**UNDP**

**Study Guide GMUN 2022**

**Agenda: Climate Change**

**Introduction to Committee:**

United Nations Development Programme (UNDP) is the global development network that connects countries to provide advice, training, grant support, and resilience to sustain development results. UNDP focuses on many development areas, including education, healthcare, social development, inequality, and crisis recovery. UNDP has brought countries together to design policies to uphold the development agenda and, therefore, have drafted the Sustainable Development Goals (SDGs). 17 SDGs are related—that is, they perceive that activity in one region will cause far-reaching influences in others and that advancement must adjust social, monetary, and ecological supportability. Accomplishing the SDGs requires various legislative associations and partners' association, for example, residents or civil servants the same to ensure we leave a superior planet for a long time into the future. However, it is to note that the covid-19 pandemic has significantly affected the progress of SDGs, especially Sustainable Development Goals III (Good health and Well-being), IV (Quality Education), & V (Gender Equality). It also brought forth the underlying loopholes in each of these sectors' policies and how the pandemic amplified the existing problems. UNDP gauges worldwide human development—a blend of schooling, well-being, and expectations for everyday comforts— could fall this year unexpectedly since 1990 when estimations started. In this committee, we shall be looking specifically at SDG III, IV & V: good health and well- being, quality education, and gender equality considering the covid-19 pandemic.

**Introduction to the Topic:**

The planet’s climate has constantly been changing over geological time, with significant fluctuations of global average temperatures. However, this current period of warming is occurring more rapidly than any past events. It has become clear that humanity has caused most of the last century’s warming by releasing heat-trapping gases—commonly referred to as greenhouse gases—to power our modern lives. We are doing this through burning fossil fuels, agriculture and land-use and other activities that drive climate change. Greenhouse gases are at the highest levels they have ever been over the last 800,000 years. This rapid rise is a problem because it is changing our climate at a rate that is too fast for living things to adapt to. Climate change involves not only rising temperatures, but also extreme weather events, rising sea levels, shifting wildlife populations and habitats, and a range of other impacts.

There is an overwhelming scientific consensus that global warming is mostly man-made: climate scientists have come to this conclusion almost unanimously.

One of the biggest drivers by far is our burning of fossil fuels – coal, gas, and oil – which has increased the concentration of greenhouse gases – such as carbon dioxide – in our atmosphere. This, coupled with other activities like clearing land for agriculture, is causing the average temperature of our planet to increase. In fact, scientists are as certain of the link between greenhouse gases and global warming as they are of the link between smoking and lung cancer.

This is not a recent conclusion. The scientific community has collected and studied the data on this for decades. Warnings about global warming started making headlines back in the late 1980s.

**Global Warming in the Light of:**

1. **Science:**

Our planet Earth is warming. This is at least what the data provided by NASA; the International Panel on Climate change et al. seems to show. Within the last 40 years, they could ascertain a significant rise in Earth’s temperature. Despite this seemingly obvious correlation between the growth of the industrial production across the globe – going along with an emission of so-called ‘green-house gases’ – the existence of a man-made, i.e. anthropogenic climate change and global warming is often contested by politicians and neoconservative news agencies across the globe.3 Global warming sceptics claim that the factual basis which supports the assumption of an anthropogenic climate change caused by the emission of greenhouse gases is neither conclusive nor convincing.4 While many of sceptics of a man-made climate change are adherent to a more critical standpoint towards sciences and scientists which they consider to be lobbyists of a certain political agenda (c.f. the parallels to the Anti-Vax-Movement), several scientists accept the data clearly stating a rise in Earth’s temperature. However, these ‘sceptical’ scientists emphasize that Earth’s climate constantly changed throughout the millennia. Therefore, the claim that the current rise in temperature is not of anthropogenic origin. Most of them blame solar winds and sunspot activities as the source of the recent rise in global temperature. Sunspots are storms on the sun’s surface that are marked by intense magnetic activity and play host to solar flares and hot gassy ejections from the sun’s corona. Scientists believe that the number of spots on the sun cycles over time.5 Solar wind consists of magnetized plasma flares and in some cases is linked to sunspots. It emanates from the sun and influences galactic rays that may in turn affect atmospheric phenomena on Earth. This solar activity therefore could periodically lead to a rise and a fall of Earth’s temperature. Many climate scientists agree that sunspots and solar wind could be playing a role in climate change. Nevertheless, the vast majority view it as very minimal and attribute Earth’s warming primarily to emissions from industrial activity—and they have thousands of peer-reviewed studies available to back up that claim.6 7

**Greenhouse Effect:**

The mechanism behind the “greenhouse effect” is in fact rather simple: Greenhouse gases such as carbon dioxide or methane concentrate within Earth’s atmosphere. Thereby, a cover is formed which prevents heat from radiating back into space as infrared light. This causes Earth’s temperature to rise. This effect is accelerated by the clearing of vast parts of the rain forest – the only forestall area transforming carbon dioxide to oxygen by the means of photosynthesis throughout the entire year thereby having a considerate influence on the concentration of CO2 in the atmosphere. Another factor, having the potential to cause a dramatic acceleration of global warming, is a potential rise of the water temperature. E.g., the oceans serve as a natural carbon dioxide storage: the so-called carbon cycle transports billions of tons of CO2 every year. However, the natural mechanism is based on a fragile equilibrium of external conditions and heavily determined by climate and temperature. However, a rise in water temperature could certainly affect the streams which permit a transport of CO2 from the atmosphere to lower sea levels.8 The potential consequences of a further progressing global warming could be devastating for man and nature. By now, the frequency of droughts has already increased in some regions (including the Mediterranean, West Asia, many parts of South America, much of Africa, and north-eastern Asia). Besides, the warming has increased the frequency, intensity, and duration of heat-related events, including heat waves in most land regions.9 In addition, the rise of Earth’s temperature causes a dramatic melting of glaciers and ice caps leading to an increased sea level. This will most certainly affect island states and states bordering the sea, e.g., Bangladesh but also the Netherlands.10 As you can see, besides a rather conclusive factual basis, there is no unanimity on the consequences or even the very existence of man-made climate change. Especially the role of CO2 emissions is hereby extremely controversial.

**Past UN Actions:**

1. **The Kyoto Convention:**

The Kyoto Protocol, adopted at COP 3, is an international agreement linked to the United Nations Framework Convention on Climate change, which commits its Parties by setting internationally binding emission reduction targets. Recognizing that developed countries are principally responsible for the current elevated levels of GHG emissions in the atmosphere because of more than 150 years of industrial activity, the Protocol places a heavier burden on developed nations under the principle of "common but differentiated responsibilities."13 The Kyoto Protocol entered into force on 16 February 2005. The detailed rules for the implementation of the Protocol were adopted at COP 7 in Marrakesh, Morocco, in 2001, and are referred to as the "Marrakesh Accords." Its first commitment period started in 2008 and ended in 2012. Under the Protocol, countries must meet their targets primarily through national measures. However, the Protocol also offers them an additional means to meet their targets by way of three market-based mechanisms: International Emission trading, the Clean Development Mechanism (CDM) and the Joint Implementation (JI). Despite its milestone character as the first international agreement on climate change, scholars and politicians criticize it from the very beginning. One major point of criticism was the principle of “common but differentiated responsibilities.” By leaving out – at that time – emerging economies such as China and India, the protocol failed to include the largest future sources of CO2 emissions. A projection suggests that, by 2050, China's cumulative contributions of CO2 to the atmosphere will exceed those of the United States.14 Even though President Clinton signed the Kyoto Protocol, the policy of “common but differentiated responsibility” led to huge controversies within the United States. It led to the so-called Byrd-Hagel Resolution of 06/12/1997 which prohibited the ratification of the Kyoto Protocol by the US.15 In consequence, the biggest emitter of CO2 at that time did not implement the obligations under the first international framework for the reduction of carbon emissions. The Harvard professor and economist Robert N. Stavins consequently concluded: "The Kyoto Protocol may come into force even without U.S. participation, but the effects on climate change will be virtually non-existent.”

1. **Paris Agreement:**

In 2015, the signatories of the UNFCCC gave it another try and adopted the so-called Paris Agreement. The Paris Agreement builds upon the Convention and for the first time brings all nations into a common cause to undertake ambitious efforts to combat climate change and adapt to its effects, with enhanced support to assist developing countries to do so. As such, it set a new course for the global climate effort. The Paris Agreement’s central aim is to strengthen the global response to the threat of climate change by keeping a global temperature rise this century well below 2 degrees Celsius above preindustrial levels and to pursue efforts to limit the temperature increase even further to 1.5 degrees Celsius. Additionally, the agreement seeks to strengthen the ability of countries to mitigate the effects of climate change. To reach these ambitious goals, appropriate financial flows, a new technology framework and an enhanced capacity building framework will be put in place, thus supporting action by developing countries and the most vulnerable countries, in line with their own national objectives. The agreement also provides for enhanced transparency of action and support through a more robust transparency framework. In addition, the Paris Agreement requires all Parties to put forward their best efforts through nationally determined contributions (NDCs) and to strengthen these efforts in the years ahead. This includes requirements that all Parties report regularly on their emissions and on their implementation efforts. However, these NDCs not only function on the ground of self-commitment. The Paris Agreement does not contain an effective way to enforce them and can only rely on ‘naming and shaming.’ However recently, NGOs on a national level try to enforce the NDCs (e.g., the lawsuit of the German Organization for Environment and Protection of Nature against the Federal Republic of Germany in front of the Federal Constitutional Court). According to climate scientists, the Paris agreement is certainly a step in the right direction. It puts the international community on the right path to keep warming under 2 degrees Celsius, but even under the same level of commitment of the Paris agreement after 2030, a MIT study indicates a 95 percent probability that the world will warm by more than 2 degrees Celsius by 2100.

**Current State of Affairs:**

Despite having committed to their NDCs, many signatory states fail to achieve even their autonomously set goals. However, according to the eighth Emissions Gap Report produced by UN Environment, even if all Signatory States fulfilled their NDCs, there would still remain a significant “gap” between the emissions reductions necessary to achieve the 2°C goal agreed within the Paris Agreement.19 The fate of the Paris Agreement mechanisms also remains uncertain as the US administration in 2017 declared their ambition to withdraw from the Paris Agreement in 2020. In consequence, the second biggest polluter will eventually not be bound by the mechanisms within the Paris Agreement. This on the other hand could cause other major polluters to withdraw from the treaty as well in order to safeguard the competitivity of their industries in the global market. While policy on a multilateral level seems paralysed, the civil society mobilizes in an unprecedented way on a global level to call for actions to fight climate change, e.g., Fridays for Future or Extinction Rebellion. Many signatory states, especially within the EU, face domestic pressure to adapt further going measures to fight climate change. On the other hand, the GDP of these often export-orientated economies heavily depends on the competitivity of their industries.

**The Role of Technology in Combatting Climate Change:**

As carbon emissions are the main source of global warming, countries face a harsh dilemma: Either they cut back on carbon emissions and risk jeopardizing their economy or they continue the status quo and risk accelerating global warming. While the dilemma is the same for all countries, the necessary consequences are different for every country. Industrialized nations, who are already emitting excessive amounts of greenhouse gases, must actively reduce their emissions. Developing countries, who are just emitting low amounts of greenhouse gases seeking to grow economically, must find ways to combine economic growth without increasing their emissions. A third way might be technology: Only if carbon-based energy sources are completely replaced by carbon-neutral sources, the current standard of living can be preserved in industrialized countries. The perspective on the potential of technology as an instrument against climate change range between optimism and disbelief. Angela Merkel, the chancellor of Germany, criticized Greta Thunberg for example for “underplaying the role of technology and innovation”.39 Boris Johnson, the prime minister of the UK, stated at his speech to the UN General Assembly that “new advances are making renewable energy ever cheaper, aiding our common struggle against climate change” mentioning “pink-eyed terminators” and “terrifying limbless chickens”.40 Critics, however, argue that the hope for technology is more a wish than a reality and just serves as an excuse to avoid harsh political measures.41 Technology serves as a tool to mitigate climate change rather than actually prevent it completely. The actual role of technology in the future remains to be seen. It is clear, however, that the race for new technologies itself has already begun. And its economic impact is huge. 42 “Green” has become a label for all sorts of products from groceries, over travels to financial products. If this transformation will lead to economic decline or growth remains to be seen. In the context of reassessing development aid, technology in any case plays an increasingly significant role as it touches the questions of how wealth and knowledge should be distributed around the globe. It is up to the United Nations General Assembly to suggest what role technology should play as a means to combat climate and improve the life of people in all nations.

**QARMA:**

1. Is the issue of Climate change of scientific or political issue?
2. Should the Paris Agreement be amended? Should the UNDP suggest implementing an enforcement mechanism? Are goals already enough or should the international community set higher goals? Should other countries try to compensate for the withdrawal of the United States from the Agreement?
3. Can foreign aid be used as a measure against Climate change? Should the principles of aid effectiveness reflect climate goals? What should a more coherent framework for sustainable foreign aid that incorporates environmental impact look like?
4. Is technology the key to solving the climate crisis or just a justification for the current status quo? What should a framework look like to promote international cooperation on technological measures against climate change?