



Boğaziçi
MUN 2023

The United
Nations
Framework
Convention on
Climate Change

Study Guide

Letter from the Secretary General

Most Esteemed Participants,

On behalf of the Academic and Organization teams of Boğaziçi Model United Nations 2023 Conference and the Model United Nations Subcommittee of the Boğaziçi University Debate Society, it is my utmost honor and pleasure to welcome you all as the Secretary-General of the 5th edition of one of the most prestigious conferences in Turkey, Boğaziçi MUN 2023.

My name is Şebnem Yaren. Currently, I am a 4th year Management student with a minor in Political Science & International Relations at Boğaziçi University. I have been a part of Boğaziçi MUN since the beginning of my university life, and I gladly took part in all the endeavors that we set off to. Hence, it is my greatest honor to be welcoming you to our United Nations Framework Convention on Climate Change (UNFCCC) committee as the Secretary-General of our esteemed conference.

We have created six marvelous committees that serve the concept that we wanted to cover in this edition, bridging the gap. One of them is one that I'm very passionate about, UNFCCC. The importance of the climate crisis is something that we should not and cannot ignore anymore. The SDGs that should be implemented until 2030 are way behind in progress and require immediate action. With the extraordinary efforts of Mr. Coştu, Mr. Bodur and Ms. Rassad; I have no doubt that all our participants in this committee will have the best time shedding light on these problems. Of course, I owe my Deputy-Secretaries General Mr. Kaan Ertan and Mr. Zühtü Anıl Tutar enormous gratitude for their assistance and cooperation in every aspect of preparing this committee.

We hope that you are as excited as we are to have one of the best four days in this committee, together!

With sincere appreciation,

Şebnem Yaren

Secretary-General of Boğaziçi MUN 2023

Letter from USG;

Most distinguished participants and dearest guests;

It is my utmost privilege and honour to serve as the Under-Secretary-General of the UNFCC committee in BOGAZICIMUN.

I personally would like to thank Secretariat of BOGAZICIMUN Conference to give this tremendous opportunity and thank my Academic Assistants, **Aylin Rassad and Güneş Bodur** for their amazing efforts and work which made this committee possible. I couldn't have done it without them!

Today's era has been shifted unforeseeably different, unpredictably fast. Adapting to circumstances will never be easy as it has never been. Despite all circumstances, in due course, it is your turn to shine.

BOGAZICIMUN will concentrate and scope in today's current global problems other than the factitious agendas in order to make think on other current ongoing problems since we had enough and bored with it.

I want to conclude my words by thanking everyone involved in the Academic and Organization team for their greatest works and efforts.

Kindest Regards,

Efe Costu

UNFCCC Study Guide – BogaziciMUN’23

1st Agenda Item: Actions to Implement SDGs to the Problem of Climate Change

Explanation of SDGs:

The Sustainable Development Goals (SDGs) are a set of 17 general goals which provides a shared blueprint for peace and prosperity for people and the planet, set by the United Nations General Assembly in 2015. It aims to assist in coordinating the efforts of Member States for achieving Sustainable Development in its humanitarian/social, technical and institutional aspects through the wide array of goals and their specific targets it encompasses.

The SDGs represent the continuation of a decades-long process of formalization and realization of tangible and measurable targets for monitoring and upscaling sustainable development throughout the world, starting in 1992 with the adoption of Agenda 21. Building on the general framework formed by the Agenda 21, the Millennium Development Goals were adopted by member states at the Millennium Summit in September 2000. The MDGs consisted of eight goals that focused on the humanitarian aspect of sustainable development, ranging from the eradication of poverty to combating HIV/AIDS by 2015.

Upon the expiration of the MDGs in 2015, the 2030 Agenda for Sustainable Development, which is based on the 17 SDGs at its core, was adopted unanimously by the member states in the United Nations General Assembly, thanks to the steps taken in 2012 at the United Nations Conference on Sustainable Development (Rio+20).



Progress on the achievement of SDG targets is monitored by an annual report prepared and presented by the UN Secretary General, called the SDG Progress Report. The Global Sustainable Development Report is also quadrennially published by an independent group of scientists appointed by the Secretary General. The main UN assembly/platform/body for the review of the implementation of SDGs is the High-Level Political Forum on Sustainable Development (HLPF).

Why Sustainable Development Goals' are important:

The Sustainable Development Goals (SDGs) are important for environmental sustainability because they recognize the interdependence of economic, social, and environmental issues and the need to address these issues in a holistic and integrated manner. The SDGs include specific goals and targets related to the environment, such as:

Goal 6: Ensure availability and sustainable management of water and sanitation for all

Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all

Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation

Goal 12: Ensure sustainable consumption and production patterns

Goal 13: Take urgent and significant action to combat climate change and its impacts

Goal 14: Conserve and sustainably use the oceans, seas and marine resources for sustainable development

Goal 15: Protect, restore and promote the sustainable use of terrestrial ecosystems, forests, mountains, and drylands

Goal 16: Promote peaceful and inclusive societies, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

Goal 17: Strengthen the means of implementation and revitalize the global partnership for sustainable development

By working towards these goals, governments, businesses, and civil society organizations can help to reduce the negative impacts of human activity on the environment, protect natural resources, and build a more sustainable and resilient future for all.

Goals and Targets Scoping Climate Change and its impacts;

- Goal 13: Take urgent and significant action to combat climate change and its impact.
 - Target 13.1: Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries
 - Target 13.2: Integrate climate change measures into national policies, strategies and planning
 - Target 13.3: Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning
- Goal 7: Ensure access to affordable, reliable, sustainable and modern energy for all
 - Target 7.2: Increase the share of renewable energy in the global energy mix
- Goal 9: Build resilient infrastructure, promote inclusive and sustainable industrialization and foster innovation
 - Target 9.4: Upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes
- Goal 11: Make cities and human settlements inclusive, safe, resilient and sustainable
 - Target 11.2: Increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, natural disasters, and other economic, social and environmental risks

Governments can adopt policies and regulations that promote the use of renewable energy and energy efficiency, such as renewable energy standards or carbon pricing mechanisms. Businesses can adopt clean and efficient technologies, reduce their energy consumption and greenhouse gas emissions, and invest in renewable energy projects. Civil society organizations can raise awareness about the importance of addressing climate change and advocate for policies and actions to reduce greenhouse gas emissions

Opposing views to SDGs:

One major argument pointing towards the insufficient aspects of the SDG Framework is that the SDGs and their associated targets and indicators form an excessively complex framework, possibly leading to inefficiencies in the implementation of the goals. This argument is supported by the observations of trade-offs between multiple SDGs, meaning that implementation of one goal results, in many cases, in the obstruction of progress in other goals. Additionally, according to certain political scientists, the overreliance of the SDG Framework on indicators for monitoring progress is a contributing factor in the obstruction of the achievements of the SDGs, mainly due to a lack of coherence between the numerous indicators that have been accepted in the negotiations.

According to the Paris Agreement, signatory countries are broadly divided into two categories; as developed and developing countries. However, no definition of developing and developed countries are given in the Agreement or in its annexes. This lack of a clear definition puts many countries in an ambiguous position, in which their responsibilities under the Paris Agreement are not clearly defined. This situation stems from the division of responsibilities set out throughout the Agreement, which states that “Developed country Parties should continue taking the lead by undertaking economy-wide absolute emission reduction targets. Developing country Parties should continue enhancing their mitigation efforts, and are encouraged to move over time towards economy-wide emission reduction or limitation targets in the light of different national circumstances.” (Paris Agreement, Article 4, Clause 4.). However, it is worth noting that by explicitly referring to the Annexes I and II of the United Nations Framework Convention on Climate Change (Paris Agreement, Article 23) as applying to the Agreement *mutatis mutandis* (with the necessary changes, but preserving the main point), the Paris Agreement can be considered to provide a general idea regarding which parties are considered as developed parties.

A major issue pertaining to the implementation of the Paris Agreement is how the progress made by the parties will be tracked and whether countries’ actions are in line with their Nationally Determined Contributions (NDCs). In order to overcome this obstacle, the Enhanced Transparency Framework was incorporated into the Paris Agreement. The ETF primarily utilizes a reporting process and a subsequent two-step procedure for the review and evaluation of these reports. The reports, called Biennial Transparency Reports, incorporate standardized formats for the reporting of greenhouse gas inventories and various indicators to measure progress made in achieving the goals set by the parties to the Agreement through their NDCs. The two-stage evaluation process consists of a Technical Expert Review, in which the compliance of the submitted BTRs with the technical provisions set by the ETF is evaluated, and a Facilitative Multilateral Consideration of Progress in which the progress made by the

Party submitting the BTR is critically evaluated by any other parties to the Agreement. The ETF framework is not concerned with the adequacy and content of the goals set by the parties through their NDCs, but rather only aims to evaluate the progress made in their realization. This, when considered together with the fact that parties are allowed to freely choose the indicators they will utilize in their BTRs without any restrictions or external review regarding their appropriateness for the evaluation of the specific NDC of the Party, has raised doubts regarding the overall effectiveness of the ETF.

Drivers and Consequences of Climate Change:

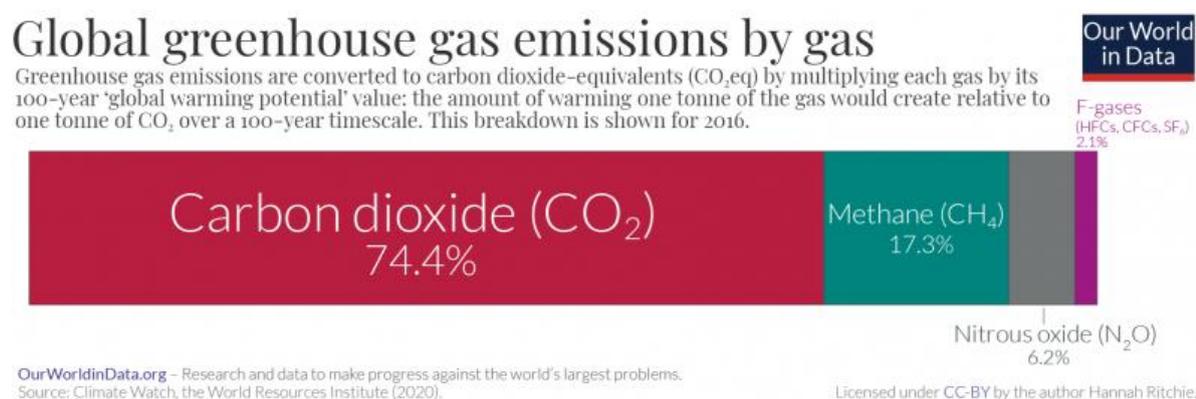


Figure 1 Source Organization: Our World in Data

Greenhouse gas emissions, including carbon dioxide, methane, nitrous oxide, and several other gases, are a major contributor to climate change. According to the United Nations Framework Convention on Climate Change (UNFCCC), these emissions are responsible for the warming of the Earth's surface and the resulting changes in the Earth's climate. The Intergovernmental Panel on Climate Change (IPCC) estimates that the burning of fossil fuels is the largest source of greenhouse gas emissions, responsible for approximately 78% of total emissions.

The UNFCCC states that the concentration of greenhouse gases in the atmosphere has increased significantly since the industrial revolution, primarily due to human activities. This increase in concentration has led to a warming of the Earth's surface and associated climate changes, such as sea level rise, more intense heat waves, and changes in precipitation patterns.

In order to mitigate the effects of climate change and achieve the goals of the Paris Agreement, it is crucial to significantly reduce greenhouse gas emissions. This can be achieved through a combination of measures such as increasing the use of renewable energy sources, improving energy efficiency, and implementing carbon pricing mechanisms.

Change in Total Methane Emissions — 2017 compared to 2000-2006 (Tg CH₄ per year)

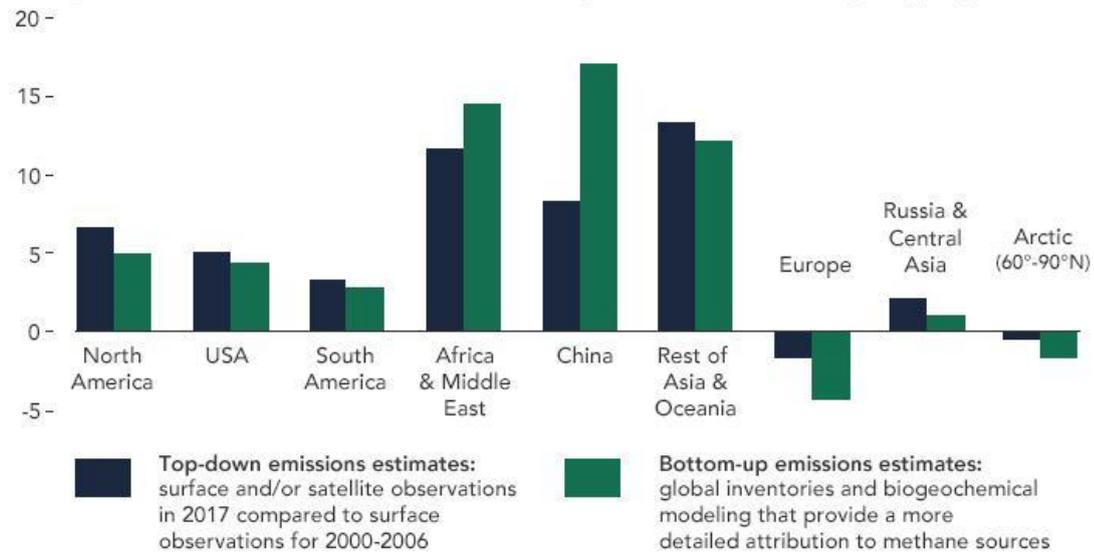
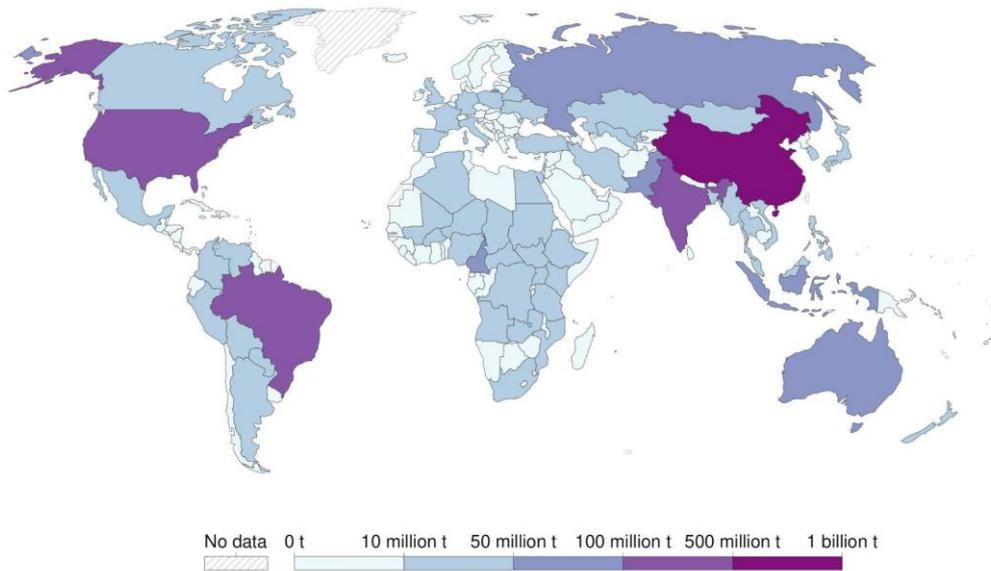


Figure 2 Source organization: NASA Earth Observatory

Emission of methane gases have a pretty significant effect on the globe we live in. According to the United Nations Framework Convention on Climate Change (UNFCCC), methane is the second most important greenhouse gas after carbon dioxide in terms of its contribution to global warming. The Intergovernmental Panel on Climate Change (IPCC) estimates that methane is responsible for approximately 20% of the total radiative forcing caused by all long-lived greenhouse gases. In terms of global warming potential, methane has a much higher impact than carbon dioxide over a 20-year time frame, with a global warming potential of 84 times that of carbon dioxide. Therefore, reducing methane emissions is a crucial step in mitigating the effects of climate change and achieving the goals of the Paris Agreement to limit global warming to well below 2 degrees Celsius.

Nitrous oxide emissions, 2019

Nitrous oxide (N₂O) emissions are measured in tonnes of carbon dioxide-equivalents¹.



Source: Our World in Data based on Climate Analysis Indicators Tool (CAIT).
Note: Emissions from land use change and forestry are included.
OurWorldInData.org/co2-and-other-greenhouse-gas-emissions • CC BY

Figure 3 Source organization: Our World in Data

According to data from the United Nations Framework Convention on Climate Change (UNFCCC), the countries with the highest nitrous oxide emissions in 2020 were:

- China: responsible for 28.2% of total global emissions
- United States: responsible for 6.9% of total global emissions
- India: responsible for 6.8% of total global emissions
- Russia: responsible for 4.9% of total global emissions
- Brazil: responsible for 3.2% of total global emissions

Nitrous oxide (N₂O) is a powerful greenhouse gas, with a global warming potential 298 times greater than carbon dioxide over a 100-year time frame. Agriculture is the largest source of nitrous oxide emissions, with the use of synthetic fertilizers and the management of manure being the main drivers. The emissions from Nitrous oxide are also produced from human activities such as fossil fuel burning, industrial processes, and wastewater management. Reducing nitrous oxide emissions is an important step in addressing climate change and promoting a healthier environment.

Chart — Sector share of nitrogen oxides emissions

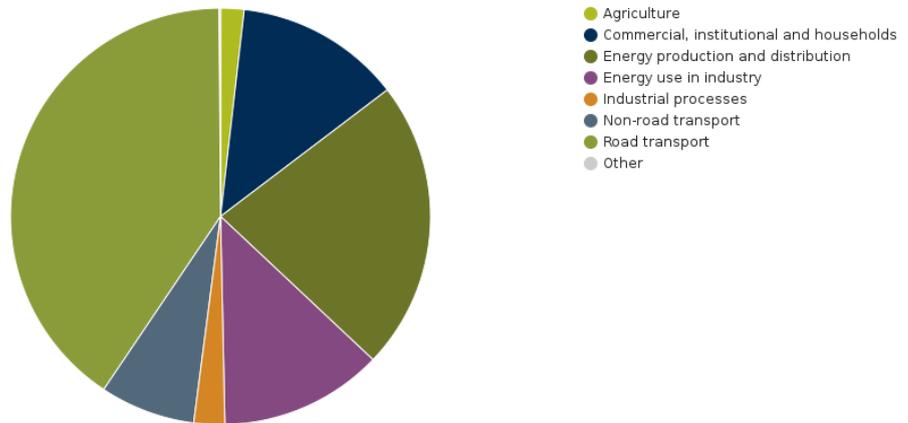


Figure 4 Source organization: European Environment Agency

Greenhouse gas emissions can come from a variety of sectors, including:

1. Energy: The burning of fossil fuels for electricity and heat is the largest source of greenhouse gas emissions, accounting for approximately 78% of total emissions.
2. Agriculture: Agricultural activities, such as the use of synthetic fertilizers, crop production, and livestock production, are a significant source of methane and nitrous oxide emissions.
3. Industry: Industrial processes, such as cement and steel production, as well as chemicals and petrochemicals, are a significant source of greenhouse gas emissions.
4. Transportation: The burning of fossil fuels for transportation, including cars, trucks, trains, and airplanes, is a significant source of emissions.
5. Waste: Landfills and waste treatment facilities are a source of methane emissions.
6. Buildings: The use of fossil fuels for heating, cooling, and lighting in buildings is a significant source of emissions.

Each of these sectors plays a role in overall greenhouse gas emissions and addressing emissions from each sector is crucial for achieving the goals of the Paris Agreement to limit global warming. For example, transitioning to renewable energy sources and improving energy efficiency can help reduce emissions from the energy sector. Adopting sustainable agricultural practices and reducing food waste can help reduce emissions from the agricultural sector. And implementing policies that encourage the use of electric vehicles and public transportation, as well as the use of energy-efficient buildings, can help reduce emissions from the transportation and buildings sectors.

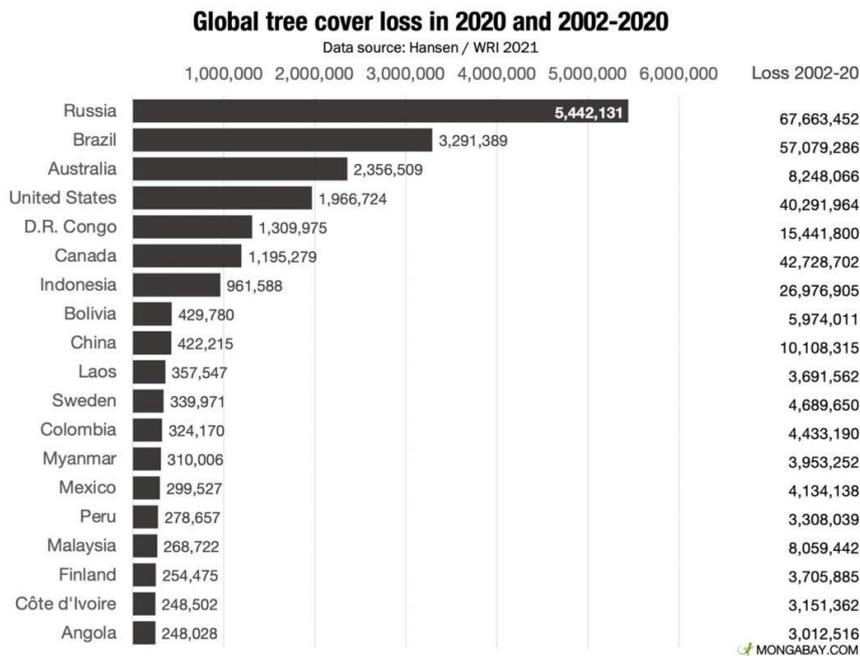


Figure 5 Source organization: Mongabay.com

According to the United Nations Framework Convention on Climate Change (UNFCCC), global tree cover loss is a significant issue that has an impact on climate change. Trees play a critical role in the global carbon cycle, absorbing and storing carbon dioxide from the atmosphere. When trees are cut down or burned, the stored carbon is released back into the atmosphere, contributing to climate change.

The Food and Agriculture Organization (FAO) of the United Nations estimates that deforestation and forest degradation account for approximately 15% of global greenhouse gas emissions. Additionally, the United Nations Convention to Combat Desertification (UNCCD) states that deforestation and land degradation are major drivers of desertification, which affects an estimated 1.3 billion people worldwide.

Furthermore, Tree cover loss also has an impact on biodiversity, as forests are home to a wide range of plant and animal species, many of which are found nowhere else on Earth.

In order to mitigate the effects of climate change and promote sustainable development, it is crucial to reduce tree cover loss and promote reforestation and afforestation. This can be achieved through a combination of measures such as sustainable forest management, protecting and restoring forested areas, and implementing policies and incentives to support reforestation and afforestation.

Therefore, preserving and expanding tree cover is important to mitigate the effects of climate change, promote sustainable development and biodiversity.

Possible actions may be taken:

1. Facilitating better coordination with Local and Regional Governments in the implementation of SDGs through better paradiplomatic dialogue
2. Promoting Climate-friendly finance by integrating SDGs into national financial systems through national green finance roadmaps
3. Improving capabilities of national and public institutions for climate action through promoting sharing of information and resources
4. Promoting awareness of climate change and its impacts within the general public and industry groups
5. Driving ambition for climate action through establishing a common ground of minimum acceptable level of emission reductions in the form of Nationally Determined Contributions (NDCs) within the negotiation process
6. Implementing a mechanism that promotes the accountability of countries and provides concrete incentives for them to set and reach ambitious emission reduction targets
7. There are a variety of actions that can be taken to reduce the effects of climate change. Some examples include:
8. Reducing greenhouse gas emissions: This can be achieved by transitioning to renewable energy sources, improving energy efficiency, implementing carbon pricing mechanisms, and reducing emissions from agriculture, industry, transportation, and waste management.
9. Promoting reforestation and afforestation: Planting trees and preserving existing forests can help absorb and store carbon, as well as provide other benefits such as protecting biodiversity and improving air and water quality.
10. Adapting to the impacts of climate change: This includes measures such as building more resilient infrastructure, improving water management, and developing early warning systems for extreme weather events.
11. Encouraging sustainable development: This includes measures such as reducing poverty, improving education and healthcare, and promoting sustainable land use practices.
12. Investing in climate change research: This includes researching and developing new technologies that can help reduce emissions and adapt to the impacts of climate change, as well as understanding the impacts of climate change on different regions and sectors.
13. Increasing climate change awareness and education: This includes educating the public and decision-makers about the causes and impacts of climate change, and encouraging individuals, organizations, and governments to take action to reduce emissions and adapt to the impacts of climate change.

2nd Agenda Item Topics: International Coordination and Collaboration against Natural Disasters due to Climate Change

What is the relationship between climate change and natural disasters?

It is apparent that there is a connection between climate change and the escalating magnitude and frequency of natural catastrophes. The Intergovernmental Panel on Climate Change (IPCC, 2014) describes the effects of climate change and climate-induced natural disasters on socioeconomic systems, including crop damage, increased wildfire risk, frequent power cuts, increased risk of food and/or water shortages, and vulnerability for the system of government.

Most common effects of Climate Change:

The rise of global surface temperature

When the temperature is higher, wildfires start more commonly and spread more aggressively. The Arctic has warmed at least twice as quickly as the rest of the world.

More frequent and powerful storms

More moisture evaporates as temperatures increase, triggering unusually heavy rains and flooding and resulting in more severe storms. The warming ocean has an impact on both the intensity and occurrence of tropical storms.

Greatly increased droughts

Water supply is in danger due to climate change, becoming more limited in many places. In already water-stressed areas, global warming makes water shortages severe. It also increases the danger of ecological and agricultural droughts. Additionally, severe sand and dust storms may be triggered by the droughts.

Loss of species

The rate of extinction is the highest it has ever been due to Climate Change. Within the next several decades, one million species face extinction.

Health risks

Due to air pollution, increased hunger, extreme weather conditions, and other environmental factors around 13 million lives are taken every year.

Loss of houses and poverty

Due to natural disasters caused by Climate Change, floods destroy homes and properties, it becomes more challenging for people who perform physical work outdoors with the present heat; disasters leave millions of people with the risk of poverty. Many refugees are from nations that are least equipped and prepared to adjust to the effects of climate change.

***It is crucial to understand that every fraction of a degree increase will only cause the effects of climate change to escalate and expand.**

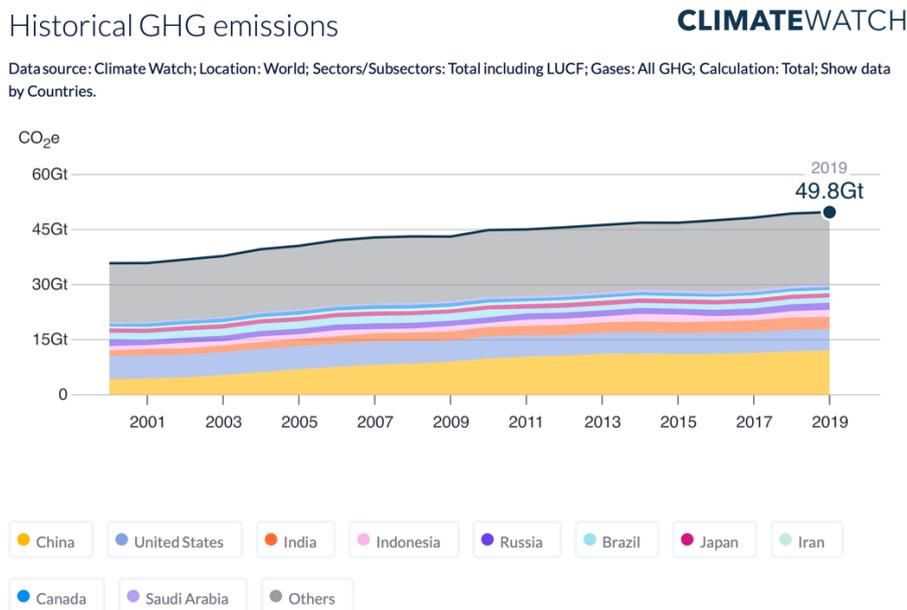
Impact of Climate Change directly on Member States

A nation’s political and economic system is seriously at risk from natural disasters. For the world’s poorer nations, economic growth is especially important. Even without the additional difficulties posed by climate change, such development is challenging to attain. The quality of an institution decreases as the total number of individuals impacted by natural catastrophes rises.

Examples of specific countries facing the outcomes of Climate Change (Taken from Emissions Gap Report 2022):

- Catastrophic floods put much of **Pakistan** under water, affecting over 30 million people
- A multiyear drought is threatening wide-scale famine in the Horn of Africa (Countries: **Ethiopia, Kenya and Somalia**)
- Heatwaves across the northern hemisphere caused wildfires and huge disruption (Countries: **United States, Spain, France, Greece, Portugal**)

Who has contributed the most to global CO2 emissions?



Source Organization: World Resources Institute

Summary: Historical country-level and sectoral GHG emissions data (2000-2019)

- and efficiently
- Sharing expertise and knowledge about disaster risk reduction and management
- Building the capacity of affected countries to reduce the risk of natural disasters and
- improve their ability to respond to them
- Providing financial support for disaster risk reduction and recovery efforts

International cooperation can also help to reduce the risk of natural disasters by supporting efforts to address the underlying causes of disasters, such as climate change, environmental degradation, and poverty. By working together, countries can develop and implement policies and programs that help to reduce the risk of natural disasters and build resilience to their impacts.

Examples of International Coordination and Collaborations:

There are a number of examples of international coordination to address natural disasters caused by climate change. Some examples include:

- The United Nations Framework Convention on Climate Change (UNFCCC) is an international treaty signed by nearly 200 countries that aims to reduce greenhouse gas emissions and mitigate the impacts of climate change. The UNFCCC provides a platform for countries to work together to address climate change and its impacts, including natural disasters.
- The Intergovernmental Panel on Climate Change (IPCC) is an international scientific body that assesses the latest scientific research on climate change and its impacts. The IPCC provides a scientific basis for international action on climate change and helps to inform policy decisions related to natural disasters.
- The United Nations International Strategy for Disaster Reduction (UNISDR) is an agency of the United Nations that works to reduce the risk of natural disasters and promote disaster risk management. UNISDR supports the implementation of the Sendai Framework for Disaster Risk Reduction, which provides a global framework for reducing the risk of natural disasters.
- The United Nations Office for Disaster Risk Reduction (UNDRR) is an agency of the United Nations that works to reduce the risk of natural disasters and promote disaster risk management. UNDRR supports the implementation of the Sendai Framework for Disaster Risk Reduction and provides technical assistance to countries to help them build their capacity to reduce the risk of natural disasters.
- The International Federation of Red Cross and Red Crescent Societies (IFRC) is a global humanitarian organization that works to reduce the impact of natural disasters on vulnerable communities. The IFRC provides emergency relief and support to communities affected by natural disasters, including those caused by climate change.
- The Green Climate Fund (GCF) is a financial mechanism established by the UNFCCC to support developing countries in their efforts to reduce greenhouse gas emissions and adapt to the impacts of climate change. The GCF provides financial support for projects and programs that help countries to reduce the risk of natural disasters and build resilience to the impacts of climate change.

Actions taken to eliminate natural disasters caused by climate change:

The UNFCCC has a number of mechanisms and programs in place to help reduce the risk of natural disasters and improve the resilience of communities to their impacts.

One of the main ways in which the UNFCCC works to eliminate natural disasters caused by climate change is by supporting countries in their efforts to reduce greenhouse gas emissions and mitigate the impacts of climate change. The UNFCCC has developed a number of international agreements and protocols to help countries reduce their emissions and transition to more sustainable and low-carbon development paths. These agreements include the Kyoto Protocol, the Paris Agreement, and the Doha Amendment to the Kyoto Protocol. In addition to supporting efforts to reduce greenhouse gas emissions, the UNFCCC also works to strengthen the capacity of countries to reduce the risk of natural disasters and improve their ability to respond to them. The UNFCCC supports the implementation of the Sendai Framework for Disaster Risk Reduction, which is a global framework for reducing the risk of natural disasters. The Sendai Framework provides a set of guidelines for countries to follow in order to reduce the risk of natural disasters and improve their resilience to their impacts. The UNFCCC also provides financial support for disaster risk reduction and recovery efforts through the Green Climate Fund (GCF). The GCF is a financial mechanism established by the UNFCCC to support developing countries in their efforts to reduce greenhouse gas emissions and adapt to the impacts of climate change. The GCF provides financial support for projects and programs that help countries to reduce the risk of natural disasters and build resilience to their impacts.

Overall, the UNFCCC is working to eliminate natural disasters caused by climate change by supporting efforts to reduce greenhouse gas emissions and mitigate the impacts of climate change, strengthening the capacity of countries to reduce the risk of natural disasters, and providing financial support for disaster risk reduction and recovery efforts.

What is the Net Zero Emissions 2050?

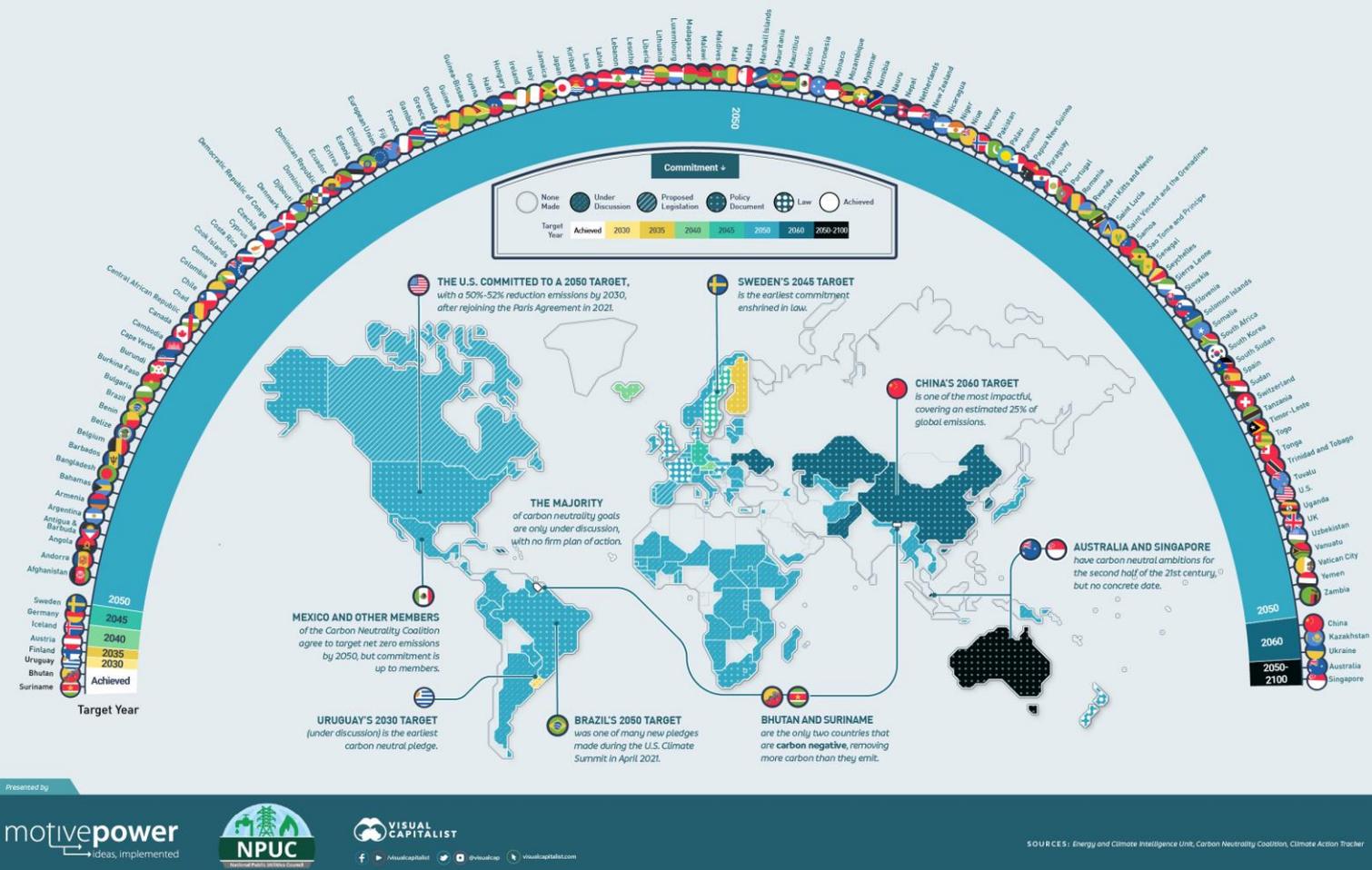
To develop energy policy for a safe and sustainable future, the International Energy Agency (IEA) - an autonomous intergovernmental organisation, established in 1974 - collaborates with nations all around the world. The IEA's Net Zero Emissions by 2050 Scenario (NZE) illustrates a roadmap for the world's energy industry to reach net zero CO₂ emissions by 2050.



RACE TO NET ZERO

CARBON NEUTRAL GOALS BY COUNTRY

Which countries have made a carbon neutral pledge?
This map breaks down pledges by target year and level of commitment.



According to data compiled by the Energy and Climate Intelligence Unit, commitments made to the Carbon Neutrality Coalition, and recent policy announcements by governments, 137 nations have declared their intention to become carbon neutral.

The only two nations that have achieved carbon neutrality and are carbon negative among early adopters are **Bhutan and Suriname** (removing more carbon than they emit). The earliest country to attempt to equal that achievement is **Uruguay**, with a 2030 objective. Next are countries in Europe, **Finland, Austria, Iceland, Germany, and Sweden**, all of which are aiming for 2045 or sooner.

Only five nations, including **Australia and Singapore**, which have not yet established a specific objective, have agreed to achieve net zero emissions after 2050. Along with **Ukraine and Kazakhstan**, 2060 is a target year for **China**, the world's greatest emitter.

Laws and Regulations addressing the issue of climate change

Several United Nations member states have implemented laws and regulations aimed at addressing the issues raised by climate change. These include:

- The Paris Agreement, an international treaty adopted by the United Nations Framework Convention on Climate Change (UNFCCC) in 2016, which aims to limit global warming to well below 2 degrees Celsius and to pursue efforts to limit warming to 1.5 degrees Celsius. The agreement was signed by 197

countries and the European Union, and sets targets for reducing greenhouse gas emissions and increasing the use of renewable energy.

- The United States Clean Air Act and the Clean Water Act, which were enacted by the U.S. Congress in 1970 and 1972 respectively. These laws set standards for air and water pollution, and give the Environmental Protection Agency (EPA) the authority to regulate emissions from power plants and industrial facilities.
- The European Union's Emissions Trading System (EU ETS), which was established in 2005 and is the world's first and largest carbon market. The EU ETS sets caps on emissions from certain industries, such as power generation and manufacturing, and allows companies to buy and sell emissions allowances.
- Renewable Portfolio Standards (RPS), which are laws or regulations that require a certain percentage of electricity to be generated from renewable sources, such as solar and wind power. Several states in the United States have implemented RPS, as have countries such as Germany, China, and India.
- Energy Efficiency Standards, which set minimum efficiency standards for appliances and buildings. Such standards are in place in many countries, including the United States, the European Union, and China.
- Carbon pricing policies, such as carbon tax and cap-and-trade systems, which create financial incentives for companies and individuals to reduce their carbon emissions. Carbon pricing policies are in place in countries such as Canada, China, and South Korea, as well as several European Union member states.

It is important to note that these laws and regulations vary in their stringency and scope and that many countries still have a long way to go to meet the goals of the Paris Agreement.

Sweden's 2045 objective is the earliest legal commitment. Only six nations, including Sweden, have created legislation establishing carbon-neutral objectives. **Denmark, France, Hungary, New Zealand, and the UK** are among them. **Canada, South Korea, the EU countries**, and another five nations have law proposals under consideration.

In the meanwhile, 24 nations have established their climate goals as official policies. They include some of the biggest polluters in the world, including **Brazil, China, Germany, and the U.S.** Currently, 99 of the 137 countries' commitments, or more than 72%, are simply being discussed, which makes them more difficult to act upon because they simply do not have an official status yet.

The role of international cooperation and coordination on natural disasters

International cooperation plays a vital role in disaster risk reduction as per the data provided by the United Nations (UN). Collaboration and coordination among countries and international organizations are crucial in addressing the challenges posed by natural disasters. This is demonstrated by the following points:

- The UN International Strategy for Disaster Reduction (UNISDR) estimates that between 2005 and 2015, natural disasters caused an average of US\$ 520 billion in economic losses per year globally.
- The UN Office for Disaster Risk Reduction (UNDRR) has reported that the number of people affected by natural disasters has been increasing steadily in recent years, with an average of 213 million people affected by natural disasters each year between 2015 and 2019.
- The UN Framework Convention on Climate Change (UNFCCC) has reported that climate change is projected to increase the frequency and intensity of certain types of natural disasters, such as heatwaves, droughts, and heavy precipitation events.
- The UN General Assembly has recognized that the impact of natural disasters is often exacerbated by a lack of preparedness and a lack of resources, particularly in developing countries.
- The UN General Assembly has also recognized that international cooperation can help to reduce the impact of natural disasters by improving preparedness and response efforts, sharing knowledge and expertise, and mobilizing resources.

In light of these data and recognition, it is clear that collaboration and coordination among countries and international organizations are crucial in addressing the challenges posed by natural disasters. International cooperation can help to reduce the impact of natural disasters on communities and economies, by improving preparedness, response, and recovery efforts, sharing knowledge and expertise, and mobilizing resources.

“Priority action: Take international co-operation to new heights”

Taken from Net Zero 2050 Report by IEA (revised in May of 2021)

To adopt clear and effective policies governments must collaborate in a way that will be beneficial and efficient for both parties. It is necessary to link national markets when advancing innovation, creating worldwide standards, and arranging the scaling up of clean technology. Cooperation must take into account the various developmental phases of the various nations and the various socioeconomic conditions of the various segments of society. Without international cooperation, reaching net-zero emissions will be more challenging and expensive for many wealthy nations. The implementation of essential technologies and infrastructure requires both technical and financial support, hence, it is unclear how many developing nations can reach net zero without international assistance. Global CO₂ emissions won't reach net zero by 2050 without increased international cooperation.

Disaster reduction and prevention require collaboration, cooperation, and coordination. To lessen risks and better avoid and manage disasters, we must network existing unique capacities, share our resources, and enhance current professional abilities.

The International Strategy for Disaster Reduction (ISDR) is a worldwide system developed within the UN to

promote efforts to lower socioeconomic vulnerability and risks from natural disasters and other technological and environmental catastrophes. The long-term objective is to give governments the tools they need to withstand disasters while preserving their social, economic, and natural resources.

(for more information see <https://www.undrr.org>)

UNDRR United Nations Office for Disaster Risk Reduction

Why is Disaster Risk Reduction important?

Natural catastrophes brought on by climate change result in significant losses in the global economy, agriculture, biodiversity, and environment as well as human lives because of the conditions of exposure and the lack of resources or measures to minimize the potentially harmful outcomes. Disaster risk reduction is the proposal and practice of lowering the risks associated with catastrophes by methodical attempts to identify and lessen the causes of disasters.

Three Strategic Objectives (SOs) and two Enablers (Es) help NDRR deliver its mission:

SO1 - Strengthen global monitoring, analysis and coordination of Sendai Framework implementation

SO2 - Support to regional and national Sendai Framework implementation

SO3 - Catalyse action through countries and partners for Sendai Framework implementation

E1 - Enhancing visibility of disaster risk reduction through global advocacy

E2 - Strengthened organizational performance

Source: <https://www.undrr.org/about-undrr/funding>

UNDRR 2021 Donors:

GOVERNMENTS	USD
Sweden *	9,089,723
Japan *	6,255,921
Germany	5,205,168
United States of America	4,147,308
Norway *	2,940,395
European Commission	2,868,432
Republic of Korea *	2,699,980
Italy	2,619,798
Australia *	2,360,954
Switzerland *	2,156,236
Finland *	1,213,592
CREWS	846,234
Czech Republic *	355,698
Luxembourg *	302,663
People's Republic of China *	299,985
CDEMA	175,497
UPS Foundation	175,000
Kazakhstan	50,000
Israel *	20,000
Philippines *	20,000
France *	12,107
SM Prime Holding	11,495
GRAND TOTAL	USD 43,826,186

Sendai Framework

The Third UN World Conference on Disaster Risk

Reduction on March 18th adopted the Sendai Framework for Disaster Risk Reduction 2015-2030 with its seven objectives and four priorities for action. On June 3, 2015, the UN General Assembly endorsed it.

Priorities:

Priority 1: Understanding disaster risk

Priority 2: Strengthening disaster risk governance to manage disaster risk

Priority 3: Investing in disaster risk reduction for resilience

Priority 4: Enhancing disaster preparedness for effective response, and to «Build Back Better» in recovery, rehabilitation and reconstruction.



Resources:

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