

STUDY GUIDE



ROTARACT MORA
MUN

SLRMUN 24



UNEP

**UNITED NATIONS
ENVIRONMENT PROGRAMME**

SLRMUN 2024

UNEP - Study Guide

Committee Background

An organization under the UN that works on environmental protection is the United Nations Environment Programme. It accomplishes this through funding and implementing research programs, which enable it to provide the UN, other bodies, and nations with information and assessments on the global environment in order to facilitate more comprehensive laws, regulations, and decisions. It also promotes sustainable and environmentally friendly development and helps its 193 member states combat pollution, climate change, and the loss of nature and biodiversity. The UN Conference on the Human Environment established the United Nations Environment Programme in 1972. In addition, UNEP oversees and mediates multilateral environmental agreements.

Governments, non-governmental organizations (NGOs), and other interested parties work together at UNEP to develop policies and programs that tackle issues like pollution, climate change, biodiversity loss, and sustainable resource management. The organization also helps communities and countries implement and adhere to environmental laws and regulations by offering technical assistance and capacity building.

Mandate

UNEP's structure includes eight divisions:

1. The Science Division's mission is to supply reliable scientific environmental assessments and data for sustainable development. It tries to give an early warning of new environmental threats, evaluates policies, and reports on the condition of the environment worldwide. It is in charge of keeping an eye on the environment and reporting on it in relation to the Sustainable Development Goals and the 2030 Agenda.
2. The UNEP's policy and program are created by the Policy and Program Division. The coordination of other divisions is guaranteed by this division.
3. The division for ecosystems aids nations in maintaining, repairing, and managing their ecosystems. It talks about how conflicts and disasters have an impact on the environment. It assists nations in lessening the pollution caused by land-based activities, strengthening their resistance to climate change, and including environmental considerations into their development strategies.
4. The Economy Division supports major corporations' efforts to reduce their environmental impact. Chemicals and Health, Energy and Climate, and Resources and Markets are its three primary branches.

5. The Governance Affairs Office encourages the use of UNEP's work by member states and other pertinent entities. The office oversees the meetings of the Committee of Permanent Representatives, a subsidiary body of UNEP, and the United Nations Environment Assembly, which is the organization's governing body. It contributes to enhancing the Assembly's prominence, legitimacy, and influence as a leading voice on environmental issues.
6. The Law Division helps to develop environmental law. Works with countries to combat environmental crime and meet international environmental commitments. The law division seeks to enhance global legislators' collaboration in crafting environmental legislation.
7. UNEP's communication division creates and distributes its messages. It distributes them via traditional and digital media channels to both individuals and governments.
8. UNEP's corporate interests, including management and financial risk exposure, are handled by the Corporate Services Division.

UNEP's specific goals are as follows:

1. Encourage the responsible use and management of natural resources such as water, forests, and marine and terrestrial ecosystems.
2. Promote the development of renewable and clean energy sources to minimize greenhouse gas emissions and mitigate climate change.
3. To safeguard human health and the environment, address the issue of hazardous and toxic substances, including chemicals, and waste management.
4. Encourage sustainable consumption and production habits to limit the environmental effect of human activities.
5. Increase awareness of environmental challenges and the necessity of sustainable development among governments, organizations, and individuals.

Ultimately, UNEP's objective is to promote sustainable development and environmental stewardship to conserve the Earth's natural resources and ecosystems for future generations.

Agenda: “Accelerating the transition to Net-Zero through innovative scientific solutions aimed at achieving sustainable energy practices and substantial reduction in emissions”

Topic Background

The term "net zero" describes the idea of removing or offsetting the same quantity of greenhouse gases as they are released into the atmosphere so that there is never a net increase in the concentration of greenhouse gases overall. One of the most important approaches to combating climate change and lessening its effects is to achieve net-zero emissions.

Governments, corporations, and individuals must all drastically cut their greenhouse gas emissions in order to achieve net-zero emissions. Some strategies to do this include switching to renewable energy sources, adopting cleaner technologies, and putting sustainable policies in place. Reforestation or the purchase of carbon capture and storage technologies are two examples of actions that remove an equivalent quantity of greenhouse gases from the atmosphere and can be used to offset any leftover emissions that cannot be eradicated.

The idea of net zero is frequently linked to the overarching objective, as stated in international climate agreements such as the Paris Agreement, of keeping global warming well below 2 degrees Celsius above pre-industrial levels. Setting net-zero targets is a common practice among nations, businesses, and organizations working to combat climate change and advance environmental sustainability.

It takes a multifaceted strategy that includes creative scientific answers, frameworks for legislation, and broad acceptance of sustainable practices to accelerate the shift to net zero. The following are some major areas in which significant reductions in emissions and the implementation of sustainable energy practices can be made possible by scientific advances:

1. Technology for Renewable Energy:

Advanced Solar Technologies: Further investigation into more affordable and effective solar panels, along with advances in materials science, can greatly increase the feasibility of solar energy.

Energy Storage: By addressing the intermittent nature of renewable energy sources and facilitating their wider integration into the grid, advances in energy storage technology, such as high-capacity batteries and sophisticated energy storage systems, can be made possible.

2. Carbon Storage and Capture (CCS):

Innovative Capture Technologies: By lowering prices and increasing efficiency, new developments in carbon capture technology can make carbon capture and storage (CCS) a more attractive option for widespread use in high-emission industries like manufacturing and power plants.

Methods of Removing Carbon: Studies on direct air capture and other methods of removing carbon can offer more resources to counteract emissions that are difficult to completely eradicate.

3. Transportation Electrification:

Battery Technology: As EV batteries continue to advance, more people will be able to afford and enjoy electric vehicles (EVs) due to their increased range, quicker charging periods, and increased appeal.

Infrastructure for EV Charging: The broad adoption of electric vehicles depends on the development of an effective and extensive infrastructure for EV charging.

The above-listed methods are but a sample of the wide range of tactics available to us to accelerate the process of reaching net-zero goals. This significant shift is being accelerated by a diversity of creative initiatives, which together form a wide landscape of possibilities.

4. Energy Management and Intelligent Grids:

Grid Modernization: By combining advanced analytics, machine learning, and smart grid technology, the power grid's total efficiency can be increased while also optimizing the distribution of energy and lowering transmission losses.

Encouragement of creative approaches to demand-side management can help balance the supply and demand for energy, lowering the need for extra power generation during peak hours.

5. Innovative Materials and Eco-Friendly Methods:

Green building technologies: The creation of environmentally friendly and energy-efficient building materials, along with creative design techniques, can drastically lower the amount of energy used throughout the building and maintenance processes.

Using a Circular Economy: By putting circular economy ideas into practice, industries may cut down on waste, encourage recycling, and lessen the negative effects of manufacturing on the environment.

A few conventions and treaties to keep in mind:

1. **The Paris agreement:** A global agreement known as the Paris Agreement seeks to keep global warming far below 2 degrees Celsius over pre-industrial levels, with a goal of 1.5 degrees. Through financial assistance, technological transfer, and recurring international evaluations, nations pledge to cut their greenhouse gas emissions, submit plans (known as Nationally Determined Contributions), and collaborate to combat climate change.

2. **2018's International Maritime Organization (IMO) Initial Greenhouse Gas (GHG) Strategy:** The United Nations specialized organization in charge of shipping regulation, the International Maritime Organization (IMO), approved an Initial Greenhouse Gas (GHG) Strategy. The plan seeks to minimize the overall yearly greenhouse gas emissions from international shipping while accelerating efforts to phase them out.
3. **United Nations 2030 Agenda for Sustainable Development:** While not a treaty specifically focused on net-zero emissions, the 2030 Agenda for Sustainable Development includes Sustainable Development Goal (SDG) 13, which emphasizes climate action. Various aspects of the agenda, such as clean energy (SDG 7) and sustainable cities (SDG 11), contribute to broader climate-related objectives.

Talking Points

1. Emphasize the serious repercussions of failing to achieve net-zero emissions and the pressing need to combat climate change. Stress that there is not much time left to mitigate the worst effects of climate change.
2. Discuss about how cutting-edge technology is helping to develop renewable energy sources including geothermal, wind, and solar energy. Draw attention to developments in energy storage technology, which are essential to sustaining a steady and dependable power supply from sporadic renewable sources.
3. Demonstrate how AI may be used to improve energy efficiency, forecast energy consumption, and optimize energy systems.
4. Talk about how artificial intelligence (AI) can be utilized to improve and manage smart grids, enhancing the energy infrastructure's overall resilience and dependability.
5. Emphasize how crucial it is to create and apply CCS technologies in order to absorb and store carbon emissions from power plants and industrial activities. Talk about the latest developments in carbon removal technology and current research to actively lower atmospheric carbon levels.
6. Emphasize the significance of encouraging government policies, such as laws and incentives, to promote the creation and application of sustainable energy technology. Encourage the private sector to invest in innovative clean energy policies by advocating for them.
7. Discuss about how public participation and awareness affect the demand for sustainable energy solutions. Emphasize how crucial it is to inform people about the advantages of a net-zero future and how they may contribute to its realization.

8. Highlight the financial benefits of the shift to net-zero, such as the development of sustainable industries, employment creation, and technical advancement.
9. Discuss about the ways in which adopting sustainable energy practices helps to fortify communities against the effects of climate change.
10. Stress how crucial it is to modify systems and infrastructure to withstand the effects of climate change.

Message from the chairs

We expect all delegates to bring in technical and feasible solutions to solve the problem. We also don't encourage blame games between delegates as it would just be stagnating debate rather than bringing in any content to the resolutions. All delegates are advised to go through and be confident with your country's foreign policy with regards to the current topic. Use credible sites which provide accurate information, this helps you to contribute useful information for the debate to make a successful resolution.

We as chairs will try our best to equally give recognition to everyone. If there are any issues, please contact us during breaks or WhatsApp message us, we will respond. We want all delegates to have fun and have a good experience about MUN at SLRMUN 2024! Do depend on the study guide fully for your research, this is made to give hints about what we as chairs expect you to bring during debate. All the best, we cannot wait to see you at SLRMUN 2024!!

Best Regards,
Chairs of UNEP,
Pranesh & Randhir.

