MACMUN 2026 - United Nations Environmental Programme

Staff Letter

Greetings delegates,

Welcome to the United Nations Environmental Programme! We are your committee staff, Jasmine and Aikam, and we are excited to guide you through three days of lively debate and problem-solving at MACMUN 2026.

The UNEP's mandate is to provide leadership and encourage international partnership in caring for the environment. It has focused on issues such as climate change, pollution, and ecosystem health. In this conference, delegates will discuss two topics: Natural Disaster Response in Vulnerable Areas and the Environmental Impacts of AI and New Technologies.

The UNEP may be lesser known than other United Nations bodies, but as you will come to understand over the course of this committee, there are a vast number of challenges and new opportunities that the UNEP faces. This committee will give you an opportunity to learn more about UNEP's goals and work towards assisting the environment.

Before diving into the details, we would like to introduce ourselves:

Jasmine: Hi! I am a second-year Honours Life Sciences student here at McMaster. I have been leading and participating in MUN conferences for four years now, and although I have yet to win any awards, it is still one of my all-time favourite activities. In my free time, I enjoy reading fantasy novels and playing video games.

Aikam: I am a second-year Honours Political Science and Honours Environment and Society student at McMaster. This is my first time leading a debate in a university setting, but I have enjoyed participating in MUN for several years. I look forward to getting to know you all over the course of this conference!

We are both looking forward to meeting all of you, and we wish you the best in your preparations for the conference. We hope that you challenge yourselves, step out of your comfort zone just a little, and engage in collaborative thinking to develop innovative solutions to the issues at hand. If you have any questions, please do not hesitate to reach out to either of us.

Sincerely,
Jasmine (she/her) and Aikam (he/him)

Committee Mission

The UNEP is dedicated to preserving, protecting, and enriching the global environment through cooperative development by all nations. Delegates of this committee will succeed by creating innovative, sustainable solutions, and approaching each topic with careful consideration of ethics and diplomacy.

This year's topics highlight the fragile relationship between nature and humanity. Our mission is to explore avenues that balance the growing demands of the world's population with the declining health of its ecosystems. By engaging with diverse perspectives and challenging themselves to think creatively, delegates will learn to develop actionable, practical, inclusive, and environmentally responsible strategies.

Above all else, this committee aims to create a positive and welcoming experience for all. Whether you are new to Model UN or a long-time delegate, UNEP encourages you to ask questions, share ideas, and step outside your comfort zone as you work toward meaningful solutions that benefit communities, and the planet.

Topic A: Natural Disaster Response in Vulnerable Areas

Introduction

One of the most crucial tasks of UNEP is to be present when and where people and the environment need it most. This topic will allow you to explore the past, present, and future of the UNEPs' core mandate and to manage what many may see as a redundant organization in a more volatile setting.

History

In 1972, the United Nations Conference on the Human Environment was held in Stockholm, Sweden.[1] This was the first conference of this scope to make the environment a central issue.[2] Following the conclusion of this conference, the Stockholm Declaration was adopted which contained 26 principles, including safeguarding wildlife, preventing oceanic pollution, and encouraging further environmental education[3]. This conference also marked the beginning of the United Nations Environmental Programme (UNEP), which was mandated to monitor the state of the environment, inform policy making with science, and coordinate key environmental issues[4]. Since its inception, the UNEP has facilitated the signing of various environmental conventions, such as the 1973 Convention for the Prevention of Pollution from Ships, and the 1976 Convention for the Protection of the Mediterranean Sea Against Pollution, among others.[5]

The UNEP engages with impacted stakeholders during a natural disaster, and does so to ensure the protection of the environment in turbulent situations. Following the 2004 Indian Ocean Tsunami, the UNEP established the Asian Tsunami Disaster Task Force.[6] This force assessed environmental damage and ensured that its recovery was on the agendas of local governments.[7]

[1] "History," *UNEP Finance Initiative, https://www.unepfi.org/about/about-us/history/*
[2] Ibid.
[3] "UNEP: 50 years of Environmental Milestones," *UN Environment Programme, https://www.unep.org/environmental-moments-unep50-timeline*
[4] Ibid.
[5] Ibid.
[6] "Maldives post-tsunami environmental assessment," *UN Environment Programme,* September 29th, 2005, https://www.unep.org/resources/report/maldives-post-tsunami-environmental-assessment
[7] Ibid.

Such responses are coordinated by the Post-Conflict and Disaster Management Branch (PCDMB) of the UNEP, which was established in 1999[8].

After the 2010 7.0 magnitude earthquake in Haiti, the UNEP highlighted the various environmental issues the nation faced before and after the disaster.[9] It shows how decades of deforestation, poor waste management, and weak infrastructure disproportionately magnified the effects of the earthquake. In the aftermath of the quake, the UNEP ensured that waste, including medical and human waste, was disposed of using safe environmental practices to minimize soil and water contamination, which would have left a generational impact on both the population and the environment.[10] The UNEP concluded by highlighting the importance for Haiti to reforest its natural areas, manage the watershed, and to reduce its reliance on charcoal.[11]

The UNEP faced significant challenges in fulfilling its mandate in Haiti[12]. Limited resources and funding constraints delayed certain actions, while the sheer scale of destruction due to non-existent building codes complicated coordination with authorities[13]. Haiti has long been politically unstable, which not only weakened the UNEP's response but also left the country struggling for more than a decade later[14]. Furthermore, the UN's own office was destroyed in the

[8] "UNEP Post-Conflict and Disaster Management Branch," *UNDRR,* June 15th, 2016, https://www.preventionweb.net/organization/unep-post-conflict-and-disaster-management-branch
[9] "GEO Haiti: State of the Environment Report 2010," *UNEP,* June 16th, 2010, https://www.unep.org/resources/assessment/geo-haiti-state-environment-report-2010
[10] Ibid.
[11] Ibid.
[12] "UNEP in Haiti: 2010 Year in Review," *ReliefWeb,* April 21st 2011, https://reliefweb.int/report/haiti/unep-haiti-2010-year-review
[13] Ibid.
[14] *"Haiti: 10 years after the earthquake,"* Humanity and Inclusion, n.d., https://www.hi-canada.org/en/news/hati-10-years-after-the-earthquake-#:~:text=Haiti%20has%20not%20been%20spared,humanitarian%20aid%20operations%20in%20Haiti.

earthquake, which illustrated that the UNEP themselves were unprepared for such a disaster, which further complicated their efforts in the country.[15]

These challenges are not unique to Haiti. As wildfires, droughts, hurricanes, and floods become increasingly common, lower-income states continue to suffer the most. Syria, for instance, is still struggling to rebuild two years after a deadly 7.7 magnitude earthquake[16]. The International Federation of the Red Cross notes how individuals continue to struggle with cash, mental health, and lodgement[17]. Many places still do not have access to clear drinking water and dangerous materials like asbestos remain in the environment. These conditions demonstrate the persistent gap between UNEP's global mission and its capacity to act effectively in fragile or conflict-affected states. Situations like these illustrate how UNEP's effectiveness depends on cooperation between other authorities, which often dilutes the UNEP's effectiveness in volatile situations.

Overall, the UNEP's work demonstrates its importance and its limitations. While it has intervened in disasters all over the world and has shown the importance of factoring in environmental conditions during recovery, it continues to face structural and political barriers that prevent it from responding as efficiently as it was originally intended to.

Current Situation

Increase in Natural Disaster Intensity and Frequency

[15] "UN headquarters in Haiti collapsed in quake," *Seattle Times,* January 13th, 2010, https://www.seattletimes.com/nation-world/un-headquarters-in-haiti-collapsed-in-quake/
[16] "Türkiye-Syria Earthquake Response," *United Nations,* n.d., https://www.un.org/en/turkiye-syria-earthquake-response
[17] "Türkiye (Turkey) and Syria earthquake 2023: a year on," *British Red Cross,* 15th July 2025, https://www.redcross.org.uk/stories/disasters-and-emergencies/world/turkey-syria-earthquake#:~:text=Red%20Crescent%20teams%20in%20both,have%20supported%2014%20million%20people.

Climate change is exacerbating natural disasters to magnitudes and frequencies never seen before. The U.S. Environmental Protection Agency has stated that "extreme weather events such as heat waves and large storms are likely to become more frequent or more intense with human-induced climate change."[18] The effects of this cannot be overstated for the UNEP. As it is, the UNEP is struggling to respond to crises around the world. Factors in disasters such as floods, wildfires, and heat waves becoming more common, there will be a serious risk for the environment, and the UNEP as it stands, will not be able to respond appropriately.

Budget Constraints

The UNEP's mission to promote sustainable recovery is lagging in its response, due in part to funding. The UNEP relies on voluntary contributions to fund over 95% of its activities, with only 5% coming from the UN budget. Additionally, key players on the world stage are adopting an isolationist approach. Russia, despite previously collaborating with the UNEP, has now prioritized economic development to fuel its war in Ukraine. The United States has also criticized the UN entirely, and its new administration has labeled climate change as "the world's greatest con job[19]." The US has also slashed its funding for the UN, which put further strain on the UNEP's ability to respond[20]. This is further discussed under the *Bloc Analysis*.

[18] "Climate Change Indicators: Weather and Climate." *EPA*. https://www.epa.gov/climate-indicators/weather-climate#:~:text=Scientific%20studies%20indicate%20that%20extreme,with%20human%2Dinduced%20climate%20change.

[19] "Trump called climate change a 'con job' at the United Nations. Here are the facts and context." *PBS.* September 25th, 2025. https://www.pbs.org/newshour/politics/trump-called-climate-change-a-con-job-at-the-united-nations-here-are-the-facts-and-context

[20] "UN faces $500m budget cut and 20% job losses after big drop in US funding." *The Guardian.* https://www.theguardian.com/world/2025/sep/18/united-nations-un-2026-budget-job-losses-us-funding-cuts

Structural Issues

The UNEP is now seen as an outdated institution that is unable to meet demand for its services. A variety of issues exist with the UNEP in its current form, including poor planning, poor human resources within the organization, and a vague mandate.[21]

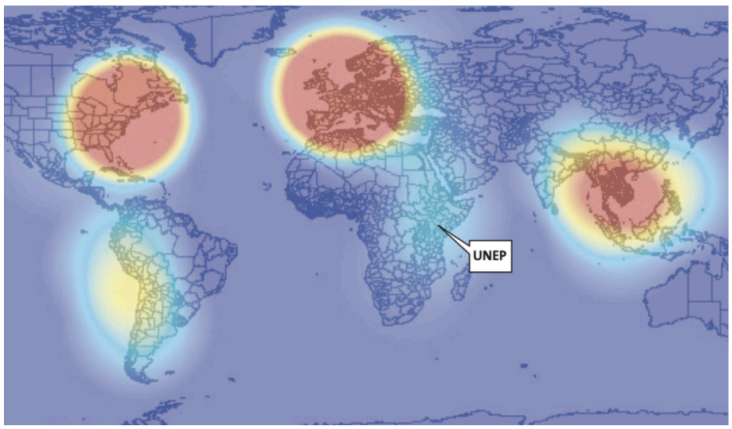

Figure 1
Ivanova, Density of International Environmental Organizations.

UNEP headquarters are located in Nairobi, Kenya, making it the second UN institution to be based in a developing nation. While projecting a powerful image, there have been far too many hurdles. First, its location makes it time-consuming to travel to. An Internal Oversight Committee found that environmental delegates spent far too much time on travel alone[22]. Second, electronic communications out of this office are unreliable, which hampers its connectivity to the rest of the world and slows the organization's response time[23]. Third, it is difficult for the UNEP to collaborate with other UN organs based in Geneva or New York due to the time difference. This delay slows down important work by almost an entire day[24]. Finally, it also makes it difficult for the UNEP to attract top environmental talent. Many policy staff, in particular, do not want to relocate to Nairobi, where resources and infrastructure are limited compared to other UN hubs[25]. This talent gap reduced the UNEP's ability to respond to

[21] Marc Levy, *"The UNEP at a Turning Point."* June 2000.
[22] Ibid.
[23] Ibid.
[24] Ibid.
[25] "Where Does the United Nations Environment Programme (UNEP) Fall Short?" *Earth.org*, July 26th 2021. https://earth.org/where-does-the-united-nations-environment-programme-unep-fall-short/#:~:text=Other%20criticisms%20of%20UNEP%20include:%20*%20**Gaps,to%20the%20UNEP%20by%20more%20than%2080%25

environmental crises worldwide, in conjunction with other factors. *Figure 1* highlights its isolation relative to other international environmental organizations.

Internal Oversight has also been critical of the UNEP's management. It is said to be overtly complicated and bureaucratic, with poor relations between senior management and staff, criticisms of its hiring practices, and a lack of transparency. A large part of the criticism toward the UNEP comes from its vague mandate. Many within the organization itself are unclear as to its specific mission, given significant overlap between the UNEP and other UN bodies. The UNEP was created as a program, and not a stand-alone agency like the World Health Organization. The initial reasoning behind this was to give the UNEP flexibility to work in various fields, all pertaining to the environment. However, this places the UNEP in a weaker position within the UN hierarchy as it constrains its authority and capacities[26].

Other organizations have been able to take advantage of UNEP'S lack of influence and establish themselves. The World Bank's increasing role in environmental work has eroded the UNEP's responsibilities[27]. The Global Environmental Facility (GEF) was created in 1992 and also has an overlapping mandate with the UNEP, especially around financing and grants[28].

There are a wide variety of challenges that the UNEP presently faces, and all of these challenges reduce not just the efficiency of the program, but also the need for it altogether. The UNEP needs to adapt to a changing world and must reassert itself as an influential body to truly complete its mandate.

[26] Ibid.
[27] Ibid.
[28] Ibid.

Bloc Analysis

United States

The UNEP has previously worked with the United States (U.S.) to initiate collective action regarding climate change, nature and biodiversity loss, and pollution and waste[29]. In the past, the U.S. has been relatively outspoken regarding climate change and other environmental issues; however, the approach under recent administrations seem to vary. Democratic administrations, under the previous Biden and Obama presidencies, prioritized international consensus, especially through the United Nations and its relevant programmes/organizations, including the UNEP[30]. However, Republican administrations have adopted a more isolationist approach that reduces the involvement of the United Nations.

The current Trump administration has reversed key environmental policies that long existed across the U.S., including rolling back many Obama-era environmental regulations that aimed to move the country away from coal power and towards renewable energy[31]. Other reversals include weakening emissions standards, streamlining environmental reviews, and rolling back Clinton-era forestry protections to allow for deforestation[32].

These actions, combined with reductions in funding for the United Nations by the U.S., pose challenges to the relevance and efficacy of the UNEP. The inconsistent approach of the U.S. has

[29] "North America," *UN Environment Programme,* n.d., https://www.unep.org/regions/north-america
[30] "USA Country Summary," *Climate Action Tracker,* September 22nd 2025, https://climateactiontracker.org/countries/usa/
[31] Ibid.
[32] "Trump's Canadian tariffs include lumber. He is pushing to cut down American trees instead," *CNN,* March 6th, 2025, https://www.cnn.com/2025/03/06/climate/trump-logging-national-forest-tariffs#:~:text=Trump's%20executive%20order%20says%20federal,in%20response%20to%20the%20order.

created uncertainty and funding vacuums across the United Nations, forcing other regional blocs and nations to step up their own commitments.

European Union

The European Union (EU) and its member states have largely stepped up their international funding commitments to compensate for a lack of American funding. The EU recently became the single largest financial contributor to the UN, providing around a quarter of all voluntary contributions[33].

The EU already cooperates with the United Nations on many aspects, including human rights, sustainable development, peacekeeping, and with the UNEP[34]. This collaboration stems from the origin of the UNEP itself in 1972 and has since continued[35]. The EU and the UNEP cooperate on several initiatives, with the EU mainly providing financial support[36]. These initiatives include the Environment Fund and the Planetary Fund[37].

China

[33] "The EU and the United Nations," *European Union External Action,* June 30th, 2025, https://www.eeas.europa.eu/eeas/eu-and-united-nations_en#:~:text=Read%20the%20factsheet-,EU%20financial%20support%20to%20the%20UN,highest%20non%2Dgovernmental%20contributor).
[34] Ibid.
[35] "European Union and UNEP," *UNEP,* November 18th, 2024, https://www.unep.org/about-un-environment/funding-and-partnerships/european-commission
[36] Ibid.
[37] Ibid.

China, like the U.S., is a founding and permanent Security Council member of the United Nations[38]. Like the EU, China is a large donor of funds to the UN as it is the second largest donor to the organization[39].

China and the UNEP have been working together for several decades[40]. In 2010, the UNEP launched a report which highlighted that a shift to a green economy would benefit economic growth, and provided recommendations for prioritizing China's green economy[41]. The UNEP has a history of assisting China following natural disasters, including after the 2008 Sichuan earthquake[42].

Russia

Russia is another powerful actor in the United Nations. Russia is a major contributor to peacekeeping budgets for missions across, and assists in the training of UN peacekeepers[43]. Russia has frequently criticized UN institutions, including those focused on the environment. One notable instance of noncompliance with UN environment initiatives is the country's refusal to ban plastics.[44]

[38] "Welcoming Message," *Permanent Mission of China to the United Nations,* n.d, https://un.china-mission.gov.cn/eng/dbtxx_141670/202404/#:~:text=As%20a%20founding%20member%20of,active%20role%20in%20international%20affairs.
[39] Ibid.
[40] "Partnership with China," *UNEP,* March 19th 2019, https://www.unep.org/explore-topics/green-economy/what-we-do/economic-and-fiscal-policy/partnership-china
[41] Ibid.
[42] "China," *UNEP,* November 7th, 2024, https://www.unep.org/china
[43] "Open Debate on UN Peacekeeping Operations," *Permanent Mission of Russia to the United Nations,* September 9th, 2024, https://russiaun.ru/en/news/polyanskiy_peacekeeping#:~:text=Our%20country%20attaches%20great%20importance,major%20contributors%20to%20peacekeeping%20budgets.
[44] "Plastics treaty talks collapse without a deal after "chaotic" negotiations," *Climate News,* August 15th, 2025, https://www.climatechangenews.com/2025/08/15/plastics-treaty-talks-collapse-without-a-deal-after-chaotic-negotiations/#:~:text=An%20opposing%20group%20of%20fossil,to%20bridge%20those%20divergent%20positions.

The role of Russia in the United Nations has declined recently, as the country is largely isolated following its invasion of Ukraine. Nevertheless, Russia, with its veto power in the Security Council alongside China, holds considerable influence. Russia has a memorandum of understanding with the UNEP, and it primarily focuses on helping conserve Russia's vast environment.

Research and Preparation Questions

1. How can UNEP organize and deliver rapid environmental assistance after disasters while preventing relief efforts from causing new environmental damage?
    a. What safeguards can prevent potential environmental risks from occurring?
2. What policies and measures can allow for countries, alongside UNEP's guidance, to improve the protections against environmental hazards?
    a. How do we prevent these hazards from turning into humanitarian crises?
3. How should UNEP interact with countries and national authorities when gaps in governance, political insecurity or tensions rise and restrict access for affected populations?
    a. How can the coordination of aid continue when a host country or state does not have control in an area?
4. What structure of funding can allow for a stronger UNEP and its disaster mandate given its dependence on factors such as donations?
    a. What prevents a new structure from repeating mistakes from the current model?

Topic B: Environmental Impacts of Artificial Intelligence (AI) and New Technologies

Introduction

There is no denying that, within the past few years, Artificial Intelligence (AI) has changed our lives. However, some may argue whether it is truly for the better. AI has become increasingly embedded in our daily routines, ranging from quick Google searches to social media algorithms, to content generation and study tools. As AI systems become more advanced and widely used, so do the environmental concerns surrounding them. Growing water consumption, energy demands, and electronic waste raise important questions surrounding the long-term sustainability of this technology. However, AI indeed holds great potential for environmental management as well – it can help to monitor ecosystems, optimize disaster response, and facilitate more efficient resource use. This topic invites delegates to carefully consider both sides of an evolving issue, and to propose strategies that allow countries to continue the implementation of Artificial Intelligence systems responsibly and sustainably.

History

In 1950, computer scientist Alan Turing posed the question, "Can machines think?"[45] It was this question that laid the foundation for the development of "thinking machines," which are known today as artificial intelligence, or AI. The Turing Test refers to a test of a machine's ability to imitate the intelligent behaviour of humans.[46] Shortly after Turing's death, Professor John McCarthy organized a workshop to clarify and develop ideas about Turing's thinking machines

[45] "The birth of Artificial Intelligence (AI) research," *Lawrence Livermore National Library,* https://st.llnl.gov/news/look-back/birth-artificial-intelligence-ai-research
[46] Benjamin St. George. "What is the Turing Test?" August 28, 2024, https://www.techtarget.com/searchenterpriseai/definition/Turing-test

at Dartmouth University.[47] The Dartmouth Conference is widely regarded as the founding moment of AI as a field of research.[48]

Throughout the past 70 years, Artificial Intelligence development has steadily increased. In the 1970s, despite the growing research shared in previous conferences, applied mathematician Sir James Lighthill declared that researchers had over-promised and under-delivered on the potential of such machines.[49] His report led to funding cuts and a period of stagnancy for the field.[50] However, with the publication of projects including the first self-driving car by Ernst Dickmanns and the chess-playing computer program Deep Blue, steps continued to be made towards the "unrealized dream" of true artificial intelligence.[51] In the early 2000s, there was a renewed interest in the field, sparking projects such as Kismet (a "social robot" capable of identifying human emotions) and AI-powered NASA rovers.[52]

When the chatbot ChatGPT developed by OpenAI was released in 2022, there was a major spike in AI popularity and usage, with the model reaching 100 million users within two months.[53] Although Artificial Intelligence is nothing new, this modern iteration sparked a huge push for AI integration everywhere. Many major platforms developed their own AI tools in response, such as Microsoft's Copilot, Google's Gemini, and Meta AI (Facebook, Instagram, WhatsApp). Since then, AI has skyrocketed in popularity and capabilities, growing at unprecedented rates. AI

[47] *Lawrence Livermore National Library*
[48] *Lawrence Livermore National Library*
[49] "The History of AI: A Timeline of Artificial Intelligence," *Coursera*, October 15, 2025, https://www.coursera.org/articles/history-of-ai
[50] Ibid.
[51] Ibid.
[52] Ibid.
[53] Bertalan Mesko. "The ChatGPT (Generative Artificial Intelligence) Revolution Has Made Artificial Intelligence Approachable for Medical Professionals," *Journal of Medical Internet Research,* June 22, 2023, https://www.jmir.org/2023/1/e48392

serves not only as a chatbot, but also to generate videos, images, websites, and programming code, to take and summarize meeting and lecture notes, to create social media posts, and much more.

However, while AI has the incredible potential to address issues in many fields, there are drawbacks. The data centers that house these tools produce electronic waste, consume fresh water to cool the systems, use precious materials that are often unsustainably mined, and use massive amounts of electricity.[54] The rapid deployment of these AI tools is a significant contributor to environmental degradation, and regulations must be implemented before it becomes irreversible. Over 190 countries have adopted a series of non-binding recommendations on the ethical use of AI (see UNESCO "Recommendation on the Ethics of Artificial Intelligence," 2021).[55] This agreement marks a good first step to regulating AI, though further development is needed to safeguard the environment and sustainability practices.

Current Situation

As with any new technological development, the emergence of artificial intelligence tools requires regulations for both personal and corporate use. Such rules must be agreed upon at the global level. For example, in the 1960s, when it became apparent that advanced missiles could turn outer space into a battlefield, the international Outer Space Treaty (1967) was created by the United Nations.[56] This agreement outlined that space would be a global common ground, free for

[54] "AI has an environmental problem. Here's what the world can do about that," *UNEP,* https://www.unep.org/news-and-stories/story/ai-has-environmental-problem-heres-what-world-can-do-about
[55] Recommendation on the Ethics of Artificial Intelligence, *UNESCO,* November 23, 2021, https://unesdoc.unesco.org/ark:/48223/pf0000381137
[56] "Treaty on Principles Governing the Activities of States in the Exploration and Use of Outer Space, including the Moon and Other Celestial Bodies," https://www.unoosa.org/oosa/en/ourwork/spacelaw/treaties/introouterspacetreaty.html

exploration by any country, and prohibited weapons of mass destruction, stating that space and all celestial bodies are designated for peaceful exploration to advance humanity.[57] Today, it is a goal of this UNEP committee to develop a similar agreement dictating the appropriate usage of artificial intelligence by all countries, with a focus on keeping such usage sustainable and avoiding harm to the environment at all costs.

Water Consumption

Water is a renewable resource, but access to fresh, purified water is limited. Energy, amongst other resources, is required to purify water into a clean state. Freshwater is only 3% of the world's water, most of which is in the form of glaciers, unavailable for consumption.[58] Over 1 billion people lack access to water every day, and those with water but inadequate sanitation are exposed to water-borne diseases, killing millions every year.[59]

AI data centers use water cooling systems, resulting in the evaporation of the water– up to 9 liters of water per kWh of energy used.[60] Due to the rapidly escalating demand for these AI products, associated companies have significantly increased their water consumption. This is concerning, as freshwater is already scarce. AI's projected water usage could hit 6.6 billion m^3 by 2027, signaling an immediate need to reduce its water footprint.[61]

[57] Ibid.
[58] Cindy Gordon, "AI Is Accelerating the Loss of Our Scarcest Natural Resource: Water," Forbes, Feb 25, 2024. https://www.forbes.com/sites/cindygordon/2024/02/25/ai-is-accelerating-the-loss-of-our-scarcest-natural-resource-water/
[59] Ibid.
[60] Ibid.
[61] Ibid.

Companies like Microsoft, Google, and Meta have vowed to mitigate their water usage by replenishing more than they use by 2030.[62] It is unclear how they will accomplish this when there is simply not enough water to go around.

Electricity and Energy Use

Data centers are buildings that house computer infrastructure - servers, storage, network equipment, and all the other components that run in the backend. For example, Amazon has over 100 data centers worldwide, each one containing approximately 50,000 servers to support cloud computing.[63] Although data centers have been around since the 1940s, generative AI consumes 7 to 8 times more energy than a typical computing workload.[64] Noticeably, by the end of 2023, when Artificial Intelligence tools became widely available, the power requirements of data centers in North America were estimated to have doubled, and this is partly due to the rapid rise in generative AI integration.[65]

The primary issue with this increase in energy usage is that the majority of this energy is produced through the burning of fossil fuels, creating greenhouse gases and leading to global warming. By the end of 2026, it is anticipated that AI data centers will be the 5th-largest consumer of energy, between the entire countries of Japan and Russia.[66] These energy demands are simply not sustainable and will continue to have serious impacts on the environment if reconsiderations are not made around AI developments.

[62] Ibid.
[63] Adam Zewe, "Explained: Generative AI's environmental impact," MIT News, Jan 17, 2025. https://news.mit.edu/2025/explained-generative-ai-environmental-impact-0117
[64] Ibid.
[65] Ibid.
[66] Ibid.

When it comes to training AI models, a massive amount of energy is used in a short time period. It was estimated that training OpenAI's GPT-3 consumed 1,287 megawatt hours, enough to power 120 average North American homes for a year, and produced around 500,000 kg of carbon dioxide.[67] One issue that arises during training are the rapid power fluctuations.[68] To protect power grids, operators tend to employ diesel-based generators.[69]

After training, energy demands do not drop but instead rise. A ChatGPT prompt uses 5 times more electricity than a single Google search, and each prompt consumes around the same amount of energy as a TV running for 9 seconds.[70] This may not seem like much, but with the combined usage of millions, this quickly adds up. Every single day, ChatGPT consumes 39.98 million kilowatt hours, enough energy to charge 8 million phones![71] The average consumer is likely not considering these costs, perhaps thinking that one prompt cannot do that much harm. While this committee cannot outright ban AI usage or stop individuals from using it, it can focus on addressing the issue at the source by placing regulations on how much energy AI data centers can consume.

Mining of Minerals and Rare Elements

In addition to energy consumption, raw materials are needed for building the hardware for AI. This includes copper, lithium, cobalt, and more precious metals like gold, silver, and platinum.[72]

[67] Dianne Plummer, "AI Training Fuels Massive Carbon Costs And Demands Greener Solutions," Forbes, Aug 28, 2025. https://www.forbes.com/sites/dianneplummer/2025/08/28/ai-training-fuels-massive-carbon-costs-and-demands-greener-solutions/
[68] Zewe, "Generative AI's environmental impact."
[69] Ibid.
[70] Ibid.
[71] Ian Wright, "ChatGPT Energy Consumption Visualized," Sept 4, 2025, https://www.businessenergyuk.com/knowledge-hub/chatgpt-energy-consumption-visualized/
[72] Fabian Hühne, "How does metal mining for electronics impact the climate crisis?" Syllucid, Jan 23, 2023, https://syllucid.com/blogs/news/how-does-metal-mining-for-electronics-impact-the-climate-crisis?

To build a 2kg computer, 800kg of raw materials are needed.[73] Additionally, some of the rare earth elements involved are mined in environmentally destructive ways, with harmful effects on nature and the people who live nearby. For example, the mining and refining processes require significant energy that produces high carbon dioxide outputs.[74] Deforestation is another concern, with 44% of mining operations located in forests, affecting countries like Brazil, Indonesia, and Suriname.[75]

Data centers also produce electronic waste, which can be dangerous in its own way. When this waste and by-products of the electronics end up in the water supply, it can be toxic.[76] If not properly treated, this poses a risk to the environment and human health.[77] This is especially true in countries like Peru, where children have been found with high exposure levels to heavy metals, leading to serious health concerns.[78]

A possible alternative to the costly mining industry is "urban mining," which involves extracting valuable materials from discarded electronics.[79] This would help to both reduce waste and harm to the environment normally generated through traditional mining procedures.[80] For example, China has adopted urban mining and e-waste collection systems, and it may be worthwhile for other countries to implement them as well.[81] Additionally, there is a vast amount of e-waste being

[73] "AI has an environmental problem," *UNEP*.
[74] Hühne, "How does mining impact climate?"
[75] Ibid.
[76] Ibid.
[77] Ibid.
[78] Ibid.
[79] Tony Perrota, "What is Urban Mining?" Greentec, Mar 28, 2022, https://www.greentec.com/blog/what-is-urban-mining
[80] Ibid.
[81] Ibid.

generated every year that could be reclaimed instead of going to landfill.[82] However, improper e-waste collection can also be dangerous, so if adopted, countries need to consider the logistics of collecting materials while avoiding harm.[83]

Bloc Analysis

Top AI developers - Western and Developed Nations

The United States, China, the United Kingdom, France, and South Korea are generally leaders in AI research and development.[84] These countries have invested the most into AI, with many of the top labs and developments occurring there. They are interested in maintaining their position as technological leaders, while reducing environmental harm where possible.[85] Many of these countries have already implemented strict emission standards and "green AI" initiatives to reduce their energy usage.[86] However, they may hesitate to support any regulations that could pose an economic burden to their tech industries.[87]

BRICS and Rapidly Developing Countries

Brazil, Russia, India, China, South Africa, and five other countries comprise the BRICS organization. These countries view AI as an essential tool for economic development.[88] Many of these states also face severe environmental pressures, including air pollution, water scarcity, and

[82] Ibid.
[83] Ibid.
[84] Stanford HAI Staff, "Global AI Power Rankings," Stanford University, Nov 21, 2024, https://hai.stanford.edu/news/global-ai-power-rankings-stanford-hai-tool-ranks-36-countries-in-ai
[85] Tim Hickman, "Energy efficiency requirements under the EU AI Act," White & Case, Apr 14, 2025, https://www.whitecase.com/insight-alert/energy-efficiency-requirements-under-eu-ai-act
[86] Ibid.
[87] Ibid.
[88] Atahualpa Blanchet, "Artificial Intelligence Governance in BRICS: Cooperation and Development for Social Inclusion," BRICS Brazil, Apr 11, 2025, https://brics.br/en/news/articles/artificial-intelligence-governance-in-brics-cooperation-and-development-for-social-inclusion

vulnerable ecosystems.[89] Because of this, these countries especially must emphasize the sustainable development of AI in industries such as healthcare and agriculture.[90]

Least Developed and Small Countries

Many of the least developed countries have limited involvement in AI, but are disproportionately affected by environmental impacts.[91] Some of them suffer from a lack of access to clean water and sanitation systems. These states will likely push for strong regulations on the environmental footprint of AI technology.[92] Their stance leans towards promoting equity and sustainability, as well as emphasizing the responsibility of wealthier nations, especially those in the Global North, to mitigate harm.[93]

Middle Eastern and Resource-Rich Countries

Countries such as Saudi Arabia, the United Arab Emirates, and Qatar are abundant in energy resources. They will tend to support the expansion of AI because it aligns with their goals for economic diversification.[94] With their access to oil and inexpensive energy, they are likely to invest heavily in data centers and AI infrastructure.[95] Additionally, many are pursuing sustainability and climate-adaptation, so they may also be open to exploring renewable-powered

[89] Ibid.
[90] Ibid.
[91] "Artificial Intelligence for Climate Action," UNCCTEC and UNIDO, July 2025, https://unfccc.int/ttclear/misc_/StaticFiles/gnwoerk_static/AI4climateaction/f2922b97c4cf431996c468e622127eb5/112f8be560ea447dab5ff2e53ab3f6e4.pdf
[92] Ibid.
[93] Ibid.
[94] Nivetha Dayanand, "Gulf sovereign funds expand AI investments," Finance Middle East, May 7, 2025, https://www.financemiddleeast.com/trends-and-outlook/gulf-sovereign-funds-expand-ai-investments-with-100-billion-push-into-infrastructure-and-equity/
[95] Ibid.

AI solutions or strategies that improve its efficiency.[96] Other resource-rich countries include those where mining operations are located, such as in Africa and South America.

Countries may align with multiple blocs as their interests allow. Delegates are encouraged to form alliances with the countries that will best allow their goals to be met.

Research and Preparation Questions

1. How are governments and technology firms able to curb the demand for water and electricity while reliance on AI infrastructure continues to grow?
    a. What limits can be put in place while not limiting access to AI?
2. How should the responsibility towards damages be calculated and divided between developers, consumer states and suppliers, when it comes to emissions, ecological damage from mining and other factors?
    a. How is the cost of this affected by national borders, and how should this be divided?
3. How can AI tools be used to support climate initiatives, conservation, and disaster management even when their use has high environmental costs?
    a. How can the effects be outweighed by the ecological footprint of AI?
4. How should countries react to the heightened need for rare minerals and increased amount e-waste due to upgrades in electronic hardware?
    a. How can these materials be recovered rather than turned into waste>

[96] Thoraya Abdullahi, "UAE turns to AI to solve power strain," The National News, Dec 8, 2025, https://www.thenationalnews.com/business/energy/2025/12/08/uae-turns-to-ai-to-solve-power-strain-created-by-surge-in-advanced-technology/

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