**United Nations Environment Assembly**

**President's Letter**

Hello delegates and welcome to the St. Bonaventure University Model UN conference! We're excited to have you participate in the United Nations Environment Assembly. My name is Haylei, and my co-chair is Ian. We'll be guiding you throughout the conference, but the real responsibilities are up to you. These responsibilities include completing thorough research on your assigned countries, the included topics, and related current events. Here are our main expectations of each delegate:

**1**. Knowledge of procedure is critical for committee to run smoothly. You will be expected to know the basic Rules of Procedure.

**2**. Knowledge of policy makes the committee more enjoyable for everyone. Look into the past and present news and history of your countries, and look at how they are reacting to events on the world stage. Know basic principles of your country's policies, especially regarding the issues we will be discussing in the committee.

**3**. Diplomacy and courtesy are not only helpful but necessary. Treat other delegates with courtesy and respect, and it will be noticed. This also means arriving in a timely and prepared manner.

Above all, we want you to have fun, participate, and collaborate with other delegates!

## The Topics:

1. **Sustainable and Clean Energy:**

Unsustainable patterns of energy production and consumption threaten not only human health and quality of life but also our ecosystem itself and contribute to climate change. Sustainable energy can be an engine for poverty reduction, social progress, equity, enhanced resilience, economic growth, and environmental sustainability. There are grave international consequences if the world does not begin to move away from fossil fuels and increase its use of alternative energies. The greatest threat that fossil fuels pose is to the environment. Global warming is an important issue that cannot be ignored. If something is not done to slow and stop the greenhouse emissions, we shall see an increase in unusual and strong weather patterns such as hurricanes and droughts, the spread of disease, the rising of sea levels, an increase in temperature, and the depletion of natural resources. This is an issue that affects the entire world and can prove very dangerous if something is not done by the international community to address it and makes strides toward solving the issue.

*Guiding Questions*

1. What incentives can we use to promote the use of renewable energy?
2. How can we best implement these forms of renewable energy?
3. How can we make renewable energy more affordable and practical?
4. What is the timeline for when member states should begin the switch from fossil fuels to renewable energy?
5. What are the international agreements in place?
6. Do we need other agreements? Is this doable in the current circumstances?

*Research Sources*

- UNEP Activities in Energy
- United Nations Framework Convention on Climate Change
- The State of Sustainable Development

**2. Reducing emissions from deforestation and forest degradation:**

Deforestation is defined as the cutting, clearing, and removal of the Earth's forests on a large scale. According to estimates by the Food and Agriculture Organization in 2010, forests cover about 31% of the Earth's total land surface. More than 60% of these forests are located in seven countries: Russia, Brazil, Canada, the United States, China, Indonesia, and the Republic of Congo. In the 1990s, the world's forests disappeared at a rate of 16 million hectares per year. From 2000 to 2010, this rate dropped to 13 million hectares per year. The global rate of deforestation has since continued to decrease because of national and international efforts to conserve and protect land covered by forests. However, as net annual forestry losses continue year after year, it has become increasingly apparent that the issue of forest sustainability requires the attention of the international community.

The causes of deforestation can be summarized into two main categories: natural causes and human activity. Natural causes of deforestation include wildfires and overgrazing. Human causes of deforestation include logging, mining, urbanization, and mass agricultural expansion. In many rural areas, forests help provide a source of income for people who are able to sell timber for profit, but these trees are often not replanted. Forests can also be used for their valuable minerals; for example, the Amazon Rainforest

contains copper, iron ore, and gold. In addition to the resources that can be extracted from forests, the physical land itself has value. When combined with government corruption and disparities in wealth, urbanization results in the conversion of forest land. For example, in Brazil, where land ownership is dominated by a wealthy elite class, landless members of the lower class who struggle to find work in the cities may choose move to forested areas and clear the land. While this alleviates economic instability and prevents political tension from escalating into conflict, the cost has not come without considerable damage to the Amazon Rainforest. Finally, the clearing of land for agricultural purposes is the most prevalent reason for deforestation.

Deforestation trends have varied in different regions across the world. Over the past decade, deforestation has had the largest impact on tropical regions, especially for nations in South America and Africa. Europe has continued losing forestry, though the rate has been slower than that of previous years, while the total forest area has remained constant in North and Central America. Asia has had a net increase in forestry, due in large part to China, Vietnam, and Indonesia. These nations have developed afforestation programs, in which trees are planted on land that is not covered by forests (as opposed to reforestation, which is the replanting of trees on land that had once been covered by forests).

The consequences of deforestation not only affect humans, but also signal shrinking biodiversity for the world around us. Forests are “carbon sinks” that absorb carbon dioxide from the atmosphere. When trees are cut down, massive amounts of carbon dioxide are released into the air. It is estimated that forest loss is responsible for 12 to 17% of annual global greenhouse gas emissions. Deforestation also results in soil erosion and the destruction of animal habitats.

*Guiding Questions*

- How can the UN work with existing international organizations to mitigate negative environmental effects of deforestation?
- How can the UN ensure the success of forest-conservation efforts while balancing financial dependencies on forest products?
- Should there be any punishments against nations that don't comply?
- Do you have any specific policy proposals to deal with this issue?

*Research Sources*

- *National Geographic* overview of deforestation: http://environment.nationalgeographic.com/environment/global-warming/deforestation-overview/
- The United Nations Forum on Forests: http://www.un.org/esa/forests/
- UN-REDD: http://www.un-redd.org/

**3. Ocean Pollution:**

The ocean is arguably the world's greatest resource. Today, nearly 44% of the world lives in coastal regions. The ocean is responsible for 90% of global transportation; it is an international highway that carries cargo ships from Beijing to Sydney to San Francisco. The bounty of the oceans provides livelihoods for nearly 200 million fishermen around the world, and is responsible for feeding more than one billion people.

Ecologically, the ocean harbors the greatest biodiversity of any habitat in the world. To date, hundreds of thousands of unique species have been discovered in the ocean; however,

scientists predict that millions more species exist near the dark recesses of the ocean floor and are just waiting to be found.

The ocean covers 71% of the Earth's surface and contains 97% of its water. Of that, nearly 1% is potable and 2- 3% is locked up in polar ice caps. As a result of global warming, these ice caps are gradually melting, causing the ocean to cover a greater amount of the Earth's surface, among other climate changes.

The ocean, like all resources, must be protected. In the past sixty years, the amount of garbage that ends up in the ocean has skyrocketed. Today, nearly 80% of marine pollution originates from land. Oil pollution, garbage and sewage, and chemical run off are just a few examples of ocean pollution:

- Oil spills are one of the biggest sources of ocean pollution. In 2010, the Deepwater Horizon spilled 4.9M barrels of crude oil into the Gulf of Mexico. The spill area affected 8,332 species and killed 11 people. Although oil spills are devastating in the severity of their impact on the environment, they only account for roughly 12% of oil in the sea. Most of the oil pollutants in the ocean result from land-based run off, such as production plants, leaking septic tanks, or even oil dispersed into the air from car exhaust.
- Plastic is another major marine pollutant. Nearly 90% of all trash floating on the ocean's surface is plastic-based. The origin of this debris is legion; plastic bags from landfills, plastic cans that enter storm drains, even rubbish left on the beach can get washed into the ocean and exacerbate the problem. Many animals mistake these floating pieces of garbage for food, resulting the deaths of over 100 000 marine mammals and one million seabirds annually.

- Chemical pollutants are a growing source of pollution and concern in ocean. One major source of chemical pollution stems from pesticides. Most farmers utilize more pesticides than their farms can absorb; excess pesticide is washed out by rain and eventually ends up in the ocean, which can cause algae to proliferate. These explosive algae populations, called algae blooms, rob their oceanic environment of oxygen, creating uninhabitable zones, or dead zones, for marine organisms. To date, more than 400 dead zones exist as a result of pesticide run off.

The ocean is an incredible resource. It provides, among other things, water, living space, jobs, transportation, food, and warmth. However, like all resources, it is finite. And if humanity continues to treat the ocean as an endless landfill, it can only suffer the consequences that it cannot begin to foresee. For example, marine pollution has tremendous effects on biodiversity, which in turn threatens the availability of the greatest source of animal protein in the world. Marine pollution also has an effect on global warming. A warmer climate causes the polar ice caps to melt and the sea level to rise, which in turn can lead to erosion, higher water levels, and less arable land.

*Guiding Questions*

- Is the ocean important to your country? Do people in your country rely on the ocean for food or jobs?
- How is your country impacted by ocean pollution? Has your country had to deal with an ocean disaster,

  such as an oil spill?

- Does your country believe that protecting the ocean should be part of the Sustainable Development Goals?

  *Research Sources*

  • USA's Marine Protected Areas http://oceanservice.noaa.gov/ecosystems/mpa/

**Additional Topic:**

Promotion of Smart Agriculture