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# Policy Brief 1

## An Introduction to Climate Change and the International Community's Response (1990-1994)

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# Executive Summary

In this brief, we introduce the phenomena of Climate Change (CC) and delve into the global response's international legal regime. We discuss the development of the United Nations Framework Convention on Climate Change (UNFCCC) and review its main provisions, briefly discuss the factors driving the evolution of the Global Climate Response, including the scientific consensus, developments in advanced economies and the role of global politics.

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# What is Climate Change?

According to the UNFCCC, Climate Change (CC) is a change of climate attributed directly or indirectly to human activity that alters the composition of the global atmosphere and which is in addition to natural climate variability observed over comparable time periods.'

It is characterised by the drastic change in normal temperatures experienced in different regions and the resultant damage to various ecosystems. For instance, CC is linked to extreme temperatures, heat waves, cold spells and reduced land productivity and flooding. CC also makes the El Nino and La Nina more intense, longer lasting and more unpredictable.

## The Science

Since the end of the industrial revolution- in the 1970s, weather patterns have become markedly different, these changes started slowly, but as the years go by, the impact is more pronounced. The change is evident from reduced agricultural yields to extreme weather events, including heatwaves and cold spells, droughts, and floods. Over time, scientific evidence attributed these changes to the increased atmospheric concentration of Green-House Gases (GHG) directly attributed to human activities and linked to the industrial revolution and reliance on fossil fuels.

To prove the existence of climate change, science has overcome three main hurdles. The first hurdle for science was proving that a change is occurring, and this was a straightforward exercise given the impacts on the food systems and weather events as referenced earlier. The second hurdle was to link these changes across the globe and attribute them to a single source. This was done most notably by the Intergovernmental Panel on Climate Change (IPCC), starting with their first assessment report (1990) and subsequent work studies and reports. The final hurdle is proving that the solution is to lower GHG concentration in the atmosphere.

Scientists across the globe work to prove that climate change is occurring, identify the changes in different ecosystems and identify solutions. The science of Climate Change has been vital in pushing forward the body of laws and regulations to respond to this phenomenon.

## The Response to Climate Change

Given the global impact of climate change, countries conducted the initial response at an international level. This is done through a series of international treaties and agreements, with the earliest dating back to the 1980s. Many countries now, including the United Kingdom, have national CC laws and regulations which guide the domestic response in line with international efforts.

## Ozone Treaties

The first international Convention addressing Climate Change was the 1985 Vienna Convention for the Protection of the Ozone Layer (1985). The Vienna Convention and Montreal Protocol on Substances that Deplete the Ozone Layer (1987) make up the Ozone Treaties, which are implemented through a secretariat housed in the UN Environment.

This treaty system seeks to reduce and eliminate gases that destroy the Ozone layer through a series of scientific and governance interventions in the state parties. The Ozone treaty system is currently heavily focused on phasing out Hydrofluorocarbons (HFCs) from supply chains.

## UNFCCC

However, the most notable Convention is the 1992 United Nations Framework Convention on Climate Change (UNFCCC). The UNFCCC is dedicated to mitigating climate change and identifying and implementing adaptation solutions. Unlike the Ozone Treaties, the UNFCCC is comprehensive as it focuses on all aspects of climate change response, including adaption, mitigation, finance, technology transfer and transparency and tracking progress. The UNFCCC and its protocols recognise the Ozone treaties and are careful not to duplicate interventions.

The UNFCCC, through the Kyoto Protocol (1994), required developed countries (Annex I Parties) to submit Nationally Determined Contributions (NDCs) and mitigation plans while developing countries were to be assisted in adaptation programs and to develop while limiting GHGs. The Paris Agreement, 2015 ushered in a new regime where all countries are required to analyse their national systems and submit their NDCs. Developed countries still have a higher burden to reduce emissions and support developing countries through finances, technology transfer and capacity building to develop sustainably. This new approach makes all parties accountable for protecting the planet. It recognises that previous Non-Annex 1 parties, including China and South Africa, are now more developed and emit more GHGs hence the requirements for all countries to implement mitigation measures.

# The United Nations Framework Convention on Climate Change (UNFCCC)

This section will explore the negotiations that led up to the UNFCCC and review key aspects of the Convention.

## 1990-1992: Negotiating the UNFCCC

### IPCC 1st Assessment Report

The UNFCCC's formation can be traced back to 1990 when the IPCC released its first assessment report. This report established a link between human activities and the increase in GHG concentrations in the atmosphere, which have resulted in extreme weather events and irreversible change to critical ecosystems.

The IPCC's report noted the need for further research on climate change. The report established the immediate adverse impact of CC on the following sectors:

• Agriculture and Forestry; Natural Terrestrial Ecosystem;

• Hydrology and Water Resources;

• Human settlements: the energy, transport, and industrial sectors; human health; air quality and changes in ultraviolet-B radiation;

• Oceans and Coastal Zones;

• Seasonal snow cover, ice and permafrost.

The IPCC's report was relied on during the Second World Climate Conference's deliberations in December 1990. Additionally, this report informed the work of The Intergovernmental Negotiating Committee (INC) for a Framework Convention on Climate Change.

### 1992: Adopting the Framework Convention

During the 1992 United Nations Conference on Environment & Development (UNCED) in Rio De Janeiro, Brazil, the text submitted by INC was negotiated, and the UNFCCC was adopted.

During this conference, Countries also adopted the following agreements:

• The Rio Declaration and its 27 universal principles,

• The Convention on Biological Diversity;

• Declaration on the principles of forest management

The 1992 Conference and its agreements shaped the systematic approach to tackling climate change and ensuring a healthy planet.

## Contents of the UNFCCC

The UNFCCC acknowledges the challenges posed by climate change, the differentiated responsibilities depending on different country's development stages and contexts and recognises the work done through the Ozone Treaties. The Framework Convention allows for nations to consistently make new decisions in line with prevailing world conditions hence the setting up of subsidiary bodies and the requirement for frequent Conferences of the Parties.

The UNFCCC was open for signing after the 1992 UNCED and entered into force in March 1994.

## Key Provisions in the UNFCCC

### Principles

- Common But Differentiated Responsibility Principle that acknowledges the disparity between developed and developing countries;
- Precautionary principle related to employing all precautions when there is scientific uncertainty over an activity; and
- The promotion of open international economic systems that promote Sustainable Development.

### Commitments

- Parties are required to publish periodic commitments on mitigation efforts, including on reduction of GHGs, with Annex 1 countries required to file these commitments regularly.
- All countries are required to devise adaptation plans and communicate the same to all parties.
- The Convention requires countries to come up with national policies in response to climate change.

### Research and Scientific Observations

- Countries are to develop and support international and intergovernmental institutions that will consistently research and carry out scientific studies while avoiding the duplication of efforts.

### Education, training & public awareness

- This is vital, in addition to technology transfer, in ensuring that all sectors of society operate cognisant of the impact of climate change and take up their responsibility in furthering adaptation and mitigation efforts.
- Support for these programs is vital for developing and least developed countries (non-Annex 1 parties).

### Conference of the Parties (COP)

- These are to be held annually and allow parties to review progress made, make amendments and enter into new agreements.
- The Kyoto Protocol, 1997 and The Paris Agreement, 2015 were both negotiated and adopted during COP Meetings.

### Subsidiary Body for Scientific and Technological Advice

- This is established to provide the COP and its other subsidiary bodies with timely information and advice on scientific and technological matters relating to the Convention.

### Subsidiary Body for Implementation

- This body assists the COP in assessing and reviewing the effective implementation of the Convention.

### Financial Mechanism

- A mechanism of the provision of financial resources for adaptation, mitigation and technology transfer.
- The Adaptation Fund [2010] and Green Climate Fund [2011] are examples of funds set up as part of the UNFCCC financial mechanism.

### Communication & Transparency

- Countries are required to keep and update a national inventory of anthropogenic emissions, mitigation measures and relevant projects and financing.
- Information sharing between governments and the public is vital in ensuring a global response and encouraging research and development.

# Evolution of the International Climate Change Regime (Part 1)

Since 1992 the UNFCCC has evolved in three main phases marked by the Kyoto Protocol 1994, the Paris Agreement 2015 and Post Paris era. The International Climate Change regime's transformation has been informed by science, the interplay between developed and developing countries and international politics in technology. In this section, we briefly discuss these drivers of change in preparation for the next brief that will explore the three phases in more detail.

## The Scientific Consensus

As noted earlier, the science and research on climate change has evolved, and this is evidenced, for instance, by the IPCC's Assessment reports and the work of other reputable institutions, including the UNFCCC's Subsidiary Body for Scientific and Technological Advice. In the October 2018 Special Report on Global Warming of 1.5°, the IPCC reiterated the need to keep global warming under 1.5 degrees Celsius to avert disaster. The science is uncontested, and all States must take decisive action.

## Developed Economies and Developing Economies

The global response's pressing concern is related to the interplay between developed and developing countries and the economic cost of change. The UNFCCC is guided by the Common but Differentiated Responsibilities principle, which recognises the difference in contributions between nations based on their development level. However, to control Climate Change, all countries must limit emissions to respond to CC; otherwise, humanity will suffer. While the fact stands that there is a ridge between developing and developed economies and the difference in responsibility, extreme weather events are non-discriminatory and developing countries often suffer more as their economies cannot internalise the economic cost of extreme events.

It remains uncontested that developed countries must significantly reduce emissions and remove GHGs from the atmosphere. Initiatives including the Carbon Capture Utilisation and Storage (CCUS) hubs listed below are testament to some measures taken by developed countries:

- Ervia Cork, Ireland
- Net Zero Teesside, United Kingdom
- Zero Carbon Humber, United Kingdom
- Longship CCS project, Norway
- Porthos, the Netherlands.

However, the main issue is that some developing economies are bigger polluters, and others are unable to access finance for renewable energy and clean energy technologies, thus relying on dirty fuels. Countries, most notably China, whose economies have exponentially grown and have fulfilled the spike in energy demand through coal plants and other fossil heavy sources, are bigger polluters than many Annex 1 countries. On the other hand, least developed countries have plans to incorporate fossil fuels to meet their growing energy demands. These fuels are cheaper compared to renewable alternatives- the challenge here is accessing finance for clean energy. This sets the stage for more pollution and makes it harder for the world to avert disaster. The UNFCCC has sought to respond to these challenges by providing finance for developing countries, encouraging technological research and building political consensus. For instance, all countries must now submit NDCs and are required to conduct climate change assessments to put things into national perspective and hopefully change national attitudes.

## International Politics – The 2020 US Elections

The biggest political challenge faced by the UNFCCC and the global response to climate change was the 2016-2020 Donald Trump Presidency and the decision to withdraw the USA from the Paris Agreement.

While individual states still took measures in response to CC, the administration encouraged the proliferation of fossil fuels. There was political backing for fracking and additional drilling of oil resources. In August 2020, the government approved oil and gas drilling plans in Alaska's Arctic Wildlife Refuge and diverted public funds to support and bail out the US oil industry affected by the Covid-19 Pandemic.

The Joe Biden 2020 election victory was a drastic change in the USA on multiple fronts, including in relation to climate change. Within a few days in office, President Biden signed the Paris agreement and is actively working towards a cleaner economy. In February 2021, the President unveiled an infrastructure plan to boost offshore wind developments and a plan on working towards a carbon-free economy by 2035. Additionally, the USA brought together 40 countries, including China and Russia, for climate talks in April 2021. Such political stances will encourage more cooperation and, even if done outside the UNFCCC system, ultimately contribute to responding to climate change in large economies.

*In the next Policy Brief, we will delve into these three phases of evolution, how the Conference of Parties System works and an introduction to COP26.*

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