and the transfer of clean technologies can aid these countries in mitigating and adapting to climate change.

The business community can drive change by **investing in low-carbon technologies and adopting sustainable practices**. Private sector initiatives, such as reducing emissions and promoting circular economies, contribute significantly to global efforts.

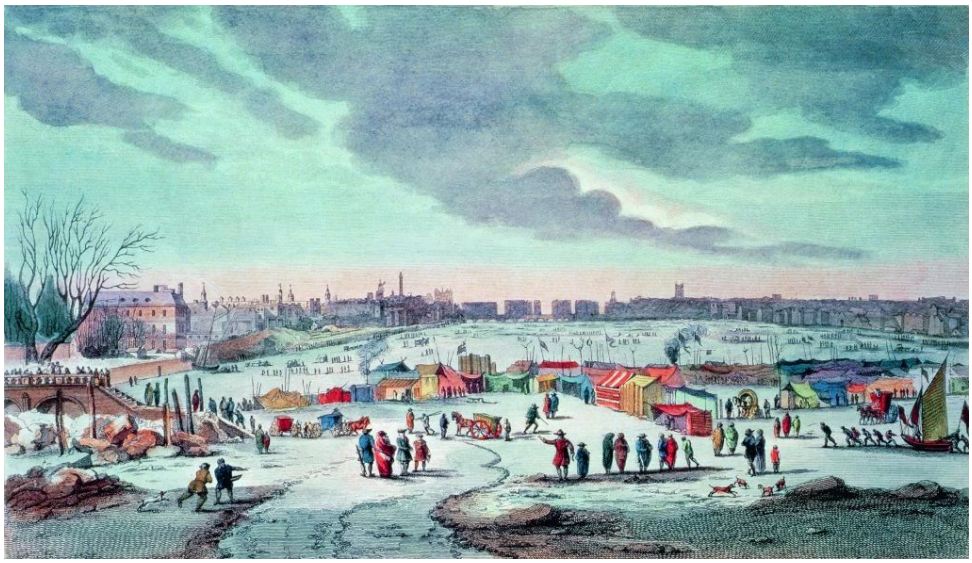
Every person can contribute to the fight against climate change by reducing their own carbon footprint. This includes adopting energy-efficient habits, reducing waste, and supporting climate action through consumer choices and advocacy.

Climate change is an urgent global challenge with far-reaching implications. The international community, led by the United Nations, has made significant strides in addressing the issue, as seen through the UNFCCC and the Paris Agreement. However, the work is far from over. All countries and sectors must collaborate to reduce greenhouse gas emissions, transition to renewable energy sources, and adapt to the impacts of climate change. By working together, we can mitigate the worst effects of climate change and create a more sustainable and resilient future for all.

Topic History:

Climate change stands as one of the most urgent and complex challenges confronting humanity today, a multifaceted issue encompassing scientific discoveries, human interventions, and policy responses. Its roots can be traced back to ancient civilizations, where early thinkers like the Greeks contemplated the Earth's climate variations. The philosopher Anaxagoras, in the 5th century BC, ventured to suggest that climate fluctuations might be linked to changes in the Sun's intensity, although these early musings leaned more towards philosophy than empirical science.

Skipping forward to the Middle Ages, anecdotal accounts of climate shifts emerged, notably the "Little Ice Age" from the 14th to the mid-19th century, when Europe endured harsh winters, famines, and even the freezing of London's Thames River.



The River Thames froze, strong winds devastated communities, and widespread famine claimed the lives of thousands of peasants. Brian Fagan recounts the climatic disasters that afflicted Britain during the 14th to 19th centuries, a period characterized by the chilling effects of the Little Ice Age.

The 19th century marked a significant shift toward a more systematic and scientific exploration of climate change. Eunice Newton Foote, an American scientist, conducted a groundbreaking experiment in 1856, revealing a connection between increased levels of carbon dioxide (CO2) in the atmosphere and elevated temperatures.

The true breakthrough in comprehending climate change came in the 20th century. In 1896, the Swedish scientist Svante Arrhenius proposed a groundbreaking theory. He posited that the burning of fossil fuels, such as coal, could escalate atmospheric CO2 levels, thus leading to global temperature increases. Arrhenius's work laid the foundation for the modern understanding of the greenhouse effect.

The 20th century witnessed substantial advances in climate science, with Charles David Keeling work at the Mauna Loa Observatory in Hawaii being pivotal. In 1958, he initiated continuous measurements of atmospheric CO2 levels, which unveiled a consistent and alarming rise in CO2 concentrations, providing compelling evidence of human-induced climate change.

By the 1980s, the world formally recognized climate change as a global concern. The United Nations established the Intergovernmental Panel on Climate Change (IPCC) in 1988, entrusted with the task of assessing scientific information on climate change, its impacts, and potential adaptation and mitigation strategies. The IPCC's assessments and reports have played a pivotal role in shaping international climate policy.

In 1992, world leaders converged at the Earth Summit in Rio de Janeiro and adopted the United Nations Framework Convention on Climate Change (UNFCCC). This milestone treaty marked the inception of global efforts to combat climate change and set the stage for subsequent climate negotiations, such as the Kyoto Protocol in 1997 and the Paris Agreement in 2015.

While the Kyoto Protocol, enforced in 2005, committed developed nations to curbing their greenhouse gas emissions, its effectiveness was compromised by the non-ratification by major emitters, notably the United States, and the failure of some nations to meet their targets. The Paris Agreement, adopted in 2015, represented a significant evolution in climate change policy. It was designed to encompass all nations, allowing each to establish its emissions reduction objectives. The primary goal is to limit global warming to well below 2 degrees Celsius above pre-industrial levels, with aspirations to limit it to 1.5 degrees Celsius.

One of the most notable reports on climate change impacts was issued by the IPCC in 2018. It warned that the world had a limited timeframe to enact substantial measures to curb global warming and avert catastrophic outcomes. This urgency has been a key catalyst for climate action.

The burning of fossil fuels, such as coal, oil, and natural gas, has been a central driver of climate change. The industrial revolution in the 18th century marked a pivotal moment as societies increasingly relied on these energy sources for power and transportation, releasing CO2 and other greenhouse gasses into the atmosphere, intensifying the greenhouse effect.

Mitigation and adaptation represent two crucial strategies to address climate change. Mitigation endeavors entail reducing greenhouse gas emissions, while adaptation focuses on lessening the impact of climate change on human and natural systems. These strategies often complement each other and are essential for confronting the issue. Mitigation involves transitioning to renewable energy sources, enhancing energy efficiency, and deploying carbon capture and storage technologies, as outlined in international agreements like the Paris Agreement.

Adaptation includes preparing for climate change impacts by building resilient infrastructure, implementing water management strategies, and developing disaster preparedness plans, measures that many local and national governments have undertaken to safeguard their communities.

Questions to Consider:

How can we ensure that global efforts to combat climate change are equitable, given the differing historical responsibilities and capabilities of nations?

Is the current approach to climate change negotiations, which relies on voluntary commitments and consensus-based agreements, effective in achieving meaningful global action?

Should wealthy nations be required to provide financial and technological assistance to developing countries to help them transition to more sustainable practices and adapt to climate change?

What is the role of international institutions and organizations, such as the United Nations and the Green Climate Fund, in coordinating and financing global climate action?

How can countries with significant fossil fuel reserves transition their economies while minimizing social and economic disruption?

Should there be stronger penalties or international sanctions for countries that fail to meet their climate commitments?

How can we address the issue of "carbon leakage," where emissions simply move from one country to another due to uneven regulations and carbon pricing?

What strategies are necessary to protect climate refugees and those displaced by climate-related events on a global scale?

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Questions to Consider:

Are global carbon markets an effective way to promote emissions reductions or do they create perverse incentives that undermine meaningful action?

What is the role of indigenous communities and traditional knowledge in global climate action, especially in preserving biodiversity and sustainable land management?

How can we encourage international collaboration on the research and development of clean energy technologies and climate-resilient infrastructure?

What mechanisms should be in place to ensure transparency and accountability in the reporting of emissions and climate actions at a global level?

Is the current international focus on limiting global warming to 1.5 degrees Celsius sufficient to prevent catastrophic consequences, or do we need to aim for even more ambitious targets?

How can the global community address the challenges of deforestation, which significantly contributes to carbon emissions and biodiversity loss?

Are there ethical considerations regarding the responsibilities of future generations and the need for intergenerational equity in climate action?

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Appendix & Sources

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