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Policy Brief 2
Global Evolution of the Climate
Change Regime: The Kyoto
Protocol (1994-2010)

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Executive Summary

This second brief explores the developments in the international regime since 1992, starting from the Kyoto Protocol, which was the first instrument that enabled Parties to the UNFCCC to take climate action through legally binding emission reduction targets. We shall also review the advancements made during the First Commitment period (2008-2012) and how this contributed to the Paris Agreement and the general evolution of the Climate Change Regime.

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The Kyoto Protocol (1995-2006)

In this section, we shall introduce the Kyoto Protocol, review it and discuss its implementation mechanisms. The Kyoto Protocol entered into force in 2005 and currently has 192 State Parties. The Protocol's mechanisms and institutions were set up between 1995 and 2006, as shall be elaborated. This paved the way for the first commitment period (2008-2012).

Kyoto Protocol, 1997 (Commenced February 2005)



During the UNFCCC's 1st Conference of Parties (COP 1) in Berlin, Germany, parties began negotiations for a protocol that would bring the UNFCCC to life. The critical task was to develop mitigation systems that included emission reduction requirements, reporting and market-based tools to encourage Annex 1 parties (developed countries) to commit to limiting emissions, thereby reduce global warming. The result of these negotiations was the Kyoto Protocol adopted at the 3rd COP in Kyoto, Japan.

The Kyoto Protocol established a new commodity (Carbon Dioxide or its equivalents as calculated under the Protocol) that can be traded for the common good by setting up the Market-Based Mechanisms (MBMs). These MBMs commonly referred to as Carbon Markets, are essential in responding to climate change. Countries are using them more to ensure an easier economic transition to a cleaner economy. The European Union Emissions Trading System (EU ETS), a cap-and-trade system, is the largest of these trading systems (commenced in 2005); other countries are now developing these market-based incentives in their effort to create carbon-neutral economies.

Below is an in-depth overview of the key provisions, mechanisms and institutions established under the Kyoto Protocol.

Key Provisions of the Kyoto Protocol

Emissions Targets

- Parties in Annex B (developed countries) committed to limit emissions by at least 5% below 1990 levels in the commitment period 2002- 2012 (Article 3).
- Parties were required to have achieved demonstrable progress by 2005.
- Further, developed countries were required to implement national policies that ensure energy efficiency; enhancement of GHG sinks; sustainable agriculture; technology development; phasing out market imperfections that enable pollution and reduce emissions. (Article 2)

Market-Based Mechanisms

- [Commenced January 2006] Clean Development Mechanism (CDM) was designed for non-Annex B parties (developing countries) to use Certified Emission Reduction (CER) projects and investments to raise funds from developed countries. Annex B parties to the Protocol who implement or finance emission reduction projects in developing countries earn tradeable CER Credits, which can be counted towards fulfilling their commitments under the Kyoto Protocol. (Article 13)
- [January 2008] Joint Implementation (JI): Annex B parties may trade emission reduction units (ERUs) resulting from projects in other Annex B territories that reduce GHGs or enhance GHG removal sinks. The JI allows for the creation of carbon markets while stimulating foreign direct investment and economic development. (Article 6)
- International Emissions Trading: The Protocol allows for emissions trading amongst Annex B parties to fulfil their commitments. The trading is supplemental to domestic action and enables countries to meet their commitments. (Article 16)

Emissions Accounting Units

- Assigned Amount Units (AAUs)- based on commitments on emissions limitations and reductions;
- Certified Emission Reductions (CERs)- these are accrued through the Clean Development Mechanism;
- Emission Reduction Units (ERUs)- result from mitigation projects and be traded under the Joint Implementation mechanism;
- Removal Units (RMUs)- generated based on land use, land-use change and forestry (LULUCF) activities.

Monitoring

- Methodology: (A 5) Annex 1 parties were directed to set up national systems to estimate anthropogenic emissions and removals by GHG sinks. Global Warming Potentials are to be used to calculate the Carbon Dioxide equivalence of anthropogenic emissions. The calculation methodologies were agreed upon at the first COP of the Kyoto Protocol in Marrakech in 2001.
- Reporting: (A7) Annex 1 parties are required to submit annual inventories to anthropogenic emissions and removals by GHG sinks as part of their national communication under the UNFCCC.
- Review: (A8) Reports from the parties shall be subjected to a comprehensive technical assessment by expert review teams. The review results shall inform the deliberations during subsequent Kyoto Protocol COPs.

Adaptation Fund (AF)

- The AF is a financing mechanism under the Kyoto Protocol established to advance adaptation projects in developing countries.
- During the first commitment period (2008-2012), funds for the AF came from 2% of the value of CERs issued each year for CDM projects.
- In 2012 at the Doha Climate Conference, parties amended the Protocol for the second commitment period (2013-2020). It was decided that 2% of the proceeds from the international emissions trading and joint implementation mechanisms.
- The Fund is managed by the Adaptation Fund Board (AFB) and held in trust by the World Bank. As of 2 April 2021, the fund balance was 566 Million US Dollars.

Developing Countries

- Developing countries (non-Annex A or B) are required to implement cost-effective programmes to improve the quality of local emissions factors. Adaptation measures should be implemented within these jurisdictions, and countries must cooperate on scientific and technical research. The Protocol acknowledges the Common But Differentiated Responsibilities that apply to different parties. Hence, the requirements on developing countries aim to enable them to access international support and strengthen their national systems.

Structuring Implementation (2001- 2006)

The Kyoto Protocol relied on existing expertise and work done since 1992 when the UNFCCC was adopted. The Protocol's implementation relies on scientific evidence provided by the Intergovernmental Panel on Climate Change (IPCC), and the Subsidiary Body for Scientific and Technological Advice set up by the UNFCCC. Between 1997 and 2006, Parties to the Protocol were involved in intense deliberations that paved the way for the first commitment period. During the UNFCCC COPs in these meetings, key agreements were arrived at; however, for the purposes of this Brief, we shall highlight two key COPs resultant agreements that significantly contributed to the Kyoto regime.

The Kyoto Rule Book: Marrakesh Accords and Declaration of 2001

In November 2001, at the 7th COP to the UNFCCC in Marrakesh, Morocco, parties negotiated and adopted the Marrakesh Accords. These are seen as the Kyoto Rule book as guidelines and rules for various aspects of the Protocol were adopted.

The Marrakech Accords contain the following rules enabling the operation of the following:

- Market-Based Mechanism: Clean Development Mechanism, Joint Implementation & Emissions Trading;
- Compliance regime;
- accounting procedures;
- The Adaptation Fund (AF): the AF was established in 2001 based on these rules.

The Nairobi Partnership Framework, 2006

In November 2006, during the COP 12 in Nairobi, Kenya, parties negotiated and agreed on the following issues relating to the Kyoto Protocol:

- Further guidance relating to the Clean Development Mechanism (CDM);
- Implementation of Emission Reduction Units (Article 6 of the Kyoto Protocol);
- Compliance Committee guidance;
- Adaptation Fund guidance.

The Nairobi Framework Partnership (NFP) was constituted after COP12 to increase CDM participation in sub-Saharan Africa. The NFP currently works with countries to reduce emissions in line with the National Determined Contributions (NDCs) under the 2015 Paris Agreement.

The Kyoto Protocol's 1st Commitment Period and The Road to Paris (2007- 2012)

Following the Kyoto Protocol's commencement in 2005, Parties began their first commitment period (Kyoto 1) in 2008. During this period (2008-2012), Parties worked to reduce emissions, enhance the capacity of carbon sinks through Land Use, Land-Use Change and Forestry (LULUCF) programs and participated in the Carbon Markets. While the Protocol had high aspirations, Kyoto 1 participating countries only covered 18% of global emissions.

Nonetheless, the Protocol required parties to reduce emissions by at least 5% of 1990 levels and achieved this target. The European Union (EU) developed a robust regional framework where the 15 member states were legally required to reduce emissions by at least 8% of 1990 targets. The EU surpassed this goal by achieving an 11% reduction in emissions without counting reductions from carbon sinks and international emissions credits.

The Kyoto 1, in itself (only looking at the 37 Countries with commitments) can be hailed as a success, especially given that parties reduced emissions by at least 12% of 1990 levels. However, looking at the bigger picture, the Kyoto system was a good pilot for mitigation approaches. The fact that major emitters, including the USA, India, Brazil, and China, were not required to reduce emissions questions the Protocol's efficiency. Thus Kyoto 1 parties made emission reductions and achieved progress. Still, globally emissions rose, thus compounding the Climate Change problem further, as clearly evidenced by the IPCC's 2018 Special Report that warned of imminent danger. To resolve the problem of Climate Change, all countries must work together to limit emissions and enhance carbon sinks while encouraging development but cognisant of the global risk posed by Climate Change.

These realities influenced the decisions in the various COPs ultimately arriving at the Paris Agreement, which required that countries making up at least 55% of emissions must ratify the Agreement for it to commence. Other developments, including the Sustainable Development Agenda adopted by the UN General Assembly in 2015, demonstrate the interconnectedness of individual countries' actions and how this can impact their development and global development.

Below is an overview of key decisions made at three Major decisions at COPs between 2008 and 2010 that ultimately paved the way for the Second Implementation period (Kyoto 2) and the 2015 Paris Agreement.

The Bali Road Map and Action Plan of 2007



In December 2007, during the 13th Conference of parties in Bali, Indonesia, a series of decisions relating to the Kyoto Protocol and setting the stage for the 2015 Paris Agreement were adopted. The Bali Action plan relating to the Kyoto Protocol and the Bali Road Map, which ultimately led to the 2015 Paris Agreement, was adopted.

The Bali Action Plan was '*a comprehensive process to enable the full, effective and sustained implementation of the Convention through long-term cooperative action, now, up to and beyond 2012*'. The Action Plan was aimed at a climate deal at

COP 15 in Copenhagen by addressing:

- i. A shared vision for long-term cooperative action, including a long-term global goal for emission reductions;
- ii. Mitigation of climate change;
- iii. Adaptation;
- iv. Technology development and transfer to support action on mitigation and adaptation;
- v. Provision of financial resources and investment to support action on mitigation and adaptation and technology cooperation.

Other decisions as part of the Bali Road Map included decisions on:

- i. Deforestation and forest management;
- ii. Technology for developing countries;
- iii. Establishment of the Adaptation Fund Board
- iv. Review of the financial mechanism, going beyond the existing Global Environmental Facility.

During COP14 in 2008 in Poland, parties adopted further rules and guidelines to advance the Bali Action Plan. Additionally, parties adopted decisions relating to climate finance mechanisms for the Adaptation Fund, the Global Environment Facility, and Least Developed Countries Fund.

The Copenhagen Accord, December 2009

Parties to the UNFCCC had hoped to reach a ground-breaking global climate deal in Copenhagen, Denmark, in 2009. The Copenhagen Accord was a vital step in the negotiations for a global climate deal as parties agreed on an emission reduction goal but failed to reach a consensus on practical measures.

The Copenhagen Accord adopted at COP 15 advanced the negotiations on the infrastructure needed for effective global climate change cooperation as parties decisively agreed to limit maximum global average temperature increase to no more than 2 degrees Celsius. Notably, during this meeting, developed countries made significant commitments on climate change finance and cooperation with developing countries as follows:

- Developed countries promised to provide US\$30 billion for the period 2010-2012 and to mobilise long-term finance of a further US\$100 billion a year by 2020 from a variety of sources;
- Agreement on the measurement, reporting and verification of developing country actions;
- The establishment of four new bodies: a mechanism on REDD-plus, a High-Level Panel under the COP to study the implementation of financial provisions, the Copenhagen Green Climate Fund, and a Technology Mechanism.

The Ambition Gap and the Cancun Adaptation Framework, December 2010

During the 16th COP in Cancun, Mexico, Parties took comprehensive decisions relating to adaptation focusing on developing countries, hence the Cancun Adaptation Framework's commencement. There was, however, a glaring gap as countries who in 2009 through the Copenhagen Accord had agreed on the 2 degree Celsius target failed to make adequate commitments. All pledges put forward in Cancun amounted to 60% of the required target to achieve a 50% chance of success under the Copenhagen Accord.

The Conference left the future of the Kyoto Protocol and Climate Action uncertain and left open the question of applicability of the international carbon market.

During the Conference the following decisions were taken:

- Establishment of a Green Climate Fund;
- Technology Mechanism set up to facilitate enhanced action on technology development and transfer to support action on mitigation and adaptation;
- Adoption of the Cancun Adaptation Framework;
- Fast-start finance resources mobilised from developing countries raised to the tune of USD 30 billion for the period 2010 – 2012;
- Information on the forest management reference level (FMRL) requested from Annex 1 parties.

Conclusion

As noted earlier, the Kyoto Protocol so far has had two commitment phases, first 2008- 2012, which focused heavily on mitigation efforts, emissions trading and financing for adaptation and response.

During the first commitment phase, various issues arose, chiefly the fact that major emitters were not Parties to the Protocol, thus while the commitments were achieved, global emissions rose steadily. In 2009 through the Copenhagen Accord, parties agreed to make commitments that would limit global warming to 2 degrees Celsius. However, an Ambition Gap emerged in 2010 in Cancun, and this left many concerns over the efficiency of the second commitment period (Kyoto 2). In the next brief, we shall delve into the second commitment period and explore the changes effected by the 2015 Paris Agreement. Below is an introductory discussion on the advancements in Climate Change governance from 2013 to 2021.

The Paris Agreement

During Kyoto 2 (2013- 2020), Parties to the UNFCCC and Kyoto Protocol made massive adjustments to the climate change regime in light of emerging technology. Additionally, the change in some non-Annex 1 parties' economic contexts as they emitted more GHGs as they industrialised was taken into account. The Paris Agreement, 2015 reflects the novel global approach to climate change. The regime changed focus from only Annex 1 parties reducing emissions to all countries now required to commit to emission reduction, show progress on adaptation programs and work towards additional climate change funding. The Agreement entered into force in 2016, and parties were required to submit their NDCs by 2020 in preparation for the Paris Agreement's first commitment period commencing in 2020.

COP 26 Glasgow, United Kingdom

The 'Third' commitment period for the Kyoto Protocol- and the first commitment period under the Paris Agreement, will, in essence, run from 2021-2026. The Paris Agreement requires parties to make more progressive commitments every five years. This new progressive and self-determined approach can be directly attributed to the 2010 Ambition Gap and increased evidence from scientists communicated through the IPCC's 2018 Special Report that reiterates the need to keep global warming below 1.5 degrees Celsius. In the next brief, we shall explore the Paris Agreement and the resulting decisions that will inform the proceedings at COP-26. We shall then discuss what to expect from COP26 by analysing the current global political and economic context and considering the impact of the Covid-19 Pandemic, and ultimately identifying intervention points for academia, research institutions, and non-governmental organisations.

References

- UNFCCC, 'What is the Kyoto Protocol,' https://unfccc.int/kyoto_protocol
- UNFCCC Conference of the Parties, Third session, Kyoto, 1-10 December 1997, 'Kyoto Protocol to the United Nations Framework Convention on Climate Change' <https://unfccc.int/sites/default/files/resource/docs/cop3/107a01.pdf>
- European Union Emissions Trading System Handbook, 2015 https://ec.europa.eu/clima/sites/default/files/docs/ets_handbook_en.pdf
- UNFCCC, 'The Clean Development Mechanism' <https://unfccc.int/process-and-meetings/the-kyoto-protocol/mechanisms-under-the-kyoto-protocol/the-clean-development-mechanism>
- UNFCCC, 'Joint implementation' <https://unfccc.int/process/the-kyoto-protocol/mechanisms/joint-implementation>
- UNFCCC, 'Emissions Trading' <https://unfccc.int/process/the-kyoto-protocol/mechanisms/emissions-trading>
- UNFCCC, 'Guidelines under Articles 5, 7 and 8: Methodological Issues, Reporting and Review under the Kyoto Protocol' <https://unfccc.int/process/transparency-and-reporting/reporting-and-review-under-the-kyoto-protocol/overview/guidelines-under-articles-5-7-and-8-methodological-issues-reporting-and-review-under-the-kyoto-1>
- UNFCCC, 'Emissions Trading' <https://unfccc.int/process/the-kyoto-protocol/mechanisms/emissions-trading>
- World Bank, 'Financial Intermediary Funds (FIFs): Adaptation Fund (AF)' <https://fiftrustee.worldbank.org/en/about/unit/dfi/fiftrustee/fund-detail/adapt#2>
- Adaptation Fund, 'Governance' <https://www.adaptation-fund.org/about/governance/>
- The Marrakesh Accords & The Marrakesh Declaration, 2001 https://unfccc.int/cop7/documents/accords_draft.pdf
- UNFCCC, Adaptation Fund <https://unfccc.int/Adaptation-Fund>
- Report of the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol on its second session, held at Nairobi: Part Two: *Action taken by the Conference of the Parties serving as the meeting of the Parties to the Kyoto Protocol at its second session* March 2007, accessed at <https://unfccc.int/resource/docs/2006/cmp2/eng/10a01.pdf#page=3>
- Nairobi Framework Partnership, 'What is the Nairobi Framework Partnership?' <https://nfppartnership.org/about/>
- UNFCCC, 'Report of the Conference of the Parties on its thirteenth session, held in Bali from 3 to 15 December 2007: Part Two: *Action taken by the Conference of the Parties at its thirteenth session*' <https://unfccc.int/resource/docs/2007/cop13/eng/06a01.pdf>
- UNFCCC, 'Bali Climate Change Conference - December 2007' <https://unfccc.int/process-and-meetings/conferences/past-conferences/bali-climate-change-conference-december-2007/bali-climate-change-conference-december-2007-0>
- UNFCCC, 'Poznan Climate Change Conference - December 2008' <https://unfccc.int/process-and-meetings/conferences/past-conferences/poznan-climate-change-conference-december-2008/poznan-climate-change-conference-december-2008-0>
- Report of the Conference of the Parties on its fourteenth session, held in Poznan from 1 to 12 December 2008, 19 March 2009 <https://unfccc.int/resource/docs/2008/cop14/eng/07.pdf>
- Copenhagen Climate Change Conference - December 2009 <https://unfccc.int/process-and-meetings/conferences/past-conferences/copenhagen-climate-change-conference-december-2009/copenhagen-climate-change-conference-december-2009>
- Report of the Conference of the Parties on its fifteenth session, held in Copenhagen from 7 to 19 December 2009: *Addendum Part Two: Action taken by the Conference of the Parties at its fifteenth session*, 30 March 2010 accessed at <https://unfccc.int/sites/default/files/resource/docs/2009/cop15/eng/11a01.pdf>

- UN General Assembly 'Transforming Our World: The 2030 Agenda For Sustainable Development', A/RES/70/1
<https://sustainabledevelopment.un.org/content/documents/21252030%20Agenda%20for%20Sustainable%20Development%20web.pdf>
- UNFCCC, 'Cancun Agreements' <https://unfccc.int/process/conferences/pastconferences/cancun-climate-change-conference-november-2010/statements-and-resources/Agreements>
- UNFCCC, Cancun Climate Change Conference - November 2010, <https://unfccc.int/process-and-meetings/conferences/past-conferences/cancun-climate-change-conference-november-2010/cancun-climate-change-conference-november-2010-0>
- European Commission, 'Kyoto 1st commitment period (2008–12)' https://ec.europa.eu/clima/policies/strategies/progress/kyoto_1_en
- David Adam, The Guardian, 'Analysis: Has the Kyoto protocol worked?' 8 December 2008
<https://www.theguardian.com/environment/2008/dec/08/kyoto-poznan-environment-emissions-carbon>



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