KIIT INTERNATIONAL MODEL UNITED NATIONS

STUDY GUIDE

LETTER FROM THE EXECUTIVE BOARD

Dear Delegates,

It is with immense pleasure that we welcome you all to the *United Nations Framework Convention on Climate Change* ("UNFCCC") to be simulated at the *KIIT International e-MUN 2021* ("the Conference"). It is our privilege to serve as your Executive Board for the duration of the Conference. The Background Guide at hand will help you commence your research for the Conference. However, we strongly recommend that you do a good amount of research beyond what is covered in the Background Guide. All of you all are entrusted upon a task greater than winning a prize, that is, to do justice to the responsibility of finding solutions to one of the more critical and challenging problems the world is facing today, i.e. *climate change*.

Kindly note that we shall be having **Position Papers** for our committee. Essentially, a Position Paper is a document, made by the delegates, which concisely and categorically summarizes the stance of their respective countries on the agenda at hand. It ought to consist of the following headings, ideally, namely:

- Name of the Committee
- Name of the Country
- Agenda to be discussed
- Brief Background of the agenda
- Past international actions taken
- Policy decisions & steps taken by the Country the delegate is representing
- Possible Solutions

The specifications of formatting for the Position Paper are as follows:

- Font Size & Style – Times New Roman, Size 12
- Line Spacing – 1.5
- Any uniform citation style, preferably OSCOLA/Blue Book. Citations are not mandatory.
- References / Bibliography can be added towards the end of the Paper Papers – however the same is not mandatory.
- Kindly refrain from posting pictures or videos in your respective Position Papers. Graphs or maps are allowed; however, they should be used sparingly and only when necessarily required.
- Content in the position paper should be **originally worded and not plagiarized**.
- The maximum page limit of the Position Paper is **2 pages**. Kindly do not exceed the same. Include all the headings of the Position Paper in a **single MS Word file**.
- Email the Position Paper to: [shivamjain.me@gmail.com] with cc to [arkoprabho.hazra@gmail.com] and [jarmim67@gmail.com]. The subject of the email should be "**KIIT e-MUN - UNFCCC Position Paper: (Country Name)**".

Your Position Paper must adhere to the above specifications, failing which it is liable to be summarily rejected. The Position Paper shall carry *substantial weightage in the marking scheme*, and the deadline for sending your Position Paper is – **January 27, 2021 – 11:59 pm**. Kindly note that *no Position Papers will be accepted by the Executive Board after the deadline and no extensions will be granted*.

We can assure you that we will remain at your disposal during your preparation for the conference and your time in the committee sessions, for any queries and concerns that may arise. We hope that this Conference turns out to be a great learning experience for all of us, and we have substantive discussion and discourse on the days of the Conference. See you (virtually) very soon!

Regards,

Arkoprabho Hazra
Co-Vice Chairperson

Shivam Jain Kakadia
Chairperson

Jarmim Hamid Imee
Co-Vice Chairperson

COMMITTEE: UNITED NATIONS FRAMEWORK CONVENTION ON CLIMATE CHANGE

In December 1990, as part of a longer process in the international debate on the impact of human activities on the Earth's environment and climate, the United Nations (UN) General Assembly established an Intergovernmental Negotiating Committee to begin work on a treaty on climate change. The resultant *United Nations Framework Convention on Climate Change* ("**UNFCCC**") was opened for signature in 1992 at the UN Conference on Environment and Development in Rio de Janeiro, and it entered into force in 1994 after having received the required 50 ratifications. As of August 2017, 197 parties have ratified the UNFCCC: all UN Member States, the State of Palestine, Niue, the Cook Islands, and the European Union. All parties to the UNFCCC are represented at the Conference of the Parties ("COP"), which meets annually and serves as *the supreme decision-making body of the Convention*.

The ultimate objective of the UNFCCC is the *stabilization of greenhouse gas concentrations in the atmosphere at a level that will prevent dangerous anthropogenic interference with the climate system*. This is to happen within a timeframe sufficient to allow ecosystems to adapt naturally to climate change, to ensure that food production is not threatened and to enable economic development to proceed in a sustainable manner.

As set out in Article 7 of the UNFCCC, the primary purpose of the COP is to review the implementation of the UNFCCC, including any related instruments, and to make the decisions necessary to promote the effective implementation of the Convention. Its functions include *examining the obligations of parties to the UNFCCC and assessing their progress towards implementation; facilitating the exchange of information; considering, adopting, and ensuring the publication of regular reports on implementation; and making recommendations on any matters necessary for the implementation of the Convention*. The COP may establish subsidiary bodies as necessary, and it is also empowered to work with international organizations, intergovernmental organizations, and non- governmental organizations.

AGENDA: DELIBERATING UPON MECHANISMS TO ACHIEVE "ZERO NET EMISSIONS" BY 2050

Introduction

Achieving zero net emissions by 2050 is a target under both the Paris and Kyoto protocols, which have been ratified by many countries. Most notably, the UK became the first country to pass the zero emissions goal into domestic law, putting legal pressure on the UK government to deliver on that target by 2030. Additionally, the EU is striving to become the first continent that becomes truly climate neutral and has implemented its Green Deal in December 2019. Nevertheless, these positive developments have occurred in light of recent reports that most countries will probably not be able to achieve the zero net emission target by 2050. The goal came under particular fire when the U.S. decided to withdraw from its legal obligations under the Paris Agreement. These recent developments have led some to call the target a 'fiction'.

In less than four years after the historic United Nations (UN) Climate Summit in Paris, the enthusiasm has largely evaporated. The Paris Agreement and its core target - holding the mean global temperature increase within a corridor of 1.5–2 degrees Celsius (2.7-3.6 °F) above pre-industrial levels - is still seen as a major diplomatic breakthrough. But since 2015, there have not been many signs of progress in climate change mitigation. While the deployment of renewable energy is clearly accelerating, it has been outpaced by total growth in energy demand, still mainly fueled by oil, gas, and coal.

Although, the year 2018 was projected to set a new record in global greenhouse gas emissions, however, there does not seem to be a major breakthrough that was recorded in emission ratios of the 197 member Nations that had signed the Paris Agreement, barring a very few exceptions. Even in the unlikely event that all the Paris Agreement signatories fulfill their voluntary national pledges, emissions would still be expected to rise a little further until 2030. The UN's Environment Programme predicts a temperature rise of 3.2°C by 2100 - in other words, well above the politically agreed thresholds - unless the current climate policy course is changed drastically.

Resources to Mitigate Emission

Renewable Energy

This has a high potential of mitigation opportunity that could deliver emission reductions of around 1.5 to 2.5 Gt CO2. Renewable energy deployment provides technological advancement and substantial benefits for rural economies in terms of employment, off-grid access to energy and diversified energy sources, in addition to modern energy services. It can enhance energy security and independence, reduce air pollution, improve public health and support adaptation goals.

Land Use

Land use is an important solution for resolving the emission reduction challenge. There are significant low-cost opportunities in agriculture, forestry and other land use related activities that link food security, environmental sustainability, local climate adaptation needs and socioeconomic development into a coherent package.

Energy Efficiency

Increasing energy efficiency is an area of significant mitigation potential. Many energy efficiency policies are often cost-effective measures, as upfront investment is generally more than compensated by economic gains due to saved energy costs. Such policies enhance energy security and independence, reduce air pollution and contribute to public health improvements.

Non-CO2 GHGs

Non-CO2 greenhouse gases, such as methane, nitrous oxide and fluorinated gases, trap more heat within the atmosphere than CO2. These gases are emitted from a broad range of sectors and sources, namely: CH4 is mostly emitted from extraction, distribution and combustion of fossil fuel, industrial processes, enteric fermentation, rice cultivation, manure management, other agricultural sources, and the waste sector; N2O is mostly emitted from industrial processes, agricultural soils, manure management and wastewater; and F-gases are mostly emitted from industrial processes. Mitigation of these emissions is an important and relatively inexpensive supplement to CO2-only mitigation strategies. The United States Environmental Protection Agency estimates that 2.7 Gt CO2 eq of non-CO2 emissions could be mitigated by 2020 at a cost below USD 50/t CO2 eq and a substantial portion of these reductions could generate an immediate financial return.

Carbon capture, use and storage

Carbon capture use and storage (CCUS) can play a significant role in mitigating carbon emissions in the future and is a key technology for the decarbonization of the energy sector in the long term. CCUS is an important option in most of the emission scenarios to reach the 2-degree goal. United Nations Environment Programme identified it could increase to reach a level capable of capturing 1.5 Gt CO2 in 2030 and 6.3 Gt CO2 in 2050 according to the International Energy Agency.

Urban Environment

Cities are the engines of the economy, with most production, trade and transportation occurring within urban settings. They can provide significant contributions to bridging the global emissions gap through independent ambitious and deeper emission reduction targets that are complementary to national commitments.

Key Policy Factors

The 1992 UNFCCC does not set a clear target but only the rather abstract objective to achieve a stabilization of greenhouse gas concentrations in the atmosphere to prevent Dangerous Anthropogenic Interference (DAI) into the climate system. Since then, several attempts to operationalize this overarching goal have been made. In the 1990s, rates of decadal temperature change or equilibrium atmospheric concentration of greenhouse gases have been most prominent. In the 2000s, temperature thresholds - notably 2°C - became much more prominent. Since the 2009 Copenhagen climate summit temperature targets have dominated the international climate debate.

With its 2015 Paris Agreement, the UNFCCC finally adopted the 1.5–2°C range as its core mitigation target. Furthermore, the Paris Agreement introduced an additional formula in order to further operationalize the new temperature target. Based on the scientific understanding that any temperature level can be translated into a remaining global emissions budget, albeit with broad uncertainty ranges, it can be said that net emissions need to be zero at some point in the future. Accordingly, the UNFCCC stipulates the goal *to achieve a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases in the second half of this century.*

The main purpose of the UNFCCC mitigation targets is to regulate the behavior of th e key actors responsible for anthropogenic climate change. Nevertheless, whereas much effort has been put into defining a threshold for DAI, surprisingly little attention has been paid to the mindset of policymakers who are tasked with preventing dangerous climate change. The problem-centered approach pursued by physical scientists assumes that appropriate policy action will follow from an accurate definition of DAI more or less automatically. *But the underlying assumption of comprehensive rationality and consistency is rarely met in climate policymaking – even if politicians, government officials, and diplomats often pretend otherwise. There is of course the fundamental difficulty of effective international coordination*.

But even on a national level, everyday governance is usually not primarily driven by objectively defined problems that require specific solutions. More often, policymakers' preferred solutions are chasing fitting problem descriptions. Although policymaking ostensibly adheres to the cultural norm of consistency, its daily practices are characterized by a fundamental inconsistency between talk, decisions, and actions. Political and administrative actors typically treat talk, decisions, and actions as relatively independent products, in order to satisfy a diverse set of stakeholders and to maximize external support.

This is particularly problematic in climate policy, a public domain that is characterized by long-term scenarios and optimal policy designs, enabling politicians to make bold promises about the far-away future without the immediate need to deliver on them. Unfortunately, in climate policy most governments choose a more progressive stance when talking and deciding, but a more modest one whe n acting.

Politics of Climate Change

As discussed above, most governments choose a progressive stance towards climate change when deciding a policy, but a more modest one when acting upon it. Furthermore, temperature targets lack the necessary characteristics to actually guide the mitigation actions of individual governments and companies. Even if temperature targets were defined more precisely – for instance, if no temporary overshoot was allowed for – it would not change the fact that they are directed at the earth system as a whole. Temperature targets cannot define the amount of emissions reductions any individual country is supposed to provide. It is therefore relatively easy for governments to support ambitious global targets while doing little to cut emissions at home.

Since the IPCC declines, with good reason, to deliver a scientific formula for fairly distributing mitigation obligations among nation states, every government is able to declare within the UNFCCC process that its own pledge is fair and ambitious. When focusing on temperature targets, mitigation efforts can only be critically evaluated at the global level and no single country can be held responsible for the looming breach of the 1.5–2°C target.

In contrast to temperature thresholds, a target of net zero emissions tells policy-makers, business leaders, and the public fairly precisely what needs to be achieved, and it directly addresses human behavior; something organizations have a better chance to influence than global temperature. A net zero emissions target is more precise, easier to evaluate, politically more likely to be attained, and ultimat ely more motivating. Since this goal directly tackles the actions perceived as problematic, its effectiveness at steering policy can be expected to be much great er than 1.5-2°C. If global greenhouse gas neutrality in the context of the Paris Agreement is interpreted to mean that all signatories have to gradually reach net zero between 2050 and 2099, then they must all be measured against the same yardstick. Any differentiation between these obligations - for instance, between industrialized nations, emerging economies, and developing countries - can only occur along the time axis. Under the bottom-up approach of the Paris Agreement, governments make that decision for themselves.

Some countries have already taken up the challenge, albeit using different interpret ations of net zero. In Europe, Sweden plans to reach Net Zero Emissions by 2045. As stated above, the UK has declared a novel legislation to attain a net zero emissions target by 2050. The European Commission recently started pushing for a "net zero by 2050" vision for the whole European Union (EU), but it remains to be see n if EU member states are willing to commit to such a target.

In the USA, the state of Hawaii was the first to decide on a bill setting a net zero targ et, to be reached by 2045. California followed with a sectoral target of zero emissions electricity, also by 2045. Around the globe, we find similar initiatives and plans, for example by the government of New Zealand or the Australian state of Victoria, but also in cities like Copenhagen or companies like Maersk, the world's lar gest container shipper.

Obviously, bold net-zero emissions or climate neutrality announcements as such cannot guarantee that all the necessary emissions reduction measures will really be implemented. Given the time horizon of several decades, even the best political intentions and the best governance structures cannot guarantee success. But since a net zero emissions target sets a very clear direction of travel, rather than positing an imaginary border between "acceptable" and "dangerous" climate change, its attainability is not a question of "either–or", but of "sooner-or-later". A net zero target thus avoids definitive failure, which might have a demoralizing politic al effect.

Zero Net Emissions and the Role of Technology

The Paris Agreement sets out guidelines in different areas to strengthen state capacity and reduce climate change effects. Among these areas are development and transfer of technology, which are essential to international efforts to reduce greenhouse gas emissions and which would, if put to proper use, be rudimentary in the end-goal of achieving "Zero Net Emissions". Taking into consideration that developing countries have fewer resources and therefore more difficulties in fulfilling international commitments, technology transfer policies are important for helping these countries increase their local capacities and capabilities regarding climate change. It is important for developing countries to work with states that have the technological means to create frameworks for cooperation and exchange. Effective development and transfer of technology to reduce and mitigate greenhouse gas emissions will contribute to the success of the Paris Agreement through international cooperation for a common interest: combating climate change.

One of the central principles of the UNFCCC is that of "common but differentiated responsibilities," which recognizes that while all parties are responsible for combating climate change, the manner in which they do so varies based on circumstances including their capacity and "national and regional development priorities." Developed and industrialized countries are held to a higher standard, as they have higher capacity and "are the source of most past and current greenhouse gas emissions." They are listed in Annex I of the UNFCCC and have more obligations than other parties, such as reporting on the measures they are taking to combat climate change and giving details on their greenhouse gas emissions. Certain developed countries are also listed in Annex II of the UNFCCC; they are expected to provide financial resources and facilitate technology transfer to assist developing countries in combating climate change. The UNFCCC thus encourages strong cooperation between parties to assist developing countries with meeting their obligations.

Zero Net Emissions: The Path Forward

Comparing the two types of mitigation targets incorporated into the Paris Agreement, the net zero emissions target is clearly the preferable one when it comes to the much needed capacity to guide appropriate action. Thresholds for temperature increase can still be useful in climate policy, but they would better be treated as environmental quality objectives that indicate a desirable end stage that the world should strive for. Policymakers clearly lack the capacity to process the full range of environmental problems at one time.

Net zero emission targets allow for a sequential climate policy strategy, since they c an only be reached by a combination of conventional mitigation and some amount of carbon dioxide removal to offset residual emissions. Only when key emitters are able to prove that pathways to net zero are feasible in the real world, based on a much higher and hopefully actionable level of understanding, it would make sense to plan and prepare for huge amounts of carbon dioxide removal to go "net negative," as an integral part of a climate recovery strategy that aims to secure the politically agreed temperature range of 1.5–2°C.

Differentiation between environmental quality objectives and policy action targets has the potential to change the way climate researchers look at policymaking. On the one hand, researchers will have to accept their relatively limited role in the process of policy formulation and even more limited role in policy action. On the other hand, they should not feel pressured to make pragmatic concessions when formulating long-term environmental objectives that are worth pursuing, as originally happened in case of the 2°C temperature target.

Pursuing net zero emissions targets will conceptually shift climate policy in two ways: it will become both more ambitious but paradoxically also more pragmatic. Current long-term reduction targets do not reach 100 percent, and many climate progressive countries still use some version of the 80–95 percent range (by 2050) introduced in the IPCC's Fourth Assessment Report in 2007. Such a target allows many governments and companies to locate a substantial share of their emissions within the remaining 5–20 percent, suggesting they are only partially affected by current climate policy pathways.

This is especially true where very ambitious reduction measures encounter substantial technological, economic, or political obstacles. This constellation is also advantageous for climate progressive governments and environmental NGOs in that they can focus their proposed solutions essentially on expanding renewables and economy-wide electrification while increasing energy efficiency. They do not need to discuss unpopular and costly measures, such as capturing and storing CO2 in the steel and cement industry, producing synthetic fuels for long-distance and heavy-duty transport, using negative emissions technologies of building the necessary infrastructure for the widespread use of hydrogen as a potential zero-carbon feedstock in the chemical industry - challenges to be tackled to create zero emissions energy systems. It is also important to promote the exchange of good practices and efforts to scale up programs that have proven successful at the local or regional level, as well as to identify and address barriers preventing successful implementation.

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