



Agenda - Addressing the Environmental Impact of Industrial and Big Tech Activity

UNEP



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LETTER FROM THE BUREAU

Namaste Delegates,

It is with immense pleasure that we, the bureau members of the United Nations Environmental Programme, welcome you to the 11th Iteration of the Shishukunj Model United Nations.

Before we begin, we would like you all to be informed that, even though we have covered the 360-degree aspects of the agenda, this guide serves only as a starting point for your research, not the entire basis. Individual research will help you understand the agenda more thoroughly and prepare you to perform well in the committee sessions. Now, as we dive into our agenda for this year, we would like to introduce you to the committee: UNEP is an international entity whose mandate is to promote sustainable development. It assists many countries to achieve low-emission pathways through its programmes in energy efficiency and transition to sustainable development. Its key activities include promoting investment in clean technologies in order to reduce emissions, protecting biodiversity and ecosystems and combating climate change.

Our agenda, "Addressing the Environmental Impact of Industrial and Big Tech Activity," revolves around the pollution and excessive use of resources caused by traditional industries and the development of data centres. There is also a surge in e-waste, and no proper systems to treat it. All of this combined results in the degradation of our natural resources and calls for substantive solutions to prevent such actions.

Please ensure that you read and research each of these subtopics thoroughly to gain a comprehensive understanding of the agenda. Additionally, we have a zero-tolerance policy regarding the use of any form of AI; all solutions must be entirely original, and also keep a check on the originality of the information and don't be a victim of false information and misinformation.

Delegates must abide by their foreign policy and see themselves as diplomats of respected countries. Being collaborative and creative will shape you in the committee sessions and in the future. Further, we would like the delegates to acknowledge that lobbying during the committee is essential, whether it means bringing blocs together or simply helping each other throughout the conference. Also, practical and implementable solutions will be expected from all the delegates.

So, fasten your seatbelts and get ready to be part of engaging debates, meaningful discussions, and much more. We look forward to seeing you all and making this conference a huge success. Good luck!

Regards

Nivedita Mehta, Chairperson

Pihu Sood, Co-Vice Chairperson

Aeshna Jain, Co-Vice Chairperson

INTRODUCTION TO THE COMMITTEE

The United Nations Environment Programme (UNEP) is the United Nations' leading global authority on the environment, working to drive transformational change in response to the triple planetary crisis: climate change, nature and biodiversity loss, and pollution and waste. Since its founding in 1972, UNEP has brought together Member States, civil society, the private sector, and UN agencies as a neutral platform to address some of the most pressing environmental challenges facing humanity.

Over the years, UNEP has played a key role in enabling global environmental action, from protecting species to supporting efforts to restore the ozone layer. It also hosts the United Nations Environment Assembly, the world's highest-level decision-making body on environmental matters, with all 193 United Nations Member States as members. Through science-based research, global coordination, and strong advocacy, UNEP supports countries and communities in achieving the Sustainable Development Goals while promoting a future where people and the planet can coexist in harmony.

Acting under the authority of the United Nations General Assembly, UNEP is mandated to coordinate environmental activities across the UN system and assist countries in developing and implementing effective environmental policies. With a workforce of nearly 3,000 people across 41 countries and territories, its mission is to inform, enable, and inspire nations and people to improve their quality of life while protecting the environment for future generations.

INTRODUCTION TO THE AGENDA

4.1 Industrial Activities

In this aspect of the agenda, there will be discussions on traditional industries such as fast fashion, minerals (iron ore and steel plants), and pharmaceuticals, in which we will discuss how industrial activities affect air and water. On a slightly more thought-provoking side, we will discuss the importance of both economic and sustainable development coexisting. We will also discuss the ethical dilemma (a tough choice between two or more good or morally acceptable options, where choosing one means breaking a promise or rule you also value) of how countries can share responsibilities when factories in developing countries, established by developed countries, bring growth while also causing pollution. Lastly, we will discuss how we can protect nature and wildlife from industrial expansion.

4.2 Big Tech Activities

This part of the agenda is about how big technology companies are affecting the environment. Companies like Microsoft, Amazon, and Google are growing very fast and using technologies like artificial intelligence (AI) and data storage. These things do make our lives easier, but they also need a lot of electricity. Most of this electricity comes from thermal power plants, which also use a lot of water for cooling. On top of that, data centres use water cooling too, which puts even more pressure on water resources.

This section also talks about problems like e-waste from phones and laptops, hidden pollution from digital systems, and greenwashing, where companies try to look eco-friendly but are not fully honest. The main aim is to understand how to come up with solutions for technology and sustainability to coexist through international cooperation.

PAST RESOLUTIONS

(UNEA-5): Promoting Circular Economy for Sustainable Consumption and Production

The resolution encourages countries to adopt a circular economy, where products are reused, repaired, and recycled instead of being discarded. It aims to reduce pollution, conserve resources, and address environmental challenges through sustainable practices, innovation, and international cooperation.

UNEP/EA.7/Res.9 (2025) :

This resolution on the environmental impact of artificial intelligence is a reminder that AI can be a powerful tool in support of sustainability and environmental protection, but only if it is developed and used responsibly. It recognises its potential benefits and risks and highlights the need for global cooperation, knowledge sharing and support for developing countries to ensure that AI contributes positively without causing environmental harm.

UNEP/EA.5/Res.11: Enhancing circular economy as a contribution to achieving sustainable consumption and production

This resolution promotes the circular economy, where products are reused, repaired and recycled, and not wasted, with an emphasis on better use of resources. It highlights ways in which countries can cut pollution and address issues like climate change, urging them to adopt such practices, promote innovation and cooperate in sustainable consumption and production.

<https://docs.un.org/en/UNEP/EA.7/Res.9>

<https://www.unep.org/environmentassembly/unea7>

<https://docs.un.org/en/UNEP/EA.5/Res.11>

KEY TERMS

1. Economic development: a process by which the economic well-being and quality of life of a nation, region, local community, or an individual are improved according to targeted goals and objectives.
2. Sustainable development: a process by which the economic well-being and quality of life of a nation, region, local community, or an individual are improved according to targeted goals and objectives.
3. Biodiversity : the variety of all living things and their interactions
4. E-Waste (Electronic Waste): any discarded, obsolete, or broken electrical and electronic device .
5. Data Centre : a central physical location that contains IT hardware, like networked computer systems, servers, and storage devices, used for processing, storing, and transmitting large volumes of data.
6. Multinational Corporation (MNC) : a large business that operates in multiple countries, maintaining a central headquarters in its home nation while managing branches, factories, or offices abroad
7. Greenwashing: Greenwashing means when a company pretends to be environmentally friendly to look good, but in reality, it does not actually follow eco-friendly practices.
8. Industrialization: the process by which a society or economy transforms from an agrarian (agricultural) system into one based on manufacturing and mechanised production
9. Emissions: the release or discharge of a substance, energy (such as heat or light), or radiation into the environment
10. Carbon footprint: the total amount of greenhouse gases (like carbon dioxide and methane) emitted directly or indirectly by an activity, person, organisation, or product
11. Circular economy : an economic model designed to eliminate waste and pollution by keeping products, materials, and resources in circulation for as long as possible.
12. Pollution Haven Hypothesis: When companies move their factories to countries that have weaker environmental laws. They do this because it is often cheaper and easier to operate there, even though it may cause more pollution.

EFFECTS OF INDUSTRIAL AND BIG TECH ACTIVITY ON AIR AND WATER

Every winter, Delhi makes the headlines for its poor air quality. Frequently, the Air Quality Index (AQI) is a measure used to indicate how clean or polluted the air is, reaching levels that are considered very poor or even severe. Poor AQI causes a lot of health issues, such as trouble breathing, eye irritation, coughing, and other related health problems. Schools are sometimes forced to limit outdoor activities, and people are advised to stay indoors. While many factors contribute to Delhi's air pollution, emissions from industries and power plants are among the major sources of the problem.



Image: *Air Quality Index (AQI) OF Delhi deteriorates due to the constant pollution*

With the rise of industries and big tech activities, they have contributed to the economic growth and technological development over time. Factories, transport systems, data centres and digital infrastructure all require lots of energy to operate. A large part of this energy is produced by burning coal that releases carbon dioxide, sulphur dioxide, and nitrogen oxides into the atmosphere. The cement, steel, chemical and oil refining industries are also among the major polluters.

These harmful substances contribute to air pollution, climate change and environmental degradation. They also affect biodiversity, since many plants and animals find it hard to survive in polluted environments. Human health is also affected. Long-term exposure to polluted air increases the risk of respiratory diseases, especially in children and the elderly.

To deal with these challenges, governments have introduced measures such as India's National Clean Air Programme (NCAP), which aims to improve air quality through cleaner technologies, stricter rules and regulations and better monitoring systems. Big tech also has

environmental impacts. Data centres depend on large amounts of electricity and water for cooling to operate. The digital economy is growing, and its environmental footprint is becoming an increasingly important concern.

Industrial and big tech activities put a lot of pressure on air and water resources :

The Role of Industrial

1)High Water Consumption: Industries use large amounts of water for manufacturing, processing raw materials, and daily work.

2)Cooling Systems : Many industries use thermal power plants, which create a lot of heat, and use a lot of water to cool machinery.

3)Overuse of Groundwater : Some industries often depend on groundwater. Excessive withdrawal causes groundwater levels to decline.

4)Water Pollution : Industrial waste and untreated effluents can contaminate rivers, lakes, and groundwater nearby, reducing the availability of clean, fresh water.

5) Industrial Emissions: Industries such as cement, steel, chemical, and oil refining release pollutants during production processes.

Big tech companies like Google, Amazon, Microsoft, Apple, and Meta depend on large-scale data centres to run their services. These data centres operate continuously, which requires a large amount of electricity. Power plants are the main source of electricity for data centres. At the same time, data centres require a large amount of water for cooling because they generate a huge amount of heat due to constant operation. In some regions, this can lead to water scarcity. Another major issue is the generation of electronic waste (e-waste) due to the rapid production and replacement of devices. If not properly recycled or disposed of, this waste releases toxic substances like lead and mercury into the soil and water, harming the environment. Additionally, mining activities for metals such as lithium, cobalt, and gold used in electronic devices lead to deforestation, and after mining, the land is often left damaged and not restored, causing habitat destruction and long-term harm to ecosystems.

These power plants depend heavily on fossil fuels such as coal and natural gas for generating electricity. When these fuels are burned, they release large amounts of greenhouse gases like carbon dioxide into the atmosphere. These gases mix with the air and gradually increase their concentration over time. As the amount of these gases increases, the Earth's temperature starts to rise because more heat is retained in the atmosphere instead of maintaining a stable balance. This leads to global warming, which affects natural climate systems and disturbs weather conditions across the world. It results in rising average temperatures, melting of ice in polar regions, rising sea levels, and more frequent extreme weather events.

The Role of Big Tech

1)**Cooling of Data Centres:** Data centres generate a lot of heat and require large amounts of water for cooling systems.

2)**Electricity from Thermal Power Plants :** Data centres require a continuous supply of electricity, much of which comes from thermal power plants that also use excessive amounts of water for cooling.

3)**Groundwater Usage:** Many data centres rely on local water sources, including groundwater, which can contribute to declining groundwater levels when used excessively.

5)**Burning of Fuels:** Industries often burn coal, oil, and natural gas for energy, producing air pollution.



***Image :** Asia's largest Tier IV data centre, located in Panvel, Navi Mumbai, is a massive, 16-floor facility spanning 820,000 square feet*

Industrial and big tech activities have improved modern life and supported economic growth, but have also led to a rise in air pollution and increased pressure on water resources. Both sectors are growing, and it is important to encourage sustainable methods that balance development and preservation of the environment.

*<https://www.eesi.org/articles/view/data-centers-and-water-consumption>

ECONOMIC DEVELOPMENT VS SUSTAINABLE DEVELOPMENT

To start, imagine this situation:

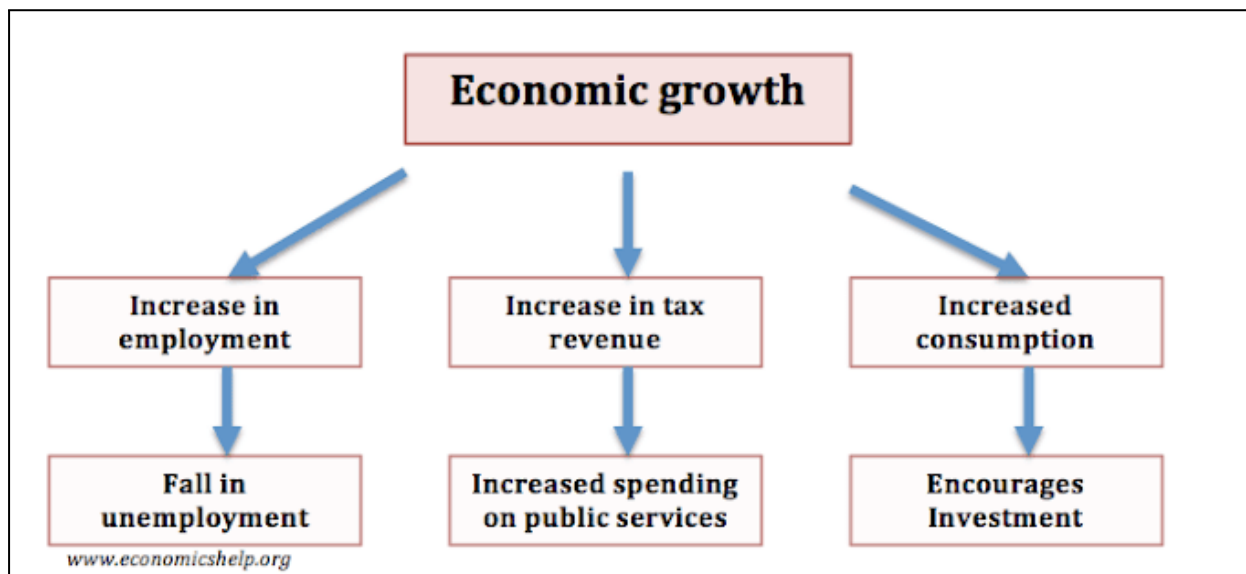
You live in a town on the banks of a beautiful, clean river. The river provides water, fish, and livelihoods to the people living there. However, the income earned from these resources is not enough for many families to meet their needs, making it difficult to afford good food, education, and healthcare.

One day, a company proposes setting up a factory in the town. It promises jobs for over 500 families, better roads, and improved facilities. However, the factory plans to dump its waste, including harmful chemicals, into the river. Although cleaner technology is available, the company refuses to use it because it would cost more money.

This creates a difficult choice. If the factory is built, many families will get jobs, and their quality of life will improve. At the same time, the river could become polluted, affecting clean water, fish, farming, and the environment. A hungry child today is a serious problem, but a polluted river tomorrow is also a crisis.

This conflict between economic development and environmental sustainability is faced by many communities around the world. To understand it better, let us first look at these two concepts separately and why both are important.

Importance of Economic Development:



1. Poverty Reduction:

Increased national output means households can enjoy more goods and services. For countries with significant levels of poverty, economic growth can enable vastly improved living standards. For example, in the nineteenth century, absolute poverty was widespread in Europe; a century of economic growth has lifted nearly everyone out of this state of poverty. Economic growth is particularly important in developing economies.

2. Reduced Unemployment

A stagnant economy leads to higher rates of unemployment and the consequent social misery. Economic growth leads to higher demand, and firms are likely to increase employment.

3. Improved public services

Higher economic growth leads to higher tax revenues (even with tax rates staying the same). With higher growth, incomes and profits, the government will receive more income tax, corporation tax and expenditure taxes. The government can then spend more on public services.

Importance of sustainable development:

We all know the basic definition of sustainable development, which is to work for today while keeping in mind the needs of tomorrow. The underlying importance of this aspect is as follows.

1. **Focuses on Sustainable Farming Methods** – Sustainable development is important as it takes care of the needs of future generations and ensures that the growing population does not burden Mother Earth. It promotes agricultural techniques such as crop rotation and efficient seeding techniques.
2. **Stabilises the Climate** – We are facing the problem of climate change due to the excessive use of fossil fuels and the destruction of the natural habitat of animals. Sustainable development. It promotes reducing the use of fossil fuels that release greenhouse gases that destroy the atmosphere and thus prevents climate change.
3. **Protects Biodiversity:** Since sustainable development focuses on preserving the ecosystem, it automatically helps in maintaining and protecting biodiversity.
4. **Financial stability** – As sustainable development promises steady growth, the economies of countries can be strengthened by using renewable sources of energy as compared to the use of fossil fuels, of which there is only a limited amount on our planet.



*This image showcases how there should be a balance between **economic growth** and **sustainable development**.*

POLLUTION HAVEN HYPOTHESIS

Think about the clothes you wear every day. If you look at the label of a T-shirt from brands such as Zara, H&M, or Shein, you may see "Made in Bangladesh," "Made in Vietnam," or another country listed on it. This tells us where the clothing item was manufactured.

But have you ever wondered why many global brands produce their goods in countries where they were not originally founded?

Manufacturing requires resources such as water, energy, land, and raw materials. It can also create pollution and release greenhouse gases into the atmosphere. Many companies choose to set up factories in developing countries because production costs are often lower and labour is more affordable.

This can bring important benefits. Factories create jobs, support local businesses, and help improve people's quality of life. However, large-scale manufacturing can also place pressure on natural resources and contribute to environmental problems if proper safeguards are not in place.

This raises an important question: How can countries enjoy the economic benefits of industrial growth while also protecting their environment and natural resources?

As UNEP delegates, your task is to explore whether economic growth and environmental protection can work together, and what governments, companies, and international organisations can do to make development more sustainable.

Why do many companies set up factories in developing countries?

Lower environmental regulations: Many countries have weak environmental laws or do not enforce them strictly. As a result, companies may face fewer restrictions on their activities, making it cheaper and easier to operate.

Lower labour costs: In some countries, high unemployment rates and lower minimum wages allow companies to hire workers at a lower cost than in North America or Europe. This reduces production costs and increases profits.

Governments seeking economic growth: Foreign factories create jobs, attract investment, and increase exports. These benefits can help strengthen a country's economy and improve living standards.

However, this situation remains controversial. While consumers in wealthier countries enjoy affordable products, many developing countries bear a large share of the environmental costs.

Pollution from factories can contaminate air, water, and soil, affecting the health and well-being of local communities.

This is known as the Pollution Haven Hypothesis.

Some measures by developing countries have been made to reduce this, namely:

1. EIA, which stands for Environmental Impact Assessment, is one of the central mechanisms for environmental regulation and a critical tool for ensuring sustainable development. In Bangladesh, Cambodia, Indonesia, and Vietnam, the EIA systems are (or, in the case of Cambodia, will be) supported by a strong legal framework with a clear delineation of EIA processes and delegated decision-making.
2. Vietnam Environmental Protection Law 2020 specifies that environmental protection should go hand in hand with economic development, local community protection, biodiversity protection and adapting to climate change. This states that protecting the environment is the responsibility of everyone, including organisations, households and individuals. It also suggests the use of renewable energy.

At first glance, the solution may seem simple: if factories cause pollution, why not stop them from operating?

In reality, the issue is much more complicated. Millions of people depend on these industries for jobs and income. The challenge is not whether development should take place, but how it should take place.

As UNEP delegates, consider the following question:

How can economic growth and environmental protection go hand in hand, and how can companies be made accountable for the damage they cause?

PROTECTION OF NATURE AND WILDLIFE FROM INDUSTRIAL EXPANSION

The world is undergoing a very fast industrial expansion, driven by economic development, urbanisation, and the rising demand for infrastructure and manufacturing capacity. While industrialisation fuels job creation, it also presents challenges for biodiversity preservation. Developing infrastructure destroys habitats, creating barriers to animal movement (migrations), disrupting patterns, and increasing human-wildlife conflicts.

The examples of habitat destruction above affect wildlife, our planet, and us as human beings. Habitat loss is a crisis of animal cruelty and ecological breakdown.

Habitat destruction leads to:

1. Increased human-wildlife conflict: As wildlife habitats shrink and urban environments grow, humans and wildlife come into closer contact, rising instances of human-wildlife conflict.
2. Biodiversity loss: As habitats are lost or fragmented, wildlife species struggle to survive and are put at greater risk of extinction.
3. Climate change: Factory farming creates 11% of global greenhouse gas emissions and is fuelling climate change.
4. Displacement and starvation: Animals affected by habitat loss are displaced from their homes, unable to find food and water.

Industrial growth and wildlife conservation together are tough but achievable. Using tools like strategic planning, technological innovation and financial help, people who make laws, activists, and business leaders can cooperate and find the perfect balance between economic growth and biodiversity conservation. When the protection of biodiversity is included in changing laws and policies in businesses, it can transform companies by making them more aware and empathetic towards wildlife.

EFFECT OF BIG TECH ON LOCAL ENVIRONMENT AND COMMUNITIES

To understand this topic, let's begin with an example of a city in Arizona known as Chandler, where residents living near large data centre facilities reported a continuous low-frequency humming sound coming from cooling systems and backup generators. The major problem that the communities are facing there is that a constant buzzing sound is produced by these big tech companies 24/7, which is causing difficulty in sleep, leading to increased stress and irritation in daily life, thus reducing the overall quality of life there.

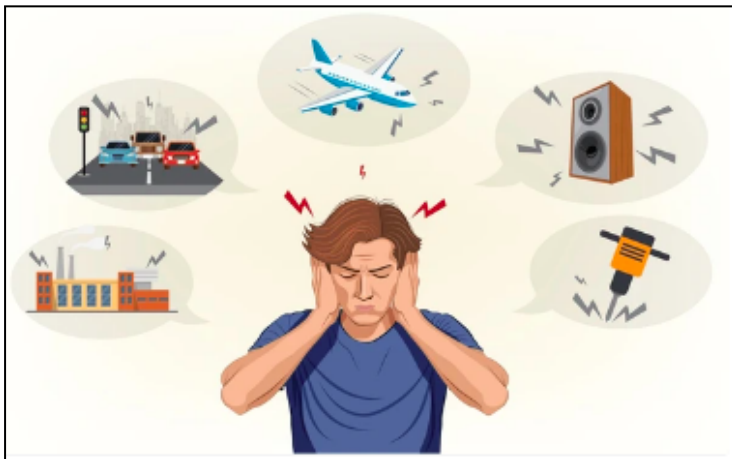


Image: causes of noise pollution

Big Tech companies build large facilities such as data centres to support online services. While these facilities can create jobs and bring investment, they can also affect the people living nearby. Data centres use huge amounts of electricity and water to operate and cool their equipment. This can put pressure on local resources, increase utility costs, and sometimes create noise from cooling systems that disturbs residents.

Although Big Tech brings economic benefits, local communities can face challenges such as -

1) Forced Displacement

a) **Rising Housing Costs:** When a large tech company moves into an area, rent and property prices often rise quickly. Many long-time residents, senior citizens on fixed incomes, and working-class families can no longer afford to live there and are forced to move.

b) **Loss of Generational Homes:** In suburban and rural areas, tech companies may purchase large amounts of land. This can pressure families to sell homes and property that have been passed down through generations, disrupting long-established communities.

c) **Decline of Local Businesses:** As more high-income workers move into the area, small local shops, markets, and family-run businesses are often replaced by expensive chains and luxury stores, changing the character of the community.

2) Chronic Noise and Physiological Impact

a) **The Constant Hum:** Data centres operate 24/7 and rely on large cooling systems. These systems create a continuous low-frequency humming noise that can be heard in nearby homes.

b) **Sleep Deprivation:** Residents living near data centres often report difficulty sleeping, headaches, fatigue, and reduced well-being due to the constant noise.

c) **Loss of Peace:** Parks, backyards, and other outdoor spaces become less peaceful, making it harder for residents to relax and enjoy their surroundings.

3) Community Conflict and Residents' Rights

a) **Lack of Public Consultation:** In many cases, residents are not properly informed or consulted before large data centre projects are approved. Communities may only learn about these developments after major decisions have already been made.

ENVIRONMENTAL COST OF CONSUMER TECH AND E-WASTE

a) Environmental Impact of Production and Resource Extraction

Smartphones, laptops and iPads are often associated with e-waste, but the environmental impact of these electronic devices begins much earlier with the extraction of raw materials and continues through the production process. Electronics for consumers also consume a lot of natural resources before they even reach consumers. The mining of these resources and the production of electronic devices place a lot of pressure on the environment and are responsible for several environmental problems.

A smartphone may seem harmless, but its manufacturing uses dozens of metals and minerals from around the world. Before they can be made into batteries, screens, and circuit boards, lithium, cobalt, copper, gold, and rare-earth elements need to be mined. Mining uses lots of water and energy resources, and manufacturing releases harmful gases into the air. The effect on the environment from electronic devices starts long before they are put to use or converted into e-waste.

Environmental Impacts :

The production of electronic devices harms the environment at every step, starting with extracting the raw materials, manufacturing and transportation around the world. These impacts play a role in three major environmental challenges:

1. Global Warming

- Manufacturing electronic devices requires large amounts of energy, much of which is generated by burning fossil fuels such as coal, oil, and natural gas.
- Mining, manufacturing and transportation produce greenhouse gases that contribute to global warming.

2. Depletion of biodiversity

- Mining and industrial activities usually involve clearing forests and natural vegetation.
- It destroys habitats and threatens plant and animal species.
- The loss of biodiversity weakens ecosystems that provide basic needs such as clean air, clean water and nutritious soil.

3. Pollution

- Improper disposal of electronics can release toxic substances such as lead, mercury, and cadmium into the environment.
- Manufacturing processes release pollutants into the air, water and surrounding environment.

b) Improper Disposal and Harmful Effects of E-Waste

When electronic devices are thrown away with regular waste instead of being recycled properly, they can create several environmental problems.

- E-waste dumped in landfills can contaminate soil and nearby water sources.
- Burning electronic waste releases toxic pollutants into the air.
- Toxic substances from e-waste can pollute soil, water, and air, affecting both the environment and living organisms.
- Exposure to harmful materials from e-waste may affect human health and well-being.
- Plants and animals can be negatively affected by environmental contamination caused by e-waste.
- Improper disposal increases the amount of waste accumulating in landfills and places additional pressure on waste management systems.
- Valuable materials such as gold, copper, and aluminium are lost instead of being recovered through recycling.
- Failure to recycle e-waste increases the demand for extracting new resources, creating further pressure on the environment and natural ecosystems.

Agbogbloshie, Ghana: – (The Environmental Consequences of Improper E-Waste Disposal)

A well-known example of the damage e-waste can do is Agbogbloshie, Ghana, one of the largest e-waste recycling sites in West Africa. Thousands of discarded computers, televisions, mobile phones and electrical cables are brought to this area for recycling. But a lot of the recycling is done unethically, such as burning wires and electronic components to recover valuable metals like copper. These practices release toxic fumes into the air and are a cause of serious pollution in the environment.

The improper disposal of e-waste in Agbogbloshie has polluted the surrounding soil, air and water, and has also exposed workers to toxic chemicals and unsafe working conditions. The seriousness of the pollution has earned Agbogbloshie a reputation as one of the world's most polluted e-waste sites. This case study highlights the serious environmental and health impact of improper disposal of e-waste and the importance of adopting safe recycling methods and responsible waste management practices.

The rapid expansion of consumer technology in today's world has played a crucial role in increasing the environmental burden. Nowadays, we all use electronic devices such as smartphones, laptops, and televisions. These devices go through a complete lifecycle, starting from production and resource extraction and ending as discarded electronic waste.

This lifecycle has a significant impact on natural ecosystems. On one hand, natural resources are extracted from the Earth to manufacture these devices. On the other hand, once these devices become outdated or non-functional, they are discarded and contribute to rising levels of toxic electronic waste, which often ends up polluting land, water bodies, and even oceans.

<https://just2ce.eu/case-studies/case-study-agbogbloshie/>

CASE STUDY 1 :

The Bhopal Gas Tragedy

Everyone is familiar with the infamous incident of the Bhopal Gas Tragedy. This case is the perfect example of how an MNC benefited from operating in a developing country. We all know that, at the end of the day, the environmental and human costs were borne by India, and the issue of accountability became highly controversial.

The Bhopal Gas Tragedy basically happened when a pesticide plant operated by Union Carbide Corporation leaked highly toxic *methyl isocyanate gas* around midnight on 2 December 1984. Residents of Bhopal living around the pesticide plant began to feel the irritating effects of MIC and started fleeing the city. However, thousands were dead by morning. While the company benefited from the lower cost of operations, the people were severely affected, with many being generationally impacted and reporting signs of:

- * Coughing
- * Feeling of suffocation
- * Severe eye irritation
- * Burning in the respiratory tract
- * Breathlessness
- * Stomach pain and vomiting

Environmental Consequences:

Toxic chemicals destroyed the environment in the area. Huge areas around the former factory are now declared unsafe for agriculture and habitation due to soil contamination. Toxic residues continue to pose risks to both human health and the ecosystem. In addition, sources of groundwater have been affected, and flora and fauna were also severely affected, as evidenced by the large number of dead animal bodies seen nearby. Trees became barren within a few days. The supply of food became scarce due to fears of contamination. Fishing was also prohibited.

The disaster highlighted the dangers of weak safety regulations, inadequate corporate accountability, and the unequal distribution of environmental risks between multinational corporations and host countries. It remains a key example of why foreign investors and host governments must share responsibility for preventing and addressing environmental damage. The Bhopal Gas Tragedy demonstrates that economic growth and foreign investment cannot come at the expense of environmental protection.



Image: this is the front page of the Indian Express, published on December 4, 1984.

CASE STUDY 2:

Pollution caused by the fast fashion industry:

The Atacama Desert's mesmerising landscape has now become an unwitting victim of the fashion industry's insatiable appetite for cheap, disposable clothing. Mounds of textile waste have transformed the serene desert into a dumping ground so large that it is visible from space.

The term was first used at the beginning of the 1990s, when Zara landed in New York. The term “fast fashion” was used to describe Zara’s mission to allow garments to go from the design stage to being sold in stores in just 15 days. The biggest players in the fast fashion world include Spanish fashion giant Zara, Chinese Shein, Japanese UNIQLO, and Swedish H&M.

Fashion production comprises 10% of total global carbon emissions, as much as the emissions generated by the European Union. The industry dries up water resources and pollutes rivers and streams, while 85% of all textiles go to dumps each year. Even washing clothes releases 500,000 tons of microfibers into the ocean each year, the equivalent of 50

billion plastic bottles. According to the UN Framework Convention on Climate Change, emissions from textile manufacturing alone are projected to skyrocket by 60% by 2030.

Fast Fashion and Its Environmental Impact:

1. **Water:** The fashion industry is the second-largest consumer of water among industries, requiring about 700 gallons to produce one cotton shirt and 2,000 gallons of water to produce a pair of jeans. Textile dyeing is the world's second-largest polluter of water, since the water leftover from the dyeing process is often dumped into ditches, streams or rivers.
2. **Microplastics:** Brands use synthetic fibres like polyester, nylon and acrylic, which take hundreds of years to biodegrade.
3. **Energy:** The process of making plastic fibres into textiles is an energy-heavy process that requires large amounts of petroleum and releases acids like hydrogen chloride. Additionally, cotton, which is used in a large amount of fast fashion products, is also not environmentally friendly to manufacture. Pesticides necessary for the growth of cotton present health risks to farmers.

Social Impact: Fast fashion not only has a huge environmental impact, but it also has a huge social impact. In fact, the industry also poses societal problems, especially in developing economies. 80% of clothes are made by young women between the ages of 18 and 24. A 2018 US Department of Labour report found evidence of forced and child labour in the fashion industry in Argentina, Bangladesh, Brazil, China, India, Indonesia, the Philippines, Turkey, Vietnam and others. In fast fashion, sales and profits are often more valued over human welfare.

The sad part is that global fast fashion brands such as H&M, Zara, and Shein are making more clothes than the planet can handle. It's also the way they make money. First, they lower labour expenses and use cheaper synthetic materials. By making large amounts of clothing, companies can produce each garment more quickly and efficiently. And by producing more garments, they may not make much profit on a single garment, but earn huge profits by selling millions of garments.

CONCLUSION

As we have seen throughout this guide, industries and modern technologies have a lot of advantages, for example, economic growth, job opportunities and improved standards of living. However, they can also cause environmental problems such as pollution, loss of

biodiversity, pressure on water resources, and the growing problem of e-waste. Such effects often affect not only the countries but also the world environment.

The question is not whether we have to choose between development and environmental protection, but how we can have both. Governments, industries, big businesses, and consumers all have a role to play in reducing environmental harm and supporting progress. With continued industrial and technological development, it is important to promote sustainable practices that balance economic growth with the protection of the environment for future generations.

EXPECTATIONS FROM THE DELEGATES

It's important to recognise the crucial role that each delegate plays in shaping the discussions and outcomes of the committee. With this in mind, the bureau has outlined a set of expectations that.

We'd like you, as delegates, to keep in mind and follow.

1. The guide serves as the starting point for your research. We encourage you to read it thoroughly and use it to formulate your thoughts and speeches. However, it is only a reference, and you should not limit yourself to it or directly write your speeches from the material provided. Please use reliable sources and extend your research to all aspects of the agenda.
2. Try stretching your imagination to develop innovative, practical, and easily implementable solutions. As the ultimate aim of the conference is to address the agenda through effective solutions, maintain a solution-oriented approach throughout your research.
3. Find nations on the agenda that hold similar beliefs to your own.
4. Examine previous agreements with other nations over the agenda and take into account regional alliances. Talk informally with countries that could become your allies.
5. Most importantly, make sure that all the information you present is authentic and verified, as the use of AI is strictly prohibited. You can refer to and use different websites that you have done your research on, but please strictly avoid plagiarism.

HOW TO RESEARCH

Step 1: Arguably, the most important step is to read the guide. Read it once, maybe twice, but be thorough with whatever is being discussed in the guide because it contains all the essential elements that the committee is going to discuss during the course of the 3 days.

Step 2: Research the allies and enemies of your country. Read about your country's foreign policy, especially the environmental laws that exist or are in the making in your country. It would be great if the data you collect is backed up with facts and figures.

Step 3: The subtopics have only been introduced to you. Now, you need to dive deeper into them by exploring various aspects of the subtopics and how your country can relate to them. Research whether your country was part of any of these subtopics or treaties. In your speeches, mention the causes, effects, and solutions your country has faced and implemented.

Step 4: The main objective of the committee is to find solutions. After you have understood the gist of the problems being discussed, think creatively, think out of the box, and come up with unique and innovative solutions to solve the problems being discussed. Make sure your solutions are detailed.

To frame better solutions, you may use the “4 W and H Rule,” which stands for What, Where, Who, When, and How. You are expected to use this rule to form achievable and relevant solutions.

To achieve that, you need to:

- Identify the root cause of the problems.
- Recognise the area/place where the solution should be implemented.
- Know the ‘people’ who will be implementing your solutions, e.g., the UN, NGOs, etc.
- Identify the resources and actions needed for the implementation of the solution.

Most importantly,

You need to ensure that the solutions make sense and are implementable.

An example we can take is climate change, which is a pressing issue. *However, this example is presented solely for your understanding of solution creation, and you are not supposed to present this same solution during the committee sessions.*

Bad Solution: To tackle climate change, the government has to be more active at the ground level.

This solution is a bad example because it does not follow the “4 W and H Rule.” It is a very vague solution. To make this a comprehensive solution, we must answer all the questions that come to mind. We must look at who will be responsible for doing this, how it will be done, and what ensures that the solution is implemented properly.

Good Solution: “To tackle climate change, the government should implement activities such as promoting renewable energy sources, improving energy efficiency, and adopting sustainable practices in transportation. Additionally, regular checks by an independent authority can ensure that these practices ultimately reduce climate change.”

Step 5: Enjoy the process. Things might seem tough when you're starting, but trust us, the harder you research and the more you explore and gather knowledge, the more it will pay off in the end when you discuss your points during the committee, make new friends, and talk to different people with varying portfolios. Stay confident and always believe in yourself.

QUESTIONS A RESOLUTION MUST ANSWER

1. How can the effects of industrial activity on air and water be controlled? What measures can be taken to involve communities in decision-making processes regarding environmental protection?
2. How can economic and sustainable development coexist? How can companies prioritise and change their practices to achieve the same?
3. How can developing countries be supported in managing their waste, along with regulating their laws and policies to ensure that the solutions are sustainable in the long term?

4. How can developed and developing countries discuss who has control over factories set up in another country using that country's resources?
5. What strategies can be implemented to stop e-waste dumping? What roles can the community play in these efforts? How can global knowledge be a key to preventing e-waste management? How can this knowledge be spread to increase awareness?
6. How can data centres use more green energy, reduce pressure on water resources, strengthen laws, and raise public awareness?
7. How can big and emerging AI or software companies be ethical and regulated in their practices to ensure both technical and sustainable development?
8. Should developed nations provide financial and technological assistance to help developing countries pursue sustainable development?

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