

LETTER FROM THE EXECUTIVE BOARD

Greetings delegates!

It gives us immense pleasure to serve as your Executive Board for the simulation of the Group of 20(G-20) at BBIMUN' 25.

We have made a background guide to help you kick start your research. The background guide has been written with the thought that it will serve as a map for you to navigate through the mass of information which you may across in your preparation for the conference. It will guide you to understand the different angles to the forthcoming discussion, a sort of a reflection of what is in store for you. Thus, as the name “map” may be hinting, it will not provide you with all the information or analysis on the agenda at hand but a path for you to carry out your research. For doing that, your research has to be comprehensive and non-exhaustive. More importantly, you have to understand your research and be able to use it. In other words, your research documents are not your arguments. You use your research to form your argument; your research cannot be your only argument. That is where analysis steps in.

It is extremely important for you to listen to everything other delegates talk about in the committee, so don't keep yourself too occupied writing your own speeches, but truly listen to what other delegates speak in the committee. It will help you give direction to the debate happening in the committee and also some point to elaborate on or rebuttal.

The trick here is to make sure you make notes of the documents that you have read and formulate arguments from the same.

Diplomacy is the first lesson that MUNs offer and thus, you as delegates are expected to be extremely courteous towards all participants.

To start, you can briefly read about the agenda and break down the agenda in various subtopics that exist within that agenda, now these topics that you have written are also the topics that will be discussed in the committee as the moderated caucus topics. All that you have to do now is to research on the subtopics of the agenda that we have written. Now when you research on particular subtopics, you don't just jot down information that you have collected through various articles, but rather try to make an argument for that subtopic while researching or simply provide your countries viewpoint on the given sub topic. This means you would have content to speak on every possible topic raised in the committee. Logic and foreign policy combined with in-depth research and knowledge are necessary to be a successful delegate. As delegates, you are expected to promote the interests of your nation and as delegates of representing different nations, you are required to know your foreign policy on the agenda and the issues related to the same. Try to highlight the same during the three days of the conference. Having said that, if you have any questions or doubts pertaining to any matters concerning this committee, please feel free to contact us.



INTRODUCTION TO THE COMMITTEE

Purpose & Scope - The G20—or Group of Twenty—is a premier international forum that brings together the world’s major economies to coordinate on global economic, financial, and sustainable development policies. As a hybrid entity, the G20 plays a unique role in fostering dialogue and cooperation between both developed and developing nations.

This particular Model United Nations (MUN) committee gathers delegates representing the 19 individual member nations plus the European Union, reflecting the real-world membership structure of the G20.

Membership & Composition - According to the committee matrix, the G20 delegates include the following:

Individual Member States (19):

- Argentina
- Australia
- Brazil
- Canada
- China
- France
- Germany
- India
- Indonesia
- Italy
- Japan
- Mexico
- Russia
- Saudi Arabia
- South Africa
- South Korea
- Turkey
- United Kingdom

- United States

Regional Entity (1):

- **European Union**

Together, these 20 entities form the complete roster of the G20 in your MUN simulation.

G20 in the Context of MUN

In the present MUN setting, the delegates will channel the viewpoints and domestic priorities of these member states and the EU, while engaging in collaborative policymaking, diplomacy, and negotiation. Whether drafting resolutions or engaging in moderated caucuses, each delegate must reflect their respective member's position and potential alliances.

Relevance to the Agenda - As this committee debates *“Reinstating the principle of Common but Differentiated Responsibilities (CBDR) with special emphasis on Green Technologies in the Global South,”* your members' differing economic statuses, climate vulnerabilities, and technology capacities will drive points of contention and opportunity:

- **Developed Economies** (EU, U.S., Japan, Canada, Australia, etc.) will likely emphasize market mechanisms, intellectual property rights, and global leadership in green innovation.
- **Global South Delegates** (India, Indonesia, South Africa, Brazil, etc.) will spotlight equity, financing, fair technology transfer, and adaptation support consistent with CBDR principles.
- **Ambiguous Members** (China, Russia, Saudi Arabia) may straddle lines—balancing national development needs with global expectations.

Understanding the Agenda- The agenda before this committee—*“Reinstating the principle of common but differentiated responsibilities with special emphasis on Green Technologies in the Global South”*—brings together two of the most debated themes in international climate politics: equity and technology.

The principle of **Common but Differentiated Responsibilities (CBDR)** lies at the heart of global environmental governance. First articulated during the 1992 Rio Earth Summit and embedded in the United Nations Framework Convention on Climate Change (UNFCCC), CBDR acknowledges that while all states share a responsibility to address environmental challenges, not



all share it equally. Developed nations, having contributed more historically to greenhouse gas emissions and having greater financial and technological capacities, are expected to take on a larger share of the burden. Developing countries, meanwhile, are recognized as having pressing developmental needs and fewer resources, warranting support in meeting global climate goals.

Over time, however, the interpretation and implementation of CBDR have become contentious. Industrialized economies argue for a more uniform distribution of responsibilities, citing the rising emissions from emerging economies. On the other hand, nations in the Global South insist that historical responsibility and equity must remain central to any international climate framework. The Paris Agreement of 2015 reaffirmed CBDR, but in a diluted form, leading to debates about whether the principle has lost its original strength.

The second focus of the agenda—**green technologies in the Global South**—is intrinsically linked to CBDR. Renewable energy systems, carbon capture technologies, sustainable transport, waste management, and energy-efficient infrastructure are increasingly seen as indispensable for mitigating climate change. Yet the diffusion of such technologies remains uneven. High costs, restrictive intellectual property regimes, and inadequate financing have left many developing countries struggling to access or adapt these innovations. For states in the Global South, this creates a double burden: the expectation to transition to low-carbon economies while lacking the very tools that make such a transition possible.

This agenda asks delegates to revisit CBDR not as a historical relic, but as a living principle that must guide equitable access to technology. It challenges developed members of the G20 to consider how they can share expertise, finance, and innovations without stifling market growth, while calling on developing members to articulate their needs, capacities, and pathways for sustainable development. The debate will not simply be about responsibilities—it will also be about opportunities: how the G20 can harness its collective influence to foster cooperation, reduce technological divides, and chart a fairer global transition to green growth.

HISTORICAL CONTEXT OF CBDR

Origins of the Principle

The concept of *Common but Differentiated Responsibilities (CBDR)* emerged at the **1992 Rio Earth Summit**, where the United Nations Framework Convention on Climate Change (UNFCCC) was adopted. The principle was designed to recognize two key realities:



1. All states share the responsibility of protecting the global environment.
2. States differ in their historical contributions to environmental degradation, as well as in their financial, technological, and institutional capacities.

CBDR therefore became a cornerstone of climate justice, ensuring that developed countries—whose industrialization had contributed most to greenhouse gas emissions—would shoulder a greater burden in combating climate change.

Embedding in International Agreements

CBDR first gained legal footing in the **UNFCCC (1992)**, which explicitly acknowledged the special circumstances of developing countries. It was further elaborated in the **Kyoto Protocol (1997)**, where only developed countries had binding emission reduction targets. This institutionalized the principle of “differentiated commitments,” granting the Global South more policy space to prioritize development while still participating in global climate efforts.

The **Paris Agreement (2015)** maintained CBDR but introduced a more flexible interpretation. Instead of clear divisions between developed and developing states, all parties were required to submit Nationally Determined Contributions (NDCs). While the language still recognized “different national circumstances,” many developing nations argued that the original spirit of CBDR had been diluted, placing greater expectations on them without proportionate support.

Evolution and Controversies

Over the past three decades, CBDR has evolved in response to shifting global dynamics. Emerging economies like China, India, and Brazil have become significant emitters, raising questions from developed nations about whether the principle still justifies differentiated obligations. Developed members of the G20 often push for greater uniformity in climate action, emphasizing current emissions rather than historical responsibility.

Developing countries, however, continue to stress that **equity must remain central**. They argue that development pathways cannot be restricted without adequate financial aid, technology transfer, and capacity-building. This tension reflects the broader North–South divide in climate negotiations: a debate between responsibility for past emissions and capacity to act in the present.



Relevance to the Current Agenda

CBDR is not just a legal principle but a moral and political compass. In the context of **green technologies in the Global South**, it provides a foundation for discussions on:

- **Technology transfer:** Ensuring affordable access to renewable and sustainable technologies.
- **Financial commitments:** Developed nations providing climate finance and investment for green transitions.
- **Equity in obligations:** Allowing space for developing nations to pursue growth while still contributing to global climate goals.

GREEN TECHNOLOGIES: SCOPE AND SIGNIFICANCE

Defining Green Technologies

Green technologies, often referred to as clean or sustainable technologies, encompass a wide range of innovations designed to reduce negative environmental impacts while promoting sustainable growth. They include renewable energy sources such as solar, wind, and hydro power, as well as advanced solutions like energy storage systems, electric vehicles, carbon capture and storage (CCS), waste-to-energy plants, sustainable agriculture techniques, and water purification systems. These technologies are not confined to the energy sector alone; they extend to transportation, construction, manufacturing, and even digital infrastructure aimed at improving efficiency and reducing carbon footprints.

Importance in Combating Climate Change

The role of green technologies in mitigating climate change cannot be overstated. As global temperatures rise and the demand for energy intensifies, these technologies present a pathway to decoupling economic growth from carbon emissions. Renewable energy helps reduce reliance on fossil fuels, while innovations in efficiency and storage address the intermittency of clean power. Moreover, sustainable transport systems and low-emission industrial processes contribute to building resilient economies that can meet environmental targets without sacrificing development.

Economic and Developmental Benefits



Beyond environmental gains, green technologies have significant economic potential. They open opportunities for job creation, industrial diversification, and rural electrification. In the Global South, access to decentralized renewable energy systems can bridge the energy gap in remote areas, fostering social inclusion and economic empowerment. By reducing dependency on imported fossil fuels, they also enhance energy security and stabilize national economies.

Global Market Dynamics

The global market for green technologies has expanded rapidly over the last decade, driven by declining costs of renewables, increasing investor interest, and policy incentives in major economies. Countries like China, the United States, and members of the European Union dominate the manufacturing and deployment of these technologies. However, the distribution of benefits is highly uneven. Many developing countries remain consumers rather than producers of green technologies, constrained by high costs, limited infrastructure, and challenges in accessing capital. Intellectual property rights and trade barriers further complicate technology transfer, reinforcing a divide between the Global North and South.

THE GLOBAL SOUTH AND CLIMATE CHALLENGES

Defining the Global South

The term *Global South* broadly refers to developing and emerging economies in Asia, Africa, Latin America, and parts of the Middle East. While not a strictly geographical category, it highlights the structural inequalities between industrialized nations and countries that continue to face development constraints. Members of the Global South often share common challenges: limited access to finance, dependence on primary sectors, and heightened vulnerability to external shocks. Within the G20, countries such as India, Indonesia, Brazil, South Africa, Argentina, and Mexico are often seen as representatives of the Global South's perspectives.

Disproportionate Impacts of Climate Change

The Global South faces some of the most severe consequences of climate change despite having contributed the least to historical greenhouse gas emissions. Rising sea levels threaten low-lying coastal states, extreme weather events disrupt food and water security, and prolonged droughts undermine agricultural livelihoods. For example, Sub-Saharan Africa is experiencing reduced crop yields, while South Asia faces intensified floods and cyclones. The vulnerability of these regions is compounded by weaker infrastructure and limited adaptive capacities, making climate impacts not just environmental but also social and economic crises.



Developmental Priorities and the Climate Dilemma

Countries in the Global South grapple with the dual challenge of pursuing economic growth while transitioning to sustainable practices. Poverty reduction, energy access, industrialization, and infrastructure development remain pressing priorities. However, the costs of shifting to low-carbon pathways are often prohibitive. Dependence on fossil fuels for growth and energy security creates tensions between developmental aspirations and international climate commitments. The demand for affordable and reliable energy continues to rise, yet the transition to cleaner alternatives requires massive investment and technological support.

Structural Barriers to Green Technology Adoption

Adoption of green technologies in the Global South is hindered by several systemic obstacles. High upfront costs and limited availability of concessional finance restrict large-scale deployment. Intellectual property restrictions can make advanced technologies unaffordable or inaccessible. Inadequate institutional capacity, insufficient research infrastructure, and lack of skilled labor further slow down the localization of innovations. Even when technologies are transferred, adaptation to local contexts—such as climate conditions, resource availability, or cultural practices—often poses additional challenges.

The Equity Argument

These difficulties underscore the central equity question in global climate negotiations: should countries that bear minimal historical responsibility be expected to undertake the same level of commitments as developed nations? The Global South argues that climate justice requires not only recognition of differentiated responsibilities but also concrete mechanisms for financial support, capacity-building, and equitable technology access. Without addressing these challenges, the divide between the Global North and South is likely to widen, undermining collective climate action.

CBDR AND GREEN TECHNOLOGY TRANSFER

Linking CBDR to Technology

The principle of *Common but Differentiated Responsibilities (CBDR)* provides the ethical and political foundation for technology transfer. Since developed countries possess both the financial resources and technological expertise, CBDR emphasizes their obligation to support developing countries in adopting cleaner pathways. Green technology transfer thus becomes a practical expression of CBDR, balancing climate action with equity.

International Mechanisms for Technology Transfer

Several multilateral frameworks embed technology transfer as a core element:

- **UNFCCC (1992):** Established the obligation of developed nations to promote, facilitate, and finance environmentally sound technologies in developing countries.
- **Kyoto Protocol (1997):** Introduced the Clean Development Mechanism (CDM), enabling developed countries to invest in emission-reduction projects in the Global South.
- **Paris Agreement (2015):** Reaffirmed technology development and transfer through Article 10, emphasizing cooperative action and the role of a “Technology Framework” under the UNFCCC.
- **Global Environment Facility (GEF):** Provides grants and funding to help developing countries acquire green technologies.

These mechanisms, though significant, have had mixed outcomes, with gaps in implementation and accessibility.

Intellectual Property Rights and Access

One of the most contentious barriers to green technology transfer lies in intellectual property rights (IPRs). Many advanced technologies, particularly in renewable energy and carbon capture, are patented by firms in developed countries. High licensing fees, restrictive patent protections, and limited technology-sharing agreements often prevent developing nations from accessing or indigenizing these solutions. This raises critical questions about balancing incentives for innovation with the global need for affordable climate solutions.

Financing and Capacity-Building

Green technologies are capital-intensive, requiring not only initial investments but also long-term maintenance and technical expertise. While climate finance pledges—such as the annual USD 100 billion commitment under the Paris Agreement—aim to bridge this gap, actual disbursement has often fallen short. Beyond finance, technology transfer also demands training programs, institutional strengthening, and research partnerships that enable recipient countries to adapt innovations to local contexts rather than relying on imports.

Success Stories and Lessons Learned

Despite challenges, there have been notable successes in green technology transfer:

- **India’s International Solar Alliance (ISA):** Promotes collaboration on solar technologies across developing countries.
- **Brazil’s biofuels program:** Demonstrates how indigenous innovation, supported by international collaboration, can create sustainable alternatives.



- **China's renewable energy expansion:** Although largely domestically driven, it has spurred affordability of solar and wind technologies worldwide.

THE ROLE OF THE G20 IN CLIMATE ACTION

The G20 as a Platform for Climate Governance

Although the G20 was originally established in 1999 as a forum for international economic cooperation, its role has steadily expanded into broader issues of global governance, including sustainable development and climate change. Given that its members collectively represent around **85% of global GDP, 75% of international trade, and nearly two-thirds of the world's population**, the G20 wields enormous influence over the trajectory of global climate policy. Moreover, G20 countries are responsible for approximately **80% of global greenhouse gas emissions**, making their actions—or inaction—central to any effort to address climate change.

Unlike formal treaty-based institutions such as the UNFCCC, the G20 does not produce legally binding commitments. Instead, it operates through consensus and voluntary commitments, often issuing Leaders' Declarations or Action Plans that guide national policies and signal political intent. While this informality allows flexibility and quicker response, it also creates criticism over the lack of enforceability.

G20's Climate Milestones

Over the past decade, climate change has gained increasing prominence on the G20 agenda:

- **2009 Pittsburgh Summit:** Leaders acknowledged the urgency of climate action and committed to phasing out inefficient fossil fuel subsidies.
- **2015 Antalya Summit:** The G20 expressed support for the upcoming Paris Agreement, emphasizing the importance of nationally determined contributions (NDCs).
- **2017 Hamburg Summit:** Despite the U.S. withdrawal from the Paris Agreement under the Trump administration, the other 19 members reaffirmed their commitment, symbolizing the “G19 vs. 1” divide.
- **2021 Rome Summit:** Leaders endorsed the Glasgow COP26 outcomes, reaffirming climate finance goals and highlighting the need to accelerate the transition to clean energy.
- **2023 New Delhi Summit:** A notable development, where G20 leaders committed to tripling renewable energy capacity globally by 2030 and recognized the need to reform



multilateral development banks for enhanced climate financing.

These milestones reflect both the G20's potential to steer global consensus and the challenges posed by differing national priorities.

CONTRIBUTIONS OF G20 MEMBERS

The G20's membership includes both the largest emitters and some of the most climate-vulnerable nations, creating a unique mix of responsibilities and expectations:

- **Developed Economies** (United States, European Union, Japan, Canada, Australia): These members dominate technological innovation and financing capacity. They often emphasize market-based mechanisms, private investment, and intellectual property protection.
- **Emerging Economies** (China, India, Brazil, South Africa, Indonesia, Mexico): These nations face rising emissions but also significant development needs. They argue for greater recognition of CBDR and demand financial and technological support.
- **Energy-Exporting Members** (Saudi Arabia, Russia): Their economies remain heavily dependent on fossil fuels, making them cautious about rapid decarbonization commitments.

The diversity of perspectives makes consensus-building within the G20 both difficult and crucial.

Tensions Within the G20

Several structural tensions shape the G20's climate discourse:

- **Equity vs. Efficiency:** Developed countries push for ambitious, uniform commitments, while developing members stress differentiated responsibilities.
- **Financing the Transition:** Climate finance pledges often fall short of expectations, creating mistrust between the Global North and South.
- **Technology Transfer vs. Intellectual Property:** Developed members are hesitant to dilute intellectual property protections, while developing members view them as barriers to equitable access.
- **Fossil Fuel Dependence:** Countries reliant on oil, gas, and coal revenues are reluctant to commit to rapid phaseouts, complicating collective pledges.



Despite these tensions, the G20's role in climate action is indispensable for several reasons:

1. **Economic Powerhouse:** Its financial resources can mobilize large-scale green investments globally.
2. **Technological Hub:** Developed members drive innovation, while emerging economies provide vast markets for deployment.
3. **Bridge Between North and South:** With members straddling both blocs, the G20 can serve as a mediator in contentious debates on CBDR and equity.
4. **Agenda-Setting Power:** As an informal grouping, the G20 can provide political momentum to formal negotiations under the UNFCCC.

The G20's challenge, therefore, lies in reconciling diverse national interests with collective global responsibility. While it cannot replace the UN climate framework, it can complement it by catalyzing commitments, mobilizing finance, and advancing cooperation on green technologies.

CASE STUDIES

India: The Solar Mission and the International Solar Alliance

India has emerged as a strong advocate for renewable energy, particularly solar power. The **National Solar Mission**, launched in 2010 as part of India's National Action Plan on Climate Change, aimed to establish India as a global leader in solar energy production. With ambitious targets to achieve **500 GW of renewable capacity by 2030**, India has positioned solar power as central to its strategy for sustainable growth.

A notable innovation has been the creation of the **International Solar Alliance (ISA)** in partnership with France, launched at COP21 in Paris. The ISA seeks to bring together countries rich in solar resources—primarily from the Global South—to facilitate cooperation, pool resources, and promote affordable solar technologies. For developing countries in Africa and Asia, this initiative offers a platform for technology sharing and financing, embodying the principle of CBDR in action. However, challenges remain, including financing gaps, the need for large-scale grid modernization, and ensuring affordable access for rural communities.

Brazil: The Biofuels Revolution



Brazil's pioneering use of biofuels is often cited as a success story in green technology adoption. Since the 1970s, Brazil has invested heavily in its **ethanol program**, derived from sugarcane, making it one of the largest producers and consumers of biofuels globally. Ethanol-fueled cars are widespread, and flexible-fuel vehicles dominate Brazil's auto market.

This model highlights how a developing country can leverage local resources to create sustainable alternatives to fossil fuels while also reducing import dependency. Moreover, Brazil's biofuel sector has spurred rural employment and boosted agricultural development. However, it is not without criticism: concerns over land use changes, deforestation, and food security remain. Nevertheless, Brazil's experience demonstrates the potential of indigenous innovation in the Global South when combined with supportive state policies and international cooperation.

China: Renewable Energy Expansion

China represents perhaps the most significant case of green technology expansion in recent decades.

As the **world's largest emitter of greenhouse gases**, China has faced mounting pressure to decarbonize. In response, it has become the **largest investor in renewable energy**, leading the world in solar and wind power capacity. China also dominates the manufacturing of solar panels, wind turbines, and increasingly, electric vehicle batteries.

This rapid expansion has had global implications. By scaling up production, China has significantly reduced the cost of renewable technologies worldwide, making them more accessible for other developing countries. Yet, China's energy transition remains complex, as coal still accounts for a substantial share of its energy mix. Furthermore, its policies illustrate a dual role: both as a leader in clean technologies and as a nation still reliant on fossil fuels to maintain growth and employment.

Africa: Challenges in Green Technology Adoption

Africa's case is unique in that it highlights the **difficulties of technology transfer** in regions with limited resources. While the continent contributes less than 4% of global emissions, it is disproportionately vulnerable to climate change, facing desertification, floods, and food insecurity. The promise of green technologies—particularly decentralized solar and wind systems—offers solutions to Africa's long-standing energy access challenges. For example, countries like Kenya have made strides in geothermal energy, and Morocco has built one of the world's largest concentrated solar power plants.

However, large parts of the continent remain energy-poor, with over 600 million people lacking access to electricity. The barriers are multifaceted: limited financing, high costs of importing



technologies, weak infrastructure, and dependency on donor-driven projects. Without substantial international support, Africa risks being left behind in the global green transition.

Lessons from the Case Studies

These cases provide important lessons for understanding the intersection of CBDR and green technologies:

- **India's solar initiatives** show the potential of South-South cooperation in renewable energy.
- **Brazil's biofuels** illustrate how localized innovation can create sustainable models tailored to national contexts.
- **China's scale-up of renewables** demonstrates how industrial policy can transform global markets.
- **Africa's challenges** highlight the urgent need for equitable finance and accessible technology transfer.

Collectively, they underline that while opportunities exist, bridging the technological divide between the Global North and South remains essential for achieving a just and sustainable climate future.

CHALLENGES AND OPPORTUNITIES IN IMPLEMENTING CBDR WITH SPECIAL EMPHASIS ON GREEN TECHNOLOGIES

Differing Capacities and Historical Responsibilities

One of the central challenges in operationalizing the principle of Common but Differentiated Responsibilities (CBDR) lies in balancing historical responsibility with current capacity. Developed nations, having historically contributed the most to greenhouse gas emissions, face moral and legal obligations to provide both financial and technological support. In contrast, many developing nations are still undergoing industrialization, grappling with poverty alleviation, food security, and energy access. While they may lack the financial and technological resources to transition quickly, they also argue that their emissions are negligible in comparison to those of industrialized economies. This asymmetry creates friction within international forums, as questions of fairness, equity, and accountability are constantly contested.

Technology Transfer and Intellectual Property Barriers

A critical aspect of advancing green technologies in the Global South is ensuring equitable access to innovation. While solar panels, wind turbines, and energy-efficient solutions exist in abundance, the cost of accessing these technologies remains prohibitive due to intellectual property rights and patent regimes largely controlled by corporations in the Global North. This raises the issue of whether global climate cooperation can truly succeed if access to solutions is conditioned on affordability. Developing countries argue for the relaxation of intellectual property restrictions and the establishment of open-source or subsidized frameworks for technology transfer. Without addressing this barrier, the global divide in climate action will only widen.

Financing Green Transitions

Transitioning to green economies requires vast financial investment—not only in infrastructure but also in education, skills development, and institutional capacity. Developing countries in the Global South often lack adequate fiscal space to make such investments without external support. Mechanisms such as the Green Climate Fund and other multilateral financing platforms exist, but disbursements have often been delayed, underfunded, or tied to restrictive conditions. For CBDR to work effectively in this context, the financing debate must be reframed not as aid but as a responsibility borne out of historical emissions. Furthermore, the G20, representing both major emitters and vulnerable economies, is uniquely positioned to design equitable financing pathways that ensure no country is left behind in the green transition.

Opportunities for the Global South

Despite these challenges, the principle of CBDR, if revived and strengthened, presents unique opportunities for the Global South. By focusing on leapfrogging directly into sustainable technologies, many developing countries can avoid the high-emission pathways that industrialized nations followed. Nations such as India, Brazil, and South Africa have already showcased leadership in renewable energy adoption, while smaller economies in Africa and Southeast Asia are pioneering community-driven sustainable practices. The G20 can act as a bridge, encouraging partnerships that pool resources, knowledge, and innovation. This not only supports equitable growth but also transforms the Global South into an active driver of green innovation rather than a passive recipient.

Role of the G20 in Bridging Divides

Given its diverse membership—including the largest emitters, financial powerhouses, and emerging economies—the G20 has a distinct capacity to mediate between divergent interests. Unlike forums limited to developed or developing countries, the G20 allows for dialogue across the



spectrum. In the context of CBDR, the group can foster a shared understanding of differentiated responsibilities while simultaneously creating a collaborative roadmap for action. This can include mechanisms for predictable financing, multilateral cooperation on technology transfer, and harmonized regulatory frameworks that prioritize sustainability. By doing so, the G20 can serve as both a laboratory for innovative ideas and a political force for implementing them globally.

CHALLENGES AND OPPORTUNITIES IN IMPLEMENTING GREEN TECHNOLOGIES IN THE GLOBAL SOUTH

Economic Barriers

One of the foremost challenges for the Global South in adopting green technologies lies in the economic constraints that many developing and emerging economies face. High upfront costs of renewable energy infrastructure, electric mobility systems, and sustainable manufacturing processes often discourage large-scale adoption. Countries reliant on fossil fuels for domestic growth and exports also face the difficult trade-off between short-term revenue generation and long-term sustainability. Limited fiscal space, coupled with debt burdens and competing development priorities such as healthcare, education, and poverty eradication, further hinders the ability of many nations to invest heavily in green technologies.

Technological Gaps and Innovation Deficits

The Global South continues to lag behind in technological capacity compared to industrialized nations. Research and development (R&D) expenditure in developing economies is significantly lower, creating reliance on imports of green technologies from the Global North. This dependency not only raises costs but also prevents the creation of domestic innovation ecosystems. The lack of skilled human capital, weak intellectual property regimes, and insufficient collaboration between universities, industries, and governments deepen this gap, limiting the ability of the Global South to indigenously produce and adapt technologies suitable for their unique socio-economic and climatic conditions.

Infrastructure and Institutional Challenges

Green technologies require robust and modern infrastructure to be effective. However, many regions in the Global South struggle with outdated power grids, inefficient transport systems, and inadequate urban planning, which complicate the integration of renewable energy and sustainable technologies. Institutional challenges, such as bureaucratic red tape, weak regulatory frameworks, and inconsistent policy enforcement, further slow down the pace of implementation. These issues



often deter foreign investment and undermine confidence in long-term sustainability projects.

Climate Finance and Technology Transfer

While international frameworks such as the Paris Agreement and the Green Climate Fund aim to facilitate climate finance and technology transfer, actual disbursement has often fallen short of commitments. Developing countries continue to call for predictable, accessible, and adequate funding to support green transitions. Moreover, the transfer of technology is complicated by intellectual property rights and concerns of competitiveness raised by corporations in the Global North. Without fair access to both finance and technology, the Global South risks being left behind in the global green transition.

Opportunities for Leapfrogging Development

Despite these challenges, the Global South also holds unique opportunities. Many developing countries, unencumbered by deeply entrenched fossil fuel infrastructures, are well-positioned to leapfrog directly into clean energy systems. For instance, rural electrification through solar mini-grids in Africa demonstrates how renewable technologies can bypass the need for costly and carbon-intensive centralized grids. Similarly, rapidly urbanizing regions in Asia and Latin America present a blank canvas for sustainable city planning and transport solutions. These opportunities, if supported with the right financing and technology, can allow the Global South to chart a development pathway that is both environmentally sustainable and economically inclusive.

Strengthening Regional and South-South Cooperation

Regional collaboration and South-South cooperation also present powerful avenues for advancing green technology adoption. Shared cultural, economic, and climatic contexts allow developing nations to pool resources, share best practices, and co-develop affordable technologies tailored to local needs. Initiatives such as BRICS cooperation on renewable energy, ASEAN's green energy programs, and the African Union's Agenda 2063 highlight the growing momentum of regional leadership in sustainability. Enhanced collaboration can also empower the Global South to negotiate more effectively in global forums such as the G20.

Chapter: Green Technologies in the Global South

Understanding Green Technologies

Green technologies refer to innovations, processes, and products that minimize environmental damage, reduce carbon footprints, and promote sustainability. These technologies range from



renewable energy sources such as solar, wind, and hydro power, to energy-efficient appliances, electric vehicles, waste management solutions, and advanced agricultural methods that limit environmental harm. In essence, green technologies are not only tools for climate mitigation but also pathways to sustainable economic development.

The Promise for the Global South

The Global South—comprising developing and emerging economies—has both the greatest need for and the most to gain from green technologies. For countries grappling with rapid urbanization, high energy demand, and vulnerability to climate change, green technologies offer the promise of:

- **Energy Security:** Harnessing renewable energy can reduce dependence on fossil fuel imports.
- **Sustainable Development:** Green technologies open avenues for inclusive growth while limiting ecological harm.
- **Resilience:** Adoption of sustainable agricultural practices and climate-smart infrastructure can enhance adaptive capacity to extreme weather events.
- **Job Creation:** The clean energy sector has the potential to provide millions of new jobs, particularly in installation, manufacturing, and maintenance.

Barriers to Adoption

Despite their promise, several barriers hinder the widespread adoption of green technologies in the Global South:

1. **High Costs:** Advanced technologies such as solar grids, electric vehicle infrastructure, and carbon capture require significant upfront investment.
2. **Technology Transfer Challenges:** Patents, intellectual property rights (IPRs), and restrictive trade practices often limit accessibility to developing nations.
3. **Infrastructure Gaps:** Weak infrastructure and unreliable power grids in many parts of the Global South pose hurdles for large-scale implementation.
4. **Financial Constraints:** Limited fiscal space makes it difficult for governments to prioritize and subsidize green technology deployment.
5. **Lack of Skilled Workforce:** Adoption requires trained professionals capable of operating and maintaining advanced technologies.

Role of International Cooperation



The G20, given its collective influence, plays a crucial role in bridging the technology gap.

International cooperation can foster:

- **Technology Transfer Mechanisms:** Platforms that ease access to innovations through partnerships, licensing agreements, and joint ventures.
- **Capacity Building:** Training programs and educational exchanges to prepare the workforce of the Global South for a green transition.
- **Financial Mechanisms:** Green funds, concessional loans, and climate financing facilities that reduce the burden of upfront costs.
- **Policy Harmonization:** Coordinated policy frameworks that align trade, intellectual property, and environmental goals.

KEY ISSUES FOR DEBATE

The intersection of *Common but Differentiated Responsibilities (CBDR)* and *green technologies* raises several contentious issues that continue to challenge policymakers, businesses, and international institutions alike. These debates highlight the friction between development imperatives and climate commitments, as well as the structural inequities in the global system of technology production and diffusion.

Balancing Development Needs with Climate Commitments

Developing countries in the Global South face the dual challenge of meeting immediate socio-economic development needs while also contributing to long-term global climate goals. Investments in infrastructure, industrial growth, and poverty reduction often rely on energy-intensive models, while CBDR principles require that they be granted space for growth. The debate emerges around whether accelerated adoption of green technologies will support or hinder these development trajectories, especially given the high upfront costs of renewable infrastructure.

Technology Transfer vs. Intellectual Property Rights

One of the most pressing points of contention lies in the ownership and sharing of green technologies. While developed countries advocate for protecting intellectual property rights (IPRs) to incentivize innovation, developing nations argue that such protections create barriers to affordable access. The debate centers on whether international frameworks should promote compulsory licensing, open-source technologies, or differential pricing models to reconcile



innovation incentives with equitable access.

Financing the Green Transition

The economic dimension of CBDR is particularly evident in the financing debate. While developed nations have pledged billions in climate finance, actual disbursements often fall short of commitments. Disputes arise over the adequacy, predictability, and accessibility of these funds. For many in the Global South, adopting green technologies without sufficient financial support risks deepening debt burdens and economic inequalities. This raises the fundamental question: *who should pay for the global energy transition?*

Sovereignty vs. Global Responsibility

Adoption of green technologies often requires policy reforms, international cooperation, and adherence to global standards. However, states—particularly those in the Global South—sometimes perceive these demands as intrusions into their sovereignty. Tensions exist between national decision-making and global responsibility, particularly when external pressure comes from powerful blocs such as the EU or G7. The question becomes whether climate obligations are being fairly distributed or disproportionately imposed on vulnerable economies.

Just Transition and Equity Considerations

The principle of a “just transition” has emerged as a crucial concern in climate debates. While green technologies can create new opportunities, they also risk displacing workers in traditional sectors such as coal mining and oil refining. For countries where these industries remain central to livelihoods, the social cost of rapid decarbonization may outweigh its environmental benefits unless carefully managed. Equity debates thus extend beyond nations to communities, industries, and individuals.

Global Competition in Green Technology Markets

Green technologies are increasingly a site of geopolitical competition, with major economies vying for dominance in sectors like solar panel manufacturing, electric vehicles, and rare earth mining. The Global South, in many cases, becomes dependent on imports or serves as a resource base for raw materials. This dynamic risks replicating historical patterns of dependency and exploitation, making it critical to debate whether current global market structures enable or undermine CBDR.



Finally, debates often revolve around whether existing multilateral forums—such as the UNFCCC, WTO, and G20—are adequately addressing the challenges of CBDR and green technology access. While these institutions provide platforms for dialogue, their effectiveness in enforcing commitments, resolving disputes, and ensuring equitable participation remains contested. The question is whether these forums need reform, or whether new institutions should be envisioned for a truly equitable green transition.

QUESTIONS A RESOLUTION MUST ANSWER (QARMA)

In order to formulate a constructive and action-oriented resolution, delegates must focus their debate and drafting efforts on addressing the following key questions. These questions are designed to ensure that the resolution is comprehensive, balanced, and implementable across diverse G20 member states while keeping in mind the unique developmental contexts of the Global South.

Defining the Scope of Common but Differentiated Responsibilities (CBDR)

- How should the principle of CBDR be reinterpreted and reinstated within the G20 framework to reflect contemporary realities of climate change, technology transfer, and global inequality?
- Should the G20 adopt a binding or voluntary approach to enforcing differentiated responsibilities?
- What criteria should determine “differentiation” (e.g., historical emissions, current capacities, financial resources, technological advancement)?

Financing Green Technologies in the Global South

- What mechanisms can the G20 put in place to ensure adequate funding for green technologies in developing nations?
- Should there be a dedicated global fund, expansion of existing mechanisms like the Green Climate Fund, or innovative financing such as carbon taxes, green bonds, or public-private partnerships?
- How can financial commitments be made transparent and enforceable?

Technology Transfer and Capacity Building

- What frameworks can ensure equitable access to cutting-edge green technologies for the Global South?
- Should G20 nations commit to open-source or subsidized licensing of key technologies?
- How can the resolution balance intellectual property rights with urgent climate and sustainability needs?
- What role can capacity-building initiatives—such as training programs, technical assistance, and educational exchanges—play in this process?

Accountability and Monitoring

- How will progress be monitored and evaluated under the principle of CBDR?
- Should there be a periodic review mechanism under the G20 or alignment with UNFCCC reporting systems?
- What penalties, incentives, or peer-review systems can encourage compliance?

Integration with Broader Development Goals

- How can climate action through CBDR and green technologies align with the UN Sustainable Development Goals (SDGs)?
- How should social equity, poverty alleviation, and job creation be incorporated into climate and technology policies?
- What safeguards can prevent new green technology initiatives from worsening inequalities between developed and developing nations?

Role of Partnerships and Non-State Actors

- What role should private corporations, research institutions, and civil society organizations play in enabling technology transfer and implementation?
- How can G20 nations encourage partnerships between Global North and South industries to scale innovation?
- Should there be a mechanism to promote South-South cooperation in green technology development?



FURTHER READINGS AND REFERENCES

For delegates wishing to deepen their understanding of the principles of Common but Differentiated Responsibilities (CBDR), green technologies, and their specific relevance to the Global South, the following references are recommended. These works provide historical grounding, theoretical perspectives, and insights into ongoing debates in international environmental governance.

Foundational Documents

- **United Nations Framework Convention on Climate Change (UNFCCC), 1992** – Establishes the principle of CBDR and sets the stage for international climate negotiations.
- **Kyoto Protocol, 1997** – The first legally binding agreement that operationalized CBDR, setting differentiated targets for developed and developing nations.
- **Paris Agreement, 2015** – Highlights the evolution of CBDR in the context of voluntary commitments (Nationally Determined Contributions).

Reports and Assessments

- **Intergovernmental Panel on Climate Change (IPCC) Assessment Reports** – Offer scientific grounding on climate change impacts, adaptation, mitigation, and the role of technology transfer.
- **United Nations Environment Programme (UNEP) Annual Emissions Gap Reports** – Provide up-to-date analysis of the gap between pledged commitments and actual progress.
- **World Bank Reports on Climate Finance and Green Technology** – Explore mechanisms for financing sustainable technologies in the Global South.
- **International Renewable Energy Agency (IRENA) Outlook Reports** – Focus on the role of renewable energy technologies in bridging the development divide.

Scholarly Articles and Books

- Rajamani, Lavanya – *Differentiated Responsibilities in International Environmental Law* – A seminal analysis of the evolution of CBDR in international law.
- Najam, Adil; Huq, Saleemul; Runnalls, David – *Environment and Globalization: Five*



Propositions – Explores the linkages between environmental justice, technology, and development.

- Sachs, Jeffrey – *The Age of Sustainable Development* – A comprehensive overview of sustainability challenges and opportunities, including technology transfer.
- Okereke, Chukwumerije – *Global Justice and Neoliberal Environmental Governance* – Examines equity and justice concerns in climate negotiations.

Case Studies and Practical Resources

- Case studies on **technology transfer projects in India, Brazil, and South Africa** – Highlight challenges and successes in deploying green technologies.
- Analyses of **G20 Communiqués on Climate Change** – Demonstrate how major economies shape collective climate action.
- **Reports from the Global South Think Tanks** (e.g., South Centre, TERI, African Climate Policy Centre) – Provide perspectives on climate justice, finance, and development needs.

