UNEP

United Nations Environmental Programme

LASALLECUNMUN 2026

"Economic and Environmental Maximization of Clean Energies: the use of green energies worldwide to reduce carbon footprints and support sustainable development."

BACKGROUND GUIDE

Dear delegates,

It is with great enthusiasm that I welcome you to the United Nations Environment Programme. My name is Diego Olvera Jiménez Méndez, and I am honored to serve as your president along with our moderator Zyanya Alejandra García Cabrera and our conference officer Morelia del Mar Gutiérrez for this LASALLECUNMUN2026.

I would like to know myself, so I am going to introduce myself. I am currently 15 years old, and I am in my first semester of high school at Universidad La Salle Cancun. Next year I would like to study Hygiene and Community Health since I want to study medicine. On a personal level, I appreciate being with my family and friends, and I also enjoy doing recreational activities. The past two years I participated in this model as a Norwegian delegation to the ECOSOC committee and as Mexico in the WHO committee. These two experiences have made me understand our current situation as a society and the importance of acting as one. They also made me realize how much I enjoy MUN, because it allows me to speak up and make my opinion heard while contributing to solving problems, we are facing all around the world.

Therefore, like me, I hope you can raise your voices to be heard. I would also like you to have fun with the model, make friends, and learn from it. Remember, this is a unique experience, which is why you should take every opportunity to share and listen to ideas to enrich our committee. In case of any doubt or if you require assistance, please do not hesitate to reach out to me. I will be there to help and guide you to resolve them.

Best wishes,

Diego Olvera Jiménez Méndez

United Nations Environment Programme (UNEP)

UNEP@prepa.lasallecancun.edu.mx

COMMITTEE DESCRIPTION

The United Nations Environment Programme (UNEP) is the United Nations leading global authority on the environment, driving transformational change on the triple planetary crisis: the crisis of climate change, the crisis of nature, land and biodiversity loss, and the crisis of pollution and waste. Since its founding in 1972, UNEP has served as a neutral convener of Member States, civil society, the private sector and UN agencies to address humanity's most pressing environmental challenges, with a universal membership of all 193 United Nations Member States.

Topic: "Economic and Environmental Maximization of Clean Energies: the use of green energies worldwide to reduce carbon footprints and support sustainable development."

INTRODUCTION

Fossil fuels remain the most used energy source. By burning the coal or petroleum, it produces greenhouse gases. This gas stays in the atmosphere and absorbs the heat the sun produces, making the Earth's temperature increase more than necessary. This long-term alteration of Earth's average temperature, caused mainly by human activity, is called climate change, and it hurts the environment. Climate change and its negative effects have become an important issue for countries to address. Many countries are looking for different energy sources that would cause less environmental damage.

Renewable energy is a sustainable alternative source of energy compared to fossil fuels, and it does not contribute to the negative impact on the environment. Renewable energy can be used immediately and does not run out. The Earth's supply of fossil fuels is rapidly diminishing as demand continues to increase. Some clean energies are solar power, geothermal energy, tidal power, hydropower, wind power, geothermal energy, and nuclear energy. These types of energy are not polluted and are renewable, making them the best option of energy sources. The goal is to increase access to green energy sources as well as prevent the further use of fossil fuels.

HISTORICAL BACKGROUND

Before the industrial age, people used natural sources of energy, the sames we still use nowadays. Ancient Egyptians and Greeks used mirrors to focus the sunlight rays, while windmills and water wheels were common in Asia and Europe, to grind grain or pump water. These early technologies were simple but effective in obtaining energy that never runs out.

There were new inventions, but reliance on renewable sources was limited. The industrial revolution in the 18th and 19th centuries changed the global energy panorama. The ability to burn coal, followed later by oil and gas, fueled unprecedented economic growth, urbanization, and technological advancement. However, the cost of it was reflected in the environment. The heavy use of fossil fuels led to air pollution, land degradation, and the recognition of climate change as a critical global threat.

The oil crisis of the 1970s was a critical moment for renewable energies. The drastic increases in oil prices exposed the vulnerability of economies that depend on fossil fuels and marked a worldwide search for alternative, cleaner energy solutions. Governments began funding research into solar panels, wind turbines, geothermal energy, and bioenergy. This decade marked the birth of renewable energy as a strategic priority, not just an experimental idea.

Since after that, technological advances have increased the efficiency and affordability of renewable energy systems. The invention of photovoltaic cells unlocked solar power's potential, making it economically accessible to homes and businesses. Hydropower continued to be a vital source of clean energy in many regions, while innovations in energy storage and smart grids addressed challenges of renewable energy's variability.

International cooperation played a crucial role in accelerating the adoption of renewable energy. The United Nations Framework Convention on Climate Change, established in 1992, set the groundwork for multilateral environmental agreements focused on reducing emissions. Major milestones included the Kyoto Protocol, which imposed emission reduction targets on developed countries, and the Paris Agreement in 2015, where nearly every nation committed to limiting global temperature rise and transitioning to cleaner energy. These agreements not only underline the urgency of climate action but also promote technology transfer, financial support, and policy alignment to support renewable energy worldwide.

CURRENT SITUATION

In 2025, the global energy transition will focus on maximizing the economic and environmental benefits of clean energy. This is a keyway to lower carbon footprints and promote sustainable development all around the world. This year has seen record-breaking progress in the use of renewable energy. For example, solar and wind power are growing so quickly that they will be able to meet all of the world's increased electricity demand by early 2025. Recent reports from groups like Ember and the United Nations show that renewable energy is not only growing faster than coal and other fossil fuels, but it is also changing the way the world uses energy and cares for the environment. This change is part of a larger movement for a future where clean energy sources are the main sources of economic growth and climate resilience.

This change in energy has been mostly caused by the huge drop in costs for renewables. The costs of solar photovoltaic and wind power technologies have never been lower. For example, the prices of solar panels have dropped by more than 80% since the early 2010s, and the efficiency of wind turbines keeps getting better. Battery storage, which is important for balancing the ups and downs of renewable energy, has also become less expensive, making it easier to use renewables. In many markets, this technological progress has made renewables the cheapest and most scalable energy sources in the world. These improvements not only make it easier to generate cleaner power, but they also make it possible to electrify and reduce carbon emissions in areas like transportation, industry, and home heating. This will expand the benefits of green energy beyond just generating electricity.

Adoption of clean energy has growing economic benefits. It is anticipated that investments in modernized grids, low-carbon fuels, and renewable energy will exceed $3 trillion by 2025, supporting the creation of jobs in manufacturing, installation, and maintenance. Millions more people are now employed in the renewable energy sector than in the fossil fuel sector, underscoring its potential as a catalyst for economic growth. Renewable sourcing also promotes price stability and energy security by reducing reliance on imported fossil fuels. Strong policy frameworks, such as national renewable targets, international climate agreements like the Paris Accord, and the United Nations Sustainable Development Goals (SDGs), especially SDG 7, which advocates for universal access to affordable and clean energy, support these economic outcomes.

Regarding the environment, reducing greenhouse gas emissions and addressing climate change requires maximizing the use of clean energy. Renewable energy sources greatly reduce carbon emissions and help to improve the quality of the air and water by replacing coal, oil, and gas-fired power plants. More sustainable land use practices and biodiversity conservation are also promoted by the widespread use of solar, wind, hydropower, and cutting-edge technologies like green hydrogen and advanced biofuels. However, despite these advancements, there are still issues with managing the environmental effects of resource extraction and land use, guaranteeing grid readiness, and ensuring equity in energy access. Policymakers, industry stakeholders, and communities must continue to work together to address these issues in order to strike a balance between social justice, environmental integrity, and economic growth.

The future is still being shaped by governance and policy innovation. More investment in clean energy, technology sharing, and inclusive policy design that promotes a just transition—one that respects local ecosystems and indigenous rights while providing training and employment opportunities for workers in the fossil fuel industry—are all things that governments and multilateral organizations support. For instance, organizations such as the Clean Energy Ministerial and the International Renewable Energy Agency (IRENA) promote cooperation and data exchange to hasten the adoption of renewable energy sources worldwide. Artificial intelligence, digital grid management, and carbon capture are being incorporated into national programs more frequently in an effort to maximize the economic and environmental benefits of renewable energy deployment while also improving system resilience and efficiency.

Different advancements and opportunities can be seen from a geographic perspective. Nearly two-thirds of new installations of renewable capacity are in Asia, led by China. Renewables are being quickly adopted by emerging markets in Africa, Latin America, Southeast Asia, and India in order to sustainably meet their rising energy demands. With new pledges to phase out coal and develop offshore wind and solar technologies, Europe's energy transition is progressing. Regional investments and innovations in battery storage and hydrogen projects have increased in North America. The need for coordinated international assistance and finance mechanisms to ensure a truly global clean energy transition is highlighted by regional differences in investment, infrastructure, and policy support, even though these regional patterns show impressive growth.

Integrating emerging sectors is a crucial component of optimizing clean energy from an economic and environmental standpoint. The market for renewable electricity is increased by the electrification of transportation through public transportation and electric vehicles, as well as by the use of green hydrogen for heavy industry and long-distance logistics. These advancements minimize overall energy requirements while optimizing environmental benefits when combined with advancements in energy efficiency and the concepts of the circular economy. Energy access and resilience are also improved by developments in digital energy management and decentralized generation, such as microgrids and community solar initiatives. These creative strategies are representative of a comprehensive vision in which clean energy supports not only the electricity industry but also a wide-ranging economic transformation in line with sustainability and climate goals.

Going forward, maintaining and enhancing these successes will require ongoing international collaboration, funding, and creativity. The nexus where climate imperatives and development opportunities meet is the economic and environmental maximization of clean energies. Increasing the use of renewable energy, updating infrastructure, encouraging the diffusion of new technologies, and tackling the socioeconomic aspects of the energy transition are all necessary to reach net-zero emissions and universal energy access. To ensure a prosperous, just, and resilient future where clean energy both promotes and benefits from sustainable development globally, this team effort is essential.

COUNTRY BOX

United States of America
People's Republic of China
Republic of India
Federative Republic of Brazil
Russian Federation
Republic of South Africa
Federal Republic of Germany
French Republic
Commonwealth of Australia
Japan
Canada
United Mexican States
Kingdom of Norway
United Arab Emirates
Arab Republic of Egypt
Argentine Republic
Republic of Türkiye
Kingdom of Denmark
Kingdoms of Netherlands
Republic of Costa Rica

GUIDE QUESTIONS

I. How can renewable energy be applied in the country's society to assure its maximization and its social acceptance?

II. How can fossil fuels be replaced by renewable energies without affecting and compromising the economic and social structure?

III. Where are renewable energy generators going to be placed to ensure that is location is safe for the environment, avoiding generating pollution?

IV. What types of clean energies are going to be used to ensure that it is used to its fullest potential?

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