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UNITED NATIONS ENVIRONMENT PROGRAMME

Dear delegates,

on behalf of the United Nations Environment Programme, it is my pleasure to welcome you to the 2019 edition of Foscamun.

My name is Lorenzo Magnifichi, and I will be your President. I will be assisted by Martina Brusò, our Moderator, and Giulia Pegan, our Vice-President.

In this committee, and in the duration of Foscamun, we will analyze and discuss two complex issues that, given the current levels of worldwide pollution, affect us and the environment every day. These two topics will be:

A. Reducing the negative effects of Light Pollution

B. Coordinating Remediation for Pollution in Cross-Border Waters

The United Nations Environment Programme plays a key role within the United Nations, as it is its leading environmental authority. Thanks to UNEP, every year sustainable development policies within the United Nations system are proposed and promoted.

UNEP work covers:

- the assessment of global, regional and national environmental conditions and trends
- the development of international and national environmental instruments
- the strengthening of institutions for a wise management of the environments

UNEP's mission is to encourage partnership by inspiring, informing and enabling nations and people to improve their quality of life without compromising that of future generations.

The Chair has high hopes that this year, the delegates will be able to reach common agreements on the pressing issues that we will discuss, to provide betterment for the international community.

Sincerely, the United Nations Environment Programme's Chair

Topic A: Reducing the Negative Effects of Light Pollution

Brief Introduction

Light Pollution is a phenomenon caused by poor lighting design and is increasing globally. Scientists have only recently begun to fully understand how light pollution affects humans and the environment. Light pollution is a problem with planetary consequences. Unlike other forms of environmental contamination, this phenomenon has serious adverse impacts on wildlife, economies and human health. Light pollution is a basic concept, but many humans remain unaware of how it occurs.

In the natural world, light is emanated from a limited number of sources, such as the sun and moon. Furthermore, these sources interval darkness and light, shining only for limited times. The modern developed world is markedly different. While man-made illumination is undeniably useful, humans aren't always careful about where and how they use light. All forms of light pollution, or photo-pollution, involve artificial illumination; however, they aren't all the same:

- **Over-illumination** occurs when people use lighting in excess, such as in big-box stores, offices and other commercial settings.
- **Light clutter** involves poor spacing or unbalanced groupings of individual lights, like those along certain highways, where they may cause air traffic hazards or increase the risk of vehicle accidents.
- **Glare** is the potentially blinding light that emanates from devices that aren't positioned or angled correctly, such as a neighbor's floodlights shining into someone else's home at night.
- **Light trespass** takes place when properties are lit inaccurately so that direct illumination goes beyond their boundaries to cause a nuisance to the neighbors.
- **Skyglow** is a phenomenon observed in over-populated areas at nighttime. The night skies of most cities aren't as dark as they should be.

Although bright city lights may have once been a local problem, photo-pollution has recently become a worldwide issue. Indeed, one study reported by the BBC in 2016 revealed that 83% of the world's population lives in an area where the sky is at least 10% brighter than it would normally be without human lighting.

History of the Issue

For a comprehensive understanding of light pollution, contemporary discourse must be coupled with an exploration of the origins and emergence of the concept, which in turn requires a broad understanding of the development of urban night-time lighting. Public lighting in the modern sense only emerged in the mid-1600s. This was a time of societal changes in Europe that allowed for lighting technologies and associated urban behaviors to

rapidly develop. In considering the origins of public night-time lighting in the 17th and 18th centuries, two important points should be noted. The first is that, despite technical improvements to oil lamps, lighting was still poor and city streets were mostly dark; only major avenues were lit, and often only on the darkest nights of winter for a few hours. Second, darkness still represented a time both sacred and dangerous for many. In certain places, it remained custom to stay home, except for special occasions, and devote evenings to prayer and rest. Gaslight (introduced in the early 1800s) was followed by the invention of electric lighting in the latter half of the 19th century, the most profound technological development in lighting and one of the most important developments of modern infrastructure. Figuratively, electric lighting became symbolic of modern progress. Aided by various technical advances, for example, floodlights, electric lighting quickly became a ‘sophisticated cultural apparatus’ that could be used for advertising, commemorating history, expressing civic pride, highlighting monuments, etc. Any lack of urban night-time illumination rapidly decreased as electrification spread across North America and Europe during the 20th century, developing alongside urbanization and the growth of transportation networks and has become widely recognized as guaranteeing greater safety and security to citizens. Although light pollution is a major problem, the situation may not be as bleak as some of the other challenges of modern life. As the scientific community continues research into the phenomenon and the general public gains awareness of how it works, more consumers, businesses and lighting producers are taking steps to use and produce lights more responsibly.

Measures

- **Reduce the use of decorative lighting:** The use of decorative lighting during festive seasons should thus be lessened to reduce the brightening of the skies.
- **Use of covered bulbs that light facing downwards:** For street lights – streets and highways lighting must be properly designed such that too much light is not reflected into the sky.
- **Minimizing the use of lights:** Switching off unnecessary lights can hugely help in reducing light pollution. This is the cheapest, easiest and most effective method of dealing with the problem.
- **The use of automatic systems to turn off street light at certain times:** when the moon shines bright, there is no need for street lighting. Automated timers and systems can be used to turn off street and highway lights when they are not needed to encourage natural lighting.
- **Make information and data about light pollution available:** Having the knowledge about the sources and effects of light pollution can significantly aid in dealing with the problem.
- **The development and advancement of better lighting devices for cruise ships, lighthouses and vessels:** In the marine world, lighthouses are used for navigation purposes for boats, cruises and ships. The drawback is that the lighthouses emit very

powerful lights that cause light pollution in the marine world, directly affecting the habitats of aquatic species.

Guiding Questions

- Has your country experienced issues related to light pollution?
- How is your country affected by this topic?
- Has your country adopted any policy regarding light pollution?
- Are there solutions or resolutions that can be taken in order to prevent the spread of light pollution?

Sources

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Topic B: Pollution of transboundary waters: coordinating remediation

Brief Introduction

Cross-border or transboundary pollution is the pollution that originates in one country but is able to cause damage in another country's environment, by spreading across borders through pathways like water or air. The state of marine and aquatic environments has steadily worsened, leading to well-known environmental disasters such as the impending death of the Great Barrier Reef, the decimation of global fish stocks and the choking of seas and marine life with plastic waste.

The aquatic environment provides a basic resource for all kinds of ecosystems and human activities. Therefore, the sustainable use of such a vital resource is predominant. There is a need to prevent, control and reduce the pollution of waters, including transboundary waters, to ensure that water resources are used with the aim of ensuring integrated and sustainable management, in a reasonable and equitable way, as well as of protecting or restoring aquatic ecosystems at the local, national and transboundary levels.

Many world leaders have realized that the survival of the societies and economies of their countries is at stake and cooperative actions need to be pursued. International assistance has also been mobilized where national attempts to organize bilateral or multilateral cooperation or collaboration have been ineffective.

History of the Issue

With an increasing number of pollution cases in the last decade, there has been a corresponding increase in the concern for remedies to transboundary pollution. One of the earliest conventions on this subject was the 1909 Agreement between the United States and Great Britain with respect to boundary waters between the USA and Canada. The United States and Canada have one of the world's oldest and most effective environmental partnerships. The U.S. - Canada border includes four of the five Great Lakes, as well as many rivers and lakes. During the 50s countries started to adopt many international norms concerning environmental pollution in the water sector. One of these treaties and norms is the International Convention for the Prevention of the Pollution of the Sea by Oil (1954, London). This convention recognised that most oil pollution resulted from routine shipboard operations such as the cleaning of cargo tanks. OILPOL 54 prohibited the removal of oily wastes within a certain distance from land and in "special areas" where the danger to the environment was acute. As a result of environmental catastrophes that took place from the early 70s to our days, several commissions were set up in order to provide an institutional plan for the growing importance of the protection of territorial waters and international

conventions responding to the growing concern within the international community about the use of chemicals and hazardous materials in transboundary waters. International Summits and Conferences helped to strengthen cooperation among States, public and private bodies but declarations and principles which are agreed upon and generally accepted and referred to in other international legal instruments are not legally binding and much still needs to be done. Several international organizations such as the Council of Europe, the African Union and the United Nations have started to play a more active role in protecting the environment, indicating that there is a will to deal with and regulate this area multilaterally.

Measures

- States need to prevent, control and reduce transboundary impact by developing, implementing and, as far as possible, harmonizing relevant legal, administrative, economic, financial and technical measures, in order to ensure that:
- The emission of pollutants is prevented, controlled and reduced at source through the application of low- and non-waste technology;
- Transboundary waters are protected against pollution from point sources and that the authorized discharges are monitored and controlled;
- Limits for waste-water discharges stated in permits are based on the best available technology for discharges of hazardous substances;
- Stricter requirements are imposed when the quality of the receiving water or the ecosystem so requires;
- Minimum biological treatment or equivalent processes are applied to wastewater;
- Appropriate measures are taken in order to reduce inputs from industrial and municipal sources;
- Appropriate measures and best environmental practices are developed and implemented for the reduction of hazardous substances from diffuse sources, especially where the main sources are from agriculture;
- Environmental impact assessment and other means of assessment are applied;
- Sustainable water-resources management, including the application of the ecosystems approach, is promoted;
- Contingency planning is developed;
- Additional specific measures are taken to prevent the pollution of groundwaters.

Guiding Questions

- Has your country experienced issues related to this phenomenon?
- Has your country implemented any of the measures listed above?
- If not, what kind of actions are needed?
- Has your country ratified all International Conventions on transborder water pollution?

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