

Cerritos Fall Conference 2019

# UNEP 2

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Topic: Plastic Pollution

Director: Kelvin Wang

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October 12, 2019

To Delegates of Cerritos Novice 2019 Conference

Dear Delegates,  
Welcome to Cerritos Novice 2019!

It is our highest honor and pleasure to welcome you all to our annual novice conference here at Cerritos High School. On behalf of the Cerritos High School Model United Nations program, we are proud to host another year of this long-standing conference, where you will become more knowledgeable on international issues, participate in intellectually stimulating discussions, and create new and everlasting friendships.

The CHSMUN program continues to compete around the world as a nationally ranked MUN program. Our delegates utilize diplomacy in order to create complex solutions towards multilateral issues in the global community. Our head chairs are selected from only the best seniors of our program, undergoing a rigorous training process to ensure the highest quality of moderating and grading of debate. Furthermore, all the topic synopses have been reviewed and edited numerous times. We strongly believe that by providing each and every delegate with the necessary tools and understanding, he or she will have everything they need to thrive in all aspects of committee. We thoroughly encourage each delegate to engage in all of the facets of their topic, in order to grow in their skills as a delegate and develop a greater knowledge of the world around them.

Our advisors and staff have put in countless hours to ensure delegates have an amazing experience at the conference. Our greatest hope is that from attending CHSMUN 2019, students are encouraged to continue on in Model United Nations and nevertheless, inspired to spark change in their surrounding communities. With 31 high school committees and 2 middle school committees, CHSMUN 2019 will provide a quality experience for beginners to learn, develop, and grow as delegates.

If you have any questions, comments, or concerns, please contact us! We look forward to seeing you at CHSMUN Novice 2019!

Sincerely,

Brianna Roldan and Tess U-Vongcharoen

Secretary-Generals

# UNEP

## Plastic Pollution

### **A Note From the Director**

Delegates,

My name is Kelvin Wang and this will be my third year in MUN. I am now a senior at Cerritos High School and am very excited to chair this committee. I am currently participating in the school's Jesus club and have done track for two years. Outside of school I am part of the Boy Scouts and my church's youth group. During my free time I enjoy playing billiard, wasting time on YouTube, and hanging out with friends. Delegates, please feel free to experiment with new strategies and find out what works best for you during these conferences. Finding the most effective and efficient strategies for you is crucial in a competitive setting, so it is essential that you take this opportunity to learn and prepare for more advanced committees down the line.

Sincerely,

Kelvin Wang,

Director, UNEP

### **Committee Introduction:**

Created in 1972, The United Nations Environment Programme (UNEP) acts as the coordinating body for the United Nation's environmental activities. UNEP's main goal is "to provide leadership and encourage partnership in caring for the environment by inspiring, informing, and enabling nations and peoples to improve their quality of life without compromising that of future generations." Throughout the years, UNEP has played a vital role in developing international environmental conventions, promoting environmental science and information and illustrating the way those can be implemented in conjunction with policy, working on the development and implementation of policy with national governments and regional institutions in conjunction with environmental non-governmental organizations (NGOs). This committee especially stresses the urgent need to combat and mitigate the global plastic pollution crisis. The pressure to alleviate plastic pollution continues to increase as disrupted

ecosystems, land, water, and air pollution remain threats which calls for the attention of the international community.

## Background:

*Plastic* is a word that originally meant “pliable and easily shaped.” Large scale production of plastic occurred after World War II due to its lightweight, durable, airtight, decay resistant, inexpensive, and flexible characteristics. Global production of plastic has grown rapidly from 1.5 million tons in 1950 to 322 million tons in 2015, half of which is for single use. However, the proliferation of plastic detrimentally affected oceans, food and water supplies, and the well being of human and wildlife worldwide. If plastic production continues at its current rate, plastic pollution will outweigh fish pound for pound by 2050. Between 4.8 million and 12.7 million tonnes of debris end up in the world’s oceans every year which has ultimately resulted in five large plastic garbage patches in the Indian, Pacific, and Atlantic Oceans. The Great Pacific Garbage Patch, the largest accumulation zone of plastic in the world, measures 1.6 million kilometers and contains 1.8 trillion pieces of plastic. Wildlife such as fish, marine mammals, and seabirds are killed and injured by plastic pollution, and it is believed to leave 700 species extinct. Deaths are mainly caused by ingestion, starvation, suffocation, infection, drowning and entanglement. Currently, estimates suggest that at least 267 species worldwide have been affected, including 84% of sea turtle species, 44% of all seabird species and 43% of all marine mammal species. Toxins and chemicals in plastic ingested by fish and other marine life directly makes their way to the food chain, ultimately affecting humans. Scientists have found microplastics in 114 aquatic species, and more than half are consumed by humans. Plastic pollution has also impacted water supplies. Recent studies into water contamination have found microplastics in 83% of tap water samples from major cities around the world and in 93% of samples from the world’s top 11 bottled water brands. Moreover, plastic waste also has its effect on air quality. 79% of plastics end up in landfills or the environment, and if present trends continue, 12 billion metric tons of plastic will end up in landfills. When plastic is burned in landfills, dangerous substances and toxins are released, polluting the air. Such pollutants lead to respiratory problems and health issues such as asthma and cancer.

## United Nations Involvement:

The United Nations has taken many measures in an effort to alleviate global plastic pollution. In 2018 at the Economist Ocean Summit in Bali, UN Environment launched a global campaign to eliminate major sources of marine litter: microplastics in cosmetics and the excessive, wasteful usage of single-use plastic by the year 2022. The CleanSeas campaign urges governments to pass plastic reduction policies with the goal of targeting major industries to minimize plastic usage for

packaging, and challenging citizens to change their throwaway habits. So far, ten countries have joined the campaign and have announced their measures to solve the issue. Indonesia has committed to slash its marine litter by a massive 70 per cent by 2025; Uruguay will tax single-use plastic bags later this year and Costa Rica will take measures to dramatically reduce single-use plastic through better waste management and education.

The United Nations Environment Programme (UNEP) has estimated that 51 million microplastic particles are littered throughout the seas. Such realities pose significantly detrimental effects on the structure of aquatic ecosystems and jeopardize the livelihoods of marine life. Furthermore, the UN Sustainable Development Goals demonstrate the array of progressive aspirations intended to be achieved by 2030. Goal 14 focuses on “Life Below Water”, ultimately aiming to avoid the use of plastic bags and conserve the natural quality of the ocean, seas, and marine resources. Goal 14 includes a plan of action to decrease and avert marine pollution from land-based activities such as nutrient contamination and debris by 2025. In addition, Sustainable Goal 12 addresses the responsible production and consumption that aims to reduce the plastic pollution that currently deteriorates marine life, urging individuals to reduce, reuse, and recycle materials such as plastics, paper, and glass.

Plastics are created with similar ingredients as fossil fuels including natural gas, releasing large amounts of toxic emissions during plastic production processes. Furthermore, plastic manufacturing accounts for nearly 8% of international oil created by gas industries and companies; thus, the Environmental Protection Agency (EPA) has gathered annual oil production statistics and estimates that 5 ounces of carbon dioxide are released into the atmosphere for every ounce of polyethylene produced (a form of plastic commonly used in plastic bottles). As a result of such environmental risks, the UN has taken action to alleviate climate change concerns by introducing Sustainable Development Goal 13. Sustainable Development Goal 13 promotes the creation of low carbon economies to enable countries to leapfrog to cleaner, more resilient economies.

## Bloc Positions:

**Western Bloc:** Plastic pollution is a global problem that has increased drastically within recent decades. Well developed infrastructure in developed countries in this bloc allow for better measures to curb plastic waste compared to developing nations. Although countries in this region do not play a large part in plastic pollution compared to Asian or African countries, species endangerment along other causes pose as the greatest threat to the nations. Daily per capita plastic waste across the highest countries such as Germany, Netherlands, Ireland, the United States is more than ten times higher than across many countries such as India, Tanzania, Mozambique and Bangladesh. Countries have taken preventive measures such as passing restrictive legislation to help alleviate plastic pollution. The US Congress passed a bill in 2006

called the The Marine Debris Research, Prevention, and Reduction Act, to create a program to address the marine debris pollution.

**Latin America and Caribbean Bloc:** Latin America and the Caribbean are home to 16 million square kilometers of oceans and the source of 24 percent of the world's fisheries. Numerous countries in the region are making progress in devising policies and campaigns to tackle the plastic pollution that threatens their marine ecosystems and citizens. Antigua and Barbuda was the first country in the Latin American region to ban plastic bags in 2016. Similarly, Colombia adopted regulation and imposed a tax on large plastic bags. This measure is expected to reduce their use of plastic by 35%. Moreover, Costa Rica adopted a strategy to drastically reduce the use of plastics by 2021 and Panama has banned polyethylene bags. Likewise, Belize and Bahamas have implemented strategies to cut back plastic use and are promoting conservation methods for the Caribbean Sea, which is the 2<sup>nd</sup> most polluted with plastics. Additionally, Ecuador is transforming the remote Galapagos islands into a plastic-free archipelago by banning the use and sale of plastic products such as straws, bags, and bottles. Fifteen Latin American and Caribbean countries are now active participants in the United Nations Clean Seas campaign.

**African Bloc:** The ongoing global movement for eliminating plastics is gaining momentum in Africa. Several countries are now taking steps to reduce the production and distribution of single-use plastics, some adopting a total ban on the production and use of plastic bags. Cameroon, Egypt, Eritrea, Ghana, Kenya, Mauritania, Morocco, Nigeria, Rwanda, South Africa and Tanzania have taken the lead, others, like Botswana and Ethiopia, are following suit. The Clean Seas campaign has further mobilized African governments to remain proactive in combating plastic pollution. In June 2018, countries such as Benin, Cote D'Ivoire and Nigeria signed the pledge to eliminate plastic waste from their water ecosystems. Furthermore, partnerships with governments, private sector companies and the general public are key to eliminate plastic pollution. In Kenya, UN Environment has partnered with Safaricom and the National Environment Management Agency to establish an end-to-end plastic waste management programme. The partnership will see the creation of a working group that brings together stakeholders, mostly manufacturers, waste collectors and plastic waste recyclers, to formulate a comprehensive solution to hard plastic waste.

**Asian Pacific Bloc:** According to Ocean Conservancy, China, Indonesia, Philippines, Thailand, and Vietnam dump more plastic into oceans than the rest of the world combined. To eliminate plastic pollution, Indonesia has pledged up to US\$1 billion a year to dramatically reduce the amount of plastic products polluting its waters. In 2016, a tax on single-use plastic bags was trialed in 23 cities across the country. The country launched a nationwide campaign to cut back on the use of plastic bags, with guidelines for retailers to charge consumers up to IDR5,000 (US\$0.37) for each plastic bag used. Similarly, the Cambodian government is also looking to

ban the production, import, and distribution of the plastic bags that are thinner than 0.03mm and less than 30cm in width. Cambodia plans to reduce the usage of plastic bags by 50 percent by 2019. Bangladesh was the first country in the world to impose a ban on plastic. In 2002, Bangladesh banned thin plastic bags after they were found to have obstructed the country's drainage system during devastating floods.

## Basic Solutions:

There are many solutions that can help towards the issue of plastic pollution seeing that this topic is multifaceted. One of many solutions that can alleviate plastic pollution is to use alternatives in place of traditional plastics. On average, it takes plastics bags 10-1000 years to decompose, while plastic bottles can take 450 years or more. When introduced to the ocean, plastic can pose as a detrimental factor in harming wildlife species. Biodegradable plastics (BDPs) break down in the environment into naturally occurring components, not just smaller pieces of themselves. The most versatile base material is starch, produced by plants. These are organic alternatives that can be used to replace harmful, traditional plastics seeing that they are biodegradable and pose little to no harmful risks to the natural environment.

When developing solutions delegates should also recognize the advantages of alternatives such as government bodies and organizations working in the private sector. Each alternative provides different strengths, so the economic status, policy, and history of plastic pollution in your country should be considered before presenting a solution in committee. In general, a delegate should prepare solutions that touch upon topics including (but not limited to) volunteer programs, educational campaigns, advertisements, methods to accumulate funding for research and development towards environmentally friendly alternatives. Furthermore, actions focused on equipping countries with environmentally friendly alternatives, promoting government legislation regarding disposal methods, working with companies involved in plastic products or disposal, pushing for reform in unsustainable waste management practices, developing frameworks, and providing incentives to encourage international participation should be proposed. Delegates should also pay attention to microplastics, which include the development and regulation of products contain microbeads. These pieces of polyethylene plastics are extremely difficult to filter out or break down, causing them to be especially harmful to the environment.

Non governmental organizations (NGOs) operate independently of any government to address a social or political issue. Specifically for the issue of plastic pollution, NGOs are used to address and alleviate different areas of the larger problem. The goals of NGOs can tackle plastic pollution in various ways from nationwide cleanups all the way to collaborating with international governments to create legislation to tackle plastic pollution. It's important to keep in mind that NGOs should not be used as an end all be all solution to the issue. Instead, they

should be used in conjunction with other solutions. Other solutions besides NGOs that can be used are implementing policies or legislation from countries that have been successful in the fight against plastic pollution within your own country.

One example of an NGO that addresses plastic pollution is the Ocean Cleanup. The Ocean Cleanup has deployed the world's first technological solution to cleanup the entire Pacific garbage Patch, the largest garbage patch in the world. The system consists of a 600-meter-long floater that sits at the surface of the water and a tapered 3-meter-deep skirt connected below. The floater provides buoyancy to the system and prevents plastic from flowing over it, whereas the skirt stops plastic from escaping underneath. With the system taking advantage of natural forces such as winds, waves, and currents to capture debris. The system drifts to the areas with the highest plastic concentration. Built with solar powered lights, cameras, anti collision systems, sensors, and satellite antennas, the system actively communicates its position at all times to collect performance data. Support vessels remove the collected plastics where they are then recycled to make into durable products. The system is estimated to collect 11,000 pounds of plastic a month, ultimately cleaning up 50% of the Great Garbage Patch in five years, and removing 90% of ocean plastic by 2040 .

## Questions to Consider:

1. In what ways can nations take preventative measures to reduce general plastic production to mitigate pollution?
2. What can be done by your nation to restore the balance of marine life, seeing that plastic pollution has negatively impacted such ecosystems?
3. How can developing nations reduce their dependence on plastic products when they are the most affordable economic option?
4. What kinds of eco-friendly infrastructure and/or alternatives can help to end plastic pollution within your own unique country and economy?
5. How can the global community end the political and controversial opinions surrounding environmental data? (Ex: Global Warming)

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