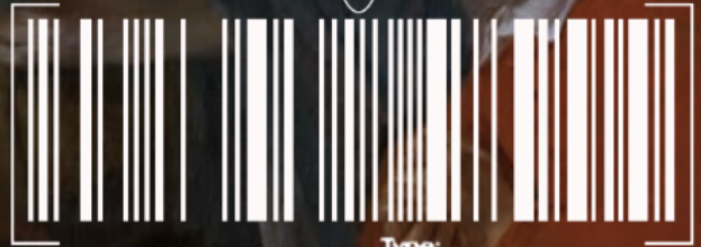
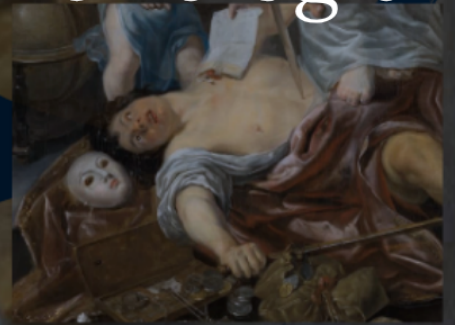


AFMUN COP31

UNDER SECRETARY GENERAL
Aslı Ela Kemaloğlu



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1. Letter from the Secretariat

Distinguished Delegates,

It is a great pleasure to welcome you all to AFMUN'26. As the Secretaries-General, we are truly pleased to see this conference once again bring together so many bright and motivated young individuals who believe in dialogue, diplomacy, and cooperation.

First and foremost, we would like to extend our sincere thanks to our academic and organization teams. This conference would not have been possible without their dedication and commitment, and we are deeply grateful for the effort they have put in.

We are living in a time where it is almost impossible to ignore what is happening around the world. Many of us often find ourselves thinking that certain situations could have been handled differently, or questioning the decisions that were made. However, AFMUN is not only a place for reflection, but also a platform for initiative. Through our committees, you will have the opportunity to express your ideas, challenge perspectives, and engage in meaningful discussions. As young people in today's world, your voice is truly important.

We hope this conference will be both inspiring and memorable for all of you.

And as we say, a realm cannot endure without its sovereign.

Yours truly,

Kaan MUŞTU & Ömer Talha Demirel

kaansettar@gmail.com

demirelomer123456@gmail.com

2. Letter from the Under Secretary General

Esteemed Delegates,

It is an honor and utmost pleasure to welcome you all to the United Nations Framework Convention on Climate Change committee. I am Aslı Ela Kemaloğlu, I am a 2nd year Communication Sciences student at Hacettepe University and I will serve as the Under Secretary General in this committee. Firstly I would like to use this opportunity to extend my most heartfelt thanks to all of the Executive Team of AFMUN'26. They are truly brilliant in all ways and I want to thank the Secretariat for inviting me to this prestigious conference and giving me this chance to make this committee finally happen.

Our committee focuses on the important topic of Climate Change. So, in this study guide you will learn about different problems caused by global warming and climate change. You will come up with solutions to eliminate this problem for today and next generations safety. For that it is really important for you to examine this study guide carefully and research upon your countries' stances and policies. Your participation in this committee will not only enhance your knowledge of this global issue but will also develop your critical thinking and diplomatic skills. As you engage in constructive debate and negotiations you have to keep in mind that having multilateral cooperation while addressing these complex matters is the key. By working together you will have the opportunity to explore innovative and effective solutions that will improve the world for the better.

I wish you all the best luck in your preparations. I am looking forward to seeing your contributions to the committee. Unfortunately due to special reasons I am not able to attend the conference physically but if you have any questions about the committee or the conference please do not hesitate to contact me via email or WhatsApp before, during or after the conference. .

Best Regards,

Aslı Ela Kemaloğlu

Under Secretary-General of United Nations Framework Convention on Climate Change

asbelskyv@gmail.com

+90 532 315 94 68

3. Introduction to the Committee

The United Nations Framework Convention on Climate Change (the Convention or UNFCCC) was adopted at the United Nations Headquarters, New York on 9 May 1992. In accordance with Article 20, it was open for signature at the UN Conference on Environment and Development, Rio de Janeiro, Brazil, 3-14 June 1992, and thereafter at the United Nations Headquarters, from 20 June 1992 to 19 June 1993. By that date, the Convention had received 166 signatures. Pursuant to Article 22, the Convention is subject to ratification, acceptance, approval or accession by States and by regional economic integration organizations. States and regional economic integration organizations that have not signed the Convention may accede to it at any time.

The Convention entered into force on 21 March 1994, in accordance with Article 23, after the 50th instrument of ratification, acceptance, approval or accession had been deposited. Today, it has a universal membership. Currently, there are 198 Parties (197 States and 1 regional economic integration organization) to the UNFCCC. Preventing “dangerous” human interference with the climate system is the ultimate aim of the Convention. The authoritative information on the status of approval, acceptance, accession and ratification of the Convention is provided by the Secretary-General of the United Nations, on the respective internet page of the United Nations Treaty Depository under United Nations Framework Convention on Climate Change.¹ (*United Nations Framework Convention on Climate Change [UNFCCC], n.d.*) for the first mention; subsequent mentions: (*UNFCCC, n.d.*)

“ARTICLE 20 - SIGNATURE

This Convention shall be open for signature by States Members of the United Nations or of any of its specialized agencies or that are Parties to the Statute of the International Court of Justice and by regional economic integration organizations at Rio de Janeiro, during the United Nations Conference on Environment and Development, and thereafter at United Nations Headquarters in New York from 20 June 1992 to 19 June 1993.

ARTICLE 22 - RATIFICATION, ACCEPTANCE, APPROVAL OR ACCESSION

1. The Convention shall be subject to ratification, acceptance, approval or accession by States and by regional economic integration organizations. It shall be open for accession from the day after the date on which the Convention is closed for signature. Instruments of ratification, acceptance, approval or accession shall be deposited with the Depositary.

2. Any regional economic integration organization which becomes a Party to the Convention without any of its member 30 States being a Party shall be bound by all the obligations under the Convention. In the case of such organizations, one or more of whose member States is a Party to the Convention, the organization and its member States shall

¹ United Nations Framework Convention on Climate Change. (n.d.). *United Nations Framework Convention on Climate Change*. Retrieved August 19, 2026, from <https://unfccc.int/process-and-meetings/united-nations-framework-convention-on-climate-change>

decide on their respective responsibilities for the performance of their obligations under the Convention. In such cases, the organization and the member States shall not be entitled to exercise rights under the Convention concurrently.

3. In their instruments of ratification, acceptance, approval or accession, regional economic integration organizations shall declare the extent of their competence with respect to the matters governed by the Convention. These organizations shall also inform the Depositary, who shall in turn inform the Parties, of any substantial modification in the extent of their competence.

ARTICLE 23 - ENTRY INTO FORCE

1. The Convention shall enter into force on the ninetieth day after the date of deposit of the fiftieth instrument of ratification, acceptance, approval or accession.

2. For each State or regional economic integration organization that ratifies, accepts or approves the Convention or accedes thereto after the deposit of the fiftieth instrument of ratification, acceptance, approval or accession, the Convention shall enter into force on the ninetieth day after the date of deposit by such State or regional economic integration organization of its instrument of ratification, acceptance, approval or accession.

3. For the purposes of paragraphs 1 and 2 above, any instrument deposited by a regional economic integration organization shall not be counted as additional to those deposited by States members of the organization.”

It is also helpful to keep in mind that Climate Action is one of the Sustainable Development Goals as the Goal 13.

3.1. The Convention

The goal of the convention is to stabilize greenhouse gas concentrations at a level that will prevent dangerous human interventions in the climate system. It is stated that this level should be reached within a sufficient timeframe to allow ecosystems to adapt to climate change, protect food production, and ensure sustainable economic development.

The convention divides states into three main groups according to different commitments as Annex I, Annex II and Non-Annex I. Firstly, Annex I parties are the industrialized countries that were members of the OECD (Organisation for Economic Cooperation and Development) in 1992 and plus countries with economies transition. This is because the industrialized countries are the main contributors to greenhouse gas emissions which are one of the main reasons for climate change. Annex I countries are expected to make the greatest effort to reduce emissions within their own borders. Annex II parties include the OECD members of Annex 1 but not the EIT (Economies in Transition) countries. They are required to financially support developing countries with undertaking emission reduction

activities and adaptation to the effects of climate change. They should also take effective steps to encourage the development of environmentally friendly technologies to EIT Parties and developing countries.

Non-Annex I countries are mostly the developing ones. The Convention recognizes some groups of developing countries as vulnerable against the threats of climate change due to their geological disadvantages or their high reliance on income from fossil fuel trade. The Convention emphasizes activities such as investment, insurance, and technology transfer that promise to address the specific needs and concerns of these vulnerable countries. The 50 member states, classified by the United Nations as least developed countries, are considered with the special assessment under the Convention due to their limited ability in adapting to climate change. Member states are encouraged to take the specific circumstances of these countries into account in funding and technology transfer activities.

Throughout its history, the UNFCCC has presented numerous agreements, most notably the Paris Agreement and the Kyoto Protocol by aiming to find sustainable solutions to the global climate crisis while all member states protect their national interests. This convention is a UN organization where the future of humanity is being considered in the view of climate change.

United Nations Framework Convention on Climate Change Annex I

Australia, Austria, Belgium, Bulgaria, Canada, Croatia, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Japan, Latvia, Liechtenstein, Lithuania, Luxembourg, Monaco, Netherlands, New Zealand, Norway, Poland, Portugal, Romania, Russia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye, Ukraine, the United Kingdom of Great Britain and Northern Ireland, **United States of America**. (The United States is set to officially exit the 1992 United Nations Framework Convention on Climate Change (UNFCCC) on February 27, 2027, following a formal notification submitted by the Trump administration in early 2026.)

United Nations Framework Convention on Climate Change Annex II

Australia, Austria, Belgium, Canada, Denmark, European Economic Community (EEC), Finland, France, Germany, Greece, Iceland, Ireland, Italy, Japan, Luxembourg, Netherlands, New Zealand, Norway, Portugal, Spain, Sweden, Switzerland, Türkiye, United Kingdom of Great Britain and Northern Ireland, **United States of America**.

United Nations Framework Convention on Climate Change Non-Annex I

Afghanistan, Albania, Algeria, Angola, Antigua and Barbuda, Argentina, Armenia, Azerbaijan, Bahamas, Bahrain, Bangladesh, Barbados, Belize, Benin, Bhutan, Bolivia, Bosnia and Herzegovina, Botswana, Brazil, Burkina Faso, Burundi, Cambodia, Cameroon, Cape Verde, Central African Republic, Chad, Chile, China, Colombia, Comoros, Congo, Cook Islands, Costa Rica, Côte d'Ivoire, Cuba, Cyprus, Democratic Peoples' Republic of

Korea, Democratic Republic of the Congo, Djibouti, Dominica, Dominican Republic, Ecuador, Egypt, El Salvador, Equatorial Guinea, Eritrea, Ethiopia, Fiji, Gabon, Gambia, Georgia, Ghana, Grenada, Guatemala, Guinea, Guinea-Bissau, Guyana, Haiti, Honduras, India, Indonesia, Islamic Republic of Iran, Israel, Jamaica, Jordan, Kazakhstan, Kenya, Kiribati, Kuwait, Kyrgyzstan, Lao Peoples' Democratic Republic, Lebanon, Lesotho, Liberia, Libya, Madagascar, Malawi, Malaysia, Maldives, Mali, Malta, Marshall Islands, Mauritania, Mauritius, Mexico, Micronesia, Moldova, Mongolia, Morocco, Mozambique, Myanmar, Namibia, Nauru, Nepal, Nicaragua, Niger, Nigeria, Niue, Oman, Pakistan, Palau, Panama, Papua New Guinea, Paraguay, Peru, Philippines, Qatar, Republic of Korea, Rwanda, Samoa, San Marino, Sao Tome and Principe, Saudi Arabia, Senegal, Serbia and Montenegro, Seychelles, Sierra Leone, Singapore, Solomon Islands, South Africa, Sri Lanka, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Sudan, Suriname, Swaziland, Syrian Arab Republic, Tajikistan, Tanzania, Thailand, Timor-Leste, Togo, Tonga, Trinidad and Tobago, Tunisia, Turkmenistan, Tuvalu, Uganda, United Arab Emirates, Uruguay, Uzbekistan, Vanuatu, Venezuela, Viet Nam, Yemen, Zambia, Zimbabwe.

Least Developed Countries

Afghanistan, Angola, Bangladesh, Benin, Bhutan, Burkina Faso, Burundi, Cambodia, Cape Verde, Central African Republic, Chad, Comoros, Democratic Republic of the Congo, Djibouti, Equatorial Guinea, Eritrea, Ethiopia, Gambia, Guinea, Guinea-Bissau, Haiti, Kiribati, Laos, Lesotho, Liberia, Madagascar, Malawi, Maldives, Mali, Mauritius, Mozambique, Myanmar, Nepal, Niger, Rwanda, Samoa, Sao Tome and Principe, Senegal, Sierra Leone, Solomon Islands, Somalia, Sudan, Tanzania, Timor-Leste, Togo, Tuvalu, Uganda, Vanuatu, Yemen, Zambia.²

3.2. Convention of the Parties (COP)

The UNFCCC's mandate does not extend to decision-making on matters of peace and security. However, its processes can - and increasingly do - acknowledge how climate change and related challenges, such as food insecurity, can contribute to instability and conflict. In recent years, Conferences of the Parties (COPs), shaped by the priorities of their presidencies, have progressively opened space to explore the interlinkages between climate change, peace and security - including through high-level events, side discussions, and contributions from observer organisations.³

The COP is the supreme decision-making body of the Convention. All States that are Parties to the Convention are represented at the COP, at which they review the implementation of the Convention and any other legal instruments that the COP adopts

² United Nations Framework Convention on Climate Change. (n.d.). [Title of document/Annexes 1–4] [PDF]. https://unfccc.int/sites/default/files/annex__1-4.pdf

³ Climate Security Mechanism. (n.d.). *United Nations Framework Convention on Climate Change (UNFCCC) and climate, peace and security*. United Nations. Retrieved August 19, 2026, from <https://www.un.org/climatesecuritymechanism/en/united-nations-framework-convention-climate-change-unfccc-and-climate-peace-and-security>

and take decisions necessary to promote the effective implementation of the Convention, including institutional and administrative arrangements. A key task for the COP is to review the national communications and emission inventories submitted by Parties. Based on this information, the COP assesses the effects of the measures taken by Parties and the progress made in achieving the ultimate objective of the Convention. The COP meets every year, unless the Parties decide otherwise. The first COP meeting was held in Berlin, Germany in March, 1995. The COP meets in Bonn, the seat of the secretariat, unless a Party offers to host the session. Just as the COP Presidency rotates among the five recognized UN regions - that is, Africa, Asia, Latin America and the Caribbean, Central and Eastern Europe and Western Europe and Others – there is a tendency for the venue of the COP to also shift among these groups.

The List of Convention of the Parties

Antalya, Türkiye	<u>COP31</u> (Current Year)	UN Climate Change Conference - Antalya, November 2026 (Will be happening later this year)
Belém, Brazil	<u>COP 30</u>	UN Climate Change Conference - Belém, November 2025
Baku, Azerbaijan	<u>COP 29</u>	UN Climate Change Conference Baku - November 2024
Dubai, United Arab Emirates	<u>COP 28</u>	UN Climate Change Conference - United Arab Emirates
Sharm el-Sheikh, Egypt	<u>COP 27</u>	Sharm el-Sheikh Climate Change Conference - November 2022
Glasgow, United Kingdom of Great Britain and Northern Ireland	<u>COP 26</u>	Glasgow Climate Change Conference – October-November 2021
Madrid, Spain	<u>COP 25</u>	UN Climate Change Conference - December 2019
Katowice, Poland	<u>COP 24</u>	Katowice Climate Change Conference – December 2018
Bonn, Germany	<u>COP 23</u>	UN Climate Change Conference - November 2017

Marrakech, Morocco	<u>COP 22</u>	Marrakech Climate Change Conference - November 2016
Paris, France	<u>COP 21</u>	Paris Climate Change Conference - November 2015
Lima, Peru	<u>COP 20</u>	Lima Climate Change Conference - December 2014
Warsaw, Poland	<u>COP 19</u>	Warsaw Climate Change Conference - November 2013
Doha, Qatar	<u>COP 18</u>	Doha Climate Change Conference - November 2012
Durban, South Africa	<u>COP 17</u>	Durban Climate Change Conference - November 2011
Cancun, Mexico	<u>COP 16</u>	Cancún Climate Change Conference - November 2010
Copenhagen, Denmark	<u>COP 15</u>	Copenhagen Climate Change Conference - December 2009
Poznan, Poland	<u>COP 14</u>	Poznan Climate Change Conference - December 2008
Bali, Indonesia	<u>COP 13</u>	Bali Climate Change Conference - December 2007
Nairobi, Kenya	<u>COP 12</u>	Nairobi Climate Change Conference - November 2006
Montreal, Canada	<u>COP 11</u>	Montreal Climate Change Conference - December 2005
Buenos Aires, Argentina	<u>COP 10</u>	Buenos Aires Climate Change Conference - December 2004
Milan, Italy	<u>COP 9</u>	Milan Climate Change Conference - December 2003
New Delhi, India	<u>COP 8</u>	New Delhi Climate Change Conference - October 2002
Marrakech, Morocco	<u>COP 7</u>	Marrakech Climate Change Conference - October 2001
Bonn, Germany	<u>COP 6</u>	Bonn Climate Change Conference - July 2001
The Hague, Netherlands	<u>COP 6</u>	The Hague Climate Change Conference - November 2000

Bonn, Germany	COP 5	Bonn Climate Change Conference - October 1999
Buenos Aires, Argentina	COP 4	Buenos Aires Climate Change Conference - November 1998
Kyoto, Japan	COP 3	Kyoto Climate Change Conference - December 1997
Geneva, Switzerland	COP2	Geneva Climate Change Conference - July 1996
Berlin, Germany	COP 1	Berlin Climate Change Conference - March 1995

4

4. Introduction to the Agenda Item

4.1. Understanding Climate Change

What is Climate Change?

Climate change refers to long-term shifts in temperatures and weather patterns. Such shifts can be natural, due to changes in the sun's activity or large volcanic eruptions. But since the 1800s, human activities have been the main driver of climate change, primarily due to the burning of fossil fuels like coal, oil and gas. Burning fossil fuels generates greenhouse gas emissions that act like a blanket wrapped around the Earth, trapping the sun's heat and raising temperatures. The main greenhouse gases that are causing climate change include carbon dioxide and methane. These come from using gasoline for driving a car or coal for heating a building, for example. Clearing land and cutting down forests can also release carbon dioxide. Agriculture, oil and gas operations are major sources of methane emissions. Energy, industry, transport, buildings, agriculture and land use are among the main sectors causing greenhouse gases.

Climate scientists have shown that humans are responsible for virtually all global heating over the last 200 years. Human activities like the ones mentioned above are causing greenhouse gases that are warming the world faster than at any time in at least the last two thousand years. The average temperature of the Earth's surface is now about 1.44°C warmer than it was in the late 1800s-prior to the industrial revolution-and warmer than at any time in the last 100,000 years. The last decade (2017-2026) was the warmest on record, and each of the last four decades has been warmer than any previous decade since 1850. Many people think that climate change mainly means warmer temperatures. But

⁴ United Nations Framework Convention on Climate Change. (n.d.). *Conference of the Parties (COP)*. Retrieved August 19, 2026, from <https://unfccc.int/process/bodies/supreme-bodies/conference-of-the-parties-cop>

temperature rise is only the beginning of the story. Because the Earth is a system where everything is connected, changes in one area can influence changes in all others.

The consequences of climate change include, among others, more frequent and intense heatwaves, intense droughts, water scarcity, severe and frequent wildfires, rising sea levels, flooding, melting polar ice such as glaciers and ice sheets, catastrophic storms, declining biodiversity, stronger storms and heavier rainfall and risks to food, water, and human health.

Climate change can affect our health, ability to grow food, housing, safety and work. Some of us are already more vulnerable to climate impacts, such as people living in small island nations and other developing countries. Conditions like sea-level rise and saltwater intrusion have advanced to the point where entire communities have had to relocate, while protracted droughts are putting people at risk of famine. In the future, the number of people displaced by weather-related events is expected to rise.

In a series of UN reports, thousands of scientists and government reviewers agreed that limiting global temperature rise to no more than 1.5°C would help us avoid the worst climate impacts and maintain a liveable climate. Yet policies currently in place point to up to 2.8°C of warming by the end of the century.

The emissions that cause climate change come from every part of the world and affect everyone, but some countries produce much more than others. The six biggest emitters (China, the United States of America, India, the European Union, the Russian Federation, and Indonesia) together account for more than half of all global greenhouse gas emissions. By contrast, the 45 least developed countries contribute only 3 per cent of global greenhouse gas emissions. Everyone must take climate action, but people and countries creating more of the problem have a greater responsibility to act first.

Many climate change solutions can deliver economic benefits while improving our lives and protecting the environment. We also have global frameworks and agreements to guide progress, such as the Sustainable Development Goals, the United Nations Framework Convention on Climate Change and the Paris Agreement. Three broad categories of action are: cutting emissions, adapting to climate impacts and financing required adjustments. Switching energy systems from fossil fuels to renewables like solar or wind will reduce the emissions driving climate change. But we have to act now. While a growing number of countries is committing to net zero emissions by 2050, emissions must be cut in half by 2030 to keep warming below 1.5°C. Achieving this means huge declines in the use of coal, oil and gas: production and consumption of all fossil fuels need to be cut by at least 30 per cent by 2030 in order to prevent catastrophic levels of climate change.

Adapting to climate consequences protects people, homes, businesses, livelihoods, infrastructure and natural ecosystems. It covers current impacts and those likely in the future. Adaptation will be required everywhere but must be prioritized now for the most vulnerable people with the fewest resources to cope with climate hazards. The rate of

return can be high. Early warning systems for disasters, for instance, save lives and property, and can deliver benefits up to 10 times the initial cost.

Climate action requires significant financial investments by governments and businesses. But climate inaction is vastly more expensive. One critical step is for developed countries to support developing countries so they can adapt and move towards greener economies.

4.1.1. Causes of Climate Change

4.1.2. **Generating Power**

A large chunk of global emissions comes from burning fossil fuels to produce electricity and heat. Most electricity is still generated by burning coal, oil, or gas, which produces carbon dioxide and nitrous oxide – powerful greenhouse gases that blanket the Earth and trap the sun's heat. Globally, a third of electricity comes from wind, solar and other renewable sources which, as opposed to fossil fuels, emit little to no greenhouse gases or pollutants into the air.

Manufacturing Goods

Manufacturing and industry produce emissions, mostly from burning fossil fuels to generate the energy needed to make things like cement, iron, steel, electronics, plastics, clothes, and other goods. Mining and other industrial processes also release gases, as does the construction industry. Machines used in the manufacturing process often run on coal, oil, or gas. Some materials, like plastics, are made from chemicals sourced from fossil fuels. The manufacturing industry is one of the largest contributors to greenhouse gas emissions worldwide.

Cutting Down Forests

Cutting down forests to create farms or pastures, or for other reasons, generates emissions, since trees, when they are cut, release the carbon they had been storing. Each year approximately 10 million hectares of forest are destroyed. Since forests absorb carbon dioxide, destroying them also limits nature's ability to keep emissions out of the atmosphere. Deforestation, together with agriculture and other land use changes, is responsible for roughly a third of global greenhouse gas emissions.

Using Transportation

Most cars, trucks, ships, and planes run on fossil fuels. This makes transportation a major contributor of greenhouse gases, especially carbon-dioxide emissions. Road vehicles produce the largest part, due to the combustion of petroleum-based products, like gasoline, in internal combustion engines. But emissions from ships and planes continue to grow. Transport accounts for nearly one quarter of global energy-related carbon-dioxide

emissions. And trends point to a significant increase in energy use for transport over the coming years.

Producing Food

Producing food causes emissions of carbon dioxide, methane, and other greenhouse gases. This is due, for instance, to deforestation and clearing of land for agriculture and grazing, digestion by cows and sheep, the production and use of fertilizers and manure for growing crops, and the use of fossil fuels to run farm equipment or fishing boats. All this makes food production a major contributor to climate change. Greenhouse gas emissions also come from packaging and distributing food.

Powering Buildings

Globally, residential and commercial buildings consume nearly 60 per cent of all electricity. As they continue to draw on coal, oil, and natural gas for heating and cooling, they emit significant quantities of greenhouse gas emissions. Growing energy demand for heating and cooling, with rising air-conditioner ownership, as well as increased electricity consumption for lighting, appliances, and connected devices, has contributed to a rise in carbon-dioxide emissions from buildings in recent years.

Consuming Too Much

Our lifestyles can have a profound impact on our planet. Our use of power at home, how we move around, what we eat and how much we throw away all contribute to greenhouse gas emissions. So does the consumption of goods such as clothing, electronics, and plastics. The wealthiest bear the greatest responsibility: the 20 largest economies are responsible for almost 80 per cent of global emissions.

4.1.3. Effects of Climate Change

Hotter Temperatures

As greenhouse gas concentrations rise, so does the global surface temperature. The last decade, 2017-2026, is the warmest on record. Since the 1980s, each decade has been warmer than the previous one. Nearly all land areas are seeing more hot days and heat waves. Higher temperatures increase heat-related illnesses and make working outdoors more difficult. Wildfires start more easily and spread more rapidly when conditions are hotter. Temperatures in the Arctic have warmed at least twice as fast as the global average.

More Severe Storms

Destructive storms have become more intense and more frequent in many regions. As temperatures rise, more moisture evaporates. This exacerbates extreme rainfall and flooding, causing more destructive storms. The frequency and extent of tropical storms is also affected by ocean warming. Cyclones, hurricanes, and typhoons feed on warm waters

at the ocean surface. Such storms often destroy homes and communities, causing deaths and huge economic losses.

Increased Drought

Climate change is changing water availability, making it scarcer in more regions. Global warming exacerbates shortages in water-stressed regions. It also leads to a higher risk of agricultural droughts affecting crops and ecological droughts making ecosystems more vulnerable. Droughts can also stir destructive sand and dust storms that can move billions of tons of sand across continents. Deserts are expanding, reducing land for growing food. Many people now face the threat of not having enough water on a regular basis.

A Warming, Rising Ocean

The ocean soaks up most of the heat from global warming. The rate at which the ocean is warming strongly increased over the past two decades, across all depths of the ocean. As the ocean warms, its volume increases since water expands as it gets warmer. Melting ice sheets also cause sea levels to rise, threatening coastal and island communities. In addition, the ocean absorbs carbon dioxide, making it more acidic and endangering marine life and coral reefs.

Loss of Species

Climate change poses risks to the survival of species on land and in the ocean. These risks increase as temperatures climb. Exacerbated by climate change, the world is losing species at a rate 1,000 times greater than at any other time in recorded human history. One million species are at risk of becoming extinct within the next few decades. Forest fires, extreme weather, and invasive pests and diseases are among many threats related to climate change. Some species will be able to relocate and survive, but others will not.

Not Enough Food

Changes in the climate and increases in extreme weather events are among the reasons behind a global rise in hunger and poor nutrition. Fisheries, crops, and livestock may be destroyed or become less productive. With the ocean becoming more acidic, marine resources that feed billions of people are at risk. Changes in snow and ice cover in many Arctic regions have disrupted food supplies from herding, hunting, and fishing. Heat stress can diminish water and grasslands for grazing, causing declining crop yields and affecting livestock.

More Health Risks

Climate change is a major threat to people's health. Climate impacts are already harming health, through air pollution, disease, extreme weather events, forced displacement, pressures on mental health, and increased hunger and poor nutrition in places where

people cannot grow or find sufficient food. Every year, environmental factors take the lives of around 13 million people. Changing weather patterns are expanding diseases, and extreme weather events increase deaths and make it difficult for health care systems to keep up.

Poverty and Displacement

Climate change increases the factors that put and keep people in poverty. Floods may sweep away urban slums, destroying homes and livelihoods. Heat can make it difficult to work in outdoor jobs. Water scarcity may affect crops. In 2024, 45.8 million people were displaced due to weather-related disasters. Most displacements happen in countries that are most vulnerable and least ready to adapt to the impacts of climate change.

4.2. The Kyoto Protocol and Paris Agreement

4.2.1. Kyoto Protocol

The Kyoto Protocol was adopted on 11 December 1997. Owing to a complex ratification process, it entered into force on 16 February 2005. Currently, there are 192 Parties to the Kyoto Protocol. In short, the Kyoto Protocol operationalizes the United Nations Framework Convention on Climate Change by committing industrialized countries and economies in transition to limit and reduce greenhouse gases (GHG) emissions in accordance with agreed individual targets. The Convention itself only asks those countries to adopt policies and measures on mitigation and to report periodically.

The Kyoto Protocol is based on the principles and provisions of the Convention and follows its annex-based structure. It only binds developed countries, and places a heavier burden on them under the principle of “common but differentiated responsibility and respective capabilities”, because it recognizes that they are largely responsible for the current high levels of GHG emissions in the atmosphere.

In its Annex B, the Kyoto Protocol sets binding emission reduction targets for 37 industrialized countries and economies in transition and the European Union. Overall, these targets add up to an average 5 per cent emission reduction compared to 1990 levels over a five year period 2008–2012 (the first commitment period).

The authoritative information on the status of approval, acceptance, accession and ratification of the the Kyoto Protocol and its amendments is provided by the Secretary-General of the United Nations, on the respective document of the United Nations Treaty Depositary under:

7.a [Kyoto Protocol to the United Nations Framework Convention on Climate Change](#)

7.b [Nairobi Amendment to Annex B of the Kyoto Protocol](#)

7.c [Doha Amendment to the Kyoto Protocol](#)

Annex B (1997)

Party	Quantified emission limitation or reduction commitment (percentage of base year or period)
Australia	108
Austria	92
Belgium	92
Bulgaria*	92
Canada	94
Croatia*	95
Czech Republic*	92
Denmark	92
Estonia*	92
European Community	92
Finland	92
France	92
Germany	92
Greece	92
Hungary*	94
Iceland	110
Ireland	92
Italy	92
Japan	94
Latvia*	92
Liechtenstein	92
Lithuania*	92
Luxembourg	92
Monaco	92
Netherlands	92
New Zealand	100
Norway	101
Poland*	94
Portugal	92
Romania*	92
Russian Federation*	100
Slovakia*	92
Slovenia*	92
Spain	92
Sweden	92
Switzerland	92
Ukraine*	100

United Kingdom of Great Britain and Northern Ireland	92
United States of America	93

* Countries that are undergoing the process of transition to a market economy.

4.2.2. Paris Agreement

The Paris Agreement is a legally binding international treaty on climate change. It was adopted by 195 Parties at the UN Climate Change Conference (COP21) in Paris, France, on 12 December 2015. It entered into force on 4 November 2016. Currently, as of August 2026, there are 194 Parties to the Paris Agreement.

Its overarching goal is to hold “the increase in the global average temperature to well below 2°C above pre-industrial levels” and pursue efforts “to limit the temperature increase to 1.5°C above pre-industrial levels.” However, in recent years, world leaders have stressed the need to limit global warming to 1.5°C by the end of this century. That’s because the UN’s Intergovernmental Panel on Climate Change (IPCC) indicates that crossing the 1.5°C threshold risks unleashing far more severe climate change impacts, including more frequent and severe droughts, heatwaves and rainfall. To limit global warming to 1.5°C, greenhouse gas emissions must peak before 2025 at the latest and decline 43% by 2030.

The Paris Agreement is a landmark in the multilateral climate change process because, for the first time, a binding agreement brings all nations together to combat climate change and adapt to its effects. Implementation of the Paris Agreement requires economic and social transformation, based on the best available science. The Paris Agreement works on a five-year cycle of increasingly ambitious climate action - or, ratcheting up - carried out by countries. Since 2020, countries have been submitting their national climate action plans, known as nationally determined contributions (NDCs). Each successive NDC is meant to reflect an increasingly higher degree of ambition compared to the previous version. Recognizing that accelerated action is required to limit global warming to 1.5°C, the COP27 cover decision requests Parties to revisit and strengthen the 2030 targets in their NDCs to align with the Paris Agreement temperature goal by the end of 2023, taking into account different national circumstances.

In their NDCs, countries communicate actions they will take to reduce their greenhouse gas emissions in order to reach the goals of the Paris Agreement. Countries also communicate in their NDCs actions they will take to build resilience to adapt to the impacts of climate change. To better frame the efforts towards the long-term goal, the Paris Agreement invites countries to formulate and submit long-term low greenhouse gas emission development strategies (LT-LEDS). LT-LEDS provide the long-term horizon to the NDCs. Unlike NDCs, they are not mandatory. Nevertheless, they place the NDCs into the context of countries’ long-term planning and development priorities, providing a vision and direction for future development.

The Paris Agreement provides a framework for financial, technical and capacity building support to those countries who need it.

Finance

The Paris Agreement reaffirms that developed countries should take the lead in providing financial assistance to countries that are less endowed and more vulnerable, while for the first time also encouraging voluntary contributions by other Parties. Climate finance is needed for mitigation, because large-scale investments are required to significantly reduce emissions. Climate finance is equally important for adaptation, as significant financial resources are needed to adapt to the adverse effects and reduce the impacts of a changing climate.

Technology

The Paris Agreement speaks of the vision of fully realizing technology development and transfer for both improving resilience to climate change and reducing GHG emissions. It establishes a technology framework to provide overarching guidance to the well-functioning Technology Mechanism. The mechanism is accelerating technology development and transfer through its policy and implementation arms.

Capacity-Building

Not all developing countries have sufficient capacities to deal with many of the challenges brought by climate change. As a result, the Paris Agreement places great emphasis on climate-related capacity-building for developing countries and requests all developed countries to enhance support for capacity-building actions in developing countries.

With the Paris Agreement, countries established an enhanced transparency framework (ETF). Under the ETF, starting in 2024, countries will report transparently on actions taken and progress in climate change mitigation, adaptation measures and support provided or received. It also provides for international procedures for the review of the submitted reports. The information gathered through the ETF will feed into the Global stocktake which will assess the collective progress towards the long-term climate goals. This will lead to recommendations for countries to set more ambitious plans in the next round.

Although climate change action needs to be massively increased to achieve the goals of the Paris Agreement, the years since its entry into force have already sparked low-carbon solutions and new markets. More and more countries, regions, cities and companies are establishing carbon neutrality targets. Zero-carbon solutions are becoming competitive across economic sectors representing 25% of emissions. This trend is most noticeable in the power and transport sectors and has created many new business opportunities for early

movers. By 2030, zero-carbon solutions could be competitive in sectors representing over 70% of global emissions.

4.3. Climate Mitigation

Climate change mitigation refers to any action taken by governments, businesses or people to reduce or prevent greenhouse gases, or to enhance carbon sinks that remove them from the atmosphere. These gases trap heat from the sun in our planet's atmosphere, keeping it warm.

As there is a direct relation between global average temperatures and the concentration of greenhouse gases in the atmosphere, the key for the solution to the climate change problem rests in decreasing the amount of emissions released into the atmosphere and in reducing the current concentration of carbon dioxide (CO₂) by enhancing sinks (e.g. increasing the area of forests). Efforts to reduce emissions and enhance sinks are referred to as "mitigation".

Since the industrial era began, human activities have led to the release of dangerous levels of greenhouse gases, causing global warming and climate change. However, despite unequivocal research about the impact of our activities on the planet's climate and growing awareness of the severe danger climate change poses to our societies, greenhouse gas emissions keep rising. If we can slow down the rise in greenhouse gases, we can slow down the pace of climate change and avoid its worst consequences.

Reducing greenhouse gases can be achieved by:

Shifting Away from Fossil Fuels

Fossil fuels are the biggest source of greenhouse gases, so transitioning to modern renewable energy sources like solar, wind and geothermal power, and advancing sustainable modes of transportation, is crucial.

Improving Energy Efficiency

Using less energy overall – in buildings, industries, public and private spaces, energy generation and transmission, and transportation – helps reduce emissions. This can be achieved by using thermal comfort standards, better insulation and energy efficient appliances, and by improving building design, energy transmission systems and vehicles.

Changing Agricultural Practices

Certain farming methods release high amounts of methane and nitrous oxide, which are potent greenhouse gases. Regenerative agricultural practices – including enhancing soil health, reducing livestock-related emissions, direct seeding techniques and using cover crops – support mitigation, improve resilience and decrease the cost burden on farmers.

The Sustainable Management and Conservation of Forests

Forests act as carbon sinks, absorbing carbon dioxide and reducing the overall concentration of greenhouse gases in the atmosphere. Measures to reduce deforestation and forest degradation are key for climate mitigation and generate multiple additional benefits such as biodiversity conservation and improved water cycles.

Restoring and Conserving Critical Ecosystems

In addition to forests, ecosystems such as wetlands, peatlands, and grasslands, as well as coastal biomes such as mangrove forests, also contribute significantly to carbon sequestration, while supporting biodiversity and enhancing climate resilience.

Creating a Supportive Environment

Investments, policies and regulations that encourage emission reductions, such as incentives, carbon pricing and limits on emissions from key sectors are crucial to driving climate change mitigation.

The Convention requires all Parties, keeping in mind their responsibilities and capabilities, to formulate and implement programmes containing measures to mitigate climate change. Such programmes target economic activity with an aim to incentivize actions that are cleaner or disincentive those that result in large amounts of GHGs. They include policies, incentives schemes and investment programmes which address all sectors, including energy generation and use, transport, buildings, industry, agriculture, forestry and other land use, and waste management. Mitigation measures are translated into, for example, an increased use of renewable energy, the application of new technologies such as electric cars, or changes in practices or behaviours, such as driving less or changing one's diet. Further, they include expanding forests and other sinks to remove greater amounts of CO₂ from the atmosphere, or simply making improvements to a cookstove design.

Under the UNFCCC, and notably under the Kyoto Protocol, developed countries have set economy-wide caps for their national emissions, while developing countries have generally focused on specific programmes and projects. Following the 2009 Copenhagen Accord and the 2010 Cancun Agreements developed countries have communicated quantified economy-wide emission targets for 2020 and developing countries have agreed to implement nationally appropriate mitigation actions (NAMAs) with support from developed countries. In addition, developed country Parties to the Kyoto Protocol – at the end of the first commitment period under the Protocol (2008-2012) – adopted a second commitment period with targets for 2013-2020, in the form of the Doha Amendment. For developing countries the Kyoto Protocol's clean development mechanism (CDM) has been an important avenue of action for these countries to implement project activities that reduce emissions and enhance sinks.

In the process leading up to the Paris Conference all countries, developed and developing, prepared intended nationally determined contributions (INDCs), which outline national

efforts to reduce emissions and increase resilience. As a result, a diversity of efforts was communicated, including absolute and relative quantified national targets, sectoral targets and programmes, and others. The new concept of INDCs was eventually formalized under the Paris Agreement as nationally determined contributions (NDCs), and Parties are requested to prepare and communicate successive NDCs every five years.

Parties to the Convention have also cooperated increasingly to reduce GHG emissions from deforestation in developing countries. Developing countries are encouraged to contribute to mitigation actions in the forest sector by undertaking activities to reduce emissions from deforestation and forest degradation, conserve forest carbon stocks, implement sustainable management of forests and enhance forest carbon stocks (REDD-plus). The Paris Agreement also recognizes the importance of sinks, including forests and encourages Parties to implement and support the existing framework of guidance and decisions that has been elaborated on REDD-plus under the Convention over the years.

Emissions from fuels used for international aviation and maritime transport contribute increasingly to global emissions. To address these emissions, there has been ongoing work in the International Civil Aviation Organization and the International Maritime Organization, as well as cooperation between these two organizations and the UNFCCC. All over the world, many measures are being taken to mitigate climate change by countries trying to live up to their commitments under the Convention, the Kyoto Protocol and the Paris Agreement. According to the Convention, Parties shall take into consideration the specific needs and concerns of developing country Parties arising from the impacts of response measures, a call that is echoed similarly by the Paris Agreement. The Kyoto Protocol commits Parties to strive to minimize adverse economic, social and environmental impacts on other Parties, especially developing country Parties. In order to facilitate assessment and analysis of such impacts, and with the view to recommending specific actions, the COP has established a forum on the impact of the implementation of response measures under the Convention, which is also to serve the Paris Agreement.

Everyone has a role to play in climate change mitigation, from individuals adopting sustainable habits and advocating for change to governments implementing regulations, providing incentives and facilitating investments. The private sector, particularly those businesses and companies responsible for causing high emissions, should take a leading role in innovating, funding and driving climate change mitigation solutions. International collaboration and technology transfer is also crucial given the global nature and size of the challenge. As the main platform for international cooperation on climate action, the Paris Agreement has set forth a series of responsibilities and policy tools for its signatories. One of the primary instruments for achieving the goals of the treaty is Nationally Determined Contributions (NDCs). These are the national climate pledges that each Party is required to develop and update every five years. NDCs articulate how each country will contribute to reducing greenhouse gas emissions and enhance climate resilience.

While NDCs include short- to medium-term targets, long-term low emission development strategies (LT-LEDS) are policy tools under the Paris Agreement through which countries must show how they plan to achieve carbon neutrality by mid-century. These strategies define a long-term vision that gives coherence and direction to shorter-term national climate targets.

At the same time, the call for climate change mitigation has evolved into a call for reparative action, where high-income countries are urged to rectify past and ongoing contributions to the climate crisis. This approach reflects the UN Framework Convention on Climate Change (UNFCCC) which advocates for climate justice, recognizing the unequal historical responsibility for the climate crisis, emphasizing that wealthier countries, having profited from high-emission activities, bear a greater obligation to lead in mitigating these impacts. This includes not only reducing their own emissions, but also supporting vulnerable countries in their transition to low-emission development pathways. Another critical aspect is ensuring a just transition for workers and communities that depend on the fossil fuel industry and its many connected industries. This process must prioritize social equity and create alternative employment opportunities as part of the shift towards renewable energy and more sustainable practices.

For emerging economies, innovation and advancements in technology have now demonstrated that robust economic growth can be achieved with clean, sustainable energy sources. By integrating renewable energy technologies such as solar, wind and geothermal power into their growth strategies, these economies can reduce their emissions, enhance energy security and create new economic opportunities and jobs. This shift not only contributes to global mitigation efforts but also sets a precedent for sustainable development.

Mitigating climate change is fraught with complexities, including the global economy's deep-rooted dependency on fossil fuels and the accompanying challenge of eliminating fossil fuel subsidies. This reliance – and the vested interests that have a stake in maintaining it – presents a significant barrier to transitioning to sustainable energy sources.

The shift towards decarbonization and renewable energy is driving increased demand for critical minerals such as copper, lithium, nickel, cobalt, and rare earth metals. Since new mining projects can take up to 15 years to yield output, mineral supply chains could become a bottleneck for decarbonization efforts. In addition, these minerals are predominantly found in a few, mostly low-income countries, which could heighten supply chain vulnerabilities and geopolitical tensions.

Furthermore, due to the significant demand for these minerals and the urgency of the energy transition, the scaled-up investment in the sector has the potential to exacerbate environmental degradation, economic and governance risks, and social inequalities, affecting the rights of Indigenous Peoples, local communities, and workers. Addressing these concerns necessitates implementing social and environmental safeguards, embracing

circular economy principles, and establishing and enforcing responsible policies and regulations.

Agriculture is currently the largest driver of deforestation worldwide. A transformation in our food systems to reverse the impact that agriculture has on forests and biodiversity is undoubtedly a complex challenge. But it is also an important opportunity. The latest IPCC report highlights that adaptation and mitigation options related to land, water and food offer the greatest potential in responding to the climate crisis. Shifting to regenerative agricultural practices will not only ensure a healthy, fair and stable food supply for the world's population, but also help to significantly reduce greenhouse gas emissions.

“Article 6

*1. Parties recognize that some Parties choose to pursue voluntary cooperation in the implementation of their nationally determined contributions to allow for higher ambition in their **mitigation and adaptation** actions and to promote sustainable development and environmental integrity.*

2. Parties shall, where engaging on a voluntary basis in cooperative approaches that involve the use of internationally transferred mitigation outcomes towards nationally determined contributions, promote sustainable development and ensure environmental integrity and transparency, including in governance, and shall apply robust accounting to ensure, inter alia, the avoidance of double counting, consistent with guidance adopted by the Conference of the Parties serving as the meeting of the Parties to this Agreement.

3. The use of internationally transferred mitigation outcomes to achieve nationally determined contributions under this Agreement shall be voluntary and authorized by participating Parties.

4. A mechanism to contribute to the mitigation of greenhouse gas emissions and support sustainable development is hereby established under the authority and guidance of the Conference of the Parties serving as the meeting of the Parties to this Agreement for use by Parties on a voluntary basis. It shall be supervised by a body designated by the Conference of the Parties serving as the meeting of the Parties to this Agreement, and shall aim:

(a) To promote the mitigation of greenhouse gas emissions while fostering sustainable development;

(b) To incentivize and facilitate participation in the mitigation of greenhouse gas emissions by public and private entities authorized by a Party;

(c) To contribute to the reduction of emission levels in the host Party, which will benefit from mitigation activities resulting in emission reductions that can also be used by another Party to fulfil its nationally determined contribution; and

(d) To deliver an overall mitigation in global emissions.

5. Emission reductions resulting from the mechanism referred to in paragraph 4 of this Article shall not be used to demonstrate achievement of the host Party's nationally determined contribution if used by another Party to demonstrate achievement of its nationally determined contribution.

6. The Conference of the Parties serving as the meeting of the Parties to this Agreement shall ensure that a share of the proceeds from activities under the mechanism referred to in paragraph 4 of this Article is used to cover administrative expenses as well as to assist developing country Parties that are particularly vulnerable to the adverse effects of climate change to meet the costs of adaptation.

7. The Conference of the Parties serving as the meeting of the Parties to this Agreement shall adopt rules, modalities and procedures for the mechanism referred to in paragraph 4 of this Article at its first session.

8. Parties recognize the importance of integrated, holistic and balanced non-market approaches being available to Parties to assist in the implementation of their nationally determined contributions, in the context of sustainable development and poverty eradication, in a coordinated and effective manner, including through, inter alia, mitigation, adaptation, finance, technology transfer and capacity-building, as appropriate. These approaches shall aim to:

- (a) Promote mitigation and adaptation ambition;
- (b) Enhance public and private sector participation in the implementation of nationally determined contributions; and
- (c) Enable opportunities for coordination across instruments and relevant institutional arrangements.

9. A framework for non-market approaches to sustainable development is hereby defined to promote the non-market approaches referred to in paragraph 8 of this Article.” (Paris Agreement, 2015, article. 6)⁵

4.4. Climate Adaption

The world is already experiencing changes in average temperature, shifts in the seasons, an increasing frequency of extreme weather events, and slow onset events. The faster the climate changes and the longer adaptation efforts are put off, the more difficult and expensive responding to climate change will be.

Adaptation refers to adjustments in ecological, social or economic systems in response to actual or expected climatic stimuli and their effects. It refers to changes in processes, practices and structures to moderate potential damages or to benefit from opportunities associated with climate change. In simple terms, countries and communities need to

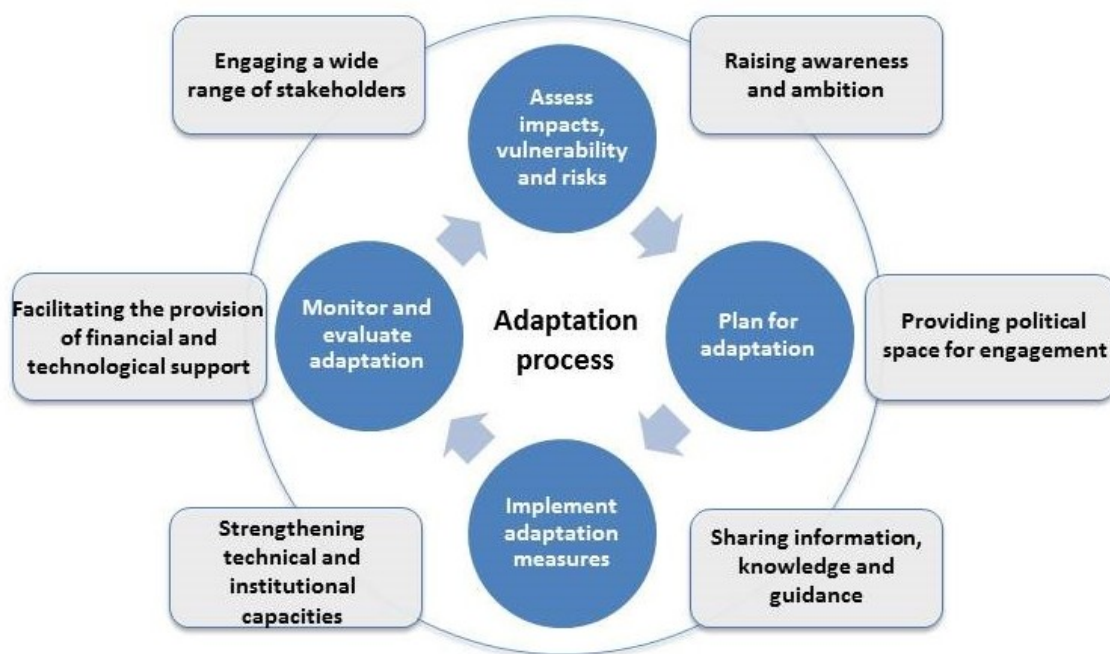
⁵ Paris Agreement, Dec. 12, 2015, T.I.A.S. No. 16-1104. https://unfccc.int/sites/default/files/resource/english_paris_agreement.pdf

develop adaptation solutions and implement actions to respond to current and future climate change impacts.

Adaptation actions can take on many forms, depending on the unique context of a community, business, organization, country or region. There is no ‘one-size-fits-all-solution’ adaptation that can range from building flood defences, setting up early warning systems for cyclones, switching to drought-resistant crops, to redesigning communication systems, business operations and government policies. Many nations and communities are already taking steps to build resilient societies and economies. However, greater action and ambition will be needed to cost-effectively manage the risks, both now and in the future.

Successful adaptation not only depends on governments but also on the active and sustained engagement of stakeholders, including local communities, national, regional, multilateral and international organizations, public and private sectors, civil society and other relevant actors, as well as an effective management of knowledge. Parties to the UNFCCC and its Paris Agreement recognize that adaptation is a global challenge faced by all with local, subnational, national, regional and international dimensions.

Adaptation is a critical component of the long-term global response to climate change to protect people, livelihoods and ecosystems. Parties acknowledge that adaptation action should follow a country-driven, gender-responsive, participatory and fully transparent approach, considering vulnerable groups, communities and ecosystems. Adaptation should be based on and guided by the best available science and, as appropriate, traditional knowledge, knowledge of indigenous peoples and local knowledge systems, with a view to integrating adaptation into socioeconomic and environmental policies and actions.



(The figure above shows the adaptation policy cycle and support offered under the United Nations Climate Change regime.)

The UNFCCC has set up constituted bodies and workstreams relevant to progressing adaptation responses and enhancing societal and environmental resilience. Under Article 7.1 of the Paris Agreement, a Global Goal on Adaptation sets out a collective commitment aimed at “enhancing [the world’s] adaptive capacity, strengthening resilience and reducing vulnerability to climate change.” Since 2011, under the UN Framework Convention on Climate Change, a number of countries have developed National Adaptation Plans. To date, only 60 countries have submitted such a plan: just over a third of developing countries, half of least developed countries, and a third of small island developing states. At CMA 5, Parties adopted the UAE Framework for Global Climate Resilience, marking a major milestone for adaptation under the Paris Agreement. The purpose of the framework is to guide the achievement of the global goal on adaptation and the review of overall progress in achieving it with a view to reducing the increasing adverse impacts, risks and vulnerabilities associated with climate change, as well as to enhance adaptation action and support.

The work on adaptation within the UNFCCC has been long-standing. The Least Developed Countries Expert Group (LEG) was established in 2001 and is currently mandated to provide technical guidance and accelerate support to the LDCs on the process to formulate and implement national adaptation plans (NAPs). Established in 2010, the Adaptation Committee (AC) is the global voice on adaptation, working to drive forward coherent UNFCCC action on adaptation worldwide by providing expert guidance, enhancing outreach, and supporting the implementation of the Paris Agreement. Since 2018, the Facilitative Working Group (FWG) furthers the operationalization of the Local Communities and Indigenous Peoples Platform (LCIPP), facilitating the implementation of three functions related to knowledge, capacity for engagement and climate change policies and action.

Parties are encouraged to utilize the technical guidance, support and resources provided by the UNFCCC-related bodies and workstreams in submitting their NAPs and Adaptation Communications (AdComs). The Adaptation Knowledge Portal, by the Nairobi Work Programme, the knowledge-to-action hub for climate resilience and adaptation, and the Lima Adaptation Knowledge Initiative (LAKI) helps countries and sub-regions around the world identify their adaptation knowledge gaps, catalyze actions to close these gaps, and share adaptation knowledge and foster learning.

4.5. Climate Finance

Climate finance refers to local, national or transnational financing—drawn from public, private and alternative sources of financing—that seeks to support mitigation and adaptation actions that will address climate change. The Convention, the Kyoto Protocol and the Paris Agreement call for financial assistance from Parties with more financial

resources to those that are less endowed and more vulnerable. This recognizes that the contribution of countries to climate change and their capacity to prevent it and cope with its consequences vary enormously. Climate finance is needed for mitigation, because large-scale investments are required to significantly reduce emissions. Climate finance is equally important for adaptation, as significant financial resources are needed to adapt to the adverse effects and reduce the impacts of a changing climate.

In accordance with the principle of “common but differentiated responsibility and respective capabilities” set out in the Convention, developed country Parties are to provide financial resources to assist developing country Parties in implementing the objectives of the UNFCCC. The Paris Agreement reaffirms the obligations of developed countries, while for the first time also encouraging voluntary contributions by other Parties. Developed country Parties should also continue to take the lead in mobilizing climate finance from a wide variety of sources, instruments and channels, noting the significant role of public funds, through a variety of actions, including supporting country-driven strategies, and taking into account the needs and priorities of developing country Parties. Such mobilization of climate finance should represent a progression beyond previous efforts.

It is important for all governments and stakeholders to understand and assess the financial needs of developing countries, as well as to understand how these financial resources can be mobilized. Provision of resources should also aim to achieve a balance between adaptation and mitigation.

Overall, efforts under the Paris Agreement are guided by its aim of making finance flows consistent with a pathway towards low greenhouse gas emissions and climate-resilient development. Assessing progress in provision and mobilization of support is also part of the global stocktake under the Agreement. The Paris Agreement also places emphasis on the transparency and enhanced predictability of financial support.

To facilitate the provision of climate finance, the Convention established a financial mechanism to provide financial resources to developing country Parties. The financial mechanism also serves the Kyoto Protocol and the Paris Agreement.

The Convention states that the operation of the financial mechanism can be entrusted to one or more existing international entities. The Global Environment Facility (GEF) has served as an operating entity of the financial mechanism since the Convention’s entry into force in 1994. At COP 16, in 2010, Parties established the Green Climate Fund (GCF) and in 2011 also designated it as an operating entity of the financial mechanism. The financial mechanism is accountable to the COP, which decides on its policies, programme priorities and eligibility criteria for funding.

In addition to providing guidance to the GEF and the GCF, Parties have established two special funds—the Special Climate Change Fund (SCCF) and the Least Developed

Countries Fund (LDCF), both managed by the GEF—and the Adaptation Fund (AF) established under the Kyoto Protocol in 2001.

At the Paris Climate Change Conference in 2015, the Parties agreed that the operating entities of the financial mechanism – GCD and GEF – as well as the SCCF and the LDCF shall serve the Paris Agreement. Regarding the Adaptation Fund serving the Paris Agreement negotiations are underway in the Ad hoc Working Group on the Paris Agreement (APA).

Standing Committee on Finance

At COP 16 in 2010, Parties decided to establish the Standing Committee on Finance (SCF) to assist the COP in exercising its functions in relation to the financial mechanism of the Convention.

Currently, the SCF has four specific functions: assisting the COP in improving coherence and coordination in the delivery of climate change financing; assisting the COP in rationalization of the financial mechanism of the UNFCCC; supporting the COP in the mobilization of financial resources for climate financing; and supporting the COP in the measurement, reporting and verification of support provided to developing country Parties. The Committee is also tasked to organize an annual forum on climate finance, provide the COP with draft guidance for the operating entities, provide expert input into the conduct of the periodic reviews of the financial mechanism and prepare a biennial assessment and overview of climate finance flows. Furthermore, the SCF is designed to improve the linkages and to promote coordination with climate finance related actors and initiatives both within and outside of the Convention. At the Paris Conference in 2015, Parties decided that the SCF shall also serve the Paris Agreement.

Long-term Climate Finance

The long-term finance process is aimed at progressing on the mobilization and scaling up of climate finance of resources originating from a wide variety of sources, public and private, bilateral and multilateral, including alternative sources. The COP decided on the following activities through to 2020: organization, by the secretariat, of annual in-session workshops; developed countries providing, on a biennial basis, information on strategies and approaches for scaling up climate finance; and convening of biennial high-level ministerial dialogue on climate finance.

Through the Cancun Agreements in 2010 developed country Parties committed, in the context of meaningful mitigation actions and transparency on implementation, to a goal of mobilizing jointly USD 100 billion per year by 2020 to address the needs of developing countries. When adopting the Paris Agreement Parties confirmed this goal, called for a concrete road map to achieve the goal by 2020, and agreed that prior to 2025 the

Conference of the Parties serving as the meeting of the Parties to the Paris Agreement (CMA) shall set a new collective quantified goal from a floor of USD 100 billion per year.

The Finance Portal

The UNFCCC website includes a climate finance data portal with helpful explanations, graphics and figures for better understanding the climate finance process and as a gateway to information on activities funded in developing countries to implement climate action.

The finance portal comprises three modules, each of which includes information made available by Parties and the operating entities of the financial mechanism.

The first module, the National Communications Module, presents information communicated by contributing countries on the provision of financial resources, in the context of regular reporting to the Convention. The second module, the Fast-start Finance Module, includes information on resources provided by developed countries in the context of their commitment to provide approximately USD 30 billion over the period 2010–2012. The third module, on Funds Managed by the GEF, is a joint effort between the secretariat of the UNFCCC and the GEF and contains information on climate finance flows of the GEF in its role as one of the operating entities of the financial mechanism to the Convention. Additionally, information on projects and programmes of the Adaptation Fund can be found in the finance portal. This fund was established under the Kyoto Protocol to finance concrete adaptation projects and programmes in developing countries that are Parties to the Kyoto Protocol.

5. Questions to Ponder

- How can states strengthen their NDCs to achieve the Paris Agreement's 1.5°C goal?
- How can developed countries support developing countries through climate finance and technology transfer?
- How should historical responsibility for emissions influence present climate obligations?
- How can fossil-fuel dependence be reduced without undermining energy security and economic development?
- How can forests, oceans, wetlands, and other natural carbon sinks be protected and expanded?
- What role should carbon-removal technologies play alongside conventional emissions reductions?
- How can developing countries strengthen their adaptation and climate-resilience capacities?

- How should climate finance be divided between mitigation, adaptation, and loss and damage?
- How can the UNFCCC improve monitoring and accountability for national climate commitments?
- What mechanisms can ensure that climate action is equitable and consistent with CBDR-RC?
- How can the international community move from simply limiting climate change toward achieving net-negative emissions and eventually reducing atmospheric CO₂ concentrations?

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