



TEDUTRAIN' 21

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UNITED NATIONS ENVIRONMENT PROGRAMME



GOAL 13:

Climate Action

UNDER-SECRETARY-GENERAL
Nisa Öncel



TED UNIVERSITY TRAINING
AND DEVELOPMENT
CONFERENCE 2021

Letter From the Secretary-General

Highly esteemed participants,

I am Hüseyin Hikmet Findık, a junior student at TED University, under the Department of Computer Engineering. I proudly would like to welcome you all to the TEDUMUN Training and Development Conference 2021, which we all believe will lead to a lot of new beginnings. While thinking about a training and development conference, it is impossible not to refer to what annoys us in real life. There is no doubt that day by day, the 21st century shows us the value of equality, democracy, justice, and every democratic norm that we deeply needed for peaceful communities. In the Turkey of the 21st century, it is obvious that we are stumbling at every single one of those values. These values create an environment that makes us happy, peaceful. It has been hard, sad, and desperate for us to see every single democratic norm being violated one by one, every day, right in front of our eyes.

When he first stepped into Havza, Samsun, while everything around was worse than ever, Mustafa Kemal Atatürk said “They do not want to kill us, they want to put us into the grave alive. We are now at the edge of the pit. One last tenacity can save us.”. When the hope ends, tenacity begins. Today is the day to show that tenacity to build a better society, to build a better Turkey, and to build a better world. On this road, we believe that we need every single piece of an idea to ensure the rights of every single one of us.

It was a pleasure to work with Nisa Öncel, such a dedicated, hardworking, perfectionist person who created a fulfilling academic document to enlighten one of the biggest obstacles that we have on the road, climate change. There is no doubt that the only way to ensure the SDG 13: Climate Action is to talk on it, spread it, and make it common; so that from individuals to the governments, everyone can take a responsibility. For the future of next generations, we have to save the world and we do not have any seconds to lose. I hope that you, the delegates, can understand the vulnerability of the topic and come up with ideas that will lead us to better futures. That was our only aim while creating this committee, I hope it finds the right hearths from the right perspectives.

Sincerely.

Hüseyin Hikmet Findık
Secretary-General of TEDUTRAIN'21

Letter From the Under-Secretary-General

Highly Esteemed Participants,

I am Nisa Öncel and it is my utmost honor to welcome you all to TRDUTRAIN'21. I am currently studying Economy and Administrative Sciences at TED University and I will be serving as the Under-Secretary-General of the United Nations Environment Programme at this conference.

Our agenda item is climate action, which is one of the most crucial topics discussed in our era.

The climate action goal is the 13th of 17 Sustainable Developments. Climate action aims to take necessary precautions and actions to combat climate change. It's an issue that requires the cooperation of states both domestically and internationally for being a cross-border crime that poses a threat to rule of law, democracy, human security, and developments of the states.

To tackle such an important topic of global well-being and security, the time to act is now.

Delegates that will be participating are expected to read this guide thoroughly, plus, further their research with the given references, along with their countries' policies regarding the agenda item; and offer solutions during the conference.

Before ending this letter, I would like to thank my Secretary-General Hikmet Findık for giving me a chance to be a part of this wonderful team and for his efforts: TEDUTRAIN would be missing without him and his administrative capabilities.

In case you have questions or inquiries, please do not hesitate to contact me via nisa.oncel@gmail.com. I'm looking forward to your participation and I hope you have a remarkable experience in TEDUTRAIN'21.

Sincerely,

Nisa Öncel

Under-Secretary-General responsible for UNEP

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I. Introduction to the committee

United Nations Environment Programme (UNEP) is a United Nations (UN) agency that was established after the June 1972 United Nations Conference on the Human Environment. UNEP coordinates and leads environmental activities, assists developing countries in their environmental policies, proposes methods and solutions, and aims to meet 17 Sustainable Development Goals including climate action that targets to take necessary precautions and actions to combat climate change.ⁱ

As our agenda item, climate action is addressed. From extreme weather events, wildfires, flooding, rising seas, and droughts to global conflicts, climate change affects every aspect of our lives. Tackling climate change is crucial, as it goes beyond global environmental and ecological degradation, it poses a major worldwide threat to international peace and security. It is now considered a priority to cap global warming at 1.5 degrees Celsius and cut global emissions.ⁱⁱ For a better future, it is of utmost importance to ensure climate stability without delays and excuses.

II. Introduction to agenda item: Climate Change

Climate action is one of the 17 Sustainable Development Goals (SDGs) that the United Nations (UN) General Assembly adopted with the 2030 Agenda for Sustainable Development in September 2015.ⁱⁱⁱ The SDGs recognize that developments should be environmentally, economically, and socially sustainable while emphasizing the importance of global partnership.

Climate action goal is concerned with climate change which is a global issue that requires urgent and definite actions and long-term sustainable commitments under international cooperation. The effects of climate change are experienced everywhere around the world

regardless and have permanent consequences. The climate action goal displays that it is no longer applicable to persist the same production, consumption, and energy patterns due to the reason that it is slower for resources to be renewed than the rate of them being consumed or used.

According to The National Aeronautics and Space Administration (NASA), climate change *is a long-term change in the average weather patterns that have come to define Earth's local, regional and global climates.*^{iv} By the definition accepted by the United Nations Framework Convention on Climate Change (UNFCCC) in 1992, climate change is *the change of climate which is attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over a comparable period.*^v

The cause of climate change is related to human activities that include the increased usage of fossil fuels, deforestation, and intensive agriculture.^{vi} The effects of climate change include but are not limited to temperature changes, precipitation, intense droughts, famine, scarcity, rising sea levels, saltwater intrusion, flooding, melting polar ice, catastrophic storms, and declining biodiversity.^{vii viii}

It is a necessity in combatting climate change, to keep warming below 1.5 degrees Celsius (°C), substitute fossil fuels with renewable energy, and bring carbon pollution down to zero by 2050, committing to net zero emissions goal and financing required adjustments such as for industrial countries to provide \$100 billion U.S. dollars for developing countries to adopt greener economies.^{ix}

III.Previous international agreements

A.Montreal Protocol, Kyoto Protocol, and the Paris Agreement

In Stockholm in 1972, the first United Nations environment conference was held, and UNEP was formed. In 1987 Montreal Protocol was signed, the treaty was about restricting chemicals that damage the ozone layer, impacting greenhouse gas emissions. IPCC was formed in 1988 to gather and assess evidence about climate change. In 1997, Kyoto Protocol was agreed upon. The nations that signed the treaty pledged to reduce emissions by %5 on average between 2008 and 2012 and each country varied in its targets. The U.S. Senate made a declaration that they would not approve the agreement. The agreement had fewer effects on reducing greenhouse gas emissions than Montreal Protocols despite the aims. ^{x xi}

In 2015 Paris agreement was adopted and entered into force 2016.^{xii} It is considered a landmark as it showed a course of efforts on combating climate change, and it is the first binding agreement that brought all nations under one agreement. The Paris Agreement has the aim to combat climate change and adapt to its impacts and their direct and indirect consequences. Reducing greenhouse gas emissions and limiting global temperature increase to 1.5 °C, at a maximum 2 °C above pre-industrial levels. The Paris Agreement was signed by 195 nations excluding the United States of America, Iran, Iraq, and Turkey. The United States of America signed later in 2016, enabling the agreement to take effect by reaching the representative level of 55% of global emissions as the ratifying countries, which without the agreement does not take effect. In 2017, the United States of America had a formal withdrawal from the Paris agreement. The withdrawal terminated \$3 billion U.S. dollars of funding. The withdrawal had severe consequences such as decreasing the carbon price for the U.S.A. while increasing the carbon price for other countries, stranding corporate leadership of China and U.S.A. in the governance of global climate, upsets the process of climate

cooperation, as the U.S.A. is among the most emitters globally, and one of the largest economies that could be supporting developing countries very positively. Also, the U.S.A. became the only member state of UNFCCC that is not a Paris Agreement signatory.^{xiii xiv xv}

Although Turkey signed the treaty in 2016, did not ratify it until October 2021, likewise, Iraq signed the treaty in 2016 and ratified the agreement in 2021, entering into force. As of November 2021, Eritrea, Iran, Libya, and Yemen still did not ratify the agreement.^{xvi}

B.Main Climate Summits of Conference of the Parties (COP) and their Achievements

United Nations Climate Change Conferences are formal meetings of the UNFCCC that are held annually. The purpose of the Conference of the Parties (COP) is to evaluate the process of combating climate change, assessing the climate crisis, negotiating and establishing binding obligations for parties such as negotiating Kyoto Protocol and Paris Agreement articles.^{xvii}

The First Conference of the Parties (COP1) was held in 1995, Berlin, Germany, and since then on, was held annually differing in locations, COP21 was held in Glasgow, the United Kingdom, and the following future COPs are decided to meet in Egypt in 2022, the United Arab Emirates in 2023 and in Ukraine in 2024.^{xviii}

At COP2, scientific findings and reports presented by the IPCC were accepted, and legally binding mid-term targets were called for. At COP3, Kyoto Protocol was adopted, established the obligation to reduce greenhouse gas emissions, and enacted Kyoto mechanisms that emphasized joint implementation, especially for emissions trading. At COP4, Argentina and Kazakhstan committed to greenhouse gas emissions reduction obligation, marking as the first developing countries to express commitment. At COP6, the United States of America declined participation in negotiations and took an observer role in the meeting, due to political issues

and concerns within the U.S.A. related to the presidency. The agreements included flexible mechanism establishment, which reduces a quantitative limit to a credit taken from meeting domestic action targets, favoring developed economies countries, was worked to put into effect in previous conferences by the United States of America especially, carbon sinks credit establishment that would absorb carbon from the atmosphere and be used for storage, establishing country-specific caps, favoring Japan specifically, compliance action plan establishment for countries not meeting targets, and establishment of financing with a fund for climate change, a least-developed-country fund and Kyoto Protocol adaptation fund of voluntary contributions.^{xix}

At COP8, with the refusals of ratification from the United States of America and Australia, Kyoto Protocol could not enter into force, ratification of Russia was required for entering into force, Russia hesitated to ratify and delayed the process. Russia ratified the protocol in 2004, and the agreement had entered into force the following year, at COP11 which is considered one of the most important milestones for international climate change policy as it marked the entry of force of Kyoto Protocol.^{xx xxi}

At COP18, developed countries failed to set a pathway for funding developing countries until COP19, where developed countries agreed to commit to providing \$100 billion per year starting from 2020.^{xxii xxiii}

IV.Features, issues, and elements of climate change and international cooperation

The climate change issue has been a part of political discussions and on the scientific agendas and United Nations agenda since the 1970s and became one of the most important discussions of the international agenda since the 1990s.^{xxiv}

Holding atmospheric greenhouse gas concentration on a stable level is not sufficient as it will let global temperature continue to rise. An increase of approximately 1.5°C to 2.0°C above pre-industrial levels is anticipated as of to date emissions effects. Due to this critical situation, greenhouse gas reduction has been the center of attraction for international climate change negotiations, and responsibility for this reduction has been allocated amongst countries by the Kyoto Protocol.^{xxv}

After the responsibility allocation, adaptation has been on the agenda for negotiations. Adaptation is important as it refers to an adjustment or a response to reducing vulnerability to changing climate conditions and their effects. As climate change impacts began to fall heavier than anticipated, and concentrations and emissions have accelerated, the adaptation costs have become an issue of discussion as high-income countries contribute to the problem mostly while developing countries necessitate assistance on resources, which generates an exigence for the providing of financial and technical support for developing countries.^{xxvi}

As climate change is a global commons issue due to greenhouse gases in the atmosphere and the general nature of the issue, international cooperation is crucial for mitigating climate change. One of the challenges that are addressed while international cooperation is the perception of costs and benefits, and mitigation costs.^{xxvii}

A.Causes of Climate Change

Burning fossil fuels releases carbon dioxide, nitrogen oxides, and other greenhouse gases. Nitrogen oxides cause smog and acid rains, and carbon dioxide is a greenhouse gas that traps heat into the atmosphere and prevents an amount of heat radiation from escaping, therefore contributing to global warming and climate change. It is known that carbon dioxide is the main reason for human-caused climate change.^{xxviii} From the beginning of the industrial revolution

and the first usage of steam engines, and other energy sources that include fuels, fossil fuel usage has accelerated.^{xxix} Also, human activity increased concentrations of greenhouse gasses that include methane and fluorinated gases. By 2020, the ratio of concentration in the atmosphere had increased above pre-industrial levels by 48%. Global warming due to human activities is known to be increasing at a rate of 0.2 °C per decade.^{xxx}

Aside from fossil fuels, burning coal, oil and gas, deforestation, increased livestock farming, and fertilizers that contain nitrogen are listed among the causes for rising emissions. As forests are important parts of the natural carbon management systems, deforestation leads to rapid increases in the atmosphere. The warmest decade that had ever been recorded was the 2011-2020 period and has been accelerating ever since. Carbon emissions have had the highest rate ever since 66 million years and are expected to continue increasing.^{xxxi}

The solutions to combat nutrient pollution are managing and reducing emissions by preparing annual greenhouse gas inventories and setting long-term goals to decrease emissions, increasing energy efficiency, and switching to renewable energy alternatives instead of burning fossil fuel. It is also of utmost importance to raise awareness for individuals to conserve energy and limit excess usage of energy.^{xxxii}

B. Environmental Impacts

Environmental challenges due to climate change, that occurred and are expected to occur as future scenarios include erosion aggravation, the decline in organic matter, loss of soil biodiversity, changes in soil carbon storages due to atmospheric carbon dioxide concentration shifts, increase in temperature, and significant changes in precipitation patterns, melting of snow and ice, increase in droughts, high river discharges, changes in species abundance and distribution, habitat structures, ecosystem processes, reducing in ecosystem resilience, water

availability due to less predictable rainfall patterns, endangered aquatic ecosystems due to decreased ice cover and changes in water temperature, increase in sea surface temperatures, ocean acidification, shifts in wind patterns, and changes in the coastal and marine ecosystem.^{xxxiii}

Climate change is increasing the demand for water while shrinking the water supplies and degrading the quality of water by precipitation-caused flooding. The increase of temperature and drier weather conditions are making the climate more volatile to both natural wildfires and human-ignited wildfires as well.

It is predicted that the limitation of global warming to 1.5°C will decrease the probability of extreme droughts and water availability risks and recover the loss of precipitation essentially. Also, loss of local species and extinction of species, hold fewer risks in 1.5°C limited warming than 2°C warmer climates.^{xxxiv} Above 1.5°C, It is expected for global terrestrial land areas to be affected by ecosystem transformations such as the loss of ocean ecosystem and for desert terrains to be expanded especially in the Mediterranean biome. Limiting warming to 1.5°C reduces the effects of global climate change on ecosystems and rising sea levels by restoring natural ecosystems. Also, removal of carbon dioxide, shifting to bioenergy sources with carbon capture and storage, reforestation, and limiting agricultural expansion are listed as crucial mitigation pathways for combating climate change.^{xxxv}

Environmental consequences of climate change bring about financial costs and direct impacts on social life. As an instance, extreme weather events, natural disasters such as floods and droughts have huge economic costs that exceed billions of U.S. dollars and millions of people per year.

C. Economical, distributional, and social impacts

For the United States of America, National Centers for Environmental Information (NCEI) records of United States America about economic and societal aspects of climate events. Between 1980 and 2019, the United States of America withstood 258 weather and climate disasters that had cumulative costs that include both direct and indirect expenditure exceeding 1.75 trillion U.S. dollars. Between 2010 and 2019 is considered as the decade of billion-dollar disasters, four-fifths of the costliest disasters occurred in the decade, showing the increasing damage of climate change.^{xxxvi}

For New Zealand, the cost of extreme weather events, when considering the sole effect of droughts and floods, from 2007 to 2017, total attributable extreme rainfall insurance costs and droughts costs added up to \$839,73 million of New Zealand dollars.^{xxxvii}

For United Kingdom goal of net zero emissions by 2050 and zero-carbon future is expected to cost less than 1% of gross domestic product (GDP) per year as proposed by the Committee on Climate Change (CCC), while the annual estimation of damages from flooding solely is expected to have an increase between £2 billion and £12 billion by the 2080s. 330,000 properties are at risk of flooding and an increase between 630,000 and 1.2 million by the 2080s is expected.^{xxxviii}

For Sub-Saharan African countries, GDP is expected to be reduced up to %3 by 2050. Effects of climate change are expected to have taken their toll on local markets through destabilization, food insecurity and scarcity escalation, and economic growth limitation. Also, higher temperatures and changes in rainfall patterns will lead to crop yields transformations and changes in the agricultural sector which has effects on increased food prices, decreased availability of food, and increased malnutrition, as reported by the International Food Policy

Research Institute (IFPRI). African countries are listed as one of the countries that are most vulnerable to and most affected by climate change due to high levels of poverty and rainfall dependence for agricultural production.^{xxxix}

Even though all economies are at loss from the climate change impacts, the countries that hold relatively low levels of adaptive capacity are in regions that include the Middle East, Southeast Asia, Latin America, and Africa. Due to heatwaves causing productivity loss, India and China are comparably more affected as they are the most populated countries globally. On the other hand, there is an increase in investment in green energy and carbon capture technology, and China is recognized as having adaptation capabilities.

It is expected for the Association of Southeast Asian Nations (ASEAN) countries (that are Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, and Vietnam as of 2021.) to lose more than 37.4% economical value as in GDP by 2048.

Although the ASEAN region is highly exposed to especially physical risks of climate change and lacks resources for adaptation, scenarios show that resilience and partnership can help countries overcome the challenges. For Singapore combatting climate change occurs mainly at the aspects of heat stress, a decrease of tourism revenues due to climate change impacts of dry seasons, higher temperatures and increased intensity of rainfall, and sea-level rise, hold the country at high-risk levels as Singapore is a densely populated open tropical island country, however showing steady resilience of exemplary.^{xi}

Singapore built seawalls and rock slopes to decrease the impact of sea-level rise in coastal areas and put on-site detention tanks, raised platform levels and flood barriers to combat flooding and more intense rainfalls, strengthened telecommunication and transport infrastructure and power stations against temperature changes and flooding.^{xli}

Global warming has also effects on tourism, with increased risks for especially specific geographic regions that have high seasonal tourism revenues.

As there are countries that are more volatile to climate change impacts and less capable of adaptation (high-risk countries), public and private partnerships are crucial while building effective and resilient global management of climate crises. It is recognized that a global address is necessary, as the combined ability for decreasing risks differs significantly.^{xlii}

D. Human Rights and Climate Change

Climate change impacts endanger human health and human rights. Heat, increase in ocean temperatures, hurricanes, wildfires, chemical hazards, and diseases are very much deadly and all humans have the right to life and protection.^{xliii} The most vulnerable groups include but are not limited to children, the elderly, people with low income and/or preexisting health conditions, and people that live in higher-risk countries. Social and environmental determinants of health, which are sufficient food, shelter, clean air, and water, are affected by climate change. It is known that areas that are weak in health infrastructure, which is seen more commonly in developing countries, are the most volatile therefore need assistance for preparations of rapidly changing climate conditions and their impacts and responding to those conditions.

1.Effects of Climate Change on Human Rights

The negative impacts of climate change on the full enjoyment of human rights are recognized. The human rights that climate change has extensive impacts on are listed as the right to life, food, health, water, sanitation, and shelter (housing), and the human rights norms are listed as self-determination, development, participation and information, transparency, accountability, equity, and non-discrimination.

Climate change poses a critical threat to the aforementioned human rights and the adequate standard of living for both individuals and societies.

Also, climate change poses a threat to human security as the scarcity of water, food, land, and other natural resources rises. It is important to assist human rights mechanisms that address environmental concerns, understand the need for global cooperation to integrate human rights into environmental laws and policies, and collaborate to reduce the disproportionate impacts which are related to climate justice, equity, access to remedy, and fairness.

2. Recognition of Human Rights Obligations Relating to Climate Change and international cooperation

In 2003, the United Nations Development Group (UNDG) approved the UN Statement of Common Understanding on Human Rights-Based Approaches to Development Cooperation and Programming (the Common Understanding) that ensures UN agencies, programs, and funds are applying human rights-based approaches on global, regional, and country levels.

It is noted by the United Nations that all responsible actors should be held accountable for the negative impacts of their activities.^{xliv} Fair distribution of development benefits is through international cooperation which ensures for developed countries to guide and assist developing countries as protecting the climate system does not only benefit to present but benefit to future generations and humankind in general. For such international cooperation, the UNFCCC acts as a framework that holds the negotiations to raise the ambition of climate action with the principles of transparency, accountability, and participation.^{xlv}

Human rights are accommodated with rights-based policies which include the principles of universality and inalienability, indivisibility, inter-dependence and inter-relatedness, equity and non-discrimination, participation and inclusion, and accountability and rule of law. For the

policies to have efficient outcomes, measurable goals and targets are expected to be set and strategic partnerships are expected to be sustainable.^{xlvi}

Conference of Parties (COP) acknowledges that when it comes to climate change, governments have both moral and legal responsibility to preserve and promote basic human rights. The Office of the High Commissioner for Human Rights (OHCHR) identifies the obligation to “*protect individuals against foreseeable threats of weather-related hazards.*”^{xlvii} The areas and persons under conditions of extreme poverty and deteriorating livelihood conditions are considered the most vulnerable therefore the most urgent to address.

The obligations of governments include the duties to respect, protect and fulfill human rights. Procedural obligations for governments include gathering and distributing information regarding environmental impacts, providing easier ways for public participation in decision-making on the environment, and offering access to remedies for environmental harm.^{xlviii}

E. Goals, Targets, and Policies

In the Paris Agreement (2015) for the first time, a long-term temperature goal was set on limiting global warming compared to pre-industrial levels, below 2 °C, preferably to 1.5 °C. This objective has effectively started low-carbon arrangements, new business sectors especially in power and transportation sectors, establishments of carbon-neutral targets, and zero-carbon solutions.^{xlix}

1. Sustainable Development Goal 13: Take urgent action to combat climate change and its impacts

Taking urgent action to combat climate change and its impacts include enhancing resilience to climate change-related hazards and disasters and strengthening adaptive capacity by 2030, consolidating measures into national policies and strategies, improving education and raising

awareness, reducing impacts and improving early warning, implementing the commitment accepted by the developed parties of UNFCCC on the goal of jointly funding developing countries by \$100 billion per year from 2020 onwards transparently, and promoting mechanism that would increase focus on women, young, and local marginalized communities.

I

2. Influence of international climate policies on domestic action and performance assessment

It is important especially for the highest-ranked emitters to commit to covering the damage of climate change impacts. Reports show that the United States of America is not on track for meeting goals, furthermore, half of the Nationally Determined Contributions (NDCs) from 2020 are stated not to be aggressive enough. The United States of America, as well as the EU, Chile, Germany, Japan, Norway, Peru, South Africa, and Switzerland, are considered insufficient in meeting their climate action goals. The United Kingdom is also one of the major greenhouse gas emitters according to the World Resources Institute (WRI) and is listed as almost insufficient alongside Costa Rica, Ethiopia, Kenya, Morocco, Nepal, and Nigeria. China is listed as a major player, as they are the largest greenhouse gas emitter in the world currently and has not committed to a 2030 emissions reduction. Also, members of the G20 including Saudi Arabia and Russia are considered to be under the list of highly insufficient. The Gambia is shown as a sufficient goal tracker and committer on hitting 2030 goals, with the support of international finance.^{li} Canada, Germany, Argentina, and South Africa are considered well-performing countries yet have issues related to the implementation of policy measures on a national level.

Overall, it is emphasized that countries must increase their NDCs and close the gap in international climate finance.

It is seen that climate financing and domestic climate policymaking are open to exploitation as developed countries may support developing countries on reduction of emissions due to the liability of suffering the loss of industrial competitiveness. It is found that there are positive relations between NDC ambition and the level of democracy of a country as well as their vulnerability to the climate crisis, while there are negative effects between NDC ambition and coal rent as well as GDP. It is also recognized that if there is a disproportionality of deployment of the costs of policies, the incentive of taking ambitious policies decreases for countries.^{lii}

III. Conclusion

The United Nations raises a red flag on the global climate crisis, the issue dominates the sustainable development discussions. It is discussed that a 2°C increase of temperature above pre-industrial times will have serious negative consequences and impacts on the natural environment, biodiversity, marine and water ecosystems, economies both national and global finance, distribution, social wellbeing, and health. Emphasizing international cooperation is of utmost importance, and the international community has recognized the need to pursue efforts to keep warming limited to 1.5°C.

Climate action, which is Goal 13 of sustainable development goals, has the aim of mobilizing US\$100 billion every year starting from 2020 and the five crucial dimensions of the climate action goal include people, prosperity, planet, partnership, and peace.

IV. Questions to be Addressed in a Resolution Paper

1. How should the United Nations decrease the chance of any further withdrawals? How could developed countries be encouraged to support and fund developing countries?

2. How could the global response be strengthened and further implemented?

3. How could countries that are especially affected by weather variability and drought become more resilient to climate change?

4. Is it possible to fund and establish supporting mechanisms for sound water management systems to diversify and keep up with the demands for water resources both for national and international projects and supply-focused policies? To contribute to the expansion of water supply, how could the United Nations support and encourage harvesting and storing rain especially for funding and executing of projects in developed countries? Could the nations be encouraged to lower their daily per capita domestic water consumption?

5. How could the climate change impacts on marine protected areas be reduced? Is it possible to help protected species and habitats adapt to climate change by expanding and enforcing marine protected areas and replenishment zones as strategically selected locations to strengthen climate resilience?

6. How could deforestation be reduced, especially in tropical areas as a long-term solution to global warming? How can international collaboration on reforestation and preserving wildlife be established and enhanced? How can sustainable individual work such as eco-friendly product usage be encouraged?

7. How could fire monitoring and prevention can be elevated and patrols be increased regionally at fire hot spots? Could United Nations help with national assessments related to expanding fire hot spots due to climate change? Could national heat indexes and advisories for the public be encouraged or established?

9. How could the local food productions and food diversification be increased? Could the agriculture transformation be encouraged and supported?

10. How could localized flooding and temperature changes effects be reduced? Could enhancement of power stations, transports, and telecommunication infrastructure and installment of flood barriers in low-lying areas be encouraged, supported, and funded by NGOs, United Nations, or other donations or resources?

11. What are other ways to increase the financing of carbon sinks that store carbon and prevent it from releasing back to the atmosphere, other than crediting industrialized countries for financing carbon sinks? Could establish a global carbon market to reduce the world's carbon emissions similar to Clean Development Mechanism (CDM) that was established under the Kyoto protocol?

V. References

ⁱUNEP. (n.d.) *About UNEP Programme*. [online] Retrieved from: <https://www.unep.org/about-un-environment>

ⁱⁱ Federal Ministry for the Environment, Nature Conservation, and Nuclear Safety. (n.d.) *What is climate action about?* [online] Retrieved from: <https://www.bmu.de/en/topics/climate-adaptation/climate-protection/what-is-climate-action-about>

ⁱⁱⁱ United Nations. (2017). *Transforming Our World: The 2030 Agenda for Sustainable Development*. [online] Retrieved from: <https://sustainabledevelopment.un.org/content/documents/21252030%20Agenda%20for%20Sustainable%20Development%20web.pdf>

^{iv} NASA. (2019). *Overview: Weather, Global Warming and Climate Change*. [online] Retrieved from: <https://climate.nasa.gov/resources/global-warming-vs-climate-change/>

^v UNFCCC. (1992). *United Nations Framework Convention on Climate Change*. [online] Retrieved from: https://unfccc.int/files/essential_background/background_publications_htmlpdf/application/pdf/conveng.pdf

vi European Commission. (n.d.) *Causes of Climate Change*. Retrieved from: https://ec.europa.eu/clima/climate-change/causes-climate-change_en

vii Worldwide Fund for Nature WWF. (n.d.) *Causes of Climate Change*. [online] Retrieved from: https://www.wwf.org.nz/what_we_do/climateaction/causes_of_climate_change/

viii United Nations. (n.d.) *What is Climate Change?*. [online] Retrieved from: <https://www.un.org/en/climatechange/what-is-climate-change>

ix Independent Expert Group on Climate Finance. (2020). *Delivering on the \$100 Billion Climate Finance Commitment and Transforming Climate Finance*. [online] Retrieved from: https://www.un.org/sites/un2.un.org/files/100_billion_climate_finance_report.pdf

x UNFCCC. (1998). *Kyoto Protocol to the United Nations Framework Convention on Climate Change*. [online] Retrieved from: <https://unfccc.int/resource/docs/convkp/kpeng.pdf>

xi UNFCCC & UNEP. (2002) T [online] Retrieved from: https://unfccc.int/resource/docs/publications/infokit_2002_en.pdf

xii UNFCCC. (n.d.) *The Paris Agreement*. [online] Retrieved from: <https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement>

xiii Ellis, J., Alteen, D. (2021) *The Paris Climate Agreement: What You Need to Know*. [online] Retrieved from: <https://www.nytimes.com/2021/01/21/climate/biden-paris-climate-agreement.html>

xiv UNFCCC. (n.d.) Key aspects of the Paris Agreement. [online]. Retrieved from: <https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement/key-aspects-of-the-paris-agreement>

xv Center For Climate And Energy Solutions. (n.d.) *Paris Climate Agreement Q&A*. [online] Retrieved from: <https://www.c2es.org/content/paris-climate-agreement-qa/>

xvi United Nations. (2016). Paris Agreement. [online] Retrieved from: https://treaties.un.org/pages/ViewDetails.aspx?src=TREATY&mtdsg_no=XXVII-7-d&chapter=27&clang=_en

xvii UNFCCC. (n.d.) *Conference of the Parties (COP)*. [online] Retrieved from: <https://unfccc.int/process/bodies/supreme-bodies/conference-of-the-parties-cop>

xviii IISD. (2021). *Glasgow Climate Change Conference (UNFCCC COP 26)*. [online] Retrieved from: <https://sdg.iisd.org/events/2020-un-climate-change-conference-unfccc-cop-26/>

xix Environmental and Energy Study Institute, (2013). *Timeline of Major UN Climate Negotiations* [online] Retrieved from: <https://www.eesi.org/policy/international>

^{xx} UNFCCC. (2005) *COP 11 Reports*. [online] Retrieved from: <https://unfccc.int/process-and-meetings/conferences/past-conferences/montreal-climate-change-conference-december-2005/cop-11/cop-11-reports>

^{xxi} WHO Framework Convention on Tobacco Control. (2005) *Eighth session of the Conference of the Parties (COP8)*. [online] Retrieved from: <https://www.who.int/fctc/cop/sessions/cop8/en/>

^{xxii} United Nations. (2014). *COP19-Decisions*. [online] Retrieved from: <https://unfccc.int/process-and-meetings/conferences/past-conferences/warsaw-climate-change-conference-november-2013/cop-19/cop-19-decisions>

^{xxiii} United Nations. (2013). *COP18-Decisions*: <https://unfccc.int/process-and-meetings/conferences/past-conferences/doha-climate-change-conference-november-2012/cop-18/cop-18-decisions>

^{xxiv} Dawson, B., Spannagle, M., (2009). *The Complete Guide on Climate Change*. New York: Routledge.

^{xxv} Intergovernmental Panel on Climate Change IPCC. (2018). *IPCC Special Report on Global Warming of 1.5°C*. [online] Retrieved from: https://www.ipcc.ch/site/assets/uploads/sites/2/2019/06/SR15_Full_Report_High_Res.pdf

^{xxvi} Baarsch, F., Schaeffer, M. & D'haen, S., (2020). *Climate change adaptation costs in developing countries: insights from existing estimates*. [online] Retrieved from: <https://www.tandfonline.com/doi/abs/10.1080/17565529.2020.1711698?journalCode=tcld20>

^{xxvii} Stavins R., J. Zou, T. Brewer, M. Conte Grand, M. den Elzen, M. Finus, J. Gupta, N. Höhne, M.-K. Lee, A. Michaelowa, M. Paterson, K. Ramakrishna, G. Wen, J. Wiener, and H. Winkler, (2014). *International Cooperation: Agreements and Instruments*. In: *Climate Change 2014: Mitigation of Climate Change. Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change*. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.

^{xxviii} Government of Canada. (2019). *Causes of Climate Change*. [online]. Retrieved from: <https://www.canada.ca/en/environment-climate-change/services/climate-change/causes.html>

^{xxix} New South Wales Government. (n.d.). *The greenhouse effect: natural and enhanced*. [online]. Retrieved from: <https://climatechange.environment.nsw.gov.au/About-climate-change-in-NSW/Causes-of-climate-change>

^{xxx} European Commission. (n.d.). *Causes of Climate Change*. [online]. Retrieved from: https://ec.europa.eu/clima/climate-change/causes-climate-change_en

^{xxx} The Nature Conservancy. (2018). *Climate Change FAQs*. [online] Retrieved from: <https://www.nature.org/en-us/what-we-do/our-priorities/tackle-climate-change/climate-change-stories/climate-change-frequently-asked-questions/#humans>

^{xxxii} United States of America Environmental Protection Agency. (n.d.) *The Sources and Solutions: Fossil Fuels*. [online] Retrieved from: <https://www.epa.gov/nutrientpollution/sources-and-solutions-fossil-fuels>

^{xxxiii} European Commission. (n.d.). *Environment Challenges*. [online]. Retrieved from: https://ec.europa.eu/clima/eu-action/adaptation-climate-change/how-will-we-be-affected/environment-challenges_en

^{xxxiv} IPCC. (2018) *Global Warming of 1.5°C. An IPCC Special Report on the impacts of global warming of 1.5°C above pre-industrial levels and related global greenhouse gas emission pathways, in the context of strengthening the global response to the threat of climate change, sustainable development, and efforts to eradicate poverty*. [online]. Retrieved from: https://www.ipcc.ch/site/assets/uploads/sites/2/2019/06/SR15_Full_Report_High_Res.pdf

^{xxxv} Department of Ecology State of Washington. (n.d.). *Climate change and the environment*. [online]. Retrieved from: <https://ecology.wa.gov/Air-Climate/Climate-change/Climate-change-the-environment>

^{xxxvi} United States of America Government on National Integrated Drought Information System. (2020). *The High Cost of Drought*. [online] Retrieved from: <https://www.drought.gov/news/high-cost-drought>

^{xxxvii} New Zealand Climate Change Research Institute, and NIWA. (2017). *Estimating financial costs of climate change in New Zealand*. [online] Retrieved from: <https://www.treasury.govt.nz/sites/default/files/2018-08/LSF-estimating-financial-cost-of-climate-change-in-nz.pdf>

^{xxxviii} Hicks, N., Ranger, N. (2014). *What are the potential impacts of climate change for the UK?* [online] Retrieved from: <https://www.lse.ac.uk/granthaminstitute/explainers/what-are-the-potential-impacts-of-climate-change-for-the-uk/>

^{xxxix} Ray, A.C. (2021). *The Impact of Climate Change on Africa's Economies*. [online] Retrieved from: <https://www.fpri.org/article/2021/10/the-impact-of-climate-change-on-africas-economies/>

^{xl} Gray, C., Haller, T. (2021) *The Economics of Climate Change: Impacts for Asia*. [online] Retrieved from: <https://www.swissre.com/risk-knowledge/mitigating-climate-risk/economics-of-climate-change-impacts-for-asia.html>

^{xli} Strategy Group Singapore, Prime Minister's Office. (2016) *Singapore unveils the latest plans for addressing climate change*. [online] Retrieved from:

<https://www.strategygroup.gov.sg/images/Press%20Release%20images/PDFs/singapore-unveils-latest-plans-for-addressing-climate-change.pdf>

^{xlii} Wade, K., Jennings, M. (2016) *The impact of climate change on the global economy*. [online] Retrieved from: <https://www.schroders.com/de/SysGlobalAssets/digital/us/pdfs/the-impact-of-climate-change.pdf>

^{xliii} U.S. Department of Commerce, National Oceanic and Atmospheric Administration (NOAA). (). *Climate change impacts*. [online] Retrieved from: <https://www.noaa.gov/education/resource-collections/climate/climate-change-impacts>

^{xliv} Expert Group on Global Climate Obligations. (2015). *Oslo Principles on Global Climate Change*. [online] Retrieved from: <https://climateprinciplesforenterprises.files.wordpress.com/2017/12/osloprincipleswebpdf.pdf>

^{xlv} Office of the High Commissioner for Human Rights 21st Conference of the Parties). (2015). *Understanding Human Rights and Climate Change*. [online] Retrieved from: <https://www.ohchr.org/Documents/Issues/ClimateChange/COP21.pdf>

^{xlvi} A Human Rights-Based Approach to Programming. (n.d.) *The Human Rights-Based Approach to Development Cooperation: Towards a Common Understanding Among UN Agencies*. [online] Retrieved from: <https://hrbportal.org/the-human-rights-based-approach-to-development-cooperation-towards-a-common-understanding-among-un-agencies/>

^{xlvii} OHCHR. (2009). *ANNUAL REPORT OF THE UNITED NATIONS HIGH COMMISSIONER FOR HUMAN RIGHTS AND REPORTS OF THE OFFICE OF THE HIGH COMMISSIONER AND THE SECRETARY-GENERAL*. [online] Retrieved from: <https://undocs.org/en/A/HRC/10/61>

^{xlviii} UNEP. (2015) *Climate Change and Human Rights*. [online] Retrieved from: https://wedocs.unep.org/bitstream/handle/20.500.11822/9530/-Climate_Change_and_Human_Rights%20human-rights-climate-change.pdf.pdf?sequence=2&isAllowed=1

^{xlix} UNFCCC. (n.d.). *The Paris Agreement*. [online] Retrieved from: <https://unfccc.int/process-and-meetings/the-paris-agreement/the-paris-agreement>

^l UNEP. (n.d.) *Goal 13: Climate Action*. [online] Retrieved from: <https://www.unep.org/explore-topics/sustainable-development-goals/why-do-sustainable-development-goals-matter/goal-13>

ⁱⁱ Watson, S.K. (2021). *There's only one country doing its Paris Agreement homework*. [ONLINE] Retrieved from:
<https://www.popsci.com/environment/paris-climate-agreement-report/>

ⁱⁱⁱ Torstad, V., Saelen H. & Boyum L.S. (2020) *The domestic politics of international climate commitments: which factors explain cross-country variation in NDC ambition?* [online] Retrieved from:
<https://iopscience.iop.org/article/10.1088/1748-9326/ab63e0>



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