

UNITED NATIONS ENVIRONMENT PROGRAMME [UNEP]

AGENDA1

AIRQUALITYANDPUBLICHEALTH

EXPANDING AIR QUALITY MONITORING AND PROVIDING THE PUBLIC WITH REAL-TIME POLLUTION DATA.

ENFORCING TIGHTER EMISSION STANDARDS FOR INDUSTRIES AND VEHICLES TO CURB HAZARDOUS POLLUTANTS.

BACKGROUND GUIDE NEWMUN - CHAPTER VII

Letter from chairs

Dear Delegates,

It is our great pleasure to welcome you to the United Nations Environment Programme (UNEP) at NEWMUN! We are so excited to have you join us for what promises to be an engaging, insightful, and enjoyable experience. As first-time delegates, you're stepping into a space where your curiosity, creativity, and confidence truly matter. Whether this is your first MUN or one of many, remember that every opinion counts and every voice can make a difference. Throughout this conference, you'll have the chance to explore ideas, challenge perspectives, and learn how global cooperation works all while developing your speaking, negotiation, and teamwork skills.

We, as your chairs, are here to guide you every step of the way. Don't hesitate to ask questions, seek help, or share your thoughts that's exactly what MUNs are for! What matters most is your enthusiasm, effort, and willingness to learn.

Above all, we hope you enjoy the experience ,make new friends, laugh a little, and discover the fun side of diplomacy.

We can't wait to see the energy and passion you bring to this council.

With warm regards,

Vaikai, Yash

Chairs, United Nations Environment Programme

INTRODUCTION

Air pollution remains one of the most critical environmental and public health concerns of our time. As cities expand and industrial activities intensify, the concentration of harmful pollutants—such as particulate matter (PM2.5 and PM10), nitrogen oxides, sulfur dioxide, and carbon monoxide—continues to rise, posing serious threats to human health and ecosystems alike. According to global health studies, millions of premature deaths each year are linked to poor air quality, with children, the elderly, and low-income communities facing the greatest risks.

Recognizing the urgent need for cleaner air, the United Nations Environment Programme (UNEP) emphasizes the importance of comprehensive strategies that address both monitoring and mitigation. Expanding air quality monitoring networks and ensuring the public has access to real-time pollution data are key steps toward informed decision-making and community awareness. At the same time, enforcing stricter emission standards for industries and vehicles is essential to reducing the release of hazardous pollutants at their source.

By promoting international cooperation, technological innovation, and strong environmental governance, UNEP seeks to guide nations toward sustainable air management systems that protect both the planet and human life. Ensuring clean air is not merely an environmental goal—it is a fundamental public health imperative and a cornerstone of sustainable development.

KEY TERMS

1. Air Quality Index (AQI):

A numerical scale that measures and reports the level of air pollution and its potential impact on human health.

2. Transboundary Air Pollution:

Pollution that travels across national borders, affects the air quality of multiple countries and requiring international cooperation.

3. Particulate Matter (PM2.5):

Fine airborne particles smaller than 2.5 micrometers that can penetrate deep into the lungs and cause serious health issues.

4. Emission Standards:

Legally enforced limits on the amount of pollutants that industries and vehicles can emit into the atmosphere.

5. Sustainable Development Goals (SDGs):

A set of 17 UN goals promoting global well-being, with SDG 3 (Health) and SDG 13 (Climate Action) closely tied to air quality improvement.

GENERAL OVERVIEW

Air pollution has emerged as one of the most significant environmental and health challenges confronting humanity today. As industrialization, urbanization, and population growth accelerate, the atmosphere is being

increasingly burdened by harmful emissions from factories, vehicles, agriculture, and energy production. The World Health Organization (WHO) reports that more than 90% of the global population breathes air that exceeds safe pollution levels, causing an estimated seven million premature deaths annually. The problem is particularly acute in developing and rapidly industrializing regions, where limited environmental regulations and poor monitoring infrastructure exacerbate the crisis.

The most common air pollutants—such as particulate matter (PM2.5 and PM10), nitrogen oxides, sulfur dioxide, carbon monoxide, and ground-level ozone—not only degrade environmental quality but also have far-reaching consequences for human health. Prolonged exposure to these substances has been linked to respiratory infections, cardiovascular diseases, strokes, and even neurological disorders. Moreover, air pollution contributes to environmental degradation by affecting ecosystems, reducing agricultural productivity, and accelerating climate change.

Recognizing the urgent need for coordinated global action, the United Nations Environment Programme (UNEP) advocates for a holistic approach that combines technological innovation, policy enforcement, and public participation. Expanding air quality monitoring systems and providing real-time pollution data empower communities and governments to make evidence-based decisions. At the same time, enforcing stricter emission standards for industries and vehicles can help curb the release of hazardous pollutants at their source.

Ensuring clean air is not merely an environmental aspiration—it is a fundamental human right and a prerequisite for sustainable development. Addressing air pollution directly supports multiple Sustainable Development Goals, including SDG 3 (Good Health and Well-being), SDG 11 (Sustainable Cities and Communities), and SDG 13 (Climate Action). Through collective international effort, technological advancement, and strong governance, the global community can move toward a future where clean air and healthy living are universal realities rather than privileges.

MAJOR PARTIES INVOLVED

International Organizations

1. United Nations Environment Programme (UNEP)

As the leading global environmental authority, UNEP coordinates international action to improve air quality and mitigate pollution-related health risks. It leads initiatives such as the *Climate and Clean Air Coalition (CCAC)* and the *Global Environment Monitoring System (GEMS)*, which help countries develop policies, share data, and implement sustainable air management practices.

2. World Health Organization (WHO)

WHO plays a crucial role in linking environmental issues to public health. It sets global air quality guidelines, conducts research on the health impacts of air pollution, and assists governments in developing national strategies to reduce health risks caused by poor air quality.

3. World Bank

The World Bank provides financial and technical assistance to countries tackling air pollution through programs focused on sustainable urban development, clean energy transition, and emission reduction. It also supports data collection and air quality monitoring projects in developing nations.

4. European Union (EU)

The EU acts as both a regional and global leader in air quality governance. Through frameworks like the *European Green Deal* and the *Ambient Air Quality Directive*, it enforces strict pollution limits and promotes green technologies and sustainable mobility solutions.

5. Non-Governmental Organizations (NGOs)

Organizations such as Greenpeace, the World Resources Institute (WRI), and Clean Air Asia advocate for stricter air pollution controls, increased transparency, and community participation. They play a vital role in raising public awareness and pressuring governments to uphold environmental commitments.

Countries

1. China

China, once home to some of the world's most polluted cities, has made major progress through its *Clean Air Action Plan*, investments in renewable energy, and expansion of air monitoring networks. It remains a key global actor in addressing industrial emissions and promoting clean technology.

2. India

India faces critical air quality challenges, particularly in urban areas like Delhi. Major pollution sources include vehicle emissions, industrial output, and agricultural burning. The *National Clean Air Programme (NCAP)* aims to reduce particulate matter pollution by up to 40% in 131 cities, marking an important national effort.

3. United States

The U.S. has historically been a leader in air quality regulation through the *Clean Air Act* and the *Environmental Protection Agency (EPA)*. It has significantly reduced major pollutants since the 1970s and supports international partnerships promoting cleaner energy and environmental innovation.

4. Japan

Japan has implemented advanced technologies and strict environmental standards since the 1970s to control industrial and vehicular emissions. Its success in reducing urban air pollution makes it a model for balancing economic growth with environmental sustainability.

5. Brazil

Brazil faces increasing air pollution in urban centers due to transportation emissions and biomass burning in the Amazon. It is working with UNEP and regional organizations to improve monitoring and promote renewable energy as part of its environmental agenda.

Time line of key events

1952 – The Great Smog of London:

A severe smog event in London, caused by coal burning, kills thousands and raises global awareness about the deadly health impacts of air pollution.

1970 – Establishment of the U.S. Environmental Protection Agency (EPA):

The EPA is founded, and the Clean Air Act is passed to regulate air pollutants and enforce emission standards, becoming a model for other countries.

1972 – United Nations Conference on the Human Environment (Stockholm Conference):

The first global environmental conference leads to the creation of the United Nations Environment Programme (UNEP), highlighting air pollution as a key environmental issue.

1992 – United Nations Framework Convention on Climate Change (UNFCCC):

This convention establishes a global framework for addressing greenhouse gas emissions, which indirectly contributes to air quality improvement.

2002 – World Summit on Sustainable Development (Johannesburg):

Air pollution is recognized as a major public health concern, linking it directly to sustainable development goals.

2012 – Climate and Clean Air Coalition (CCAC) Launch:

UNEP and partner organizations launch the CCAC to reduce short-lived climate pollutants, including black carbon, methane, and hydrofluorocarbons, which affect air quality and climate.

2015 – Adoption of the Sustainable Development Goals (SDGs):

SDG 3 (Good Health and Well-being) and SDG 13 (Climate Action) emphasize reducing air pollution as critical to human health and sustainable development.

2018 – WHO Global Air Quality Guidelines Update:

WHO updates its air quality guidelines, lowering safe thresholds for PM2.5 and PM10, reflecting the increasing evidence of health risks even at low pollution levels.

2021 – UN Climate Change Conference (COP26, Glasgow):

Countries commit to stronger climate action and measures to reduce air pollution, including phasing down fossil fuels and promoting cleaner transport solutions.

Ongoing – National Clean Air Programmes and Monitoring Initiatives:

Countries such as India, China, and the EU continue to implement nationwide air quality monitoring systems, enforce stricter emission standards, and develop policies to protect public health.

Previous attempts to resolve the issue

1. National Policies:

- *Clean Air Act (USA, 1970)*: Set emission limits for industries and vehicles, creating the EPA.
- *National Clean Air Programme (India, 2019)*: Targets 20–40% reduction in particulate pollution in major cities.
- *China's Clean Air Action Plan (2013–2017)*: Reduced coal use, promoted renewables, and enforced stricter vehicle emission standards.

2. International Agreements:

- *Stockholm Declaration (1972)*: Highlighted global environmental issues, including air pollution.
- *UNFCCC & Paris Agreement (1992, 2015)*: Promoted reduction of fossil fuel use and greenhouse gas emissions.

- *Climate and Clean Air Coalition (CCAC, 2012)*: Targets short-lived climate pollutants like black carbon and methane.

3. Technological & Monitoring Initiatives:

- Expansion of air quality monitoring networks to provide real-time pollution data.
- Promotion of cleaner technologies, such as electric vehicles and renewable energy.
- Public awareness campaigns encouraging pollution reduction practices.

4. Regional & Collaborative Efforts:

- *EU Ambient Air Quality Directive*: Sets legally binding limits on pollutants.
- Regional initiatives in Asia and Latin America to manage transboundary pollution.

POSSIBLE SOLUTIONS

1. Strengthening Regulations and Enforcement:

- Implement and enforce stricter emission standards for industries, power plants, and vehicles.
- Regularly review and update national air quality guidelines to align with WHO recommendations.

2. Expanding Monitoring and Data Transparency:

- Develop comprehensive air quality monitoring networks to provide real-time pollution data.
- Ensure public access to information to raise awareness and enable informed decision-making.

3. Promoting Cleaner Technologies and Energy Sources:

- Encourage the use of electric vehicles, renewable energy, and energy-efficient industrial processes.
- Support research and innovation in low-emission technologies and sustainable urban infrastructure.

4. International Cooperation and Policy Coordination:

- Strengthen regional and global agreements to tackle transboundary air pollution.
- Share best practices, technological expertise, and funding to support developing countries in reducing emissions.

5. Public Awareness and Community Engagement:

- Conduct educational campaigns about the health risks of air pollution and preventive measures.
- Promote behavioral changes, such as reduced use of fossil fuel-based transport and cleaner cooking methods.

6. Integration with Sustainable Development Goals (SDGs):

- Align national policies with SDG 3 (Good Health and Well-being), SDG 11 (Sustainable Cities), and SDG 13 (Climate Action) to ensure a holistic approach

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Agenda-2

Sustainable Ocean Management

Introduction

Oceans are essential to global climate stability, food security, and economic development. However, in recent times, unsustainable exploitation, loss of biodiversity, and changes due to climatic reasons have all threatened the wellbeing of Oceans. Strengthening Marine Governance, Expanding MPAs (Marine Protected Areas), and combating illegal, unreported and unregulated (IUU) fishing has become essential to ensure sustainable use of our oceans, and conserve the marine ecosystem.

Definition of Key Terms:

- Marine Protected Areas (MPA): Designated ocean zones where human acts are regulated/banned to conserve marine ecosystems.
- Ocean Pollution: Introduction of harmful substances to marine life.
- IUU fishing: Illegal, Unreported and Unregulated fishing acts that violate conservation rules.
- Sustainable Fisheries Management: Regulating fishing practices to maintain the ecosystem.
- Biodiversity: Variety of marine species and ecosystems essential for ecological stability.

General Overview:

Our issue focuses on implementing effective ocean-management strategies through expanding MPAs, enforcing anti IUU measures, and promoting sustainable fishery management practices to protect our marine ecosystems and global food security.

The concerned issue gained momentum with the 1982 UN Convention on the Law of the Sea (UNCLOS). Since then, global initiatives, including the SDG-14, 2023 High Seas Treaty, etc. have been introduced to

regulate fishing practices, marine life, and to reduce pollution.

Many marine ecosystems are being threatened by overfishing, plastic pollution, coral bleaching, and climate change, and IUU fishing occupies more than fifth of global fish catching, and coastal communities also remain highly dependent on small-scale (IUU) Fishing.

Oceans absorb ~30% of global CO₂ emissions.

Marine resources support ~3 billion people globally.

Estimated \$10–23 billion lost globally each year due to IUU fishing.

Major Parties Involved:

- United Nations Environment Programme: Coordinates global marine protection programs and environmental treaties.
- FAO (Food and Agriculture Organization): Oversees global fisheries policy and anti-IUU programs/frameworks
- International Maritime Organization (IMO): Regulates maritime pollution & vessel standards.

Timeline of Key Events:

- 1982: UNCLOS adopted by the UN
- 2016: Port State Measures Agreement enters into force to combat IUU fishing
- 2022: Plastic Pollution Treaty negotiations begin
- 2023: High Seas Biodiversity Treaty agreed to protect international waters.

Previous Attempts:

- UNCLOS established maritime rights.
- FAO developed global IUU fishing guidelines, and Port state measures agreement.
- SDG-14, which promotes marine stability.
- 2023 High Seas Treaty adopted to protect biodiversity beyond national waters.

Possible Solutions:

- Expanding MPAs with clear, strong enforcement frameworks.
- Enhancing satellite tracking systems, and drone surveillance to detect IUU fishing.
- Increasing funding towards developing coastal countries.
- Reducing marine pollution through enhanced waste management systems and global plastics regulations.
- Encouraging global marine data sharing and global ocean monitoring collaborations
- Strengthening penalties for suspected IUU vessels.

Appendices:

UNCLOS (United Nations Convention on the Law of the Sea) FAO Port State Measures AgreementSDG-14:
Life Below Water

Regional Fisheries Management Organizations database

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