



BACKGROUND GUIDE:
UNITED NATIONS
DEVELOPMENT COUNCIL

AGENDA:
Ensuring Carbon Neutrality
Globally

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Letter from Executive Board

Dear Participants,

It is our pleasure and absolute honour to preside over **MUN Bank Model UN's United Nations Development Council, 2022.**

Usually delegates ask us what are the expectations of the Executive Board Members for a committee, and to that we would like to say that at the least we expect everyone to take the issues under review seriously. We expect that while you have fun during research or deliberations upon the issue, but you do not undermine their relevance, that you debate them because they affect you as an individual as well.

This guide has been prepared with the idea that it will brief you about the issues at hand, and give you a good starting point for further research. So we request you to not see it as an end in itself in terms of preparation. Going beyond the scope of this guide during preparation is not only suggested, but is a necessity if you wish to perform well. Since along with it being an academic simulation, it is a competitive forum as well, the Executive Board would maintain a marking sheet. **You shall be marked on the following parameters -**

- 1. Verbatim**
- 2. Lobbying**
- 3. Chits**
- 4. Points**
- 5. Diplomatic Courtesy**
- 6. Documentation**

It is important that you use this document as a reference point and make your own opinion based upon your portfolio along with the Research and Analysis done. In case of any queries feel free to contact us. We will try our best to answer the questions to the best of our abilities.

Regards,

Aryaveer Singh- Head Chair

Neesha Ng Sundram-Vice Chair

Anika Nusrat-Rapporteur

Introduction to the United Nation Development Council:

The United Nations Development Program serves as the UN's global development network, The main purpose of this body is to bring about change and development around the world and to improve the situation and the lives of many people around the world. UNDP provides expert advice, training and financial assistance to developing countries, with a strong focus on Less Developing Countries. Since 1966, the UNDP has worked as a partner for people from all walks of life, building resilient nations.

Today, on the ground, in more than one hundred and seventy countries and regions, it continues to provide a global perspective and spatial understanding to help countries move from poverty to prosperity. Less than- Kofi Annan's leadership, world leaders vowed to work together to achieve Millennium Development. The goals, which include the important task of reducing poverty by 50 percent by the end of this year. Icon hence the obligation of the United Nations Development Program, to unite the world once and for all national efforts, with the aim of achieving these eight main goals set. UNDP's mandate is to assist its countries and share solutions in four key areas: Poverty Alleviation and Achieving the Millennium Development Goals (MDGs), Democracy, Disaster Prevention and Recovery, Environment and Power for Sustainable Development. While doing all his work, UNDP protects human rights, empowers women, the young and the very poor, the most vulnerable Community. Over the past ten years, UNDP has worked with 112 international governments, including 50 countries at high risk of disaster, developing and implementing policies and support for disaster risk reduction-rescue operations. UNDP programs aim to strengthen the national capacity for prevention once and for all responding to natural disasters. In its support for recovery, UNDP focused especially in subsequent normal restorations problems of functional change to development, using the restoration function as an opportunity to 'build a better back'. Such efforts are focused to strengthen governance structures as well as better disaster risk policies management and reaction.



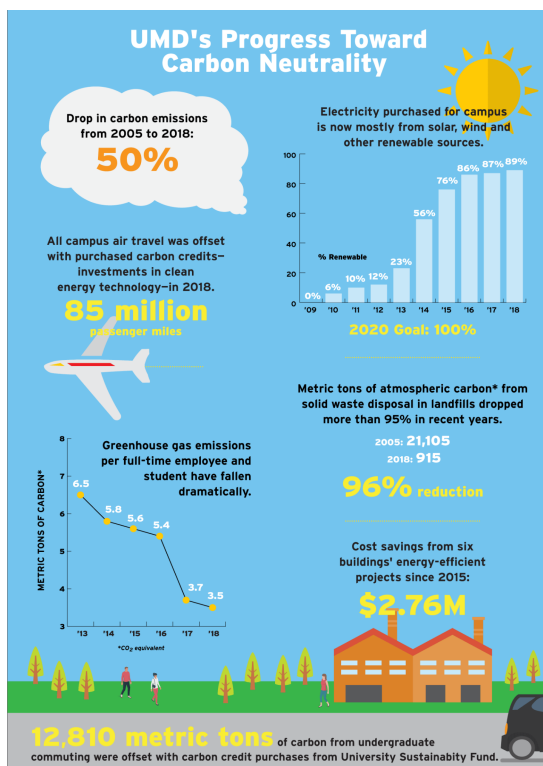
Introduction to the Agenda:

What is Carbon Neutrality?

Carbon neutral means that there is a balance between carbon emission from a carbon sink and carbon absorption from the atmosphere. The removal of carbon monoxide from the atmosphere and its subsequent storage is called carbon sequestration. Achieving net zero emissions requires offsetting all global greenhouse gas (GHG) emissions through carbon sequestration. Carbon sinks are systems that absorb more carbon than they emit. The main natural carbon sinks are soil, forests and the sea. Natural sinks are estimated to remove 9.5 to 11 Gt of CO₂ per year. In 2019, annual global CO₂ emissions reached 38.0 Gt. Until now, artificial carbon sinks have not been able to remove carbon from the atmosphere on the scale needed to combat global warming. Carbon stored in natural sinks, such as forests, is released into the atmosphere through wildfires, land re-use, or logging. This is why reducing carbon emissions is so important to achieve climate neutrality.

A key element towards carbon neutrality is powering economies with clean energy, replacing polluting coal and gas and oil fired power stations with renewable energy sources, such as wind or solar farms. This would dramatically reduce carbon emissions. Plus, renewable energy is now not only cleaner, but often cheaper than fossil fuels. A wholesale switch to electric transport, powered by renewable energy,

would also play a huge role in lowering emissions, with the added bonus of slashing air pollution in the world's major cities. Electric vehicles are rapidly becoming cheaper and more efficient, and many countries, including those committed to net zero, have proposed plans to phase out the sale of fossil fuel powered cars. Other hazardous emissions are related to agriculture (livestock produces significant amounts of methane, a greenhouse gas). If you eat less meat and eat more plant foods, you can significantly reduce that amount. And here too, there are promising signs such as the growing popularity of "vegetable meat" now sold in major international fast food chains.



Key Definitions:

Carbon offsetting:¹ an action or activity, such as the planting of trees or carbon sequestration, that compensates for the emission of carbon dioxide or other greenhouse gases to the atmosphere.

Carbon sequestration:² Carbon sequestration is the process of capturing and storing atmospheric carbon dioxide. It is one method of reducing the amount of carbon dioxide in the atmosphere with the goal of reducing global climate change.

Climate neutrality:³ Climate neutrality can be achieved if CO₂ emissions are reduced to a minimum and all remaining CO₂ emissions are offset with climate protection measures. If climate-damaging greenhouse gases are completely avoided or if gase

Carbon sink:⁴ A carbon sink is a land or ocean mass that can take in carbon - most notably carbon dioxide - from the atmosphere. It is the opposite of a carbon *source*, which acts to emit carbon into the atmosphere, such as a motor vehicle or a coal-fired power plant. Carbon sources cause negative impacts to the earth as they emit carbon from below the Earth's surface that would otherwise not enter the atmosphere.

Hazardous emissions:⁵ means all emissions, releases, leaks, escapes, dumping, discharges or threatened discharges of Hazardous Substances into the air, surface water, ground water or the ocean or on or into the land.

Sustainable development:⁶ Sustainable development can be defined as an approach to the economic development of a country without compromising with the quality of the environment for future generations.

¹ https://www.castrol.com/en_gb/united-kingdom/home/path360/cneutral.html

² <https://clear.ucdavis.edu/explainers/what-carbon-sequestration>

³ <https://www.myclimate.org/information/faq/faq-detail/what-is-climate-neutrality>

⁴ https://energyeducation.ca/encyclopedia/Carbon_sink

⁵ <https://www.lawinsider.com/dictionary/release-of-hazardous-materials>

⁶ <https://byjus.com/commerce/meaning-and-features-of-sustainable-development/>

Stances of Major Countries and NGOs

Major Countries Involved

China

China has been the largest emitter of carbon dioxide gas in the world since 2004 and was responsible for 28.5 percent of global carbon dioxide emissions in 2018. The country also produced 9.9 billion metric tons in the year 2019 alone. The reason behind this is because coal is responsible for approximately 58% of the total energy generated by China in 2019. The burning of coal (rich in carbon) in power and industrial plants and boilers releases large amounts of CO₂ into the atmosphere. Moreover, China is one of the largest importers of oil, which contributes to large CO₂ emissions through the country's use of motor vehicles.

The main reason for the usage of coal in China, is the use of the industrial sector as China's primary coal consumer. The production of cement and steel that both emit a large amount of CO₂, have undergirded China's infrastructure development. In fact, China manufactures half of the world's steel, producing roughly five times more than the European Union, hence having more carbon emissions than the EU. (Blokhin, 2022)

Moving on, China has made two main pledges in the past two decades. The first is during the Copenhagen Accord in 2009. The targets made were to reduce the **carbon intensity from 40% to 45%** below 2005 levels and to increase the **non-fossil fuel share of energy supply to 15%** by 2020. The Chinese government announced in March 2018 that it had achieved its Copenhagen emission reduction targets for 2020. Next, the second pledge is the Paris Agreement 2016. During this agreement, China pledged a carbon intensity reduction of 60% to 65% below 2005 levels, to increase the non-fossil fuel share of energy supply to 20% as well as to peak carbon emissions. ("How is China Managing its Greenhouse Gas Emissions?", n.d.) President Xi Jinping also said that the final target of peaking carbon emissions would be able to be achieved no later than 2030 and China would be able to reach net-zero by 2060. (Takeuchi, 2021)

United States of America

The United States ranks second in carbon emissions worldwide, producing approximately 4.7 billion metric tons of carbon dioxide emissions in 2019. (Blokhin, 2022) The major factor that contributes to the amount of carbon emissions is the transportation sector which makes up 27% of 2020 greenhouse gas

emissions in 2020 as 90% of the fuel used for transportation is still petroleum based. Two other sectors, which are the electricity production sector and the industry sector are also major contributors to the amount of greenhouse gas emitted due to the burning and consumption of fossil fuel. (United States Environmental Protection Agency, 2022)

The United States was affiliated with the Paris Agreement in 2020, withdrawing once from the agreement but rejoined in 2021 after the state general elections. Following that, President Biden established goals to create a carbon pollution-free power sector by 2035 and a net zero emissions economy by no later than 2050. (The White House, 2021) The state's stance was further reiterated during COP26 in which the state also agreed to boost climate cooperation with China.

Bhutan

Being one of the only three countries in the world that has a negative carbon rate, Bhutan generates about 2.2 million tonnes of CO₂ each year, but its forests absorb three times the amount of CO₂ produced, which eventually creates a carbon sink. (Thakur, 2021)

The core of Bhutan's national carbon neutral strategy are protected areas. Bhutan's constitution now demands that a minimum of 60 percent of the country's total land area remains under forest cover for all time. 81 percent of Bhutan is presently under forest cover, while more than half the country is protected as nature reserves, national parks and wildlife sanctuaries which are all connected by a network of biological corridors. (Patil, 2022) Logging exports were even banned in 1999. The main reason for this action is to further conserve forests and to provide timber for local people at affordable prices in the interest of rural development and the maintenance of cultural values.

Aside from that, a large portion of Bhutan's electricity comes from its rivers by harnessing the power of hydroelectricity. The amount of electricity generated through this method produces enough to supply free energy to the people of Bhutan and the extra is even exported to other neighbouring countries.

Finland

Finland is targeted to reach a net zero status by the year 2035. Attributing to 1.5% of the total emissions of the EU in the year of 2019, Finland was responsible for 55.3 million tonnes of CO₂ equivalent of emissions. (European Parliament) The European Union which Finland is part of, has the third largest

amount of carbon emissions in the world. The main emitting sectors of Finland are their energy industry and transport industry, together accounting for 50 % of total emissions in 2019. However, with the exception of agriculture, emissions have decreased in all other sectors since 2005 (European Parliament)

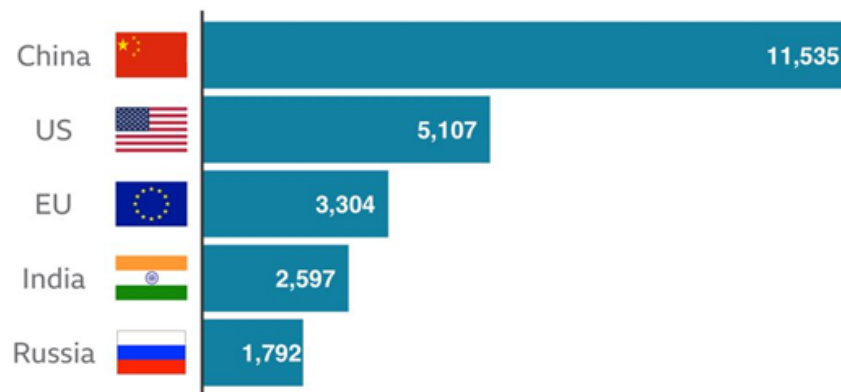
The key pillar of Finland's national climate policy is the Climate Change Act that entered into force on 1 June 2015. According to the Act, Finland must reduce its greenhouse gas emissions by at least 80% by 2050 from the levels in 1990. Aside from the Climate Change Act, this state draws up a medium term plan for climate change action during each electoral term. 'Towards Climate-Smart Day-to-Day Living' which was the first Medium-term Climate Change Policy Plan, was completed in 2017.

Apart from recent efforts, Finland is the first country to introduce and implement carbon taxation.

Finland introduced a carbon tax of EUR1. 12 (USD1. 41) per tonne of CO₂ in 1990, based on the carbon content of the fossil fuel.

The top five emitters of carbon dioxide

Megatonnes of CO₂ per year



2019 data, EU includes UK
One megatonne = 1,000,000 tonnes

Source: EC, Emissions Database for Global Atmospheric Research



NGOs Involved

Greenpeace

Greenpeace has been one of the most vocal environmental NGOs that have voiced out against multiple facets of issues regarding carbon emissions.

In 2021, the issue Greenpeace spoke out most vocally against is carbon offsetting, which is claimed to be obscuring climate wrecking-emissions and is a form of greenwashing. To further elaborate, carbon offsetting is a licence to keep polluting, and distracts us all from the real work of cutting emissions. It is where companies and governments emit carbon but at the same time try to meet their carbon reduction targets. (Greenberg, 2021) It is harmful in the sense where false hope is given where the environmental crises can be ended without states and corporations reducing their own emissions. Hence, Greenpeace maintains its stance that needed reductions and fossil fuel phase-outs cannot be replaced by net-zero pledges and offsets with the actions of states and businesses.

However, their viewpoint is criticised by several media outlets. Some put forward the carbon offsets can be useful if they abide by the strict regulations and stressed that it is a voluntary and globally achievable action without overwhelming industries immediately. Others say that Greenpeace is biased and is spreading wrong information regarding carbon offsets altogether. (Verra, 2021)

WWF (World Wildlife Fund)

The World Wildlife Fund focuses on tackling the climate crisis by taking a variety of actions including the encouragement of the implementation of more ambitious climate policies by governments, supporting the shift to renewable energy as well as working with cities, businesses and communities in order to create a climate-resilient, net-zero future.

Some detailed actions that they have taken include providing financial support to developing countries as an implementing partner of the Green Climate Fund (GCF) and the Global Environment Facility (GEF) in order to accelerate climate action as well as supporting REDD+, which offers financial incentives to developing countries that create and implement strategies to manage and use their forests responsibly and help countries and regions assess the benefits nature provides under different development and climate change scenarios in order to reduce emissions from deforestation. (World Wildlife Fund, n.d.)

Possible Solutions

Carbon offsetting

Despite being a controversial short to mid term solution, carbon offsetting offers a middle ground to reduce the emissions of carbon while still providing a source of income for corporations and protection to environmental areas, and at least some form of monitoring and accountability to ensure that companies are sticking to their commitments. It is also more feasible than making drastic changes like phasing out non-renewable energy overnight.

However, there are two conditions for carbon offsetting to be considered as a genuine carbon offset. The first would be that carbon offsetting is done additionally. Additionality is a concept that garners frequent misunderstanding. One commonly heard misleading claim, for example, is that a project can be considered additional if GHG emissions are lower than they would have been “in the absence of the project.” GHG reductions are only considered additional if they would not have occurred in the absence of a market for offset credits. (Carbon Offset Guide)

The second requirement is for carbon offsetting to be done permanently. For most kinds of carbon offset projects, reversals are either physically impossible or extremely unlikely which means that carbon is kept out of the atmosphere forever with these projects.

Stabilising carbon in solid and dissolved forms to prevent them from being released into the atmosphere and causing it to warm is the main idea of carbon sequestration. However, like the above, carbon sequestration is a short-to-mid-term solution, as we do not have the ability to remove carbon from the atmosphere as fast as we are emitting it.

There are several approaches that can be taken in regards to carrying out carbon sequestration. A few mainstream ones include carbon farming and reforestation. The main objective of carbon farming is to use plants to trap carbon in the air, and following that, relies on several practices to encourage the trapped carbon to move into and stay in the soil. Reforestations increases the amount of trees that can serve as a carbon sink and sequester a larger amount of carbon. It is estimated that worldwide forests currently sequester on the order of 2 Gt CO₂ per year.

Compliance with Environmental Laws

Many countries in the world have laws and policies targeting climate change, however, for them to be effective and contribute to the fight against climate change, compliance is expected of these laws. According to the UNEP, developing countries and countries with economies in transition have varying experiences in the enforcement of national environmental law. This issue in turn can cause an increase in the culture of impunity and weaken the effectiveness of environmental laws, especially when states are

not able to pay adequate attention to inspection and monitoring as well as to set procedures to engage the community in order to deter violations of the law.

Some practices that states may consider adopting in order to increase the compliance with existing environmental laws include but are not limited to, civil enforcement as well as criminal enforcement. With civil enforcement, programmes may include training, public engagement to create awareness about the issues as well as information sharing. On the other hand, criminal enforcement focuses on similar programmes with the addition of training of procedures in the criminal law as well as remedies that include criminal sanctions and penalties.

Achieve cooperation in between private sectors and states

Since 1988, 100 coal and oil producing companies are responsible for over 70 percent of global greenhouse gas emissions; accounting for 1 trillion tons of greenhouse gas emissions. (Bonnardeaux) Hence, in order to completely achieve a carbon neutrality globally, states need the cooperation and support from private sectors. Furthermore, the compliance of private sectors towards environmental laws are also very much needed.

If possible, private sectors are also encouraged to make the transition of non-renewable energy sources to renewable energy sources alongside states.

QARMAs (Questions A Resolution Must Answer)

1. Are there ways to balance the economic and social reliance of countries on non-renewable energy sources with reducing carbon emission?
2. How would carbon emissions from the private sector be reduced?
3. How would climate change issues caused by carbon emissions be handled by Member States?
4. What can Member States do to ensure current legislations to reduce carbon emissions are enforced?
5. How can we ensure international action across Member States and intersectoral action within their respective territories with respect to their sovereignty?

6. How can Member States bridge the capabilities between developed and developing countries to transition into clean technologies to reduce carbon emissions?
7. What preventive and corrective actions should developed and developing countries within Member States take to be able to equally reach the target of net-zero carbon emissions by 2050?

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