CERF

STUDY GUIDE

2025

COLOMBO MODEL UNITED NATIONS

Climate and Economic Resilience Forum (CERF)

Vision

Promoting multisectoral and multinational collaboration in the context of climate change by counterbalancing economic growth and sustainable development.

Purpose and Mandate

Climate change must be regarded as a key metric of economic development as opposed to measuring a nation's/region's standing merely through its GDP. Economic progress must account for resilience to climate risks, sustainable growth, and other climate-related factors. Why? A nation or region may not fully realize its developmental potential if climate-related challenges hinder its progress. By considering climate-related indicators, nations may be able to assess their true economic health and long-term developmental potential.

Our goal is to analyze the technical aspects of various climate-related challenges and connect them to comprehensive economic solutions. However, this is not a science or law committee; we won't delve deeply into the scientific intricacies or legal frameworks of environmental issues. Instead, our focus is on bridging diverse perspectives to foster well-rounded discussions. By incorporating input from representatives across sectors, we aim to address all critical intersections between climate and economic resilience effectively. This will not function as a typical UNFCCC or UNEP-style committee. Instead, it will take the form of a forum, embracing the characteristics of open dialogue, collaborative exchange, and multifaceted perspectives. The emphasis will be on fostering dynamic discussions and innovative solutions, reflective of a forum's inclusive and interactive nature.

In essence, this simulation reflects the World Economic Forum (WEF) as it operates in status quo, focusing on its role as a platform for addressing global issues. However, the discussions will be specifically limited to the overlap between agendas of climate-focused organizations, like the UNFCCC, UNEP, GCF, and IPCC, and economic development organizations, like the UNDP, ILO, and IOM. Unlike the WEF's broader topics, this simulation highlights the connection between climate resilience and sustainable economic development, aiming to foster clear and actionable solutions.

PD 1: The Transition to Low-Carbon Economies of LEDCs

Background

Since the adoption of the Paris Agreement, countries have been striving to lower carbon emissions and strengthen the global response to climate change. However, low-income countries lack the resources to match the progress of other developed nations. These nations require technical and financial support to advance in their low-carbon paths while remaining worker-friendly and sustainable.

Topic breakdown

Least Developed Countries (LEDCs)

Least Developed Countries (LEDCs) are nations recognized by the United Nations as exhibiting the lowest indicators of socioeconomic development. They are characterized by:

1. Low Income: LEDCs have a Gross National Income (GNI) per capita below a specified threshold, which is currently set at approximately $1,018.
2. Human Resource Weakness: These countries face significant challenges in education, healthcare, and overall human development, leading to lower Human Assets Index (HAI) scores.
3. Economic Vulnerability: LEDCs are highly susceptible to economic shocks, such as fluctuations in commodity prices and natural disasters, which further destabilize their already fragile economies.

As of recent counts, there are about 46 countries classified as LEDCs, primarily located in Africa and Asia.

Low-Carbon Economies

A low-carbon economy aims to minimize carbon emissions and reduce reliance on fossil fuels. This transition involves shifting towards sustainable energy sources such as wind, solar, and hydroelectric power. Some of its key features include:

1. Sustainable Energy Use: Emphasis on renewable energy sources to reduce greenhouse gas emissions.
2. Energy Efficiency: Adoption of technologies and practices that enhance energy efficiency across various sectors, including transportation, manufacturing, and residential areas.
3. Sustainable Practices: Implementation of sustainable agricultural practices, waste management systems, and urban planning that prioritize environmental health.

Low-carbon economies are essential for combating climate change and achieving sustainability goals globally.

Transition Processes

The transition to a low-carbon economy involves several strategic actions:

1. Policy Development: Governments must create regulations and incentives that promote low-carbon technologies and practices.
2. Investment in Renewable Energy: Significant investment is required to develop infrastructure for renewable energy sources.
3. Capacity Building: Training and education initiatives are necessary to equip the workforce with skills relevant to green technologies.
4. International Cooperation: Collaboration between developed and developing nations is crucial for technology transfer and financial support.

The transition is particularly challenging for LEDCs due to their economic constraints but is vital for their sustainable development and resilience against climate change impacts.

Case Studies

COP 29: MAJOR…FAILURE?

The UNFCCC's 29th Conference of the Parties (COP29) brought to light the ongoing injustices that Least Economically Developed Countries (LEDCs) encounter in international climate negotiations. LEDCs suffer the most from climate consequences even though they contribute very little to global emissions, but their issues are frequently ignored. The failure of affluent nations to deliver the $100 billion annual climate money pledged in 2009—much of which was delivered as loans, further burdening vulnerable nations with debt—was one of the major issues that surfaced at COP29.

Furthermore, structural injustices were exposed during the Loss and Damage Fund's operationalization, as large polluters opposed predictable payment systems, depriving LEDCs of the financial stability they needed to recover from climate-related calamities. The plight of Pacific Island nations exemplified the systemic neglect of LEDCs at COP29.

These countries, who faced existential concerns from sea level rise, requested immediate financial assistance from the Loss and Damage Fund but were met with insufficient commitments and bureaucratic delays. Leaders from these countries expressed concern that industrialized nations have provided limited aid and have not taken substantial steps to address issues such as biodiversity loss and community displacement, leaving them to manage these challenges with minimal support.

IEA LAUNCHES OBSERVATORY FOR INCLUSIVE CLEAN ENERGY TRANSITIONS

The International Energy Agency (IEA) has launched a new tool called the Global Observatory to track progress on people-centred clean energy transitions. This initiative aims to showcase best practices that prioritize fairness and inclusivity in clean energy policies. The observatory will feature case studies focusing on four key themes: jobs and worker protections, social and economic development, equity and social inclusion, and citizen participation in clean energy transitions.

The IEA estimates that achieving net zero emissions could create around 30 million new jobs in clean energy technologies by 2030. However, policies are needed to support workers transitioning from

declining fossil fuel sectors to emerging clean energy roles. Additionally, the IEA's Clean Energy Labour Council was established in 2022 to enhance dialogue between the agency, stakeholders, and the labor sector.

Research Questions:

1. How do government subsidies for fossil fuels impact the low-carbon energy transition?
2. What metrics should be used to measure progress toward a low-carbon economy effectively?
3. What is the role of Central Banks and International Financial Institutions in the transition towards a low-carbon economy?
4. What are the economic impacts of transitioning to a low-carbon economy on different sectors, particularly in developing countries?
5. What role do regional trade agreements by trading blocs play in facilitating or obstructing the adoption of low-carbon technologies among member states? How do the trade policies of major trading blocs affect the ability of developing countries to access low-carbon technologies?
6. What are the primary barriers that developing countries face in accessing GCF funding?
7. What criteria should be used to assess the capacity of countries to meet their NDC commitments?
8. How can debt restructuring be tailored to address both climate and social needs?
9. What are the key factors driving the demand for green talent?
10. How can companies mitigate supply chain disruptions for low-carbon technologies?

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PD 2: Averting and Adapting to Climate-Induced Displacement

Background

With the increasing occurrence of extreme climate events, nations, especially LEDCs, have seen mass migration from severely affected areas. This displacement primarily takes place within national borders but can also involve movement across borders, leading to the necessity of providing protection in a global context. The effects of climate change have a disproportionate impact on developing countries and vulnerable populations, including those living in conflict-affected regions, highlighting the need for collaborative efforts across multiple countries and sectors to assist individuals in dangerous situations in adapting to and alleviating the negative impacts. Emergency preparedness and climate resilience require contingency funds, but capacity limitations and a lack of fiscal space can result in trade-offs. External organisations such as the Green Climate Fund, seek to mitigate this issue, but cannot meet requirements alone.

Topic breakdown

Climate-Induced Displacement

Climate-induced displacement refers to the movement of individuals or groups driven to leave their homes due to environmental changes caused by climate change. This type of migration can occur within national borders or across international boundaries. Some factors that play a major role in climate-induced displacement include:

1. Environmental factors: Extreme weather events (e.g., floods, storms) and gradual changes (e.g., desertification, sea-level rise) are some of the main drivers that force people to migrate from their homes or residences.
2. Socio-Economic Conditions: Economic instability, loss of livelihoods, and resource scarcity can increase the need for migration, particularly in areas already vulnerable to climate change.
3. Conflict and Political Factors: Climate change can act as a "threat multiplier," intensifying existing conflicts over resources and leading to increased displacement as communities compete for a decreasing supply.

Averting and adapting to climate-induced displacement

Averting and adapting to climate change is essential for protecting development gains and preventing vulnerable communities from falling deeper into poverty. It enhances community resilience to extreme weather events and addresses inequities faced by marginalized groups.

With the rising frequency of climate-related disasters, effective adaptation strategies are of high priority. While reducing greenhouse gas emissions is vital, adaptation is necessary to manage the impacts already being felt. Together, these efforts promote sustainable development and improve the well-being of communities globally. Overall, averting and adapting to climate change is of significant importance, considering it a necessity for many nations and their commitment towards achieving the 2030 agenda.

Case studies

Fiji and planned relocation

Fiji has as a last resort, developed guidelines for the planned relocation of communities vulnerable to slow-onset changes to ensure an inclusive, collaborative transition without the erosion of rich Indigenous culture. This framework can be used as a foundation for other nations to support endangered communities as planned relocation becomes an increasingly viable option to adapt to unpredictable climate events. However, the guidelines lack consideration of loss of livelihoods, land ownership complications, and a robust legal framework, thus enabling stakeholder disputes.

Nepal

Nepal is ranked 12th out of 180 nations in the Global Climate Risk Index 2021, making it extremely vulnerable to climate calamities. Due to the devastating 2015 earthquake, 2.6 million Nepalese were internally displaced, making earthquakes a serious natural threat to the country. Nearly a million Nepalese have been internally displaced as a result of floods, adding to the existing burden of displacement brought on by earthquakes. To help avert future crises, Nepal is focusing on mitigation and adaptation through its focus on the following sectors: energy, agriculture, and appropriate land use.

The Cancun Agreements (2010)

The 2010 United Nations Climate Change Conference established the Cancun Adaptation Framework which aims to enhance adaptation strategies in LEDCs through multinational collaboration in the aspects of finance and technical support. The Cancun agreements made no changes to the magnitude of the voluntary emissions reductions commitments made according to the Copenhagen Accord either for developed or developing countries. However, developed countries are urged under the Cancun agreements to increase the ambition of their targets “to a level consistent with” the latest Intergovernmental Panel on Climate Change (IPCC) recommendations. In addition, developed countries are urged to prepare “low-carbon development strategies or plans,” and encourage developing countries to do so as well but the Cancun agreements establish no process to define them further.

Research questions

1. How can early warning systems improve, specifically hazard detection and warning delivery?
2. How can planned relocation be implemented without community disruption and convoluted funding mechanisms?
3. How can nations empower local communities to reduce asymmetric information and enhance resilience?

4. How can nations incorporate climate considerations into infrastructure planning and investment to construct resilient cities and systems despite capacity limitations?
5. What ethical considerations should climate mitigation frameworks include to ensure indigenous and other vulnerable communities are not exploited?
6. Can countries with low GDP per capita and limited fiscal space afford to forgo present economic growth/stability for long-term climate resilience?
7. Is it possible for nations focused on debt restructuring to prioritise climate action simultaneously?

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Conference Topic: Trade-off Between Sustainable Outcomes and Financial Performance within the Climate Crisis

Background: The Dichotomy of Progression and Planetary Health

The relentless pursuit of progression–by countries, corporate giants, and even individuals–often blindsides decision-makers to the mounting costs of environmental degradation. Economic agents prioritise short-term economic gain and KPI (Key Performance Indicators) fulfilment, yet these victories are often pyrrhic, achieved at the expense of our planet's health. Inaction accrues "climate debt", and the impacts of ignorance are almost germane to bankruptcy. Future generations bear the compounded costs of today's unsustainable choices which creates a vicious cycle where the cost of inaction eventually dwarfs the investments needed for sustainable practices today.

Successive progress needs to be defined against the benchmark of planetary health. Measurements like GDP and corporate profitability must be weighed against their work toward sustainability. It means green practices being implanted in the DNA of an economy, integrating green metrics in performance goals, reframing growth with low emission and climate action at the fore of priority. Green bonds, carbon markets, and transition financing could light up a sustainable transformation across the world. In the absence of strong international norms on emissions and accountability, however, there is a risk of sustaining inequality and fragmentation in our efforts. It is not only important but also imperative to set these guidelines so that the playing field is levelled for the sustainable future of one and all.

Topic Breakdown

Trade-off

The term "trade-off" refers to the balancing act between two competing objectives, in this case, sustainable outcomes and financial performance. In the context of the climate crisis, businesses often face the dilemma of investing in environmentally friendly practices that may initially seem costly or yield lower short-term profits. However, understanding this trade-off is crucial as it can reveal opportunities for long-term benefits and sustainability. Research indicates that while there may be instances where pursuing sustainability appears to conflict with immediate financial gains, there are also many cases where integrating sustainable practices leads to improved financial performance over time.

Sustainable Outcomes

"Sustainable outcomes" encompass the results achieved through practices that promote environmental health, social equity, and economic viability. These outcomes are vital for addressing the pressing challenges posed by climate change. Sustainable outcomes can include reduced carbon emissions, improved resource efficiency, and enhanced community well-being. Companies increasingly recognize that achieving these outcomes not only fulfills corporate social responsibility but can also enhance their brand reputation and customer loyalty. As businesses adapt to the climate crisis, focusing on sustainable outcomes becomes essential for long-term viability and resilience.

Financial Performance

"Financial performance" refers to a company's ability to generate profit and maintain overall financial health, typically measured through metrics such as return on assets (ROA), profit margins, and revenue growth. The relationship between financial performance and sustainability is complex; while some studies suggest that investing in sustainable practices may initially strain financial resources, evidence increasingly shows that such investments can lead to enhanced profitability in the long run. Companies that effectively integrate sustainability into their core strategies often find that they can achieve both strong financial results and positive environmental impacts, challenging the notion of an inherent trade-off.

Case Studies

ECONOMIC INCENTIVES AND MISALIGNED OUTCOMES (Unintended Consequences of the Renewable Heat Incentive Scheme)

The Renewable Heat Incentive (RHI) was introduced as the world's first long-term financial support program for renewable heat, aimed at reducing greenhouse gas emissions and transitioning away from fossil fuels. By incentivizing the adoption of renewable energy systems, the RHI sought to combat climate change through both domestic and non-domestic programs. However, despite its ambitious goals, the scheme led to several unintended consequences. Among the most significant was an over-reliance on biomass, particularly wood pellets, which, when managed unsustainably, resulted in deforestation and worsened air quality. Furthermore, the RHI inadvertently incentivized the installation of inefficient systems that were mismatched to property needs, resulting in wasted energy and increased operational costs.

A critical flaw in the RHI design was the lack of adequate limitation on the subsidies, making the scheme prone to exploitation. Participants discovered they could earn more in subsidies than they spent on fuel, which encouraged abuse, such as heating unoccupied spaces purely for financial gain. This misaligned incentive structure was most apparent in Northern Ireland, where the scheme's lack of cost controls escalated into a political scandal. Whistleblowers brought the cases of abuse to light, and the flood of applications crashed the public funds. It finally boiled over into a full-blown political crisis with high-profile resignations and the collapse of the Northern Ireland Executive that has led to the region's destabilization.

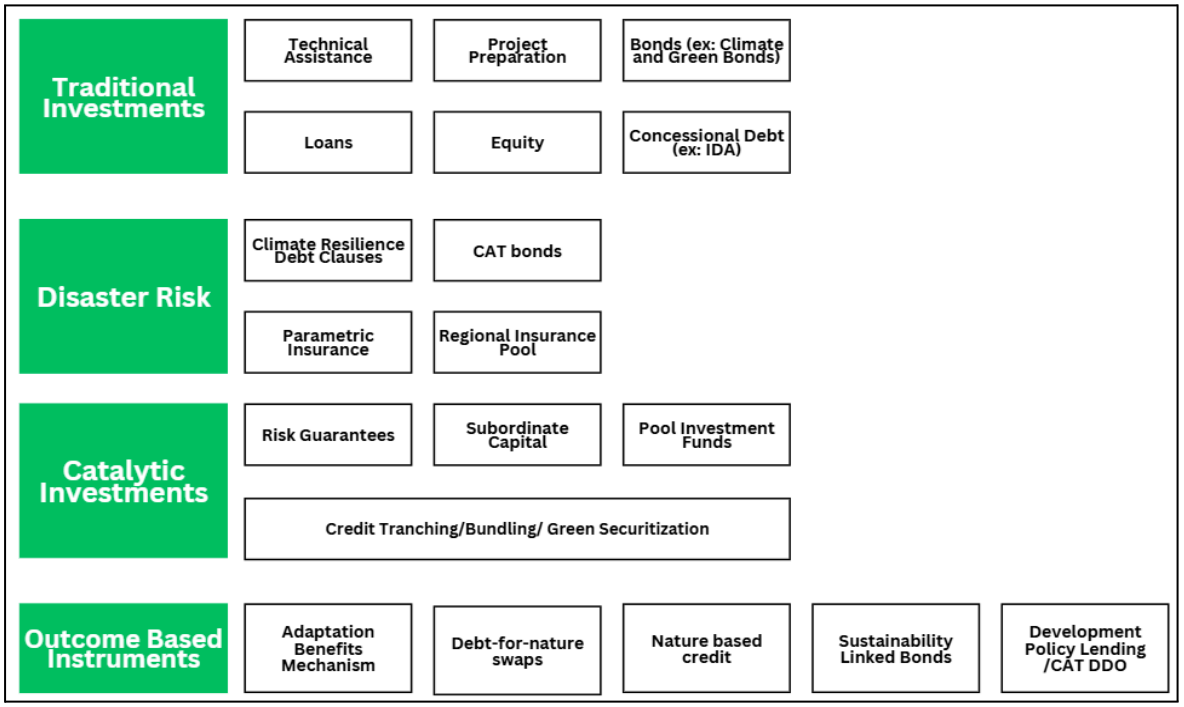
IS GEOPOLITICAL RIVALRY INFLUENCING SUSTAINABILITY?

Geopolitical rivalry is rooted in the desire for economic dominance and financial competitiveness between nations. While it often disrupts international cooperation and exacerbates environmental degradation, such rivalry also has proved to stimulate innovation and investments in clean technologies. Recent examples, including the U.S.–China competition and the energy crisis prompted by the Ukraine war, reveal the profound yet nuanced impacts of such rivalries on climate action and environmental sustainability.

Geopolitical tensions frequently undermine sustainability by prioritizing short-term energy security over long-term climate goals. The war in Ukraine disrupted global supply chains, pushing nations to revert to fossil fuels, thus increasing carbon emissions. Simultaneously, great power rivalries, particularly between the U.S. and China, have complicated global climate cooperation. Protectionist policies, such as tariffs on clean energy technologies, hinder the diffusion of renewable energy innovations and exacerbate supply chain vulnerabilities. This fragmentation poses risks to global decarbonization efforts, as countries focus on national interests over collective environmental action.

Conversely, geopolitical rivalries can catalyze advancements in clean technologies. For example, the U.S. Inflation Reduction Act, partly spurred by competition with China, has driven substantial investments in renewable energy and electric vehicle manufacturing. Similarly, Europe's accelerated energy transition, in response to reliance on Russian gas, highlights how energy independence strategies can align with climate objectives. Rivalries can also foster diplomatic leverage in climate finance, as seen in the U.S. and EU's support for loss-and-damage funds aimed at isolating China diplomatically. These dynamics underscore how competition can fuel innovation and financial support for sustainable development.

Illustrations



Global Climate Resilience Finance Stack

Research Questions

1. To what extent does the Social Cost of Carbon (SCC) assess economic implications of carbon emmisions? How is this metric used in policy making?
2. How does the International Capital Markets Association (ICMA) and the Climate Bonds Initative (CBI) differ in their approach to project evaluation when implementing standards such as Green Bonds Principles and Climate Bonds Standards? To what extent do these standards lead to Green Bonds that contribute to GHG reductions and renewable energy added?

3. Can dependence on historical data lead to misleading risk assessments in the context of Climate Change? What are the limitations of using Climate Value at Risk (CVaR) in climate risk assessments?
4. How effective are regional initiatives such as African Risk Capacity (ARC) and Caribbean Catastrophe Risk Insurance Facility (CCRIF) in the realm of insurance and resilience funding?
5. What is the current level of adoption of “Green AI”? What role do tech giants play in advancing sustainable AI technologies?
6. How do Feed-in Tariffs affect the competitiveness of renewable energy technologies?
7. How does the EU Taxonomy for Sustainable Activities differ from other climate finance taxonomies?
8. Do Small-Island Developing States (SIDS) truly benefit from initiatives such as Ocean Risk and Resilience Action Alliance (ORRAA)?
9. To what extent can the Voluntary Carbon Market (VCM) be regulated?

Sources

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Further Reading

Organizations

- Task Force on Climate-related Financial Disclosures (TCFD)
- IFRS
- Standing Committee on Finance (SCF)
- COP 29, UNFCCC, Global Environment Facility (GEF), UNEP, World Economic Forum, Green Climate Fund, Kyoto Protocol, Paris Agreement, Belem declaration (relating to Indigenous people), The OECD Horizontal Project on Climate and Economic Resilience, Just Energy Transition Partnerships

Resolutions/Frameworks

- Paris Agreement
- Kyoto Protocol
- UN General Assembly Resolution [A/RES/76/210]- Ensuring Access to Sustainable Energy
- Cancun Adaptation Framework
- Sendai Framework
- The IOM, UNHCR and Georgetown University's Toolbox: Planning Relocations to Protect People from Disasters and Environmental Change

Glossary

1. Environmental, Social, and Governance (ESG)
2. Greenwashing
3. Voluntary Carbon Markets
4. Sustainability-Linked Loans (SLLs)
5. Carbon Finance
6. Technology Transfer
7. Circular Economy
8. Blended Finance
9. Debt-for-climate swaps
10. Just Transition Fund
11. Transition Bonds
12. Carbon Pricing
13. Small-Island-Developing States (SIDS)
14. Renewable Energy Technologies (RETs)
15. Carbon Credits
16. International Financial Institutions (IFIs)

Message from the chairs

Dear Delegates,

We as the chairs expect constructive debate that, first and foremost, aligns with the mandate of the committee while advocating for feasible and practical solutions that can be implemented through the committee that addresses the underlining issues presented with each topic.

While this committee can be seen as a very technical committee at face value, and to a certain extent it can be, it is of utmost importance that delegates understand that the main point of this committee is to simply address the scope of that of an environmental committee with the addition of key components of that an economics-related committee, but from a bit of a different perspective than usual.

With all of that in mind, we look forward to seeing all of you in committee and wish everyone the best of luck. 😀

Joshua, Randhir, Thejanaa