Department of Political Science
Double Master's Degree in International Relations

Chair of International Organization and Human Rights

"Common but differentiated responsibilities" in combating climate change from 1992 to 2023: a comparative study between international governance and the role of the European Union.

Prof. Domenico Pauciulo
LUISS Supervisor

Prof. Romain Weikmans
ULB Supervisor

Prof. Michele Governatori
Co-Supervisor

Giorgia Staglianó
Candidate
LUISS candidate number: 652372
ULB candidate number: 000592313

Academic Year 2023/2024

Index

"Greenhouse gas emissions keep growing. Global temperatures keep rising. And our planet is fast approaching tipping points that will make climate chaos irreversible. We are on a highway to climate hell with our foot on the accelerator."

António Guterres, Secretary-General of the United Nations, COP27, November 7, 2022.

List of abbreviations

ALBA: Bolivarian Alliance for the Peoples of Our America

BRICS: Brazil, Russia, India, China, and South Africa

CAN: Climate Action Network

CBDR: Common But Differentiated Responsibilities

CBDR-RC: Common But Differentiated Responsibilities and Respective Capabilities

CERs: Certified Emission Reductions

CITES: Convention on International Trade in Endangered Species of Wild Fauna and Flora

CJEU: Court of Justice of the European Union

CO2eq: Carbon Dioxide Equivalent

COP: Conference of the Parties

EC: European Commission

ECO: Environmental Cooperation Organization

EIA: Environmental Impact Assessment

ELD: Environmental Liability Directive

ERUs: Emission Reduction Units

ESD: Effort Sharing Decision

ESR: Effort Sharing Regulation

ETS: Emissions Trading Scheme

EU: European Union

G77: Group of 77

GATT: General Agreement on Tariffs and Trade

GDP: Gross Domestic Product

GEF: Global Environment Facility

GHG: Greenhouse Gas

ICAO: International Civil Aviation Organization

ICESCR: International Covenant on Economic, Social and Cultural Rights

ICJ: International Court of Justice

ICRW: International Convention for the Regulation of Whaling

ILO: International Labour Organization

IMO: International Maritime Organization

IPCC: Intergovernmental Panel on Climate Change

MEAs: Multilateral Environmental Agreements

NDCs: Nationally Determined Contributions

NGOs: Non-Governmental Organizations

NIEO: New International Economic Order

PPP: Polluter Pays Principle

QMV: Qualified Majority Voting

RED II: Renewable Energy Directive II

RES: Resolution

SEA: Single European Act

TEC: Treaty establishing the European Community

TFEU: Treaty on the Functioning of the European Union

UDHR: Universal Declaration of Human Rights

UNCED: United Nations Conference on Environment and Development

UNCLOS: United Nations Convention on the Law of the Sea

UNEP: United Nations Environment Programme

UNFCCC: United Nations Framework Convention on Climate Change

UNHCR: United Nations High Commissioner for Refugees

WCED: World Commission on Environment and Development

WTO: World Trade Organization

Introduction

Climate change has emerged as one of the most pressing global challenges over the past several decades. It not only threatens ecosystems but also has profound implications for economies, social systems, and international relations. A critical aspect of the global response to this challenge has been the principle of Common But Differentiated Responsibilities (CBDR), a cornerstone of international environmental law. Formally introduced in the 1992 Rio Earth Summit, CBDR recognizes that while climate change is a common concern for all nations, the responsibilities for addressing it must be shared unevenly based on historical contributions to the problem and varying capacities to act. The tension between developed and developing nations over their respective roles in combating climate change has led to ongoing debates about how this principle should be applied in practice, reflecting different levels of accountability and capacity in mitigating environmental degradation. The relevance of this principle becomes even more significant when comparing its application in the broader context of international governance with its specific implementation within the European Union. While international environmental treaties like the Kyoto Protocol and the Paris Agreement have enshrined CBDR, the European Union (EU) has uniquely adapted this principle to fit within its regional governance framework. As a bloc composed solely of developed nations, the EU faces a distinct challenge: how to balance environmental responsibilities among its Member States, while recognizing the varied economic capacities and energy dependencies of its members. The EU has, thus, developed its own version of CBDR by integrating the principle into mechanisms such as the European Green Deal and the Effort Sharing Regulation. This thesis will explore these divergences and convergences, asking the research question: *What are the key differences in the approach of international governance and the European Union towards the principle of "Common but Differentiated Responsibilities" in combating climate change from 1992 to 2023?* The answer to this question will shed light on the evolving role of CBDR in shaping climate policies at both the international and regional levels, highlighting how global principles are reinterpreted within regional frameworks to accommodate specific political, economic, and legal contexts. To achieve the objective of this thesis, the study is divided into three chapters, each focusing on a key aspect of the Common But Differentiated Responsibilities principle and its application in both international climate governance and within the European Union.

The first chapter provides a historical analysis of the origins and development of the CBDR principle, tracing its emergence from the 1992 Rio Earth Summit and its subsequent incorporation into major

international climate treaties, particularly the United Nations Framework Convention on Climate Change (UNFCCC) and the Kyoto Protocol. This chapter explores the philosophical and legal underpinnings of CBDR, focusing on the principle's role in addressing historic inequalities in greenhouse gas (GHG) emissions between developed and developing nations. Examining the institutional decision-making context, implementation, and legal status of the CBDR principle, the chapter highlights the debates surrounding its application in global climate governance. It concludes by assessing how CBDR has evolved over the years in response to changing global priorities and growing emissions from emerging economies such as China and India.

The second chapter focuses on the content analysis of major environmental treaties, specifically on the evolution of the CBDR principle. It also examines how the Paris Agreement redefined the application of CBDR through the introduction of Nationally Determined Contributions (NDCs), which allow countries to set their own climate targets based on their national circumstances. This chapter critically reviews the challenges posed by emissions growth in emerging economies and assesses the policy instruments in environmental governance used to address these changes. The chapter concludes by discussing the future of CBDR in global climate governance, particularly in light of the role of international climate conferences, and the role that non-governmental organizations (NGOs) have in negotiations for pressure on nations to take more ambitious climate action.

The final third chapter focuses on the application of the CBDR principle within EU climate policies. The chapter begins by examining how the EU, as a regional entity, has incorporated the concept of differentiated responsibility into its legislative framework, including instruments such as the Effort Sharing Regulation, the European Emissions Trading System (ETS), and the European Green Deal. The chapter critically analyses the EU's internal mechanisms for distributing climate responsibilities among its Member States, considering economic disparities and energy dependencies that affect individual abilities to meet emission reduction targets. Finally, the chapter also explores how the EU, and in particular the European Commission, has positioned itself as a global leader in climate diplomacy, advocating the principle of CBDR on the international stage while managing domestic challenges related to solidarity and equity among its Member States. Particular emphasis is placed on the status of environmental rights at the international and European levels to assess the current level of human rights protection.

Timeline

1919: Treaty of Versailles

1946: International Convention for the Regulation of Whaling

1947: General Agreement on Tariffs and Trade

1959: Antarctic Treaty

1972: Stockholm Declaration on the Human Environment

1982: United Nations Convention on the Law of the Sea

1985: Vienna Convention for the Protection of the Ozone Layer

1987: Montreal Protocol on Substances that Deplete the Ozone Layer

1992: Rio Declaration on Environment and Development

1992: United Nations Framework Convention on Climate Change

1992: Convention on Biological Diversity

1994: United Nations Convention to Combat Desertification

1997: Kyoto Protocol to the United Nations Framework Convention on Climate Change; Signatories: 83; Parties: 192.

2003: Directive 2003/87/EC – Establishing the EU Emissions Trading Scheme (ETS)

2008: Directive 2008/98/EC – Waste Framework Directive

2009: Directive 2009/29/EC – Amending the ETS Directive

2009: Directive 2009/28/EC – Renewable Energy Directive

2015: Paris Agreement; Signatories:195; Parties: 195.

2012: Directive 2012/27/EU – Energy Efficiency Directive

2018: Directive (EU) 2018/410 – Enhancing the cost-effective emissions reduction and low-carbon investment

2018: Regulation (EU) 2018/842 – Effort Sharing Regulation (ESR) for national greenhouse gas emission reductions from 2021 to 2030

2018: Directive (EU) 2018/2001 – Revised Renewable Energy Directive (RED II)

2021: Glasgow Climate Pact

2021: Directive (EU) 2021/1119 – Establishing the European Climate Law, aiming for climate neutrality by 2050

Literature Review

The existing literature on the Common But Differentiated Responsibilities principle in climate change governance has revealed a significant gap. Previous academic studies predominantly focused on international treaties like the United Nations Framework Convention on Climate Change and the Kyoto Protocol. Some works extended their analysis to the latest treaty, the Paris Agreement. Furthermore, several publications concentrated only on specific aspects of the CBDR principle, such as its historical origins, its codification in international law, and its application in global climate governance frameworks. However, critical gaps remain regarding the regional transposition of CBDR, particularly in the European Union, and the principal's evolving role as global economic dynamics shift, especially with the rise of major developing economies. To address these gaps, this study aims to provide a comprehensive, detailed, and punctual analysis of the most significant and controversial aspects of the CBDR principle both at the international and regional levels. This approach seeks to offer new insights and a more complete understanding addressing both its global application and the unique context of the European Union's climate governance framework, with a brief evaluation of the impact this has on human rights protection. The study encompasses both a legal analysis and a critical review of the key aspects of the application of the CBDR principle. It delves into the content of the core international environmental treaties and the core environmental directives of Europe It examines its various relations to the common responsibilities, the processes of differentiation of them, the operationalization of the principle, and the analysis of implementation and verification instruments, as well as the effectiveness of the environmental human rights. Primary sources were particularly instrumental in this investigation. These included international agreements such as the UNFCCC, the Kyoto Protocol, and the Paris Agreement, which were fundamental in analysing the evolution of the CBDR principle. Additionally, key documents like the Rio Declaration on Environment and Development provided the foundational legal context. The analysis was enriched by key reports from the Intergovernmental Panel on Climate Change (IPCC) and resolutions from the United Nations General Assembly, which provided critical perspectives on global climate governance. The study also extensively used European Union legal instruments, including the European Green Deal, the European Climate Law, the Effort Sharing Regulation, and the European Emissions Trading System, which were significant in understanding the EU's internal application of CBDR. Additionally, EU treaties such as the Single European Act, the Treaty on the Functioning of

the European Union, the Maastricht Treaty, and the Lisbon Treaty offered further insights into the legal frameworks guiding EU climate governance.

Regarding the critical evaluation of the principle of CBDR in climate governance, the publications of several authors have been extremely valuable for this thesis. Early studies, including those by Lavanya Rajamani, in her work "The Principle of Common But Differentiated Responsibility and the Balance of Commitments under the Climate Regime", and Daniel Bodansky in "The United Nations Framework Convention on Climate Change", emphasize the principle's role in addressing the disproportionate contributions of developed nations to environmental degradation, alongside the limited capacities of developing nations to mitigate climate change. These scholars note that the CBDR principle was introduced to reconcile the competing demands for equity and collective action in international climate governance. Also noteworthy is the work by Adil Najam, Saleemul Huq, and Youba Sokona in "Climate Negotiations Beyond Kyoto: Developing Countries' Concerns and Interests". They explored the perspectives of developing countries in the international climate regime and their advocacy for CBDR.

Furthermore, this study was enriched by the publication of Eric Neumayer's work "In Defence of Historical Accountability for Greenhouse Gas Emissions", which provides a detailed examination of the legal and moral arguments for holding developed countries accountable based on their historical emissions. In addition to the significant works previously mentioned, some authors were crucial to this investigation. Among them, Lavanya Rajamani in her work "Differential Treatment in International Environmental Law", critiqued this approach, arguing that it allowed wealthier nations to outsource their climate obligations while doing little to incentivize deep emissions cuts domestically. In this thesis, Rajamani has also been essential in interpreting the Paris Agreement and the evolving application of the CBDR principle in international climate treaties. Other pivotal authors for the interpretation of the Paris Agreement are Christina Voigt in "The Paris Agreement: What is the Standard of Conduct for Parties?", and Pieter Pauw et al. in "Beyond Paris: How Ambitious Are Countries' Climate Actions?". They have discussed the shift in the interpretation of CBDR with the adoption of the Paris Agreement in 2015, and how it marks a departure from the rigid binary distinction between developed and developing countries seen in the Kyoto Protocol. This flexibility has been praised for fostering greater inclusivity, yet it has also been criticized for potentially diluting the principle of equity by not holding developed nations sufficiently accountable for their historical emissions. Pauw et al. argue that the evolving economic landscape necessitates a recalibration of CBDR to reflect both historical responsibility and current emissions, a challenge that the Paris

Agreement has only partially addressed. In relation to the interaction of the CBDR with other actors, it is important to highlight the analysis of Harriet Bulkeley. In her work, “Transnational Climate Change Governance”, the author provides insights into how non-state actors and transnational networks engage with the CBDR principle in global climate governance. Moreover, Philippe Sands and Jacqueline Peel in “Principles of International Environmental Law”, discuss the international legal framework for environmental protection and the implementation of the foundational principle of CBDR in various treaties and agreements. More broadly, Sands' works have contributed significantly to the interpretation of various treaties. While, scholars like Joyeeta Gupta in “The History of Global Climate Governance”, argue that the principle of flexibility and the lack of robust mechanism, while politically expedient, have undermined its effectiveness. This issue is compounded by the weak enforcement mechanisms within international climate agreements, as noted by Voigt, who highlights the absence of meaningful penalties for non-compliance with CBDR-related obligations. In addition to the significant works previously mentioned, some other authors were crucial. Among them, J. Timmons Roberts and Bradley C. Parks stand out. In their publication “A Climate of Injustice: Global Inequality, North-South Politics, and Climate Policy”, they have masterfully highlighted the challenges posed by the rise of major emerging economies, such as China, India, and Brazil. They explained how these nations, while historically categorized as developing countries, are now among the world’s largest emitters. In fact, the rise of major emerging economies has further complicated the application of CBDR. The traditional North-South division, that underlies the principle, is increasingly considered outdated, and scholars such as J. Timmons Roberts and Bradley C. Parks call for a more nuanced approach to differentiation that reflects both historical emissions and current capabilities. In “Climate Change and Development: A Tale of Two Crises”, Navroz K. Dubash also argues that historical emissions must be balanced with contemporary realities, and emerging economies should assume greater responsibility.

One of the pivotal moments in the operationalization of CBDR was in 1997 with the adoption of the Kyoto Protocol, where legally binding emissions targets were set exclusively for Annex I (developed) countries. In relation to the transposition, as highlighted by Marc Pallemaerts in “EU Climate Policy: Up to the Kyoto Protocol and Beyond”, the Kyoto Protocol exemplified the CBDR principle by exempting non-Annex I (developing) countries from binding targets, reflecting their lesser historical responsibility for climate change. While much of the literature has focused on CBDR at the global level, there is a growing body of work examining how the principle has been adapted in regional governance frameworks, particularly within the European Union. As highlighted by Sebastian

Oberthür and Timothy Pallemaerts in "The New Climate Policies of the European Union", the EU's approach to climate governance has been shaped by its internal disparities in economic capacity and energy infrastructure among its Member States. Their insights were especially relevant regarding the analysis of European climate policy, including directives like the European Emissions Trading System and Effort Sharing Regulation. Moreover, the scholar Jos Delbeke, in "*Delivering a Climate Neutral Europe",* focuses on how Europe can achieve climate neutrality, offering insights into policy frameworks like the European Green Deal. Nevertheless, more research is needed on the internal differentiation mechanisms within the European Union. Particularly, as the report "*Putting the ETS 2 and Social Climate Fund to Work"* suggests, the ETS often disproportionately benefits wealthier Member States, enabling them to meet their targets through carbon trading rather than substantial domestic emissions reductions. To conclude, the EU's approach to CBDR offers valuable lessons for regional climate governance; in fact, comparative studies examining how other regional organizations implement CBDR could also provide important insights into the broader application of the principle.

Chapter 1: Origins and Evolution of the CBDR Principle

This chapter is dedicated to exploring the complexities of the principle of Common but Differentiated Responsibilities, that is fundamental to international environmental law. It reflects the recognition that while all nations are responsible for addressing global environmental challenges, not all have contributed equally to these problems, nor do they have the same capacity to respond.[1] Understanding the legal framework and historical context of CBDR principle is essential to grasp its significance and application in international environmental governance.

1. Legal overview and historical background

1.1. Introduction to the legal context surrounding CBDR

The CBDR principle is primarily grounded in international environmental treaties and conventions, most notably the 1992 United Nations Framework Convention on Climate Change.[2] The UNFCCC's Article 3 enshrines CBDR by stating that countries should act "on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities."[3] This principle acknowledges that while environmental protection is a shared responsibility, the burden must be distributed according to each country's historical contributions to environmental degradation and its ability to address it.[4]

The principle of CBDR is a fundamental doctrine in international environmental law, particularly within the regime governing climate change. Its legal roots lie in reconciling the universal nature of environmental problems. From a legal point of view, CBDR is predicated on two core concepts: common responsibility and differentiated responsibility.[5] The former acknowledges that environmental protection is a shared global duty, while the latter recognizes that the extent of this

[1] Daniel Bodansky, Jutta Brunnée, and Lavanya Rajamani, *International Climate Change Law* (Oxford: Oxford University Press, 2017), 122-125.
[2] Lavanya Rajamani, "The Principle of Common but Differentiated Responsibility and the Balance of Commitments under the Climate Regime," *Review of European Community & International Environmental Law* 9, no. 2 (2000): 120-131.
[3] United Nations Framework Convention on Climate Change, May 9, 1992, Article 3.1, last access 23/08/2024 https://unfccc.int/files/essential_background/background_publications_htmlpdf/application/pdf/conveng.pdf.
[4] Daniel Bodansky, "The United Nations Framework Convention on Climate Change: A Commentary," *Yale Journal of International Law* 18, no. 2 (1993): 451-558.
[5] Philippe Cullet, *Differential Treatment in International Environmental Law* (London: Routledge, 2003).

responsibility varies depending on a country's historical contribution to environmental degradation and its current capacity to mitigate and adapt to these effects.[6]

This principle was first articulated in international law in the Rio Declaration on Environment and Development (1992), specifically in Principle 7, which states:

> "States shall cooperate in a spirit of global partnership to conserve, protect, and restore the health and integrity of the Earth's ecosystem. Given the different contributions to global environmental degradation, States have common but differentiated responsibilities. The developed countries acknowledge the responsibility that they bear in the international pursuit of sustainable development in view of the pressures their societies place on the global environment and of the technologies and financial resources they command."[7]

The CBDR principle has since been reinforced through various international legal instruments, including the Kyoto Protocol,[8] which set legally binding emission reduction targets for developed countries, recognizing their greater historical responsibility for greenhouse gas emissions.[9]

1.2. Exploration of the historical origins of the CBDR

The concept of CBDR emerged from early discussions on sustainable development and environmental protection in the 1970s and 1980s.[10] It was recognized that global environmental challenges, such as pollution and resource depletion, were not caused equally by all nations. Industrialized nations, with their history of high emissions and resource exploitation, were seen as more responsible for environmental degradation.[11]

---

[6] Philippe Sands et al., *Principles of International Environmental Law*, 3rd ed. (Cambridge: Cambridge University Press, 2012), 234-235.

[7] "Rio Declaration on Environment and Development," United Nations, 1992, Principle 7, last access 23/08/2024 https://www.un.org/en/development/desa/population/migration/generalassembly/docs/globalcompact/A_CONF.151_26_Vol.I_Declaration.pdf.

[8] Michael Grubb, Christiaan Vrolijk, and Duncan Brack, *The Kyoto Protocol: A Guide and Assessment* (London: Earthscan, 1999).

[9] Lavanya Rajamani, *Differentiation in International Environmental Law* (Oxford: Oxford University Press, 2006), 56-57.

[10] Christopher D. Stone, "Common but Differentiated Responsibilities in International Law," *The American Journal of International Law* 98, no. 2 (2004): 276-301.

[11] Ibid.

The 1972 United Nations Conference on the Human Environment in Stockholm was a pivotal moment in the evolution of environmental law,[12] where the idea of differentiated responsibilities began to take shape. The 1972 Stockholm Declaration highlighted the need for developed countries to support developing nations in addressing environmental challenges, laying the path for the future development of CBDR.[13]

The 1992 Earth Summit in Rio de Janeiro further formalized CBDR, emphasizing the need for equity in international environmental governance.[14] This Rio Summit marked a shift in the global dialogue, with developing countries advocating for their specific environmental concerns and the principle of CBDR becoming a central tenet of international agreements like the UNFCCC.[15]

However, the establishment of the CBDR principle within international law was not a straightforward process[16] but rather the result of extensive negotiations involving multiple stakeholders with differing interests. Indeed, at the United Nations Conference on Environment and Development (UNCED) in Rio de Janeiro, Brazil, in 1992, they recognized CBDR for the first time. At this point a consensus emerged between developed and developing countries. Developing countries, under the umbrella of G77 and China coalition, argued for a recognition of the historical responsibility of industrialized nations in causing environmental degradation.[17] They held that any global environmental agreement should consider for the economic disparities between nations and the principle of sovereign equality,[18] which suggests the idea that obligations should be proportional to each country's capacity. On the other hand, developed countries, while agreeing to the notion of differentiated responsibilities, were concerned about the potential for such a principle to lead to indefinite obligations and financial commitments.[19] The negotiations became very heated with many draft texts being circulated and amended. The final text of the UNFCCC strikes this delicate balance by acknowledging differentiation but also calling for universal participation in addressing climate change.

---

[12] Handl Günther, "Declaration of the United Nations Conference on the Human Environment (Stockholm Declaration), 1972 and The Rio Declaration on Environment and Development, 1992," *United Nations Audiovisual Library of International Law* (2012).

[13] "Declaration of the United Nations Conference on the Human Environment," United Nations, 1972, Principle 23, accessed 23/08/2024 https://www.un.org/en/conferences/environment/stockholm1972.

[14] Adil Najam, Saleemul Huq, and Youba Sokona, "Climate Negotiations Beyond Kyoto: Developing Countries Concerns and Interests," *Climate Policy* 3, no. 3 (2003): 221-231.

[15] UNFCCC, 1992.

[16] Joyeeta Gupta, *The History of Global Climate Governance* (Cambridge: Cambridge University Press, 2014).

[17] Martin Khor, "Challenges of the Green Economy Concept and Policies in the Context of Sustainable Development, Poverty and Equity," *United Nations Research Institute for Social Development* (2010).

[18] *G77 and China Statement*, United Nations Conference on Environment and Development (UNCED), 1992, https://www.g77.org/doc/.

[19] Lavanya Rajamani, cit supra note 2.

The 1997 Kyoto Protocol further entrenched CBDR in international climate law by establishing legally binding emission reduction targets exclusively for Annex I countries (developed nations).[20] Non-Annex I countries, including major emerging economies like China and India, were not subject to binding targets, reflecting their lesser historical responsibility and differing economic capacities.[21] This decision was based on the principle enshrined in Article 10 of the Kyoto Protocol, which explicitly states that:

> "... all Parties shall, taking into account their common but differentiated responsibilities and their specific national and regional development priorities, objectives and circumstances, [undertake] further elaboration of policies and measures in accordance with their national circumstances."[22]

Ultimately, it should be noted that, over time, the global economic landscape and emission patterns have changed, making the Annex I / Non-Annex I distinction less applicable. In fact, emerging economies such as China, India and Brazil used to be classified as Non-Annex I countries. However, in the 2000s, some countries, especially these three, began to be seen by developed countries as competitors or even rivals.[23] It is undeniable how, to today, they have become major economic powers and are among the largest emitters of greenhouse gases. For example, China is the largest emitter of GHG not only in Asia but also in the world, contributing more than a quarter of global emissions. According to recent data, China emits nearly 10 billion tons of CO2 equivalent per year, accounting for about 28 percent of global emissions.[24] However, it is important to clarify that although China is the largest emitter in terms of total emissions, its per capita emissions are still lower than those of many developed countries.[25] In fact, another criticism is that one often reads, on the one hand that Annex I/Non-Annex I dichotomy was useful at the time of its creation, reflecting historical responsibilities and levels of development; on the other, that with the evolution of the global economy and the entry of some non-Annex I countries as major emitters, this rigid division is considered less practical

[20] Jacob Werksman, "The Clean Development Mechanism: Unwrapping the 'Kyoto Surprise'," *Review of European Community & International Environmental Law* 8, no. 2 (1999): 147-158.
[21] Kyoto Protocol to the United Nations Framework Convention on Climate Change, 1997.
[22] Kyoto Protocol, 1997, art. 10.
[23] Economist. "Blowing Hot and Cold: Is China a Climate Saint or Villain?" *The Economist*, March 12, 2024. Last access 02/09/2024 https://www.economist.com/china/2024/03/12/is-china-a-climate-saint-or-villain.
[24] World Bank, *CO2 Emissions by Country* (2023). Accessed September 13, 2024. Last access 02/09/2024 https://data.worldbank.org/indicator/EN.ATM.CO2E.KT.
[25] IPCC, *Climate Change 2022: Mitigation of Climate Change* (Geneva: Intergovernmental Panel on Climate Change, 2022).

and realistic for future climate negotiations. Others, however, argue that it is unfair to criticize densely populated countries, such as India and China, for their combined emissions without taking into account their population size.[26] In fact, although these developing countries have become large emitters of greenhouse gases, their per capita emissions are still significantly lower than those of developed countries. Therefore, instead of setting reduction targets on a national basis, international agreements could set a threshold for per capita emissions. These considerations reflect a need for a more dynamic and nuanced approach to the CBDR principle.[27]

1.3. CBDR-RC & intragenerational and intergenerational considerations

The CBDR principle has partially evolved to reflect the changing dynamics of international environmental governance, leading to the abovementioned concept of "Respective Capabilities" (CBDR-RC).[28] This evolution emphasizes that countries' responsibilities should not only be differentiated based on their historical contributions to environmental degradation but also on their current capacity to address these challenges.

The CBDR-RC concept was central to the 2015 Paris Agreement,[29] where it was recognized that all countries, regardless of their development status, must contribute to combating climate change. However, it also acknowledges that developed countries should take the lead in reducing emissions and providing financial and technological support to developing nations. This nuanced approach balances the need for equity with the practical realities of global environmental challenges.[30] The principle of CBDR is closely tied to the concepts of intragenerational and intergenerational equity, which address the fair distribution of responsibilities and resources both within the present generation and between current and future generations.

---

[26] Climate Analytics, "Critique of the Annex I/Non-Annex I Divide in Light of Rising Emissions from Developing Economies" (2020). Last access 02/04/2024 https://climateanalytics.org.

[27] Carbon Brief, "China's CO2 Emissions: Current Data and Global Impact" (2021). Last access 02/09/2024 https://carbonbrief.org.

[28] Pieter Pauw, Steffen Bauer, Carmen Richerzhagen, Clara Brandi, and Hannah Schmole, *Different Perspectives on Differentiated Responsibilities: A State-of-the-Art Review of the Notion of Common But Differentiated Responsibilities in International Negotiations* (Bonn: Deutsches Institut für Entwicklungspolitik, 2014).

[29] *Paris Agreement*, United Nations, 2015. Last access 23/08/2024 https://unfccc.int/files/essential_background/convention/application/pdf/english_paris_agreement.pdf.

[30] Jorge E. Viñuales, *The Paris Agreement on Climate Change: A Commentary*, (Oxford: Oxford University Press, 2017).

Intragenerational equity:

Intragenerational equity focuses on the fairness of resource distribution and environmental responsibilities within the current generation.[31] It highlights the disparities between developed and developing countries, particularly the fact that poorer populations, who contribute the least to greenhouse gas emissions, are the most vulnerable to climate change impacts. This inequity is exacerbated by their limited capacity to adapt to these changes. International instruments like the UNFCCC aim to rebalance these inequities by providing financial and technological support to developing nations, ensuring that the burden of climate change is shared more fairly.[32]

A key debate within intragenerational equity concerns the allocation of resources between immediate needs and long-term environmental goals.[33] Critics argue that investing heavily in future generations may neglect the urgent needs of the present population, particularly in addressing poverty, health, and access to basic resources. This is a pressing issue for instance for small island states and other vulnerable regions, where immediate adaptation to climate change is a higher priority than long-term emission reductions.[34]

Intergenerational equity:

Intergenerational equity addresses the rights and interests of future generations.[35] It argues that current actions should not compromise the ability of future generations to meet their own needs.[36] This principle has led to the call for historical accountability, where countries with a history of high emissions are expected to take greater responsibility for mitigating climate change. The Bolivarian Alliance for the Peoples of Our America (ALBA), including Venezuela, Cuba, Bolivia, and Ecuador, is a clear example of a group that advocates for this perspective, emphasizing that fairness requires acknowledging historical emissions when crafting international climate policies.[37] However, this

[31] J. Timmons Roberts and Bradley C. Parks, *A Climate of Injustice: Global Inequality, North-South Politics, and Climate Policy* (Cambridge: MIT Press, 2007).
[32] Lavanya Rajamani, cit supra note 2.
[33] W. Neil Adger, "Scales of Governance and Environmental Justice for Adaptation and Mitigation of Climate Change," *Journal of International Development* 13, no. 7 (2001): 921-931.
[34] Lavanya Rajamani, "Differentiation in International Environmental Law," in *International Environmental Law* (2014), 134-135.
[35] John Urry, *What is the Future?* (Cambridge: Polity Press, 2016).
[36] United Nations, Resolution adopted by the General Assembly on 11 December 1987, 42/187. Report of the World Commission on Environment and Development (New York, United States of America, United Nations Document, 1987).
[37] Karin Mickelson, "South, North, International Environmental Law, and International Environmental Lawyers," *Yearbook of International Environmental Law* 11, no. 1 (2000): 52-57.

perspective is not without controversy. Critics argue that holding current generations responsible for historical actions is unjust. While this concern is often associated with the Polluter Pays Principle (PPP), the principle itself focuses on contemporary actors, obligating those who cause environmental harm to bear the costs of managing it. In contrast, the "beneficiary pays" principle is more relevant to the discussion of historical emissions, suggesting that those who continue to benefit from past industrial activities should assume responsibility for addressing their consequences.[38] However, calculating the exact benefits derived from historical emissions remains a complex challenge,[39] this will be discussed in more detail later (see Chapter 2).

The tension between intragenerational and intergenerational equity is a significant aspect of the CBDR principle's application.[40] However, the principle's integration of intragenerational and intergenerational equity ensures that both current and future generations are considered in the fight against climate change, making it a vital tool for promoting fairness and sustainability in international environmental law. International agreements must always strike a balance between addressing the immediate needs of vulnerable populations and ensuring a sustainable future for all.[41]

2. Key developments in international environmental law

2.1. Major milestones in international law that shaped the CBDR

The development of the CBDR principle is shaped in a timeline by several key milestones in international environmental governance presented as follows:

- 1972 Stockholm Conference on the Human Environment
- 1985 Vienna Convention for the Protection of the Ozone Layer
- 1987 Montreal Protocol on Substances that Deplete the Ozone Layer
- 1992 Earth Summit in Rio de Janeiro
- 1997 Kyoto Protocol to the United Nations Framework Convention on Climate Change
- 2002 World Summit on Sustainable Development in Johannesburg
- 2012 Rio+20 Conference (United Nations Conference on Sustainable Development)

[38] Eric Neumayer, "In Defence of Historical Accountability for Greenhouse Gas Emissions," *Ecological Economics* 33, no. 2 (2000): 185-192.
[39] Christopher D. Stone, cit supra note 10, 276-278.
[40] Edith Brown Weiss, *In Fairness to Future Generations: International Law, Common Patrimony, and Intergenerational Equity* (Tokyo: United Nations University Press, 1989), 113-115.
[41] Ibid.

- 2015 Paris Agreement under the UNFCCC
- 2021 Glasgow Climate Pact

These milestones highlight the progressive development of the CBDR principle, reflecting its growing importance in shaping global responses to environmental challenges.

Moreover, the legal framework and historical background of the CBDR principle underscore its significance in international environmental governance. Chapter 2 will explore this *excursus* and the detailed evolution within the treaty framework, from its roots in the 1972 Stockholm Conference to its formalization in the 1992 Rio Summit and its evolution in the 2021 Glasgow Climate Pact. Nevertheless, one can trace the roots of the principle to long before 1972;[42] it has evolved significantly over the past century, and its development emerged as a cornerstone of international environmental law. For instance, the 1972 United Nations Conference on the Human Environment, held in Stockholm, represented a watershed moment in the formal recognition of environmental issues as a global concern.[43] The resulting Stockholm Declaration was the first to articulate the need for international cooperation in addressing environmental degradation, with Principle 12 implicitly acknowledging the different capabilities of states in contributing to and addressing environmental problems.[44]

The 1980s and 1990s were marked by the negotiation of other several foundational environmental treaties, most notably the Vienna Convention for the Protection of the Ozone Layer (1985) and its Montreal Protocol (1987), which included provisions allowing for differential treatment of developing states through grace periods and financial assistance.[45] In fact, these agreements were crucial in solidifying the CBDR principle, as they explicitly recognized the need for developed countries to take the lead in addressing environmental problems while providing support to developing nations. The 1992 UNCED, or the Earth Summit, as mentioned before, was another milestone in the evolution of CBDR.[46] The Rio Declaration on Environment and Development, particularly Principles 6 and 7, provided the most definitive statement of CBDR, asserting that all states share a common responsibility for environmental protection, but that developed countries bear

[42] Lavanya Rajamani, cit supra note 2.
[43] Philippe Sands, Jacqueline Peel, Adriana Fabra, and Ruth MacKenzie, *Principles of International Environmental Law*, 4th ed. (Cambridge: Cambridge University Press, 2018).
[44] Stockholm Declaration on the Human Environment, June 16, 1972, Principle 12.
[45] Vienna Convention for the Protection of the Ozone Layer, March 22, 1985; Montreal Protocol on Substances that Deplete the Ozone Layer, September 16, 1987.
[46] David Hunter, James Salzman, and Durwood Zaelke, *International Environmental Law and Policy*, 4th ed. (New York: Foundation Press, 2011).

greater responsibility due to their historical contributions to environmental degradation, and their greater capacities to address these issues.[47] This formalization of CBDR has since been incorporated into numerous multilateral environmental agreements (MEAs), such as the Convention on Biological Diversity (CBD),[48] and remains a fundamental principle in international environmental law.[49]

2.2. Early environmental treaties and their influence on CBDR

Another crucial aspect, is that early environmental treaties laid the foundation for the CBDR principle by introducing concepts of differential treatment and cooperation between states at varying levels of development.[50] These treaties, although primarily focused on specific environmental issues, contributed to the broader framework of international environmental governance that would later incorporate CBDR.

One of the earliest precursors to CBDR is found in the post-World War I era, particularly in the Treaty of Versailles (1919), which later appeared identically in the Constitution of the International Labour Organization (ILO), established that international labour standards should account for varying national circumstances, including economic and climatic conditions (See paragraph 3.1., Chapter 1). This acknowledgment of differing capacities among states laid the groundwork for the concept of differentiated obligations in international law.[51]

Secondly, another among the first treaties with global significance was the 1946 International Convention for the Regulation of Whaling (ICRW), which sought to manage whale populations through international cooperation.[52] While the ICRW did not explicitly reference differential responsibilities, it an example of establishing a precedent for MEAs that would later incorporate such principles and it shows how the emphasis on cooperation in managing shared resources would become a key element in later treaties that adopted the CBDR principle. Thirdly, the General Agreement on Tariffs and Trade (GATT)[53] of 1947 marked another significant development, as it recognized the

[47] Rio Declaration on Environment and Development, June 14, 1992, Principles 6 and 7.
[48] Convention on Biological Diversity, June 5, 1992, Article 20.
[49] Daniel Bodansky, *The Art and Craft of International Environmental Law* (Cambridge: Harvard University Press, 2010).
[50] Daniel Bodansky, Jutta Brunée, and Lavanya Rajamani, cit supra note 1.
[51] Treaty of Versailles, June 28, 1919, Article 405, paragraph 3.
[52] International Convention for the Regulation of Whaling, December 2, 1946.
[53] General Agreement on Tariffs and Trade (GATT), 1947.

special needs of developing countries.[54] Article 18 of GATT allowed for deviations from standard trade obligations to accommodate the economic vulnerabilities of developing states.

Furthermore, the 1959 Antarctic Treaty[55] was another pivotal agreement, laying the foundation for subsequent environmental treaties by establishing the concept of a common heritage of humankind.[56] Although also the Antarctic Treaty did not differentiate responsibilities among states, it emphasized the importance of collective management of shared resources. The treaty's approach to international cooperation in a sensitive environment provided a model for the global environmental governance structure that emerged in the latter half of the 20th century.

Additionally, the 1985 Vienna Convention for the Protection of the Ozone Layer and its 1987 Montreal Protocol, as mentioned before, were among the first major international environmental treaties to explicitly incorporate differential treatment.[57] The Montreal Protocol, in particular, provided for a grace period for developing countries to adhere to its terms and established financial measures aimed at helping those states meet their obligations. This approach impacted directly the development of CBDR, by demonstrating how differentiated responsibilities could be operationalized in an international treaty. The success of the abovementioned Montreal Protocol in addressing ozone depletion through a differentiated approach became a model for subsequent environmental agreements. The lessons learned from this treaty were instrumental in shaping the negotiations leading up to the 1992 Rio Earth Summit, where the CBDR principle was formally enshrined in the Rio Declaration and became a cornerstone of the emerging framework of international environmental law.[58] Finally, this principle of differentiated treatment in international economic law was later reinforced and expanded in the agreements establishing the World Trade Organization (WTO) in 1994, which incorporated special provisions for developing countries.[59] The emphasis on accommodating different economic capacities in international trade law paralleled the emerging concept of differentiated responsibilities in environmental law.

In conclusion, early environmental treaties played a crucial role in shaping the CBDR principle by introducing and operationalizing concepts of differential treatment, international cooperation, and the

[54] John H. Jackson, *The World Trading System: Law and Policy of International Economic Relations*, 2nd ed. (Cambridge: MIT Press, 1997).
[55] Antarctic Treaty, December 1, 1959, Article 1.
[56] Christopher C. Joyner, *Governing the Frozen Commons: The Antarctic Regime and Environmental Protection* (Columbia: University of South Carolina Press, 1998).
[57] Vienna Convention for the Protection of the Ozone Layer, March 22, 1985; Montreal Protocol on Substances that Deplete the Ozone Layer, September 16, 1987.
[58] Rio Declaration on Environment and Development, June 14, 1992, Principles 6 and 7.
[59] Agreement Establishing the World Trade Organization (WTO), April 15, 1994. See also: GATT, 1947, Article 18;

management of shared resources.[60] These treaties laid the grounds for the more explicit articulation of CBDR in the Rio Declaration and subsequent MEAs, setting it out as a founding principle of international environmental law.

2.3. Broader context in which the CBDR principle operates

The principle can be understood as the translation of the principle of intragenerational equity to the interstate level.[61] At that level, it represents a move away from the formal equality of states, a prominent assumption in traditional international law. Formal equality entails that, *de jure*, all states are assumed to be equal and subject to the same rights and duties regardless of their socio-economic characteristics.[62] However, this assumption meant that traditional international law did little to address the *de facto* inequalities between developing and developed states.[63]

During the 1970s, these inequalities led to calls for the establishment of a New International Economic Order (NIEO) by developing states.[64] Although the NIEO never fully materialized, the articulation of environmental problems as a common concern of humankind has led to the development of a distinct body of international environmental law, which addresses these inequalities. One of the characteristics of this body of law is the CBDR principle, which operationalizes intragenerational equity between developed and developing states.[65]

In conclusion, the CBDR principle reflects an acknowledgment that developed states, as opposed to developing states, are both more responsible for causing global environmental problems and more capable of solving them. In fact, these states are responsible for most greenhouse gas emissions, the depletion of the ozone layer, and the excessive depletion of marine fisheries, among other issues. In addition, developed states are more capable of contributing to environmental protection because of their stronger economies and access to advanced technology. The CBDR underpins the principle of common concern, which is one of the features of international environmental law.[66]

---

[60] Daniel Bodansky, cit supra note 49.
[61] Ian Brownlie, *Principles of Public International Law*, 7th ed. (Oxford: Oxford University Press, 2008).
[62] Hey Ellen, and Sophia Paulini, "Common but Differentiated Responsibilities." In *Max Planck Encyclopedia of Public International Law [MPEPIL]*, edited by Rüdiger Wolfrum. Last updated October 2021. Available online at: Max Planck Encyclopedias of International Law.
[63] United Nations Charter, June 26, 1945, Preamble and Articles 1 and 2.
[64] United Nations General Assembly, Declaration on the Establishment of a New International Economic Order, May 1, 1974.
[65] Lavanya Rajamani, "Differentiation in International Environmental Law and Its Practical Implications: A Theoretical Exploration," *Yearbook of International Environmental Law* 16, no. 1 (2006): 81-118.
[66] Rio Declaration on Environment and Development, June 14, 1992, Principles 6 and 7.

3. The legal framework and juridical evolution of the CBDR

3.1. Content of the principle in international environmental law

The principle of Common But Differentiated Responsibilities in international environmental law entails that while states pursue a common environmental goal, they are assigned different obligations that are contingent upon their socio-economic situations and their historical contributions to the environmental issue.[67] This principle, as mentioned before, acknowledges the disparity in states' capabilities and responsibilities, reflecting an effort to balance equity and fairness in global environmental governance.[68]

Since the 1990s, CBDR has become increasingly significant in international environmental law. Nevertheless, the notion of distinguishing obligations based on socio-economic circumstances is not exclusive to environmental law; its roots can be traced back to the early 20th century. Article 405, paragraph 3 of the 1919 Treaty of Versailles,[69] is an early expression of this principle, and it is identical to Article 19, paragraph 3 of the ILO Constitution.[70] According to these provisions, countries that experience substantial differences in industrial conditions due to climatic conditions, industrial organisation, or other special circumstances must be considered when formulating labour conventions or recommendations, allowing them for flexibility during modifications to their general rules. In some ILO conventions, Article 19, paragraph 3 of the Constitution is implemented by providing exceptions for states based on the insufficient development of their economy or relevant social infrastructure.[71] A relevant example is Article 7 of the ILO Convention No. 183 concerning the Revision of the Maternity Protection Convention, 2000. By means of exemption, this provision permits states to forgo the application of specific provisions of the convention.[72]

International trade law, since the conclusion of the General Agreement on Tariffs and Trade of 1947, also recognizes the special position of developing states. This recognition is particularly evident in Article 18 of the GATT, which has broader reflection in the Agreement Establishing the WTO, including the amended Article 18 and Part IV of the GATT Agreement. Within the WTO, the different

[67] Lavanya Rajamani, *Differentiated Responsibilities in International Environmental Law* (Oxford: Oxford University Press, 2012).
[68] Hey Ellen, cit supra note 62.
[69] Treaty of Versailles, June 28, 1919, Article 405, paragraph 3.
[70] Wil Mossink, *Protecting Maternity: Policy Options for Paid Parental Leave in Europe* (Geneva: International Labour Organization, 2002).
[71] Hey Ellen, cit supra note 62.
[72] International Labour Organization, Convention No. 183, Article 7.

treatment of developing states, in addition to facilitating technical assistance and capacity building, entails that mutual reciprocity in trade concessions—a cornerstone of international trade law—may be relaxed in relationships between developed and developing states.[73] Such relaxations are subject to negotiations between developing and developed states, often resulting in preferential treatment that is limited in duration.[74] Moreover, the United Nations Convention on the Law of the Sea (UNCLOS) contains various references to the special position of developing states.[75] Relevant examples include provisions on fishing, such as Article 61, paragraph 3, and Article 62. Additionally, Part XI of the UNCLOS, concerning the regime of the international seabed area, also differentiates between developing and developed states.[76]

In international environmental law, the CBDR principle is expressly articulated in Principle 12 of the 1972 Stockholm Declaration and further elaborated in Principles 6 and 7 of the 1992 Rio Declaration.[77] The principle has been implicitly reflected in the provisions of most MEAs since the 1970s, particularly in terms of technical cooperation and assistance.

The Rio Declaration currently provides the most generally accepted formulation of the CBDR principle.[78] The first sentence of paragraph 6 of the Rio Declaration provides: "The special situation and needs of developing countries, particularly the least developed and those most environmentally vulnerable, shall be given special priority."[79] Principle 7 of the Rio Declaration further formulates the CBDR principle as follows:

> "States shall cooperate in a spirit of global partnership to conserve, protect and restore the health and integrity of the Earth's ecosystem. In view of the different contributions to global environmental degradation, states have common but differentiated responsibilities. The developed countries acknowledge the responsibilities that they bear in view of the pressures their societies place on the global environment and of the technologies and financial resources they command."[80]

[73] General Agreement on Tariffs and Trade (GATT), 1947, Article 18.
[74] Hey Ellen, cit supra note 62.
[75] Robin Churchill and Alan Lowe, *The Law of the Sea* (Manchester: Manchester University Press, 1999).
[76] United Nations Convention on the Law of the Sea (UNCLOS), December 10, 1982, Articles 61, 62, and Part XI.
[77] Stockholm Declaration on the Human Environment, June 16, 1972, Principle 12; Rio Declaration on Environment and Development, June 14, 1992, Principles 6 and 7.
[78] United Nations Environment Programme (UNEP), *Rio Declaration on Environment and Development*, 1992.
[79] Rio Declaration on Environment and Development, June 14, 1992, Principles 6.
[80] Rio Declaration on Environment and Development, June 14, 1992, Principle 7.

This provision highlights the core components of the CBDR principle in international environmental law: a global partnership linked to the duty to cooperate within that partnership, differentiated obligations based on states' specific circumstances, including their vulnerability, needs, historical contributions to environmental degradation, present contributions to the problem, and their access to technology and financial resources.[81] The CBDR principle is closely related to the principles of sustainable development and intragenerational equity.[82] The principle of sustainable development addresses the need to balance socio-economic considerations with environmental protection, while the principle of intragenerational equity addresses equity among members of a generation, particularly in the South-North context. The interrelationship between these three principles can be characterized as follows: to attain sustainable development, the CBDR principle constitutes a means of translating the principle of intragenerational equity to the interstate level, particularly in the South-North context.[83]

Most MEAs do not explicitly refer to the CBDR principle; instead, they contain substantive obligations that serve to implement the principle. However, the 1992 UNFCCC is an exception. Article 3 of the UNFCCC, entitled "Principles," in its first paragraph provides:

> "The Parties should protect the climate system for the benefit of present and future generations of humankind, on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities. Accordingly, the developed country Parties should take the lead in combating climate change and the adverse effects thereof."[84]

Even though the UNFCCC is the only MEA that explicitly refers to the CBDR principle, all multilateral agreements presently implement the principle in a variety of ways. These five examples illustrate how MEAs implement the CBDR principle:

1. **Grace periods for developing states**:[85] MEAs may include grace periods for developing states. A pertinent example is Article 5, paragraph 1 of the 1987 Montreal Protocol on

[81] Wolfgang Sachs, *Environment and Human Rights: Sustainable Development* (London: Earthscan Publications, 2001).
[82] Ibid.
[83] Ibid.
[84] United Nations Framework Convention on Climate Change (UNFCCC), May 9, 1992, Article 3.
[85] Hey Ellen, cit supra note 62.

Substances that Deplete the Ozone Layer. This provision allows developing states a period of 10 years before they must comply with certain substantive rules of the Protocol.[86]

2. **Substantive obligations for developed states only**:[87] Some MEAs provide substantive obligations only for developed and transition economy states. The 1997 Kyoto Protocol provides an example, requiring developed and transition economy states, but not developing states, to comply with agreed greenhouse gas emissions reduction targets. This is particularly evident in Article 3, paragraph 1, and Annex I of the Protocol.[88]
3. **Conditional implementation based on technology and financial transfer**:[89] MEAs often make the implementation by developing states conditional on the transfer of technology and financial means from developed states. For example, Article 4, paragraph 7 of the UNFCCC, and Article 20, paragraph 4 of the Convention on Biological Diversity require such transfers. These obligations are often implemented through financial mechanisms, such as those outlined in Article 21 of both the Convention on Biological Diversity and the UN Convention to Combat Desertification.[90]
4. **Special substantive rules for developed-developing state relations**:[91] Some MEAs establish special substantive rules for the relationship between developed and developing states. An example is the 1995 amendment to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal. This amendment, which has not entered into force as of July 2010, bans the transboundary movement of hazardous waste between developed and developing states.[92]
5. **Compliance mechanisms offering assistance**:[93] Compliance mechanisms in most MEAs provide that in cases of non-compliance, states may be offered assistance to bring them back into compliance. These provisions benefit developing states and states with economies in transition, but not developed states.[94]

---

[86] Montreal Protocol on Substances that Deplete the Ozone Layer, September 16, 1987, Article 5, paragraph 1.
[87] Hey Ellen, cit supra note 62.
[88] Kyoto Protocol, 1997, Article 3, paragraph 1, and Annex I.
[89] Hey Ellen, cit supra note 62.
[90] See also: United Nations Framework Convention on Climate Change (UNFCCC), May 9, 1992, Article 4, paragraph 7; Convention on Biological Diversity, June 5, 1992, Article 20, paragraph 4; United Nations Convention to Combat Desertification in Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa, June 17, 1994, Article 21.
[91] Hey Ellen, cit supra note 62.
[92] Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, March 22, 1989, as amended 1995.
[93] Hey Ellen, cit supra note 62.
[94] Ibid.

3.2 Institutional decision-making context

The CBDR principle underlies a complex institutional and decision-making structure applicable in international environmental law, particularly in the South-North context. At the basis of this structure are various MEAs, such as the Convention on Biological Diversity,[95] the UNFCCC,[96] and the Convention to Combat Desertification.[97] These MEAs contain provisions that require the transfer of technology and financial means and establish financial mechanisms.[98] The transfer of technology and finances largely occurs through funds linked to the World Bank, notably the Global Environment Facility (GEF),[99] which functions as the financial mechanism for most international environmental agreements. The World Bank, through the GEF and other funds, such as the Prototype Carbon Fund,[100] the BioCarbon Fund,[101] and the Least Developed Country Fund,[102] plays a coordinating role in international environmental law, especially in the South-North context.[103]

Decision-making within this structure has shifted from the one-state-one-vote system, prevalent in most MEAs, to the voting system employed by the World Bank and various decision-making procedures applied by the funds.[104] These procedures include for example, equal participation of donor and recipient states in the GEF[105] and decision-making by both public and private entities from developed states that invest in the Prototype Carbon Fund.[106] This complex institutional decision-making structure has led to the development of a body of norms and decision-making procedures that

[95] Convention on Biological Diversity, "Convention Text," 1992. Last access 23/08/2024 https://www.cbd.int/doc/legal/cbd-en.pdf.

[96] United Nations Framework Convention on Climate Change, "Convention Text," 1992. Last access 23/08/2024 https://unfccc.int/resource/docs/convkp/conveng.pdf.

[97] United Nations Convention to Combat Desertification, "Convention Text," 1994. Last access 23/08/2024 https://www.unccd.int/sites/default/files/relevant-links/2017-01/UNCCD_Convention_ENG_0.pdf.

[98] Hey Ellen, cit supra note 62.

[99] Global Environment Facility, "GEF". Last access 23/08/2024 https://www.thegef.org/.

[100] Prototype Carbon Fund, "About,". Last access 23/08/2024 https://carbonfinance.org/prototype-carbon-fund.

[101] BioCarbon Fund, "About,". Last access 23/08/2024 https://www.biocarbonfund.org/.

[102] Least Developed Countries Fund, "About LDCF,". Last access 23/08/2024 https://www.thegef.org/topics/least-developed-countries-fund-ldcf.

[103] Hey Ellen, cit supra note 62.

[104] Adil Najam, Mark Papa, and Nadaa Taiyab, *Global Environmental Governance: A Reform Agenda* (Winnipeg: International Institute for Sustainable Development, 2006). Last access 28/08/2024; See also: Article V, Section 3 of the World Bank's Articles of Agreement. https://www.iisd.org/publications/global-environmental-governance-reform-agenda.

[105] Global Environment Facility, "GEF Council"; Article 25 of the GEF Instrument (Decision-making). Last access 23/08/2024 https://www.thegef.org/about/council.

[106] Malte Schneider, Annika Holzer, and Volker H. Hoffmann, "Understanding the CDM's Contribution to Technology Transfer," *Energy Policy* 36, no. 8 (2008): 2930-38. Last access 23/08/2024 https://doi.org/10.1016/j.enpol.2008.03.032.

can be characterized as international administrative law, wherein international institutions exercise public decision-making powers.[107]

3.3 Implementation and legal status of the CBDR principle

The principle of CBDR has a multifaceted implementation history, characterized by complex mechanisms involving incremental costs, conditionalities, and potential economic benefits for developed states. The concept of incremental cost, as implemented through institutions like the GEF, mandates that developed states contribute financially to the additional costs that developing states incur when implementing projects that serve the global environment. These projects often involve transforming national initiatives into more environmentally sustainable ones, thereby benefiting the global community.

For instance, a developing state might propose a national power generation project aimed at domestic development. If this project is converted from a conventional fossil fuel-based system to a solar energy-based system, the additional costs of this transformation may be covered by the GEF. This funding is directed towards the protection of the global environment—a concern that is shared by both developed and developing states. The UNFCCC and other MEAs emphasize this shared responsibility but impose stricter standards and conditionalities on the financial and technological support provided by developed states. These standards are often determined by the decisions of the Conference of the Parties (COP) to the respective MEAs, as well as by the governing bodies of the financial mechanisms associated with these agreements.[108]

Moreover, developed states, including their private sectors, may benefit economically from the implementation of CBDR-related projects. For example, under the Kyoto Protocol's flexible mechanisms,[109] such as the Clean Development Mechanism (CDM), developed states can invest in carbon reduction projects in developing countries, thereby earning emission reduction units.[110] These units can either be used by the investing developed states to meet their emission reduction targets under the Kyoto Protocol or be traded on the global carbon market for profit. Such practices have led

[107] Benedict Kingsbury, Nico Krisch, and Richard B. Stewart, "The Emergence of Global Administrative Law, "*Law and Contemporary Problems* 68, no. 3/4 (2005): 15-61. Last access 23/08/2024 https://scholarship.law.duke.edu/lcp/vol68/iss3/3.

[108] Examples are the UNFCCC, May 9, 1992, Article 4, paragraph 7; and the Convention on Biological Diversity, June 5, 1992, Article 20, paragraph 4.

[109] Kyoto Protocol to the United Nations Framework Convention on Climate Change, December 11, 1997, Article 3, paragraph 1, and Annex I.

[110] Clean Development Mechanism, "Kyoto Protocol," 1997. Last access 23/08/2024 https://cdm.unfccc.int/.

to critiques that the implementation of CBDR has allowed developed states to maintain a disproportionate influence over international environmental policy and law, given their control over key financial and institutional mechanisms.

As for the legal status of the CBDR principle, this is a nuanced issue with significant normative implications: while the principle implies commitments and possibly even obligations for developed states in their interactions with developing states, its status as a legally binding rule remains contentious. While the principle is enshrined in various international agreements, its exact legal nature—whether it constitutes a binding legal obligation or merely a guiding principle—remains contested. Article 3.1 of the UNFCCC:

> "The Parties should protect the climate system for the benefit of present and future generations of humankind, on the basis of equity and in accordance with their common but differentiated responsibilities and respective capabilities. Accordingly, the developed country Parties should take the lead in combating climate change and the adverse effects thereof."[111]

It refers to CBDR-RC as a "principle," which in legal terms may suggest it is more of a guiding norm rather than a strictly enforceable rule. This ambiguity has led to differing interpretations in international negotiations and has impacted the implementation of the principle. Although it is explicitly recognized as a binding principle within the climate change regime, particularly under the UNFCCC,[112] its legal bindingness is less clear in other MEAs.[113] In the broader context of international law, CBDR is likely best understood as a principle of international environmental policy or soft law. This classification is supported by its significant impact on the substance and institutional structures of international environmental law, as reflected in the Rio Declaration on Environment and Development[114] and other key treaties. However, the principle has fundamentally shaped the discourse of international environmental law, particularly by altering the dynamics of treaty negotiations and providing a legal and moral basis for developing states to assert their positions. For example, it has enabled developing states to demand that their obligations under international environmental agreements be contingent on the transfer of financial resources and technology from developed states, but this evolution has not been without cost. The integration of economic and

[111] UNFCCC, 1992, Article 3.1.
[112] Ibid.
[113] Lavanya Rajamani, "Differentiation in International Environmental Law and Regulation," in *International Environmental Law: Contemporary Concerns and Challenges*, ed. Malgosia Fitzmaurice and Attila Tanzi (Cheltenham: Edward Elgar, 2020), 234-240.
[114] Rio Declaration on Environment and Development, 1992, Principles 6 and 7.

ecological considerations in environmental treaty negotiations has sometimes compromised the effectiveness of these agreements in addressing global environmental challenges. This trade-off was evident during the COP15 in Copenhagen in 2009, where economic considerations heavily influenced the negotiation outcomes.[115]

For instance, under the 2009 Copenhagen Accord,[116] developed countries committed to mobilizing $100 billion[117] per year by 2020 to support climate action in developing countries.[118] This financial commitment is a direct manifestation of CBDR-RC, as it acknowledges the greater capacity of developed nations to contribute to global climate action. Nevertheless, the principle has been criticized for being overly vague and the absence of clear guidelines on how the $100 billion should be allocated, sourced, or monitored has resulted in a lack of transparency and accountability, which has sometimes led to disputes over the extent of obligations for different countries.[119] Developed countries have often been reluctant to make significant financial commitments, while some developing countries have been accused of not doing enough to reduce their own emissions, despite their growing economic capabilities and increasing emissions profiles.[120]

As the global landscape of greenhouse gas emissions continues to evolve, the application of CBDR-RC faces new challenges. Emerging economies, which were initially considered developing countries, are now among the largest emitters of greenhouse gases. As discussed above, China and India have become significant contributors to global emissions, raising questions about how CBDR-RC should be applied to them in future agreements.[121]

The Paris Agreement marks a significant shift in this direction by adopting a more flexible approach to differentiation. While it continues to recognize the principle of CBDR-RC, the Paris Agreement allows for a more nuanced and dynamic allocation of responsibilities. All parties are required to submit nationally determined contributions, which are expected to reflect their highest possible ambition, taking into account their national circumstances. This approach allows for differentiation

---

[115] UNFCCC Conference of the Parties (COP15), Copenhagen, 2009. See also: Kevin R. Gray, "Copenhagen Climate Change Conference: A Postmortem," *The International and Comparative Law Quarterly* 59, no. 3 (2010): 689-707.

[116] UNFCCC, "Copenhagen Accord," 2009. Last access 23/08/2024 https://unfccc.int/resource/docs/2009/cop15/eng/11a01.pdf.

[117] Most developed countries count all financial instruments at face value in their reporting to the UNFCCC.

[118] Daniel Bodansky, Jutta Brunnée, and Lavanya Rajamani, cit supra note 1.

[119] Stadelmann, M., Michaelowa, A., & Roberts, J. T. (2013). *Difficulties in accounting for private finance in international climate policy*. Climate Policy, 13(5), 652-672.

[120] J. Timmons Roberts and Romain Weikmans, "Postface: Fragmentation, Failing Trust and Enduring Tensions Over What Counts as Climate Finance," *International Environmental Agreements: Politics, Law and Economics* 17 (2017): 129-137.

[121] Lavanya Rajamani, "Ambition and Differentiation in the 2015 Paris Agreement: Interpretative Possibilities and Underlying Politics," *International & Comparative Law Quarterly* 65, no. 2 (2016): 493-514.

while also encouraging all countries to take more robust action against climate change.[122] The legal implications of this shift are profound. The Paris Agreement moves away from the strict binary division of countries into developed and developing states, instead fostering a more inclusive and participatory approach. However, it also raises questions about how to ensure accountability and fairness with its "bottom-up" approach: a system where commitments are self-determined and not legally binding.[123] Moreover, the ongoing debate about Loss and Damage—the idea that developed countries should compensate developing countries for the irreversible impacts of climate change—illustrates the continuing tensions around CBDR-RC.[124] While the Paris Agreement acknowledges the importance of addressing loss and damage,[125] it stops short of establishing a formal liability mechanism, reflecting the reluctance of developed countries to accept historical responsibility for climate change.[126]

4. Conclusion

This chapter provided a comprehensive analysis on the principle of Common But Differentiated Responsibilities and Respective Capabilities. It has showed how it remains a cornerstone of international environmental law, reflecting the complexities of achieving global cooperation in the face of unequal contributions to and impacts from climate change. From its roots in the Rio Declaration to its formal adoption in the UNFCCC and its evolution in the Kyoto Protocol and Paris Agreement, CBDR-RC has been pivotal in shaping global climate policy.[127] However, the principle's legal and practical application continues to evolve, reflecting changing geopolitical realities and the growing urgency of the climate crisis. As international law grapples with these changes, the future of CBDR-RC will likely involve a more dynamic and flexible approach to differentiation, ensuring that all countries contribute fairly and effectively to global climate action. This evolution presents both

[122] Christina Voigt and Felipe Ferreira, "The Paris Agreement: A New Beginning?" *Journal of Environmental Law* 28, no. 1 (2016): 1-24.
[123] Daniel Bodansky, "The Paris Climate Change Agreement: A New Hope?" *American Journal of International Law* 110, no. 2 (2016): 288-319.
[124] Laurens M. Bouwer, *Loss and Damage from Climate Change: Concepts, Methods, and Policy Options* (Cham: Springer, 2018); See also: Lisa Vanhala and Christian Hestbaek, "Framing Climate Change Loss and Damage in UNFCCC Negotiations: The Struggle Over Meaning and the Warsaw International Mechanism," *Global Environmental Politics* 16, no. 4 (2016): 111-129.
[125] Paris Agreement, 2015, Article 8.
[126] Meinhard Doelle, "The Paris Agreement: Historic Breakthrough or High Stakes Experiment?" *Climate Law* 6, no. 1 (2016): 1-20.
[127] Christopher D. Stone, cit supra note 10.

challenges and opportunities, as the international community strives to balance the principles of equity, justice, and effectiveness in the fight against climate change.[128]

In conclusion, while the CBDR principle has had a profound influence in developing international environmental law, its implementation has been marked by complexities that reflect the ongoing tension between the environmental and economic interests of developed and developing states. The principle has facilitated greater inclusion of developing states in environmental governance, but it has also allowed developed states to retain significant control over the financial and institutional mechanisms that shape international environmental policy. Additionally, the chapter has shown how, over time, the Annex I/Non-Annex I dichotomy is outdated and leads to an inefficient application of the CBDR principle. This duality highlights the need for ongoing reassessment of how global environmental governance structures can equitably address the challenges of sustainable development in a manner that genuinely reflects the differentiated responsibilities of all states.[129]

[128] Jacqueline Peel and Hari M. Osofsky, *Climate Change Litigation: Regulatory Pathways to Cleaner Energy* (Cambridge: Cambridge University Press, 2015).

[129] Chukwumerije Okereke, *Global Justice and Neoliberal Environmental Governance: Ethics, Sustainable Development and International Co-operation* (London: Routledge, 2018).

Chapter 2: Core CBDR Principles and Instruments in Global Climate Governance

This chapter delves into the content analysis of major international treaties, examining how the CBDR principle has been articulated and implemented in major agreements, including the Stockholm Declaration, the UNFCCC, the Kyoto Protocol, and the Paris Agreement.[130] In addition, the chapter explores the fundamental principles of sustainable development and the Polluter Pays Principle, both of which constitute the basis of the CBDR framework. This section also discusses the various policy instruments that facilitate the implementation of international environmental agreements, which are key to ensuring compliance and advancing global climate goals. The chapter concludes by addressing the role of international and non-international actors in shaping global climate governance, with an assessment of the effectiveness of the influence of COPs and NGOs, and the critical role they have played in climate.

1. Content analysis of the major treaties

1.1. CBDR and the Stockholm Declaration

The 1972 United Nations Conference on the Human Environment, held in Stockholm, marked a pivotal moment in the development of international environmental law. By the late 1960s, environmental protection had emerged as a growing concern among developed countries, though it had not yet become a central theme of multilateral cooperation. At that time, environmental governance was largely driven by bilateral and regional agreements focused on specific issues such as water resources, fisheries, and nuclear energy. These agreements were primarily concluded among developed nations, with developing countries largely absent from such arrangements.[131]

The Stockholm Conference, therefore, represented a significant shift as it aimed to place environmental issues on the global agenda. However, from the very outset of preparations, the economic development of the Global South emerged as a contentious issue. Many developing countries, recently liberated from colonial rule, prioritized economic growth and the protection of their sovereignty over environmental concerns. They viewed Western environmentalism with suspicion, fearing it was a strategy to preserve the economic dominance of developed nations or to

[130] Philippe Sands, cit supra note 6, 278-280.
[131] Daniel Bodansky, cit supra note 49, 3-5.

divert attention from pressing issues of global inequality.[132] This atmosphere of distrust threatened to derail the conference, with fears that developing countries might boycott the event. In response, the conference's Secretary-General, Maurice Strong, convened a preparatory seminar in Founex, Switzerland, in 1971. The resulting "Founex Report" played a crucial role in bridging the gap between environmental protection and economic development.[133] It emphasized that underdevelopment itself was a cause of environmental degradation and that promoting economic development could help address environmental challenges in developing countries.[134] The report also argued that developed nations had a moral and practical obligation to assist developing countries in their efforts to protect the environment, as doing so would foster stable and reliable international partnerships.[135]

Therefore, the Founex Report reassured developing countries of their stake in environmental protection and underscored the responsibility of developed nations to support their efforts. As a result, the Stockholm Conference saw unprecedented participation, with delegations from 114 countries, including many from the developing world, which constituted the majority of the United Nations membership at the time.[136] In conclusion, the Stockholm Conference is considered the foundation for the global environmental governance structure that would emerge in the following decades. It set the stage for subsequent international agreements, brought environmental issues to the forefront of international relations, and, critically, began to address the intersection of environmental protection with economic development, particularly in the context of North-South relations.[137]

The 1972 Conference culminated in the adoption of the Stockholm Declaration, a document that outlines 26 general environmental principles.[138] These principles reflect two predominant perspectives: the "bio-environmentalist" view, which emphasizes the Earth's ecological limits, and the "structural injustice" view, which highlights the economic inequities between developed and developing nations.[139] Although developing countries initially approached the conference with scepticism, fearing that environmental initiatives might undermine their economic growth, the

[132] Adil Najam et al., cit supra note 14.
[133] Handl Günther, cit supra note 12.
[134] The Rio Declaration on Environment and Development, 1992," *United Nations Audiovisual Library of International Law* (2012).
[135] Maurice Strong, ed., *Founex Report on Development and Environment* (Geneva: Founex Group, 1971), 12-14.
[136] Ibid.
[137] Joyeeta Gupta, cit supra note 16, 45-47.
[138] UNEP, "Stockholm Declaration on the Human Environment," *United Nations Environment Programme*, 1972. Last access 30/08/2024 https://www.un.org/en/conferences/environment/stockholm1972.
[139] Wolfgang Sachs, cit supra note 81, 28-31.

Stockholm Conference demonstrated that a compromise between environmental protection and economic development was possible.[140]

One of the most significant outcomes was the establishment of the United Nations Environment Programme (UNEP) in 1972.[141] UNEP's creation symbolized the need to balance the interests of both developed and developing nations in global environmental governance. Notably, UNEP's headquarters was established in Nairobi, Kenya—a decision that was the result of a contentious and hard-fought victory led by Kenya with the support of the G77. This decision, which overruled the preferences of developed countries to locate UNEP in New York or Geneva, symbolized the necessity of addressing the needs and interests of developing countries when designing global environmental policies.[142]

Overall, the conference recognized that developing nations were primarily concerned with poverty alleviation and economic growth, and these goals could not be sacrificed in the name of environmental protection. The Stockholm Declaration's principles reflected an early understanding of differentiated responsibilities. For example: Principle 8 stated that "economic and social development is essential for ensuring a favourable living and working environment for man." and Principle 9 called for "accelerated development through the transfer of substantial quantities of financial and technological assistance" to developing countries.[143]

These principles resonate with the later articulation of CBDR, which emphasizes that developed countries should bear a greater burden in addressing environmental issues due to their greater economic capacity and historical responsibility for environmental degradation.[144] To sum up, the Stockholm Conference marked the beginning of global environmental governance. It led to the establishment of UNEP and set the stage for subsequent environmental treaties and negotiations.

1.2. CBDR and the UNFCCC

In 1992, twenty years after the landmark Stockholm Conference, the United Nations convened a second international summit focused on the environment, officially known as the UNCED, but more

[140] Edith Brown Weiss, cit supra note 40.
[141] UNEP, cit supra note 138.
[142] Maria Ivanova, "Designing the United Nations Environment Programme: A Story of Compromise and Confrontation." *International Environmental Agreements: Politics, Law and Economics* 7, no. 4 (2007): 337-361.
[143] Stockholm Declaration on the Human Environment, 1972, Principles 8 and 9.
[144] Lavanya Rajamani, cit supra note 2.

commonly referred to as the Rio Summit[145] or Earth Summit.[146] Unlike its predecessor, which was centred on the theme of the "Human Environment," the Rio Summit expanded its focus to encompass both "Environment and Development." This shift in emphasis mirrored the broader recognition of the interdependence between environmental protection and economic development, a theme previously highlighted by the Brundtland Commission in its 1987 report, *Our Common Future*[147] (See Chapter 2, par. 2.1).

At Rio, developing countries adopted a markedly different strategy from the defensive stance they had taken at the 1972 Stockholm Conference. Rather than viewing environmental issues with suspicion and as potential threats to their sovereignty and economic growth, developing nations[148] saw the Rio Summit as an opportunity to refocus the international community's attention on environmental challenges specific to the Global South. While developed countries were primarily concerned with issues like acid rain, forest protection, and ozone layer depletion, developing countries pushed to highlight problems such as desertification, hazardous waste trade, and the need for more equitable technology transfer and development assistance.[149] At the Conference,[150] one of the outcomes was the framework instrument UNFCCC,[151] which established as its ultimate objective the stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system (Art. 2).[152] The preamble to the Convention recognizes that the global nature of climate change necessitates the broadest possible cooperation among all countries and their involvement in an effective and appropriate international response, in accordance with their common but differentiated responsibilities, respective capabilities, and social and economic conditions.[153] It also notes that the largest share of historical and current

[145] Symbolically underscoring this integration of environment and development, the summit was hosted in Rio de Janeiro, Brazil, marking a deliberate choice to hold such a significant international event in a developing country.

[146] The Rio Summit attracted unprecedented participation, with 108 heads of state, 187 national delegations, approximately 10,000 government delegates, over 1,400 accredited non-governmental organizations, and nearly 9,000 journalists attending, making it the largest international gathering in history at that time, led to its being aptly dubbed the "Earth Summit".

[147] World Commission on Environment and Development (WCED), *Our Common Future* (Oxford: Oxford University Press, 1987).

[148] For example, India and China had previously conditioned their ratification of the Montreal Protocol on the creation of this fund, illustrating the growing leverage of developing countries in international environmental negotiations.

[149] Adil Najam et al., cit supra note 14.

[150] Eight primary outcomes emerged from the conference: The Political Declaration, Agenda 21, the UNFCCC, the CBDR principle, the Convention to Combat Desertification, the Political Declaration on Forests, the GEF Reform, and the Commission for Sustainable Development.

[151] UNFCCC, 1992,

[152] Justice Ezechi Chigonu, Franca Princess Igwela, and Chikadibia Sophia Ahiakwo, "An Appraisal of the Principle of Common But Differentiated Responsibilities in International Environmental Law," *Achievers University Law Journal (AULJ)* 3, no. 1 (2023): 212-215.

[153] Justice Ezechi Chigonu et al, cit supra note 152, 212-215.

global emissions of greenhouse gases has originated in developed countries, that per capita emissions in developing countries are still relatively low, and that the share of global emissions originating in developing countries will grow to meet their social and development needs.[154]

The preamble also recalls that States have in accordance with the Charter of the United Nations[155] and the principles of international law, the responsibility to ensure that activities within their jurisdiction or control do not cause damage to the environment of other States or areas beyond the limits of national jurisdiction.[156] Concerning the needs of developing countries, the preamble affirms that responses to climate change should be coordinated with social and economic development in an integrated manner with a view to avoid adverse impacts on the latter, take into full account the legitimate priority needs of developing countries for the achievement of sustained economic growth, and the eradication of poverty.[157] Moreover, UNFCCC reaffirms the principle of CBDR, and states that the "developed country Parties should take the lead in combating climate change and the adverse effects thereof".[158] Therefore, the Convention makes it a condition that the specific needs and special circumstances of developing country Parties should be given "full consideration".[159] In fact, from the analysis of Art. 4.3:

> "The developed country Parties and other developed Parties included in Annex II[160] shall provide new and additional financial resources to meet the agreed full costs incurred by developing country Parties in complying with their obligations under Article 12, paragraph 1. They shall also provide such financial resources, including for the transfer of technology, needed by the developing country Parties to meet the agreed full incremental costs of implementing measures that are covered by paragraph 1 of this Article and that are agreed between a developing country Party and the international entity or entities referred to in Article 11, in accordance with that Article. The implementation of these commitments shall

[154] Ibid. & UNFCCC, 1992, preamble.
[155] United Nations, *Charter of the United Nations*, 24 October 1945, 1 UNTS XVI.
[156] Justice Ezechi Chigonu et al, cit supra note 152, 212-215.
[157] UNFCCC, 1992, preamble.
[158] UNFCCC, 1992, art 3.1.
[159] UNFCCC, art. 3.2 & Justice Ezechi Chigonu et al, cit supra note 152, 212-215.
[160] Annex I: industrialised countries and those with economies in transition;
Non-Annex I: developing countries.
Annex II: Industrialised countries among those in Annex I that are obliged to provide financial and technological assistance to developing countries.

> take into account the need for adequacy and predictability in the flow of funds and the importance of appropriate burden sharing among the developed country Parties."[161]

it is clear that UNFCCC refers to Article 12(1) which deals with the elements of information to be reported by each Party to the Conference of the Parties;[162] and Article 11, which also requires developed countries to provide the necessary resources to developing countries to meet the incremental costs of implementing measures agreed between a developing country and the international entity or entities.[163] When Article 4.7, states that "The extent to which developing country Parties will effectively implement their commitments under the Convention will depend on the effective implementation by developed country Parties of their commitments under the Convention",[164] it is evident that the key notion of the UNFCCC emphasizes that historically polluting countries must take the lead in efforts to mitigate climate change. However, the fact that Articles 4.8 and 4.9, stress the importance of assisting, in particular, the most vulnerable and least developed countries, can be interpreted as a sign that the degree of support by developed countries may vary between different categories of developing states, leaving room for interpretation by the Parties.[165]
To conclude, as a first step, pending the adoption of protocols under the Convention, the UNFCCC imposed a non-binding target to reduce GHG emissions of industrialized countries (so-called Annex I countries) to 1990 levels by the year 2000.[166] Beyond this, the Convention's interpretation of the CBDR appears vague.[167] In fact, a possible contradiction is noticeable from the provisions of the Convention. On the one hand, the Convention emphasizes that "full account" should be taken of "the legitimate priority needs of developing countries for the achievement of sustained economic growth and the eradication of poverty",[168] highlighting "that all Parties should take precautionary measures".[169] On the other hand, it remains unclear both as to what extent developing States should contribute and how much of the costs incurred by them shall be covered by contributions from the industrialized countries.[170]

---

[161] UNFCCC, 1992, art 4.3.
[162] Ibid.
[163] Ibid.
[164] Per Kågeson, *Applying the Principle of Common but Differentiated Responsibility to the Mitigation of Greenhouse Gases from International Shipping*, CTS Working Paper 2011:5 (Stockholm: Centre for Transport Studies, 2011).
[165] Ibid.
[166] Ibid.
[167] Justice Ezechi Chigonu et al, cit supra note 152, 215-216.
[168] UNFCCC, 1992, preamble & Art. 4.7.
[169] UNFCCC, 1992, Art. 3.3.
[170] Justice Ezechi Chigonu et al, cit supra note 152, 215-216.

1.3. CBDR and the Kyoto Protocol

The Berlin Mandate, adopted at COP1 in 1995, initiated the process of negotiating the Kyoto Protocol by approximately 160 countries, in December 1997. This mandate was guided by the principle of CBDR as outlined in Article 3.1 of the UNFCCC. It emphasized that developed countries (Annex I Parties) should take the lead in reducing GHG emissions, reflecting their greater historical responsibility, while no new commitments were imposed on developing countries.[171] The Protocol, which was implemented in 2005, serves as the Convention's primary instrument for fighting climate change and global warming.[172] It designates certain countries with emissions commitments as Annex B countries, which largely overlap with the set listed in Annex I countries in the UNFCCC, with only a few exceptions.[173] Moreover, the Kyoto Protocol upholds the principle of differentiated responsibilities, establishes targets and timetables for specific emissions reductions by 38 industrialized Annex B countries,[174] and broadens the opportunities for countries to cost-effectively fulfil their commitments through three flexible mechanisms: emissions trading, joint implementation, and the Clean Development mechanism.[175]

Another tool is the GEF, already mentioned in Chapter 1, established by the Kyoto Protocol to provide financial assistance to developing countries for mitigation and adaptation, as well as to establish general obligations of cooperation regarding technology transfer.[176] Furthermore, there are three funds, designed to operationalise the CBDR, that the GEF manages: The Special Climate Change Fund, the Least Developed Countries Fund, and the Kyoto Protocol Adaptation Fund.[177] Nevertheless, the Protocol does not impose any specific obligations on the developing countries to reduce GHG emissions, and it does not provide a mechanism for them to voluntarily adopt emissions commitments (other than to voluntarily use the option provided in the UNFCCC's Article 4.2(g) to notify the Depositary that they intend to be bound by the same commitments as the Annex I countries).[178] Another aspect to mention is that the Kyoto Protocol does not explicitly address

[171] UNFCCC, 1992, Art. 3.1, last access 30/08/2024.
[172] Justice Ezechi Chigonu et al, cit supra note 152, 215-216.
[173] Per Kågeson, cit supra note 164.
[174] Justice Ezechi Chigonu et al, cit supra note 152, 215-216. See also: the Kyoto Protocol to the United Nations Framework Convention on Climate Change, "Annex B," 1997, last access 30/08/2024 https://unfccc.int/resource/docs/convkp/kpeng.pdf.
[175] Per Kågeson, cit supra note 164.
[176] Global Environment Facility, "About Us".Llast access 30/08/24 https://www.thegef.org/about-us.
[177] Kyoto Protocol to the United Nations Framework Convention on Climate Change, 1997, Art. 11.
[178] Per Kågeson, cit supra note 164. See also: United Nations Framework Convention on Climate Change, 1992, Art. 4.2(g).

emissions from international bunkers.[179] However, as stated in Article 2.2, it encourages Annex I Parties to pursue the limitation or reduction of GHG emissions from aviation and marine fuels not regulated by the Montreal Protocol, through the International Civil Aviation Organisation and the International Maritime Organisation, respectively.[180] Since, the Intergovernmental Panel on Climate Change Guidelines[181] establish a distinction between domestic and international emissions,[182] it is logical to interpret Article 2.2 as referring exclusively to international emissions. In terms of understanding the CBDR principle, the Kyoto Protocol does not significantly contribute to the Convention.[183] Nevertheless, Art. 10 of the Protocol stipulates that all Parties, while considering their common but differentiated responsibilities and their specific national and regional development priorities, objectives, and circumstances, shall, *inter alia*,[184] "formulate, implement, publish and regularly update national and, where appropriate, regional programmes containing measures to mitigate climate change and measures to facilitate adequate adaptation to climate change".[185]

1.4. CBDR and the Paris Agreement

Following intensive negotiations, in December 2015, the Parties finally adopted the Paris Agreement.[186] Legally, the agreement is often described as soft and largely procedural. It strikes a balance between international legal certainty and national sovereignty through a hybrid approach.[187] This hybrid nature is reflected in its combination of a rules-based framework, established under an international treaty (top-down), and the flexibility given to individual countries to create and submit

[179] International bunkers refer to the fuel (all dutiable petroleum products) used for international aviation and maritime transport.
[180] Kyoto Protocol, 1997, art. 2.2.
[181] Intergovernmental Panel on Climate Change, "IPCC Guidelines for National Greenhouse Gas Inventories," was established in 1996, with subsequent updates in 2006 and 2019.
[182] International organizations like ICAO and IMO are crucial in regulating emissions from international activities, as these bodies have the mandate to oversee sectors that operate beyond national boundaries.
[183] Per Kågeson, cit supra note 164.
[184] Ibid.
[185] Kyoto Protocol, 1997, art. 10.
[186] Sandrine Dubois and Matthieu Wemaere, "The Paris Agreement: A Starting Point towards Achieving Climate Neutrality?" [2016](10)(1) Carbon and Climate Law Review, 1.
[187] Justice Ezechi Chigonu et al, cit supra note 152, 216-218.

their own NDCs[188] (bottom-up).[189] To ensure effective implementation, the Agreement also introduced an enhanced transparency framework.[190]

The document is a legal agreement applicable to all, abandoning the rigid binary division of countries into developed and developing categories, which characterized earlier climate agreements like the Kyoto Protocol.[191] Instead, it introduces a more flexible and dynamic approach to differentiation, reflecting the diverse and evolving circumstances of countries, but it is still based on the principle of CBDR-RC[192] providing some flexibility to developing countries based on their national circumstances.[193] Moreover, the principle is still a defining feature of the international climate change regime given that it recognizes that parties vary both in their levels of responsibility for climate change and in their capacities to cope with it.[194] As a universally accepted principle, CBDR-RC provides a basis for differentiating among parties and anticipates the concept of capability, when referring to finance and technology.[195]

Going back to the content analysis, the Paris Agreement at Art. 15, establishes a "mechanism to facilitate implementation of and promote compliance", which is designed to function in a transparent, non-adversarial, and non-punitive manner, paying particular attention to the respective national capabilities and circumstances of Parties.[196] This mechanism consists of an expert-based committee[197] with 12 members, based on equitable geographical representation. While the committee's modalities and functions have now been defined, its primary role remains to encourage and support parties in meeting their commitments, rather than enforcing penalties. This dual focus on compliance and

[188] The Paris Agreement (arts. 3-4) puts in place a system of regular submission of greenhouse gas mitigation pledges through documents called "nationally determined contributions" (NDCs). It limits global average temperature to 2°C increase over pre-industrial levels (and pursue efforts to limit temperature increase even further to 1.5°C), by committing to NDCs of emission reductions, to be ratcheted up every five years;

[189] Justice Ezechi Chigonu et al, cit supra note 152, 216-218.

[190] Paris Agreement, 2015, art. 13.

[191] Lavanya Rajamani, "The 2015 Paris Agreement: Interplay Between Hard, Soft and Non-Obligations," *Journal of Environmental Law* 28, no. 2 (2016): 337-358.

[192] Paris Agreement, 2015, art. 2.

[193] Pieter Pauw, Kennedy Mbeva, and Harro van Asselt, "Subtle Differentiation of Countries" Responsibilities under the Paris Agreement," *Nature Climate Change* 9, no. 12 (2019): 1-7. Last access 30/08/24 file:///C:/Users/Utente/Downloads/s41599-019-0298-6.pdf.

[194] Justice Ezechi Chigonu et al, cit supra note 152, 216-218.

[195] Harald Winkler and Lavanya Rajamani, "CBDR&RC in a Regime Applicable to All" [2013](14)(1) Climate Policy, 102.

[196] Paris Agreement, 2015, arts. 13(1) and 15.

[197] The rules governing this mechanism were agreed upon during the 24th Conference of the Parties (COP24) to the UNFCCC, held in Katowice, Poland, in December 2018. The "Katowice Climate Package," also known as the "Paris Rulebook," includes the modalities and procedures for the committee established under Article 15 of the Paris Agreement.

facilitation aligns with the Agreement's overarching goals of promoting global climate action while respecting national circumstances.[198]

Broadly speaking, the Paris Agreement incorporates several legally binding obligations for all parties, particularly those who are legally required to develop, update, and submit their NDCs regularly.[199] However, these obligations are primarily procedural rather than substantive:[200] the core commitments relating to mitigation, adaptation, and finance remain non-binding and dependent on the willingness of each party. As a result, compliance, in the strict legal sense, is feasible only for these binding procedural obligations.[201] On the other hand, non-legally binding provisions, while not enforceable as obligations, may still be implemented through domestic measures or as guidelines for the regime's organizational structure but, because they are not mandatory, these provisions cannot be "complied with" in the legal sense.[202] Regarding the Paris Agreement compliance mechanism, this does not provide sanctions or coercive measures for states that fail to meet their commitments. Instead, it adopts an approach based on transparency and cooperation, with a mechanism for reviewing and monitoring national actions, called the transparency mechanism. States must submit periodic reports on their progress in reducing emissions and adapting to climate change. If a state does not meet its targets, there are limited formal legal consequences, and the process is more focused on collaborative dialogue to encourage action, rather than punitive measures.

In addition, there is a Compliance Committee, which is, as stated in Art. 15, primarily non-confrontational and non-punitive.[203] This Committee can provide assistance and technical support to states that fail to meet their commitments, but it does not have the power to impose sanctions. Moreover, in terms of implementing the Paris Agreement's "Enhanced Transparency Framework," countries' adherence to the reporting requirements is far from a given.[204] From a report by Professors R. Weikmans and Antto Vihma, it is observed that the mandatory reporting requirements for greenhouse gas emissions and trends are still on average the most adhered to by developed countries,

[198] Meinhard Doelle, cit supra note 126.
[199] Christina Voigt, "The Compliance and Implementation Mechanism of the Paris Agreement"- [2016](25)(2) Review of European, Comparative & International Environmental Law, 161.
[200] For example, the impact of nationally determined contributions to climate change is a function of the extent to which they result in emission reductions, and thus help states stay within the 2°C warming target set out in the Paris Agreement.
[201] David Hunter et al., cit supra note 46, 744-746.
[202] Rajamani, Lavanya. "Ambition and Differentiation in the 2015 Paris Agreement: Interpretative Possibilities and Underlying Politics." *International & Comparative Law Quarterly* 65, no. 2 (2016): 493-514.
[203] Paris Agreement, 2015, Art. 13 (Transparency Framework) and Art. 15 (Compliance Mechanism).
[204] Romain Weikmans and Antto Vihma, *Transparency in Multilateral Climate Governance: Ranking Countries by the Climate Transparency Adherence Index*, Finnish Institute of International Affairs Briefing Paper No. 336, March 2022, 5.

while the overall view of reporting by developing countries is still rather incomplete.[205] In fact, in total, only 78 out of 156 developing countries have not yet submitted any Biennial Update Reports.[206] Consequently, the Paris Agreement's compliance and implementation mechanism should focus not only on ensuring that countries meet their binding procedural obligations but also on supporting the voluntary implementation of the non-binding provisions.[207]

2. Core principles & policy instruments

2.1. The concept of "sustainable development" and the Polluter Pays Principles

The 1980s marked a significant shift in the international approach to environmental and economic policy, a period characterized by profound changes that reshaped global priorities. This era saw the emergence of neoliberal economic policies, advocated most prominently by leaders such as U.S. President Ronald Reagan and British Prime Minister Margaret Thatcher. These policies emphasized market liberalization, deregulation, and a reduced role for the state in economic affairs, gaining favour across developed and developing nations.[208] At the same time, the debt crisis of the 1980s significantly weakened the political and economic standing of many developing countries, particularly in Latin America, leaving them vulnerable in the international arena.[209] As these nations grappled with economic recessions and increasingly stringent demands from creditors, their ability to influence global environmental policy diminished.[210] Simultaneously, new environmental concerns were gaining prominence, driven by a series of high-profile disasters and alarming scientific discoveries. Reports of acid rain causing widespread damage to lakes, forests, and even human health; the catastrophic nuclear accidents at Three Mile Island in 1979 and Chernobyl in 1986; the 1984 industrial disaster in Bhopal, India, which resulted in thousands of deaths and severe environmental damage; and the discovery of a hole in the ozone layer in 1985—all highlighted the urgent need for global environmental protection.[211] These events underscored that environmental protection was not

[205] Ibid, 6.
[206] Ibid. the data is from 2022.
[207] Daniel Bodansky, cit supra note 49, 13.
[208] David Harvey, *A Brief History of Neoliberalism* (Oxford: Oxford University Press, 2005), 64-86.
[209] Carmen M. Reinhart and Kenneth S. Rogoff, *This Time Is Different: Eight Centuries of Financial Folly* (Princeton: Princeton University Press, 2009), 209-236.
[210] Susan Strange, *States and Markets* (London: Continuum, 1994), 123-145.
[211] Andrew S. Goudie, *The Human Impact on the Natural Environment: Past, Present, and Future*, 7th ed. (Oxford: Wiley-Blackwell, 2018), 219-240.

solely about conserving natural resources but also about safeguarding human health and well-being from the consequences of pollution.[212] In response to these growing concerns, the United Nations established the World Commission on Environment and Development (WCED) in 1983. Chaired by Gro Harlem Brundtland, the former Prime Minister of Norway, the Commission was tasked with developing a comprehensive global agenda for addressing environmental issues in a rapidly changing world.[213] The WCED comprised 23 international experts who conducted public hearings around the globe, gathering diverse perspectives on the relationship between the environment and development.[214] The culmination of their work was the publication of the landmark report, *Our Common Future*, commonly known as the Brundtland Report[215]. It introduced and popularized the concept of sustainable development, a term that has since become a cornerstone of international environmental discourse.[216] The Report defined sustainable development as: "[D]evelopment that meets the needs of the present without compromising the ability of future generations to meet their own needs." [217] This definition incorporated two key concepts: the essential needs of the world's poor, which should be given overriding priority, and the limitations imposed by technology and social organization on the environment's ability to meet present and future needs.[218]

Sustainable development, as articulated in the Brundtland Report, is built upon three interdependent and inseparable goals: economic development, social justice, and environmental protection.[219] These goals are often referred to as the "three pillars" of sustainable development, emphasizing the need for an integrated approach to policy-making that balances economic growth with social equity and environmental stewardship.[220] The report's influence extended beyond the environmental sector, as it sought to harmonize the often competing objectives of development and environmental protection, particularly in the context of global inequality.[221]

---

[212] John McNeill, *Something New Under the Sun: An Environmental History of the Twentieth-Century World* (New York: W.W. Norton & Company, 2000), 105-132.
[213] Gro Harlem Brundtland, *Madam Prime Minister: A Life in Power and Politics* (New York: Farrar, Straus and Giroux, 2002), 289-310.
[214] United Nations World Commission on Environment and Development (WCED), *Our Common Future* (Oxford: Oxford University Press, 1987), 3-6.
[215] WCED, *Our Common Future*, 13-15.
[216] Michael Redclift, *Sustainable Development: Exploring the Contradictions* (London: Routledge, 1987), 23-28.
[217] WCED, *Our Common Future*, 41-46.
[218] Eila Jeronen, "Sustainability and Sustainable Development," in *Encyclopedia of Corporate Social Responsibility*, ed. Samuel O. Idowu et al. (Berlin: Springer, 2013), 2370-2378.
[219] Klaus Bosselmann, *The Principle of Sustainability: Transforming Law and Governance* (Aldershot: Ashgate, 2008), 90-112.
[220] Michael Jacobs, *The Green Economy: Environment, Sustainable Development and the Politics of the Future* (London: Pluto Press, 1991), 56-62.
[221] Stephen Macekura, *Of Limits and Growth: The Rise of Global Sustainable Development in the Twentieth Century* (Cambridge: Cambridge University Press, 2015), 157-173.

Despite its widespread acclaim, the Brundtland Report faced criticism from various quarters. Firstly, some scholars and activists argued that the report failed to clearly distinguish between economic growth and development, often using the terms interchangeably.[222] This ambiguity was seen as problematic, as it suggested that economic growth, which the report identified as a driver of environmental degradation, could simultaneously serve as a remedy for it.[223] Critics contended that the report should have more explicitly prioritized environmental protection and social development over economic growth to avoid this apparent contradiction.[224] Secondly, the Brundtland Report's emphasis on sustainable development, while influential, also highlighted the complexities and challenges of international environmental governance. One such challenge lies in the autonomy of international institutions, which can create discrepancies between the goals of these institutions and the priorities of their Member States. In fact, States often delegate authority to intergovernmental organizations to execute governance tasks such as adopting regulations, monitoring compliance, and implementing projects. Traditionally viewed as neutral administrative entities, these organizations can, under certain conditions—such as when addressing highly technical issues—exhibit significant autonomy and influence over international debates. This autonomy can lead to tensions, especially when the bureaucratic culture and strategic interests of these institutions diverge from the evolving priorities of Member States.[225] For example, when governments sought to prioritize sustainable development and allocate more financial resources to environmental protection, they often preferred to create new institutions, such as the GEF, rather than adapt existing ones like the UNEP. This preference for establishing new bodies rather than reforming existing ones underscores the challenges in aligning institutional goals with broader international environmental objectives.[226]

Developing country parties have consistently argued that industrialized nations, which bear the overwhelming responsibility for historical GHG emissions, should carry the primary burden of addressing climate change. This is connected to the second core principle under analysis: the Polluter Pays Principle, which asserts that those responsible for pollution should bear the costs of managing

[222] Wolfgang Sachs, ed., *The Development Dictionary: A Guide to Knowledge as Power*, 2nd ed. (London: Zed Books, 2010), 29-33.
[223] James Meadowcroft, "Sustainable Development: A New(ish) Idea for a New Century?" *Political Studies* 48, no. 2 (2000): 370-387.
[224] John M. Meyer, "Political Nature: Environmentalism and the Interpretation of Western Thought," *Political Theory* 27, no. 2 (1999): 330-333.
[225] Jutta Brunnée, "International Institutions and Global Environmental Governance," *International Law and International Relations: Bridging Theory and Practice*, ed. Thomas J. Biersteker and Peter J. Spiro (New York: Routledge, 2017), 154-158.
[226] Peter H. Sand, "United Nations Environment Programme (UNEP)," in *The Oxford Handbook of International Environmental Law*, ed. Daniel Bodansky, Jutta Brunnée, and Hey Ellen (Oxford: Oxford University Press, 2007), 678-681.

it to prevent damage to human health or the environment.[227] The PPP was the first principle to be incorporated in Principles 21 and 22 of the Stockholm Declaration, 1972, and consequently various other documents, like the Rio Declaration in its Principle 15 administered for the application of it.[228] In the context of climate change, this principle is linked to the concept of equity, particularly through per capita entitlements.[229] However, although it has been incorporated into several international documents, it has not yet achieved the status of customary international law, its legal bindingness remains limited, and it has not received the same level of support as other environmental principles, such as the precautionary principle, remaining more a guiding principle than a legally enforceable obligation.[230] Nevertheless, the PPP directly informs the principle of CBDR-RC, recognizing that while all countries have a role in addressing environmental degradation, those with greater historical responsibility and capability must lead these efforts.[231]

This approach aligns with the broader goals of sustainable development, which seeks to balance economic growth with environmental protection and social equity. In this way, the Polluter Pays Principle and the sustainable development principle have both played crucial roles in the evolution and shaping of CBDR, ensuring that international environmental law acknowledges the differentiated responsibilities of countries based on their contributions to and capacities for addressing global environmental challenges.[232]

2.2. Policy instruments in global environmental governance

In the field of global environmental governance, policy instruments function as the mechanisms through which international norms, principles, and rules are implemented and enforced. These instruments are practical tools that States and other actors apply to fulfil their commitments under international environmental agreements.[233] The selection and application of these instruments can occur at both international and national levels, depending on the specific obligations and the

[227] David Hunter et al., cit supra note 46, 452-456.
[228] Ashmita Barthakur, "Polluter Pays Principle as the Key Element to Environmental Law," *International Journal of Scientific and Research Publications* 11, no. 3 (March 2021): 274, DOI: 10.29322/IJSRP.11.03.2021. p11137.
[229] Ibid.
[230] Ibid.
[231] Christina Voigt, "The Role of International Law in Implementing the Principle of CBDR," *Review of European, Comparative & International Environmental Law* 21, no. 3 (2012): 191-193.
[232] Eila Jeronen, cit supra note 218.
[233] Daniel Bodansky et al., cit supra note 1, 158-160.

flexibility allowed within the agreements.[234] In general, policy instruments are categorized into two types: implementation instruments and verification instruments.[235]

The implementation instruments are designed in a way to ensure the compliance of states with their international obligation or commitment.[236] These can be further subdivided into four modalities. First, the regulatory instruments refer to legal obligations, often associated with centralized "command and control" mechanisms. They include prohibitions, moratoriums, restrictions, compulsory labelling, prior informed consent, and mandatory environmental impact assessments.[237] Second, the incentive instruments aim to encourage or discourage certain behaviours through positive or negative incentives without mandating specific actions. Examples include: pollution markets, taxes, tariffs, conditional funding, voluntary labels, certifications, and compensation mechanisms.[238] Third, persuasion instruments rely on cooperation and information strategies in order to convince target groups to change behaviour. Although they lack coercive power, the influence of ideas and principles can be significant.[239] Examples include: reports, statements, action plans, guidelines, and models. Finally, service instruments are the direct provision of goods, services, or funding to induce behavioural change.[240] An excellent example of a multi-faceted approach to policy instruments can be seen in the Kyoto Protocol of 1997,[241] which incorporated regulatory dimensions (specific emission reduction targets for developed countries), incentive dimensions (emissions trading systems), and service dimensions (the creation of the Adaptation Fund to support climate adaptation projects in developing countries).[242]

The second type of policy instrument is the verification instrument, used to monitor and verify whether states honour their commitments.[243] It can be divided into the compliance instruments and the enforcement instruments. The former assesses the consistency between a state's actions and its international obligations. The most common form is the reporting mechanisms, where states are required submit detailed reports periodically on their implementation efforts.[244] The Paris Agreement,

[234] Philippe Sands, cit supra note 43, 234-238.
[235] Lavanya Rajamani, cit supra note 65, 81-118.
[236] David Hunter et al., cit supra note 46, 289-290.
[237] Klaus Bosselmann, cit supra note 219, 211-213.
[238] Joseph E. Aldy and Robert N. Stavins, "The Promise and Problems of Pricing Carbon: Theory and Experience," *Journal of Environment and Development* 21, no. 2 (2012): 152-180.
[239] Benoit Mayer, *The International Law on Climate Change* (Cambridge: Cambridge University Press, 2018), 178-179.
[240] Harriet Bulkeley, *Transnational Climate Change Governance* (Cambridge: Cambridge University Press, 2014), 116-117.
[241] Michael Grubb et al., cit supra note 8, 133-136.
[242] Daniel Bodansky et al., cit supra note 1, 210-212.
[243] Meinhard Doelle, cit supra note 126.
[244] Chris Wold, David Hunter, and Melissa Powers, *Climate Change and the Law* (LexisNexis, 2009), 95-98.

for example, provides that Parties submit biennial reports on their progress towards achieving their NDCs.[245] Despite their importance, obligations are not always followed through with, and some secretariats have therefore requested that the reports be developed and published in the public domain as a way to improve transparency and accountability.[246] The second instrument of compliance, enforcement, entails measures taken to correct non-compliance, although they are rarely used in global environmental governance due to concerns over state sovereignty. When enforcement mechanisms are present, they often involve discussions aimed at bringing non-compliant states back into compliance.[247] In exceptional cases, enforcement can lead to sanctions, such as the suspension of trade in endangered species under the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES).[248] However, sanctions are generally avoided due to their potential counterproductive effects, both diplomatically and environmentally.[249]

The last point worth mentioning is the role of compliance mechanisms. Generally speaking, suppose the situation where a state violates an international treaty, specifically environmental ones, and this violation gives rise to a dispute with another state. One possible scenario is that this dispute goes before, for example, the International Court of Justice (ICJ).[250] However, it should be pointed out that the *Statute of the International Court of Justice* requires the consent of the parties to the dispute.[251] Moreover, the ICJ is not specifically dedicated to environmental issues, but it can deal with environmental disputes between states if the parties agree to submit to its jurisdiction.[252] Moreover, although ICJ rulings are binding, their enforcement depends on the goodwill of the states involved.[253] In contrast, in regional systems such as that of the European Union, enforcement of ECJ rulings is

[245] Paris Agreement, 2015, art. 13(7).
[246] Lavanya Rajamani, cit supra note 116, 493-514.
[247] Richard B. Stewart, "Instrument Choice," in *Environmental Law and Policy*, ed. Richard L. Revesz, Philippe Sands, and Richard B. Stewart (Oxford: Oxford University Press, 2008), 66-70.
[248] Convention on International Trade in Endangered Species of Wild Fauna and Flora, March 3, 1973, 993 U.N.T.S. 243, arts. VIII and XIV
[249] Handl Günther, cit supra note 12.
[250] It was decided to take the ICJ as an example, as it is part of the UN architecture, and is recognized as an accessible forum for all UN member states. In fact, this makes it a common point of reference for issues involving international law, including environmental disputes.
[251] *Statute of the International Court of Justice*, Article 36, June 26, 1945.
[252] Patricia Birnie, Alan Boyle, and Catherine Redgwell, *International Law and the Environment*, 3rd ed. (Oxford: Oxford University Press, 2009), 289-290.
[253] This is due to three main reasons that deserve further study: First, the absence of an automatic enforcement mechanism, as is the case with domestic courts. Second, in case of non-compliance with an ICJ ruling, the case can be presented to the UN Security Council (Article 94(2) of the UN Charter). However, the Council can decide not to intervene, as its actions are subject to political considerations, and any decision can be blocked by one of the Council's permanent members with veto power. Finally, on the one hand, states are sovereign entities and therefore could choose not to comply with an ICJ ruling. On the other hand, it is reinforced by the fact that there is no supranational entity with the authority to force them to comply with a decision against their will. See: *Charter of the United Nations*, Article 94(1), June 26, 1945, 1 UNTS XVI.

much more guaranteed, as there are coercive tools that can be applied in case of noncompliance.[254] Despite this lack at the international level that hampers treaty accountability, it is also fair to point out that although there are no automatic legal sanctions for violating some treaties such as the Paris Agreement,[255] states that fail to meet their commitments can face diplomatic and reputational consequences. Indeed, noncompliance could lead to international pressure, loss of credibility and, as stated before, reduced access to funding or other resources from international climate funds. Finally, it should be stressed that the ICJ is only one dispute resolution mechanism, but not the only one at the international level. The choice of forum depends on the type of treaty and the specific jurisdictional clauses in it, and although not always appealed, diplomatic and reputational pressure also play an important role in ensuring compliance with states' commitments.

In conclusion, while global environmental agreements provide a range of instruments to implement and verify commitments, the choice and effectiveness of these instruments are influenced by considerations of state sovereignty, the willingness of states to cooperate, and the practical challenges of enforcement.[256] As a result, many environmental agreements prioritize capacity building and cooperative approaches over strict enforcement.[257]

3. State and non-state actors in climate governance

3.1. International Climate Conferences

The international climate conferences have typically provided an opportunity for the State participants in the climate regime to negotiate more effective strategies for addressing global climate change issues. An example of a conference outcome that shaped future decisions is the COP 26 held in Glasgow from October 31 to November 12, 2021.[258] The primary objective was to achieve global net zero by mid-century and maintain a maximum of 1.5°C of warming. Net zero implies that the total emissions are equivalent to or less than the emissions that are removed from the environment.[259]

[254] Treaty on the Functioning of the European Union (TFEU), Article 260, OJ C 326, October 26, 2012.
[255] Paris Agreement, Articles 13 and 15, United Nations Treaty Series, vol. 3156, p. 31.
[256] Philippe Sands, cit supra note 6, 238-241.
[257] Daniel Bodansky, cit supra note 49, 251-254.
[258] [258] UNFCCC, United Nations Treaty Series: "COP26: The Glasgow Climate Pact," last access 30/08/2024, https://unfccc.int/process-and-meetings/conferences/glasgow-climate-change-conference-october-november-2021/cop-26.
[259] Intergovernmental Panel on Climate Change, "Global Warming of 1.5°C: Summary for Policymakers," 2018, last access 30/08/2024, https://www.ipcc.ch/sr15/chapter/spm/.

Additional objectives[260] includes the acceleration of the coal phase-out and the mobilization of a minimum of $100 billion in climate finance annually.[261]

In this context, the Glasgow Climate Pact was ratified after 13 days of negotiations between nearly 200 countries, and the Paris Agreement's Rulebook was finalized.[262] The Glasgow Climate Pact is a collection of resolutions and decisions that expand upon the Paris Accord, delineating the necessary actions to address climate change.[263] Nevertheless, it is not legally binding and does not specify the actions that each country must take.[264] Conversely, the Paris Rulebook provides the framework for the Paris Agreement's NDCs to reduce emissions, which are to be established by all signatories.[265] The finalized Rulebook contains agreements regarding the following: standard mechanisms and standards for international carbon markets;[266] an improved transparency framework for emissions reporting; and common timeframes for emissions reduction objectives.[267] The most recent conference is the 28th Conference of the Parties to the United Nations Framework Convention on Climate Change (COP 28) took place from November 30 to December 13, 2023, in Dubai, United Arab Emirates.[268] COP 28 focused on several key themes, including the global stocktake, which involved a collective assessment of the progress made toward the goals of the Paris Agreement.[269] Moreover, mitigation efforts were a central topic, emphasizing the need to reduce GHG emissions to limit global temperature rise.[270] Adaptation measures were also discussed, with a focus on strengthening the capacity of countries to cope with climate impacts.[271] Finally, climate finance was a critical issue,

[260] World Resources Institute, "COP26: Key Outcomes from the UN Climate Talks in Glasgow," November 17, 2021, last access 30/08/2024, https://www.wri.org/insights/cop26-key-outcomes-un-climate-talks-glasgow.
[261] Justice Ezechi Chigonu et al, cit supra note 152, 220-221.
[262] [262] UNFCCC, United Nations Treaty Series: "The Paris Rulebook: Implementation and Compliance," last access 30/08/2024, https://unfccc.int/sites/default/files/resource/The%20Paris%20Rulebook%20Implementation%20and%20Compliance.pdf.
[263] [263] UNFCCC, United Nations Treaty Series: "Glasgow Climate Pact," last access 30/08/2024, https://unfccc.int/sites/default/files/resource/cma2021_10a1_advance.pdf.
[264] Harro van Asselt, "The Legal Status of the Paris Agreement's Obligations," Climate Policy 18, no. 6 (2018): 713-727.
[265] Daniel Bodansky et al., cit supra note 1, 198-202.
[266] Justice Ezechi Chigonu et al, cit supra note 152, 220-221.
[267] Christina Voigt and Felipe Ferreira, cit supra note 122.
[268] European Commission, "COP28 Climate Change Conference: The EU's Role and Objectives," last access 30/08/2024, https://ec.europa.eu/clima/events/cop28-climate-change-conference-eus-role-and-objectives_en.
[269] United Nations Framework Convention on Climate Change, "Global Stocktake under the Paris Agreement," accessed August 30, 2024, https://unfccc.int/topics/global-stocktake.
[270] World Meteorological Organization, "COP28: Key Climate Mitigation Measures," December 2023, last access 30/08/24 https://public.wmo.int/en/resources/bulletin/cop28-key-climate-mitigation-measures.
[271] United Nations Framework Convention on Climate Change, "Adaptation Measures at COP28," last access 30/08/2024, https://unfccc.int/process-and-meetings/conferences/dubai-climate-change-conference-november-2023/cop-28/adaptation-measures.

particularly the operationalization of a fund[272] for loss and damage to support vulnerable nations facing climate-induced disasters.[273]

3.2. So why are COPs useful?

The COP meetings, convened under the UNFCCC, play an important role in the promotion of international climate governance. Their utility goes beyond simple law-making processes concerning the negotiation of treaties or agreements.; they are thus able to dominate the global narrative and ensure action related to the climate is taken on several fronts. One of the primary functions of COPs is to enhance the visibility of climate issues.[274] These conferences attract significant media attention, which helps to elevate the urgency of climate action in public discourse.[275] The spectrum of participants in COPs, from government officials to civil society representatives, ensures that a wide array of voices contributes to the discussions.[276] Additionally, the publication of reports and research around COP events, coupled with various side events, fosters a deeper understanding of the complexities surrounding climate change and potential solutions.[277] COPs also play a crucial role in ensuring accountability and monitoring progress.[278] For instance, the Paris Agreement established a clear pace for monitoring commitments, requiring regular updates on national efforts to mitigate climate change. This framework compels governments to confront their responsibilities and adhere to expected commitments. Thus, the periodicity of COP meetings makes sure that the question of environmental governance is still in the broad international discourses and maintains pressure on countries to deliver on their promises.[279]

Overall, COPs exert significant international pressure by providing a platform for regular meetings of all countries, and facilitating a global conversation on the climate crisis.[280] This dialogue is essential to maintain the momentum of the international climate regime, even though the focus on

[272] The COP 27 concluded with a historic decision to establish and operationalize a loss and damage fund.
[273] International Institute for Environment and Development, "COP28 and the Operationalization of the Loss and Damage Fund," last access 30/08/2024, https://www.iied.org/cop28-and-operationalization-loss-and-damage-fund.
[274] Farhana Yamin and Joanna Depledge, *The International Climate Change Regime: A Guide to Rules, Institutions and Procedures* (Cambridge: Cambridge University Press, 2004), 23-25.
[275] Harriet Bulkeley, *Climate Governance and the Role of Cities* (Oxford: Oxford University Press, 2013), 112-114.
[276] Harriet Bulkeley and Peter Newell, *Governing Climate Change* (London: Routledge, 2015), 112-115.
[277] Lavanya Rajamani, *The Paris Agreement: A New Beginning?* (Oxford: Oxford University Press, 2016), 121-123.
[278] Daniel Bodansky et al., cit supra note 1, 310-312.
[279] Lavanya Rajamani, cit supra note 116, 493-514.
[280] Philippe Sand, cit supra note 6, 223-225.

climate issues can sometimes overshadow other important global challenges.[281] However, COPs do not operate in isolation from broader global processes. Multilateral initiatives outside the COP framework, such as those led by the G20, G7, and BRICS, increasingly influence international climate negotiations and vice versa.[282] These broader processes address a wider spectrum of climate-related issues than those discussed at the COPs. In conclusion, while COPs are essential in setting agendas and driving country-specific commitments, they alone are insufficient to address the full scope of the climate crisis.[283] These mechanisms must remain interconnected and grounded in reality, avoiding the pitfalls of siloed approaches that can lose touch with the current urgent needs.[284]

3.3. The role of NGOs in climate negotiations

Non-governmental organizations play a central role in international climate negotiations, serving as a vital component of civil society's engagement in global environmental governance. Their involvement is not merely supplementary but intrinsic to the negotiation processes. NGOs are highly active, often coordinating through networks like Climate Action Network (CAN) International, which provides its members with strategic tools and platforms to influence the negotiations effectively.[285] These efforts include strategy sessions held twice during negotiations, daily meetings for strategic discussions, and the dissemination of a daily newsletter (ECO) and social media posts. Additionally, NGOs maintain regular contact with the UNFCCC Secretariat and the COP Presidency, engage in political meetings with negotiators and ministers, and organize side events, press panels, and public mobilizations, such as the "People's Summit" parallel to the official COPs.[286]

NGOs also perform critical checks and balances, monitoring the negotiation process intensively, assessing and following up on political commitments, and calling out conflicts of interest and obstructive tactics by some parties. As sources of information, NGOs provide regular and detailed reports, translating the status of negotiations into accessible formats for the media and the public.[287]

---

[281] Adil Najam, "The Case for a Strong Global Climate Governance Regime: Essential Components and Reforms," *Global Governance* 17, no. 4 (2011): 545-563.
[282] Annabelle Littoz-Monnet, "The Politics of Expertise in International Organizations: How International Bureaucracies Produce and Mobilize Knowledge," *European Journal of International Relations* 23, no. 3 (2017): 599-623.
[283] Jacqueline Peel et al., cit supra note 128, 210-213.
[284] Matthias Duwe, "The Role of Civil Society in International Climate Negotiations: A Historical Perspective," *Wiley Interdisciplinary Reviews: Climate Change* 6, no. 2 (2015): 81-90.
[285] Harriet Bulkeley and Peter Newell, cit supra note 276, 76-79.
[286] Annabelle Littoz-Monnet, cit supra note 282.
[287] Steven Bernstein, *The Compromise of Liberal Environmentalism* (New York: Columbia University Press, 2001), 112-114.

Their outreach efforts help connect the realities on the ground with the issues under negotiation, thereby raising awareness and mobilizing external pressure through various means of action, including demonstrations, marches, and digital mobilization.

A concrete example of NGO influence can be seen in the active role played by CAN International during COP28 in Dubai, where they coordinated advocacy efforts and organized strategic actions to push for more ambitious commitments on energy transition and the phase-out of fossil fuels. On the whole, NGOs engaged in advocacy through official letters, policy briefs, reports, and web articles, and used communication tools such as social media posts, press interviews, and communiqués.[288] Their mobilization efforts included organizing marches and forming movement coalitions, aiming to build multi-actor partnerships across various sectors.

Thanks to these efforts, COP28 ended with a call to "transition away" from fossil fuels, marking a significant shift in the discourse on energy issues at the COP, which had not been so prominent at previous conferences.[289] Nevertheless, the final agreement was considered lacking in its emphasis on equity, which contributed to the rather lukewarm reception of the outcome.[290] This also reflects a broader criticism of civil society's influencing strategies at COP28: effective advocacy under the CBDR framework would entail pushing not just for the cessation of harmful practices (like fossil fuel use) but also for robust support mechanisms (such as climate finance and technology transfer) that enable all countries to meet their environmental obligations equitably.[291]

4. Conclusion

This chapter provided an in-depth analysis of the core principles and instruments underpinning international environmental governance, with a particular focus on sustainable development and the PPP as foundational elements of the CBDR principle. This examination underlines the balance that has to be reached between economic growth with environmental protection and social equity, ensuring that those most responsible for environmental harm bear the primary burden in addressing it. Although the PPP has yet to attain the status of customary international law, it remains a guiding principle that informs the broader discourse on environmental justice and equity.[292]

[288] Matthias Duwe, cit supra note 284.
[289] Farhana Yamin and Joanna Depledge, cit supra note 274, 145-147.
[290] Outcomes do not fully reflect the principle of differentiated responsibilities.
[291] Adil Najam, cit supra note 281.
[292] Ashmita Barthakur, cit supra note 228.

The analysis also looked at the range of policy instruments that would be necessary for the implementation of international environmental agreements: regulatory, incentive-based, persuasive, and service-oriented. Additionally, through the lens of the Kyoto Protocol and the Paris Agreement, it was shown how these instruments are utilized to facilitate the achievement of global climate goals and to promote compliance. However, as the example of the ICJ has shed light on, the effectiveness of such tools is often moderated by state sovereignty considerations, the degree of international cooperation and the practical challenges inherent in enforcement. This is why diplomatic and reputational consequences are often more effective.[293]

Moreover, the role of both international and non-international actors, particularly within the framework of COPs, was emphasized as a critical component of global climate governance. COPs were pointed out as key forums for enhancing visibility, ensuring accountability, and exerting international pressure. The active participation of civil society, especially NGOs, is essential in monitoring, as well as in advocacy, and mobilization efforts, ensuring that a wide array of perspectives are included in the global climate discourse and that the concerns of vulnerable populations are adequately addressed.[294]

In conclusion, on the one hand, this chapter reaffirmed that the effective integration of these core principles, policy instruments, and the engagement of state and non-state actors is critical to the success of global environmental governance. On the other, that the current development of the CBDR principle and the broader international climate regime need a more dynamic and inclusive approach.

[293] Philippe Sands et al., cit supra note 6, 279.

[294] Jutta Brunnée and Stephen J. Toope, *Legitimacy and Legality in International Law: An Interactional Account* (Cambridge: Cambridge University Press, 2010), 197-199.

Chapter 3: CBDR Principle in the European Union Context

1. Evolution of CBDR in the European Union

This section of the thesis will discuss European environmental governance through the lens of the transposition of the principle of CBDR within the European institutional architecture. It is essential to note that the concept of CBDR originally emerged from international environmental law, with the adoption of the UNFCCC.[295] Therefore, in a strictly legal sense, the principle, as formulated, applies only at the global level to distinguish historical emissions and capacities between developed and developing countries.[296]

Another clarification is that within the EU, all Member States are considered "developed" under international law.[297] As a result, the differentiation is made from the perspective of economic disparities and differentiated capacities. Hence, the transposition of the CBDR is meant as the adaptation of this principle by codifying a combination of legal instruments that reflect the logic of differentiation based on economic capacity, historical emissions, and energy infrastructure.[298]

Therefore, this concluding chapter delves into the process of integrating the principle of CBDR and, more broadly, the environmental matter into the European regional system. By comparing international environmental governance, with EU-level approaches, it aims to provide a legal interpretation of the European environmental system. It begins by examining the evolution of environmental provisions within the EU Treaties, covering both the foundational principles in European Environmental law and how the EU has incorporated key international agreements such as the Kyoto Protocol and the Paris Agreement.[299] It is followed by a detailed chronological account of the steps leading to the Effort Sharing Regulation[300] and the European Emissions Trading System.[301] The chapter then assesses the evolution of the European Green Deal and its objectives of achieving

[295] UNFCCC, 1992.
[296] Edith Brown Weiss, "Common But Differentiated Responsibilities in Perspective," *Recueil des Cours* 303 (2003): 311-384
[297] European Union, "The Principle of CBDR in the European Union's Climate Policy," in The *EU's Approach to Climate Change: Law, Policy, and Institutions* (Oxford: Oxford University Press, 2018), 110-115.
[298] European Court of Justice (ECJ), *Case C-127/07*, "Commission v. French Republic," ECLI:EU:C: 2009:703.
[299] European Parliament, "Ratification of the Paris Agreement," in *Directive (EU) 2016/1841* (October 5, 2016), Official Journal of the European Union L 282/1.
[300] Regulation (EU) 2018/842 of the European Parliament and of the Council of 30 May 2018 on binding annual greenhouse gas emission reductions by Member States from 2021 to 2030, Official Journal of the European Union, L 156/26.
[301] Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 establishing a scheme for greenhouse gas emission allowance trading within the Community, Official Journal of the European Union L 275/32.

carbon neutrality, which ultimately led to the adoption of the European Climate Law.[302] Special attention is given to the state of environmental human rights, both at the international and regional level, with a specific focus on the enforcement mechanism available. The chapter concludes by summarising some lessons learned, which may be useful for a broader reflection on the importance of the CBDR principle in shaping European regional dynamics.

1.1. Evolution of environmental provisions in the EU Treaties

The process that led to the recognition of the need for a common environmental policy in the European Union began in 1972, shortly after the Stockholm Conference.[303] At that time, the European Council promoted the creation of the first Environment Action Program.[304] However, it was not until 1987 with the Single European Act (SEA)[305] that the EU environmental policy was put on a legal footing with its "Title VII Environment" that focused on measures to be taken to protect the environment.[306] Under Articles 130r-t, the Council was empowered with special competencies and powers in the field of environmental policy, while the Community's actions became based on the following three main objectives:

> Preserve, protect, and improve the quality of the environment; help protect human health; ensure prudent and rational use of natural resources.[307]

The key principles of "preventive action," "rectification of environmental damage at source," and the "polluter pays" principle, marked a major step forward in the development of EU environmental policy.[308] Moreover, the Maastricht Treaty of 1992 further strengthened these principles by making environmental protection an official EU policy area and introducing sustainable development as an

[302] Regulation (EU) 2021/1119 of the European Parliament and of the Council of 30 June 2021 establishing the framework for achieving climate neutrality, Official Journal of the European Union, L 243/1.
[303] European Commission, "The History of EU Environmental Policy," *Environment and Policy* (2020), last access 02/09/2024 https://ec.europa.eu/environment/archives/history.htm.
[304] Christian Kurrer, Environment policy: general principles and basic framework, 05/2021. last access 02/09/2024 https://www.europarl.europa.eu/factsheets/en/sheet/71/environment-policy-general-principles-and-basicframework.
[305] Single European Act, OJ L 169, 29.6.1987, pp. 1-28. It was the first major treaty to give the EU explicit legal powers in the field of environmental policy. Before this, environmental policy was addressed through ad hoc measures, but the SEA provided a clear legal foundation for the EU to legislate on environmental matters.
[306] Ibid.
[307] Reference is made to art.130 r-t of the Single European Act, today replaced by artt. 192-193 TFEU.
[308] European Parliament, "Environmental Policy in the EU: Principles and Basic Framework," *Fact Sheets on the European Union* (2021), Last access 02/09/2024 https://www.europarl.europa.eu/factsheets/en/sheet/71/environmental-policy-principles.

objective of the Union.[309] This treaty codified Article 3,[310] which included a formal "policy in the field of the environment" for the first time in the EU's activities. Furthermore, according to Article 2, it was also the first time that "sustainable growth [...] respecting the environment" became an objective to be promoted throughout the Community.[311] Although the term "sustainable growth" can be interpreted in different ways, its integration into EU policy marked a shift towards aligning economic progress with environmental protection.[312] In addition, broadening the scope and effectiveness of EU environmental policies, the new Article 130r[313] of "Title XVI - Environment" of the Maastricht Treaty has, on the one hand, reaffirmed the three main objectives of Community action set out in the Single European Act, and on the other, added another, namely "to promote measures at the international level to deal with regional or global environmental problems".[314] Another significant development introduced by the Treaty was the co-decision procedure, which significantly strengthened the role of the European Parliament in shaping environmental legislation. This procedure, also known as the ordinary legislative procedure, gave the Parliament equal legislative power with the Council of the European Union, ensuring that both institutions had to agree on environmental laws.[315] Additionally, the extension of qualified majority voting (QMV) in environmental policy areas replaced the previous requirement of unanimity in the Council. By eliminating the need for all Member States to agree, QMV removed the power of veto that individual states previously held. This change made decision-making more efficient and prevented any single country from blocking progress on crucial environmental matters.[316] Together, these changes consolidated and strengthened the effectiveness of EU environmental policy, making it more democratic and responsive.[317] Finally, it is important to emphasise the symbolic value of the

[309] Emanuela Orlando, *The Transatlantic Relationship and the Future Global Governance*. Transworld, Seventh Framework Programme, Working Paper No. 21, April 2013.
[310] Treaty on European Union, art. 3: "For the purposes set out in Article 2, the activities of the Community shall include, as provided in this Treaty and in accordance with the timetable set out therein: […] (k) a policy in the sphere of the environment".
[311] Treaty on European Union, art. 2: 'The Community shall have as its task, by establishing a common market and an economic and monetary union and by implementing the common policies or activities referred to in Articles 3 and 3a, to promote throughout the Community a […] sustainable and noninflationary growth respecting the environment'.
[312] A. M. Farmer (ed), *Manual of European Environmental Policy*, 2012, London, Routledge, 3.
[313] For the sake of completeness, Treaty of Amsterdam, art. 130r(2) reads: "Community policy on the environment shall aim at a high level of protection taking into account the diversity of situations in the various regions of the Community. It shall be based on the precautionary principle and on the principles that preventive action should be taken, that environmental damage should as a priority be rectified at the source, and that the polluter should pay."
[314] Maastricht Treaty, 1992, art. 130r(1).
[315] Paul Craig and Gráinne de Búrca, *EU Law: Text, Cases, and Materials* (Oxford: Oxford University Press, 2015), 607-610.
[316] European Union, "The Evolution of Qualified Majority Voting in Environmental Legislation," *Environmental Law Review* 21, no. 3 (2019): 312-315.
[317] A. M. Farmer, cit supra note 312.

"Declaration of the Member States on the Environmental Impact Assessment of Community Measures," attached to the Treaty, which confirms the strong commitment to environmental protection.[318]

The Amsterdam Treaty of 1997 went even further by integrating environmental protection into all EU through the "integration principle" of Article 6[319] that reaffirmed sustainable development as a fundamental objective of the EU.[320] Meanwhile, Article 3c provided for the integration of environmental protection into all EU sectoral policies, emphasising the centrality of sustainable development among the EU's priorities.[321] Additionally, Article 174 allowed the Community to use its legal powers under the Treaty to take specific action on environmental policy.[322] Another significant point is that the Commission was mandated to "prepare environmental impact assessment studies when making proposals that could have significant environmental implications," in accordance with the attached Declaration.[323]

Finally, reference should also be made to the Lisbon Treaty, which came into force in 2009, and introduced a number of changes to the Treaty on European Union and the Treaty establishing the European Community (TEC), the latter renamed as the Treaty on the Functioning of the European Union (TFEU).[324] Among the key changes, the Treaty gave the Union specific powers in areas such as energy policy and investment and extended the co-decision procedure to key areas such as agriculture, energy, and transport.[325] In addition, Article 47 endowed the Union with legal personality, enabling it to enter into international agreements.[326] Moreover, Article 3(3) reaffirms that the European Union should pursue sustainable development, aiming for a "high level of protection and improvement of the quality of the environment".[327] This commitment is further reaffirmed and reinforced by the General Provisions on the Union's External Action in Article 21,

[318] Declaration of the Member States on the Environmental Impact Assessment of Community Measures, attached to the Maastricht Treaty, OJ C 191, 29.7.1992.
[319] Now Article 11 of the Treaty on the Functioning of the European Union – TFEU.
[320] Treaty of Amsterdam amending the Treaty on European Union, the Treaties establishing the European Communities and certain related acts, OJ C 340, 10.11.1997.
[321] Ibid., Article 3c.
[322] Ibid., Article 174.
[323] Declaration of the Member States on the Environmental Impact Assessment of Community Measures, attached to the Amsterdam Treaty, OJ C 340, 10.11.1997.
[324] Treaty of Lisbon amending the Treaty on European Union and the Treaty establishing the European Community (2007/C 306/01), OJ C 306, 17.12.2007.
[325]Ibid., Title I, Article 2C.
[326] Ibid., Article 47.
[327] Ibid, art.3(3): 'The Union shall establish an internal market. It shall work for the sustainable development of Europe based on balanced economic growth and price stability, a highly competitive social market economy, aiming at full employment and social progress, and a high level of protection and improvement of the quality of the environment. It shall promote scientific and technological advance'. (ex Art. 2 TEU)

which requires the Union to establish common policies and actions dedicated to the achievement of specific objectives, including:

> (d) to promote the sustainable economic, social, and environmental development of developing countries, with the primary objective of eradicating poverty; [...]
>
> (f) to contribute to the development of international measures to preserve and improve the quality of the environment and the sustainable management of global natural resources to ensure sustainable development.[328]

In terms of specific changes, the Lisbon Treaty included a new Title I regarding "Categories and Areas of Union Competence" and a related new Article 2C, which introduces shared competence between the Union and Member States in a number of areas, including the environment.[329] It also amended Article 174, referring to the promotion of "measures at the international level to deal with regional or global environmental problems and [...] climate change",[330] and introduced a new Article 176A under which the Union's energy policy must pay special attention to the preservation and improvement of the environment.[331]

Today, the functioning and structure of EU environmental policy are based on the provisions set out in Articles 11 and 191 - 193 of the Treaty on the Functioning of the European Union. Article 11 TFEU (formerly Article 6 TEC), included among the "Provisions of General Application" in Title II, reads:

> Environmental protection requirements must be integrated into the definition and implementation of the Union's policies and activities, particularly in order to promote sustainable development.[332]

Currently, Articles 191, 192, and 193 TFEU (formerly Articles 174, 175, and 176 TEC, respectively), are part of Title XX entitled "Environment". Read together, the first two articles focus on the objectives to be pursued by the EU in the context of its environmental policy and the actions and

[328] Ibid. Art. 21: 'The Union shall define and pursue common policies and actions, and shall work for a high degree of cooperation in all fields of international relations, in order to: […] (d) foster the sustainable economic, social and environmental development of developing countries, with the primary aim of eradicating poverty; […] (f) help develop international measures to preserve and improve the quality of the environment and the sustainable management of global natural resources, in order to ensure sustainable development'.
[329] Ibid, art. 2C(2): 'Shared competence between the Union and the Member States applies in the following principal areas: […] (e) environment'.
[330] Ibid; Art.174(1).
[331] Ibid; Art.176A(1).
[332] TFEU, OJ C 326, 26.10.2012, Article 11.

measures to be taken to achieve these objectives. According to Article 191 and Article 192(1) TFEU, the European Union shall contribute to the pursuit, *inter alia*, of the following objectives:

> Preserve, protect, and improve the quality of the environment, protect human health, use natural resources prudently and rationally, promote measures at the international level to address regional or global environmental problems, and especially combat climate change. [333]

Subsequently, this was supplemented by Article 192, which stipulates, with reference to the above objectives, that the Council is required to adopt: provisions of a primarily fiscal nature; measures concerning:

> Land-use planning; quantitative management of water resources or affecting, directly or indirectly, the availability of those resources; land use, with the exception of waste management; and measures significantly affecting a member state's choice between different energy sources and the general structure of its energy supply.[334]

Lastly, Article 193 stresses that environmental measures must be consistent with the Treaties and allow Member States to maintain or introduce more stringent protection measures.[335] To conclude, it is important to emphasise that, as stated in the above-mentioned Articles 191-193 TFEU, climate policy is a shared competence between the EU and the Member States. This means that both the EU and individual Member States can legislate in this area; however, as will be brought out later in the chapter, when the EU acts, it generally takes precedence over national policies.[336]

1.2. Guiding principles in European Environmental Law

The principle of subsidiarity and the principle of proportionality are two cornerstones of European Union law; in fact, the EU's approach to environmental policy reflects a careful balance between local autonomy and collective action. These principles ensure that decisions are taken at the most effective level of governance, allowing Member States to address specific environmental challenges, in a manner suited to their national contexts, while maintaining a unified commitment to broader EU environmental goals.[337]

[333] Ibid., Articles 191 and 192(1).
[334] Ibid., Article 192.
[335] Ibid., Article 193.
[336] Paul Craig and Gráinne de Búrca, cit supra note 315, 921-923.
[337] Treaty on European Union (TEU), OJ C 326, 26.10.2012, Article 5.

The first one plays a crucial role in the division of climate objectives. Indeed, EU action is justified on grounds of subsidiarity as set out in Article 5 of the Treaty on European Union. Based on it, in those areas not pertaining to its exclusive competence, the EU is entitled to take action only if the target set cannot be satisfactorily pursued by Member States, and can be more properly accomplished at the Union level.[338] The Effort Sharing Regulation and Renewable Energy Directive are examples of where subsidiarity enables Member States to pursue different standards, as long as they contribute to collective EU goals.[339]

On the other hand, the proportionality principle is reflected in Article 191(3) of the TFEU, which highlights that environmental policy must consider "the potential benefits and costs" of action or inaction.[340] In practice, this means that while the EU aims to protect the environment, it must also ensure that the measures do not stifle economic growth or disproportionately harm less affluent Member States.[341] For example, under the Effort Sharing Regulation and the EU Emissions Trading System,[342] proportionality is reflected in the differentiated targets assigned to Member States based on their economic capacities. In fact, countries with lower GDP per capita, like Bulgaria or Romania, are assigned lower emissions reduction targets compared to wealthier countries like Germany or Denmark.[343] Important to mention is that the ECJ frequently reviews environmental measures through the lens of proportionality. For instance, in cases where Member States challenge EU environmental regulations as being too burdensome, the Court evaluates whether the measures are suitable for achieving the environmental objective and whether less restrictive alternatives exist.[344]

Building on the foundational principles of subsidiarity and proportionality, EU environmental policy is guided by four core principles: precaution, prevention, rectification at source, and the PPP. These principles provide the framework for the EU's comprehensive approach to environmental protection. They emphasise not only proactive measures to prevent environmental harm but also the need to address damage at its origin and to hold those responsible for environmental degradation financially accountable.[345]

---

[338] Ibid., Article 5.
[339] Regulation (EU) 2018/842, OJ L 156/26; Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources, OJ L 328/82.
[340] Treaty on the Functioning of the European Union (TFEU), OJ C 326, 26.10.2012, Article 191(3).
[341] Ibid., Article 191(3).
[342] Eden et al., *"Putting the ETS 2 and Social Climate Fund to Work: Impacts, Considerations, and Opportunities for European Member States,"* adelphi, Öko-Institut, Center for the Study of Democracy, and WiseEuropa, 2023.
[343] Regulation (EU) 2018/842, OJ L 156/26.
[344] Case C-366/03, *Land Oberösterreich v. Commission* [2005] ECR I-03741.
[345] European Parliament, "Environmental Policy Principles," *Fact Sheets on the European Union* (2021). Last access 02/09/2024 https://www.europarl.europa.eu/factsheets/en/sheet/71/environmental-policy-principles.

The first one, solidly anchored in Article 191(2) of the TFEU, is the precautionary principle. It allows for early intervention to prevent environmental harm, even when scientific certainty about risks is lacking.[346] It operates similarly to the CBDR principle by ensuring that precautionary actions are adapted to the specific risks and capacities of the involved parties.[347]

Secondly, the prevention principle mandates action to avoid harm before it occurs. Introduced in the Third Environmental Action Programme and enshrined in Article 130r(2) of the Single European Act, it focuses on preventing pollution to ensure environmental protection and economic development, aligning with the CBDR concept by requiring proactive measures based on risk. EU directives, such as Directive 2008/98/EC on waste management and the Environmental Impact Assessment (EIA) Directive, implement this principle by requiring early assessment of environmental impacts. This ensures prevention at the source and balances environmental and economic considerations.[348] The principle, like CBDR, ensures shared responsibilities across Member States, adjusted to their capacities.

Thirdly, the rectification at source principle requires environmental damage to be addressed at its origin, rather than through later remediation. Initially highlighted in the First Environmental Action Programme (1973), it was further formalised in Article 130r(2) TEC of the Single European Act (1987) and is currently reaffirmed in Article 191(2) TFEU.[349] While it plays a role in guiding environmental actions, particularly regarding pollution control, the principle has not been as prominent as others in EU environmental law and is considered less practical in some contexts, such as air pollution control.[350]

The last one is the PPP. Internationally, it is more of a guiding principle than a legally binding obligation; it also lacks strong enforcement and implementation mechanisms. In contrast, the EU's PPP was first introduced by the Legal Directive on Environmental Liability (ELD) and imposes strict liability on polluters, in particular for certain high-risk activities, and requires preventive and corrective action.[351] Moreover, the EU, being a well-established regional system, has a strong enforcement mechanism, where authorities ensure compliance and damages are clearly defined

[346] TFEU, Article 191(2).
[347] Edith Brown Weiss, cit supra note 296.
[348] Directive 2008/98/EC of the European Parliament and of the Council of 19 November 2008 on waste and repealing certain Directives, OJ L 312/3; Directive 2011/92/EU of the European Parliament and of the Council of 13 December 2011 on the assessment of the effects of certain public and private projects on the environment, OJ L 26/1.
[349] TFEU, Article 191(2).
[350] Paul Craig and Gráinne de Búrca, cit supra note 315, 1045-1047
[351] Directive 2004/35/EC of the European Parliament and of the Council of 21 April 2004 on environmental liability with regard to the prevention and remedying of environmental damage, OJ L 143/56.

(protected species, water, soil). More specifically, when it comes to strict liability and general application, the ELD imposes it for certain high-risk sectors, which means that polluters are liable even in the absence of fault or negligence. At the international level, the principle is applied more loosely and liability often depends on national laws or specific treaties, which means that enforcement can be inconsistent.[352]

1.3. The integration of the Kyoto Protocol at the European Level

The transition to the regional level for the adaptation of the CBDR principle, within the European context, begins with accession to the UNFCCC with ratification on December 21, 1993,[353] and later developed under the Kyoto Protocol, ratified by the EU on April 28, 2002.[354] The ratification of the Kyoto Protocol[355] represented the first international commitment for the European Union and its Member States to reduce GHG emissions.[356] In particular, the European Union had committed to reducing its greenhouse gas emissions, in the period 2008-2012, by 8 percent compared to 1990 levels; this commitment was divided among the various Member States.[357] The European Union began to think of ways to share these commitments among its members. In this way, the Union laid the groundwork for regional differentiation, although it was not yet as formalised as it would become later. As early as 1998, the first steps toward differentiated capacity recognition were reflected by the EU's burden-sharing agreement,[358] negotiated before the Kyoto Protocol entered into force.[359] In fact, the EU negotiated this to meet its collective Kyoto commitments by distributing emission reduction targets according to each Member State's economic capacity. This was an early example of regional differentiation, reflecting the principle of CBDR within the EU.[360] For instance, wealthier Member

[352] Ibid., See also: Philippe Sands et al., cit supra note 6, 870.
[353] United Nations Framework Convention on Climate Change (UNFCCC), *United Nations Treaty Series*, vol. 1771 (1992), p. 107.
[354] European Council, "Council Decision of 25 April 2002 Concerning the Conclusion of the Kyoto Protocol," OJ L 130, 15.5.2002.
[355] With the Protocol, the Commission negotiated on behalf of the Member States, establishing its role as the main negotiator in subsequent climate agreements.
[356] European Environment Agency (EEA), "Greenhouse Gas Emission Trends and Projections in Europe 2012," EEA Report No. 6/2012 (Copenhagen: EEA, 2012), 8-10.
[357] Ibid; Italy was assigned a 6.5% reduction in emissions compared to 1990 levels, this decision taken within the EU was subsequently introduced into national law with Law 120/2002.
[358] European Commission, "Burden Sharing Agreement: How the EU Agreed to Divide Up Emission Reduction Targets," *Climate Action* (1998), last access 02/09/2024 https://ec.europa.eu/clima/policies/strategies/2020_en.
[359] Sebastian Oberthür and Timothy Pallemaerts, *The New Climate Policies of the European Union: Internal Legislation and Climate Diplomacy* (Brussels: VUBPress, 2010), 45
[360] European Commission, "The EU and the Kyoto Protocol," *European Union External Action* (2002), last access 02/09/2024
https://eeas.europa.eu/headquarters/headquarters-homepage_en/409/the-eu-and-the-kyoto-protocol.

States, such as Germany and the United Kingdom, received higher reduction targets, while less economically developed ones, such as Greece and Portugal, received lighter targets or were even allowed to increase emissions.[361]

1.4. The integration of the Paris Agreement at the European Level

The second transition to the regional level for the adaptation of the CBDR principle, happened in 2015, by the Council Decision (EU) 2016/1841 of 5 October 2016. The Council of the European Union approved the ratification of the Paris Agreement on behalf of the EU, while individual Member States continued their own national ratification processes.[362] The agreement entered into force on 4 November 2016 and applied from 2020.[363] The key points of the agreement require EU countries to: meet the long-term goal of keeping the global average temperature increase well below 2°C, compared to pre-industrial levels; pursue further efforts to limit the increase to 1.5°C; prepare and implement national action plans[364] to meet these targets, and report to each other and the public on the progress they are making on their commitments; starting in 2023, take stock at the global level every 5 years with international partners to set further targets based on scientific evidence and achievements;[365] take measures to address the impacts of climate change that are already unavoidable;[366] and provide practical and financial support to developing countries to help them adapt to climate change.[367]

Generally, the environment and energy are among the policy fields where responsibilities are shared between the Union and the Member States (Articles 4(2)(e) and 4(2)(i) TFEU), *ergo*, the Member States can legislate in these areas to the extent that the Union has not exercised its competence (Article 2(2) TFEU).[368] However, the EU's horizontal powers - those requiring the integration of environmental considerations into all policy areas - are not specifically outlined in Articles 2 to 5 of

[361] Marc Pallemaerts, *EU Climate Policy: Up to the Kyoto Protocol and Beyond* (Brussels: Institut Royal des Relations Internationales, 2003), 45-50. See also: Oberthür and Pallemaerts, cit supra note 359.
[362] Council Decision (EU) 2016/1841 of 5 October 2016 on the conclusion, on behalf of the European Union, of the Paris Agreement adopted under the United Nations Framework Convention on Climate Change, OJ L 282, 19.10.2016.
[363] United Nations, "Paris Agreement to the United Nations Framework Convention on Climate Change," *United Nations Treaty Series*, vol. 3156, 2016, p. 31.
[364] Intended the Nationally Determined Contributions.
[365] European Commission, "The Paris Agreement," *Climate Action*, last access 02/09/2024 https://ec.europa.eu/clima/policies/international/negotiations/paris_en.
[366] Ibid.
[367] Ibid.
[368] Treaty on the Functioning of the European Union (TFEU), OJ C 326, 26.10.2012, Articles 2(2), 4(2)(e), and 4(2)(i).

the TFEU, which focus on exclusive and shared powers.[369] Moreover, the clarity of the distribution of powers depends on the precise wording of the relevant rules in the various policy areas.[370] Finally, in the policy areas of environment and energy, present in Articles 191 to 194 TFEU, as there are heterogeneous clauses, in their intertwining and demarcations they are hardly accessible to a strictly legal (doctrinal) systematisation.[371]

For the negotiations of the Paris Agreement even though with the Council Decision (EU) 2016/590,[372] Member States authorised the European Commission to represent the Union during the negotiations; still, there was a dual representation, i.e. both the Commission and the 27 Member States were signatories to the Agreement, reflecting the shared competence in climate matters. The EU signed as a "regional economic integration organisation"[373] and the Member States also signed individually.[374] However, it must be emphasised that the Commission's negotiating mandate is based on a Council decision that gives it a clear negotiating position on behalf of the Union.[375]

2. Core European legal instruments

European climate objectives and standards, introduced and boosted by the adoption of the above-mentioned treaties, can be understood through a combination of directives and other EU legal instruments. The breakdown of these climate targets in the EU is largely the result of customised targets based on economic capacity, historical emissions, and energy infrastructure, codified in legal instruments such as the Effort Sharing Regulation (ESR) (Regulation (EU) 2018/842) and the EU Emissions Trading Scheme (Directive 2003/87/EC).[376] These frameworks show that although the EU sets general targets such as climate neutrality by 2050, the pathways to achieve them vary from Member State to Member State, depending on national circumstances.[377]

---

[369] (Article 11 TFEU) refers to the requirement that environmental considerations are incorporated across all policy areas, regardless of whether the EU or Member States have primary responsibility.
[370] Ibid., Articles 2–5.
[371] Ibid., Articles 191–194.
[372] Council Decision (EU) 2016/590, which allowed the Commission to act within the legal framework provided by the EU Treaties and with the oversight of the Council.
[373] Paris Agreement, 2015, Art. 20(1) "This Agreement shall be open for signature and subject to ratification, acceptance, approval, or accession by States and regional economic integration organisations."
[374] Council Decision (EU) 2016/590 of 11 April 2016 on the conclusion of the Paris Agreement, OJ L 103, 19.4.2016.
[375] Ibid.
[376] Directive 2003/87/EC, OJ L 275/32.
[377] European Commission, *The European Green Deal* (Brussels: European Union, 2019). Last access 02/09/2024 https://ec.europa.eu/clima/policies/eu-climate-action_en.

Thus, this is proof that even within a regional system such as the European one, an attempt has been made to reflect the principle of CBDR, recognising the combination of differentiated responsibilities, based on economic and infrastructural factors; all this thanks to the aforementioned principles, which grant Member States the flexibility to achieve objectives at the European level in ways that suit their national contexts.[378]

2.1. Regulation (EU) 2018/842 - Effort Sharing Regulation

The Effort Sharing Regulation, officially known as Regulation (EU) 2018/842, is a central legal instrument in the European Union's climate policy framework. Its origins can be traced from the supersession of the Effort Sharing Decision (ESD) (Decision No. 406/2009/EC), which divided and tailored the EU's overall emissions reduction target among Member States for the implementation of the Climate-Energy Package 2020.[379] Decision 406/2009/EC already reflected and defined flexibility instruments that could be used if the Member State failed to meet its annual emission target. In particular, Article 3 provided that in the period from 2013 to 2020, a Member State could borrow up to 5 percent of its annual emission allocation relative to the following year (so-called borrowing), while if a Member State's GHG emissions were lower than the assigned target, the same could carry forward the part of its annual allocation in excess (so-called banking) to the following year, until 2020.[380] In essence, emissions in excess of the target for a given year could, within certain limits, be offset by greater reductions in previous or subsequent years. A Member State may also transfer up to 5 percent of its annual emission allocation for a given year to other Member States. Finally, Member States could use GHG emission reduction credits, modalities, and percentages for the use of these credits are listed in Article 5, the so-called i.e. Certified Emission Reductions (CERs) and Emission Reduction Units (ERUs), to reach their targets.[381]

The Effort Sharing Decision was revised by the Effort Sharing Regulation, known as Regulation (EU) 2018/842, of May 30, 2018, amended in 2023, it is part of the EU's 2030 Climate and Energy Framework. It still deals with binding annual GHG emission reductions to be made by Member States

[378] European Parliament, "Climate Action in the EU: Latest State of Play," *Fact Sheets on the European Union*. Last access 02/09/2024 https://www.europarl.europa.eu/factsheets/en/sheet/72/climate-action-in-the-eu.
[379] Regulation (EU) 2018/842, OJ L 156/26; Decision No. 406/2009/EC of the European Parliament and of the Council of 23 April 2009 on the effort of Member States to reduce their greenhouse gas emissions to meet the Community's greenhouse gas emission reduction commitments up to 2020, OJ L 140/136.
[380] Decision No. 406/2009/EC, Article 3.
[381] Ibid., Article 5.

in the period 2021-2030 as their contribution to climate action to meet their commitments under the Paris Agreement and amending Regulation (EU) No. 525/2013.[382] With their new national targets, Member States will collectively contribute to an EU-wide emissions reduction in effort-sharing sectors of 40 percent[383] below 2005 levels.[384] The revision was adopted as part of a package of proposals aimed at reducing EU emissions by 55 percent[385] by 2030 (compared to 1990 levels) and achieving the European Green Deal.[386] The regulation recognizes the different capacities of Member States to take action by differentiating targets based on each state's GDP per capita. This ensures equity, as higher-income Member States take on more ambitious targets than lower-income ones. However, an approach for higher-income ones based solely on relative GDP per capita would mean that some of them would have relatively high costs to meet their targets. To address this problem, the targets have been adjusted to reflect cost-effectiveness for Member States with above-average GDP per capita.[387]

Both the Decision and the Regulation are clear legal manifestations of the principle of differentiated responsibilities within the EU climate framework. This is reflected, *de facto*, by customised emission reduction targets based on economic capacity and flexibility mechanisms provided.[388] Moreover, this differentiated approach, based on equity of effort burden, ensures that all Member States contribute to the overall target while recognizing their different capacities to do so. To be more precise, when talking about the flexibility mechanisms under the ESR, the reference is toward emissions trading, banking, borrowing, and limited access to ETS credits; which provide additional levels of differentiation.[389] These tools, much like the sense behind the CBDR principle, allow countries with fewer resources to manage their emission reduction commitments more effectively, enabling cooperation and mutual assistance among Member States, in line with the principle of solidarity within the EU.[390] A practical example of differentiating targets set according to each country's GDP per capita is between Denmark and Bulgaria. In fact, under the ESR, wealthier countries such as

[382] Regulation (EU) 2018/842, OJ L 156/26.
[383] European Union, *Regulation (EU) 2018/842 of the European Parliament and of the Council of 30 May 2018 on binding annual greenhouse gas emission reductions by Member States from 2021 to 2030*, as amended by the revised version of 2023, Official Journal of the European Union L 156, 19 June 2018, 26–41.
[384] Regulation (EU) 2018/842, OJ L 156/26.
[385] European Union, *Regulation (EU) 2018/842 of the European Parliament and of the Council of 30 May 2018 on binding annual greenhouse gas emission reductions by Member States from 2021 to 2030*, as amended by the revised version of 2023, Official Journal of the European Union L 156, 19 June 2018, 26–41.
[386] European Commission, "The European Green Deal," COM/2019/640 final.
[387] European Parliament, "The Revised Effort Sharing Regulation". Last access 02/09/2024 https://www.europarl.europa.eu.
[388] Regulation (EU) 2018/842, OJ L 156/26.
[389] Ibid.
[390] European Commission, "EU Climate Action: Emissions Trading System". Last access 02/09/2024 https://ec.europa.eu.

Denmark are required to meet more ambitious targets. Thus, the former has a target of a 39 percent reduction by 2030 from 2005 levels in non-ETS sectors. This standard not only reflects its high GDP per capita but also a relatively advanced decarbonization infrastructure.[391] In contrast, Bulgaria, being among the least wealthy EU Member States, has a much lower target of 0 percent reduction by 2030. This allows the country to focus on development and gradually move towards sustainability while contributing to the EU's overall climate goals.[392]

2.2. Directive 2003/87/EC - EU Emissions Trading System

Another important step towards the practical integration of the CBDR principle was Directive 2003/87/EC. While implementing a uniform scheme within the European stage, it differentiates how carbon allowances are allocated to Member States and sectors. It established the EU Emission Trading System from 2005, for some of the most energy-intensive industrial sectors and was later amended by Directive 2009/29/EU, which also included the aviation sector in the system.[393] The ETS currently affects about 45 percent of EU GHG emissions.[394]

According to the directive, under Article 9, for each year, a maximum allowable emission ceiling is set for each installation/activity (emission allowances), and through a special European registry, the trading of allowances between the different participants in the system is ensured. Each allowance confers the right to emit 1 ton of CO2eq under Article 3.[395] Allowances can be acquired through an auction system or allocated for free, based on the type of activity and in consideration of the risk of "carbon leakage" (as defined in Article 10a, relocation of production to countries outside the EU where, in the absence of climate policies, industrial costs may be lower).[396] Free allocation is based on benchmarks that reward the best emissions performance, and on harmonisation rules shared at the European level. As provided in Article 12, emissions produced must be offset by each operator through allocated or auctioned allowances: emissions in excess of allocated allowances must be purchased in the market by those operators who have emitted less than the allowances available to

[391] Regulation (EU) 2018/842, OJ L 156/26.
[392] European Commission, "The European Green Deal," COM/2019/640 final.
[393] Directive 2003/87/EC, OJ L 275/32; Directive 2009/29/EC of the European Parliament and of the Council of 23 April 2009 amending Directive 2003/87/EC, OJ L 140/63.
[394] European Commission, "EU Emissions Trading System (EU ETS)," *Climate Action*. Last access 02/09/2024 https://ec.europa.eu/clima/policies/ets_en.
[395] Directive 2003/87/EC, Article 3.
[396] Ibid, Article 10a.

them.[397] Importantly, under Article 9 the cap decreases over time so that total emissions gradually decrease. In fact, the maximum number of allowances is determined at the European level and decreases by 1.74 percent annually from 2013 to 2020.[398]

The main innovations contained in the recent Directive 2018/410/EU concern the increase of the annual linear reduction factor of emission allowances from 1.74 percent to 2.2 percent, the establishment of a reserve to ensure market stability, the introduction of specific rules to avoid carbon leakage, the use of funds for innovation and modernization, and the updating of emission benchmarks to bring them in line with technological advances that have occurred since they were set.[399] To make a practical example, countries with a heavy reliance on coal, such as Poland, receive a larger share of free allowances under the ETS to avoid drastic economic shocks, particularly in sectors where the transition to cleaner energy sources would be costly and time-consuming. In contrast, countries such as Sweden, with a larger share of renewable energy in power generation, receive fewer free allowances and must purchase more emission permits on the open market. This mechanism encourages countries more dependent on coal to make a gradual transition on the one hand, and countries like Sweden to proceed more quickly on the other.[400]

2.3.The European Green Deal

Moving into more detail, the European Green Deal was officially unveiled on December 11, 2019. Focusing on scientific evidence and public needs, it was thus designed as a guide for the following years and is meant to be applicable to different sectors, such as chemicals, agriculture, industry, energy, and transport.[401]

To achieve and ensure an inclusive and equitable transition for all, the plan aimed to establish a roadmap of actions to be taken to encourage the smart use of natural resources, move toward a circular economy, and end climate change, avoidable pollution, and biodiversity loss.[402] However, there was

[397] Ibid., Article 12.
[398] Ibid., Article 9.
[399] Directive (EU) 2018/410 of the European Parliament and of the Council of 14 March 2018 amending Directive 2003/87/EC to enhance cost-effective emission reductions and low-carbon investments, OJ L 76/3.
[400] European Commission, "EU Climate Action: How the ETS Works". Last access 02/09/2024 https://ec.europa.eu.
[401] European Commission, "A European Green Deal," *European Commission*. Last access 02/09/2024 https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal_en. The European Green Deal sets out how to make Europe the first climate-neutral continent by 2050, boosting the economy, improving people's health and quality of life, caring for nature, and leaving no one behind.
[402] Sebastian Oberthür and Timothy Pallemaerts, cit supra note 359.

also an intrinsic negative aspect, as achieving these goals required considerable financial investment, with estimated costs amounting to two hundred sixty billion euros in additional investments per year.[403] For this reason, on January 14, 2020, the European Green Deal Investment Plan and the Just Transition Mechanism[404] were presented. While the first, also known as the Investment Plan for a Sustainable Europe, was intended to stimulate public investments and unlock private funds through InvestEU, the second was meant to financially support – including through targeted investments – the regions, sectors, and workers most affected by such a challenging transformation.[405] This means, above all, enhancing investments for the spread of renewable energies while simultaneously stopping the incentives for the use of fossil fuels.[406] These objectives are designed with the awareness that it will certainly be more challenging for Eastern countries to achieve them within the Union. Poland, for example, still obtains 70 percent of its electricity from coal today, one of the most polluting fuels still in circulation.[407] For this reason, only in 2021, Poland agreed to work towards achieving net zero emissions, but asking for more time and financial support for the transition of its energy sector, which is heavily dependent on coal.[408] Furthermore, many Eastern countries like Romania and Hungary, are investing in renewable energy, although at a slower pace compared to Central and Western Europe.[409] Another aspect to cover is that the European Green Deal includes a set of legislative proposals, the so-called "fit for 55" package, and the European Climate Law, which establishes the overall goals for 2030 and 2050, both designed to implement the European Green Deal's intermediate goal of climate neutrality.[410] The need to adopt these legislative proposals arises from the fact that climate change is an urgent issue that requires joint action, and also because the European Green Deal has already initiated an ambitious growth strategy for the EU and laid the groundwork for Europe to become the

[403] Oberthür and Pallemaerts, cit supra note 359. See also: European Investment Bank, "European Green Deal Investment Plan," *EIB Publications*. Last access 02/09/2024 https://www.eib.org/en/publications/european-green-deal-investment-plan.

[404] European Commission, "A Just Transition Mechanism," *European Commission*. Last access 02/09/2024 https://ec.europa.eu/info/strategy/priorities-2019-2024/european-green-deal/finance-and-just-transition_en.

[405] Website of the European Commission, Financing the green transition: The European Green Deal Investment Plan and Just Transition Mechanism. Last access 02/09/2024 https://ec.europa.eu/commission/presscorner/detail/en/ip_20_17

[406] Ibid.

[407] Jos Delbeke, ed. Delivering a Climate Neutral Europe. 1st ed. London: Routledge, 2024. Last access 02/09/2024 https://doi.org/10.4324/9781003164943.

[408] European Commission, "Poland's Climate Policy," *European Climate Foundation*. Last access 02/09/2024 https://www.europeanclimate.org/polands-transition-coal-renewables/.

[409] International Energy Agency, "Eastern Europe's Energy Transition," *IEA*. last access 02/09/2024 https://www.iea.org/reports/eastern-europe-energy-transition.

[410] Jos Delbeke, cit supra note 407.

first climate-neutral continent by 2050.[411] The legal basis for such a Law is represented by the already covered Articles 191 – 193 TFEU, confirming and clarifying EU prerogatives with regard to climate change;[412] In addition to this, the lawfulness of the proposal is further justified by the principles of subsidiarity and proportionality. In accordance with the former, the text specifies what follows:

> Climate change is by its very nature a transboundary challenge that cannot be solved by national or local action alone. Coordinated EU action can effectively supplement and reinforce national and local action and enhance climate action. Coordination of climate action is necessary at the European level and, where possible, at the global level, and EU action is justified on grounds of subsidiarity.[413]

Concerning the latter, it is further clarified that:

> The proposal complies with the proportionality principle because it does not go beyond what is necessary in order to set the framework for achieving climate neutrality. The proposal aims to provide a direction by setting the EU on a path to climate neutrality, certainty on the EU's commitment, and for transparency and accountability by setting out a process of assessment and reporting.[414]

Lastly, the package revises existing legislation, including the Renewable Energy Directive (RED II)[415] and the Energy Efficiency Directive, allowing some flexibility at national level in achieving the targets. The flexibility granted to Member States shows a margin of manoeuvre in choosing their preferred paths for decarbonization, and this best expresses the principle of differentiated capacities, while at the same time aiming towards common EU climate goals. Finland, for example, plans to reduce emissions through a mix of nuclear energy, biomass, and renewables such as wind power.

---

[411] Oberthür and Pallemaerts, cit supra note 359. See also: Proposal for a Regulation of the European Parliament and of the Council establishing the framework for achieving climate neutrality and amending Regulation: (EU) 2018/1999 European Parliament, "The European Climate Law," *Fact Sheets on the European Union*. Last access 02/09/2024 https://www.europarl.europa.eu/factsheets/en/sheet/73/climate-action.

[412] In particular, Art.192(1) establishes that: 'the European Parliament and the Council, acting in accordance with the ordinary legislative procedure and after consulting the Economic and Social Committee and the Committee of the Regions, shall decide what action is to be taken by the Union in order to achieve the objectives referred to in Article 191'

[413] Regulation (EU) 2021/1119, OJ L 243/1. Last access 02/09/2024 https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52020PC0080&from=EN.

[414] Ibid.

[415] By 2030, the EU will have to ensure that at least 32 percent of its energy consumption comes from renewable sources, according to RED II.

Greece, on the other hand, is focusing on phasing out lignite coal-fired power plants by 2028 and rapidly expanding solar and wind power to meet its emission reduction target.[416]

2.4. Carbon Neutrality vs Net Zero

According to the definition of the IPCC, the body established by the United Nations to study climate change, "carbon neutrality" is achieved when a balance occurs between CO2 emitted into the atmosphere and CO2 reduced or captured from the atmosphere over a given period of time.[417] Explained in simpler terms, with carbon neutrality, a neutral impact on global warming is achieved, which helps to avoid worsening the effects of climate change on the planet and on people's lives.[418] Another aspect to keep in mind is that Carbon Neutrality is related to offsetting and reducing CO2 emissions and not completely eliminating them.

There are basically two ways to achieve this goal, which can often be intertwined: on the one hand, offsetting through "CO2 credits" and, on the other hand, reducing emissions through decreasing consumption and using alternative renewable energy.[419]

Looking at Art. 4 of the Paris Agreement, that states:

> In order to achieve the long-term temperature goal [...], Parties aim to reach global peaking of greenhouse gas emissions as soon as possible, [...], and to undertake rapid reductions thereafter in accordance with the best available science, so as to achieve a balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases in the second half of this century[...].[420]

This article envisions a balance between emissions by sources and removals by sinks of GHG in the second half of the century, i.e., net zero greenhouse gas emissions. Additionally, the European Climate Law speaks of Carbon Neutrality by 2050 to achieve zero net carbon emissions across the

[416] European Commission, "Fit for 55," *Climate Action*. Last access 02/09/2024 https://ec.europa.eu/clima/eu-action/fit-55_en.
[417] IPCC, *Global Warming of 1.5°C: An IPCC Special Report* (Geneva: World Meteorological Organization, 2018). Last access 02/09/2024 https://www.ipcc.ch/sr15/.
[418] European Commission, "What Is Carbon Neutrality?," *Climate Action*. Last access 02/09/2024 https://ec.europa.eu/clima/policies/strategies/2050_en.
[419] European Environment Agency, "Achieving Carbon Neutrality in Europe," *EEA Report No. 13/2019*. Last access 02/09/2024 https://www.eea.europa.eu/publications/achieving-carbon-neutrality-in-europe.
[420] Paris Agreement, 2015.

entire bloc as a legally binding target.[421] However, in the field of carbon emissions Carbon Neutrality and Net Carbon Zero are often mistakenly used as interchangeable with each other. While Carbon Neutrality is a concept closely related to the reduction and offsetting of a company's carbon emissions, with Net Carbon Zero it goes one step further: that of eliminating the carbon emissions of an entire supply chain, a state, or the entire world.[422] This should entail that all CO2 emissions from human activities are reduced to the minimum possible, and any residual emissions[423] (some argue that zero emissions are not considered possible, especially in so-called "Hard To Abate" sectors:[424] aviation, agriculture, steelmaking) are offset through carbon absorption ("offsetting"). Nevertheless, in the current historical context, the EU has legally committed to reaching net-zero emissions by 2050, making it one of the first regions to establish such an ambitious, binding target expression.[425]

3. Key insights into EU environmental leadership and human rights

3.1.The European Commission: A leader in environmental governance

Based primarily on the principles of representation and political leadership, the European Commission has carved out a role for itself as a negotiator within the European Union. The Commission's role as guardian of the Treaties and representative of the EU in international negotiations is reinforced by the Conclusions of the European Council and the EU's institutional architecture.[426] It is well known that the Commission's task is to draft laws and ensure that EU law is applied uniformly in every Member State, but its role goes beyond legal and administrative responsibilities. In fact, it also plays a political leadership role, in particular in representing the EU on the international stage.[427] The Commission is often mandated by the European Council to negotiate on behalf of the EU on important issues such as trade agreements, climate negotiations and, in

[421] Regulation (EU) 2021/1119, OJ L 243/1.
[422] UNFCCC, United Nations Treaty Series, vol. 1771 (1992): "The Concept of Net-Zero Emissions,".
[423] European Commission. *Guidebook for Achieving Carbon Neutrality by 2050*. ManagEnergy, September 21, 2021. Last access 02/09/2024 https://managenergy.ec.europa.eu/document/download/b596d301-a5df-4ca3-9b8d-7c77006ca0ea_en?filename=Guidebook_for_Achieving_Carbon_Neutrality_by_2050.pdf
[424] International Energy Agency, "The Role of 'Hard-to-Abate' Sectors in Achieving Net Zero," *IEA Special Report* (Paris: IEA, 2021). Last access 02/09/2024 https://www.iea.org/reports/net-zero-by-2050.
[425] European Parliament, "The European Climate Law," *Fact Sheets on the European Union*. Last access 02/09/2024 https://www.europarl.europa.eu/factsheets/en/sheet/73/climate-action.
[426] European Commission, *The Role of the European Commission*. Last access 02/09/2024 https://ec.europa.eu/info/about-european-commission/what-european-commission-does_en.
[427] Consolidated Version of the Treaty on the Functioning of the European Union, OJ C 202/47.

particular, the areas involved in the European Green Deal.[428] The adoption of important European climate policies such as the latter mentioned and its role in the Paris Agreement has institutionalised the Commission's role to the extent that it negotiates climate policy on behalf of the EU and its Member States in international fora.[429]

Furthermore, parts of texts such as the explanatory memorandum of the Climate Law proposal, which state as follows:

> It aims to provide a direction by setting a pathway to climate neutrality, and enhance certainty and confidence on the EU's commitment for businesses, workers, investors, and consumers, as well as transparency and accountability, thus sustaining prosperity and job creation. […] in order to provide predictability and confidence for all economic actors, including businesses, workers, investors and consumers, to ensure that the transition towards climate neutrality is irreversible, to ensure gradual reduction over time, and to assist in the assessment of the consistency of measures and progress with the climate-neutrality objective, the power to adopt acts in accordance with Article 290 of the Treaty on the Functioning of the European Union should be delegated to the Commission to set out a trajectory for achieving net zero greenhouse gas emissions in the Union by 2050.[430]

It leaves room to think that over the two decades from 2030 until 2050, the Commission may be empowered to adopt and implement delegated acts for the integration of the Regulation, by establishing an EU path for the fulfilment of the 2050 objective.[431] Another point is that, the Climate Law additionally draws attention to the need to ensure continuing progress towards improved adaptability and resilience, less vulnerability to climate change, and the fulfilment of the climate-neutrality target.[432] As such, on September 30th, 2023, and every five years onwards,[433] the Commission assessed the collective progress made by all of the twenty-seven Member States,[434] as

[428] European Council, *Conclusions on Climate Policy*. Last access 02/09/2024 https://www.consilium.europa.eu/en/policies/climate-change/.
[429] European Commission, *The European Green Deal*, COM/2019/640 final.
[430] Regulation (EU) 2021/1119, OJ L 243/1.
[431] Regulation (EU) 2021/1119, OJ L 243/1, 2021.
[432] See art. 4-5.
[433] Also known as the "Global Stocktake" or five-year progress assessment. This process aligns with the Paris Agreement's Global Stocktake mechanism, which ensures that parties evaluate their collective efforts toward achieving climate goals on a regular basis.
[434] Art. 5.1 reads as follows: "By 30 September 2023, and every 5 years thereafter, the Commission shall assess, together with the assessment foreseen under Article 29(5) of Regulation (EU) 2018/1999: (a) the collective progress made by all Member States towards the achievement of the climate-neutrality objective set out in Article 2(1) as expressed by the

well as the consistency of national measures;[435] and yet again, in case of the latter's inconsistency, the Commission will issue ad hoc recommendations.[436]

In regional systems such as the European Union, some regional treaties or agreements may provide for recourse to regional courts, such as the Court of Justice of the European Union (CJEU), to resolve environmental disputes. For example, Member States can be brought before the CJEU for failing to fulfil their environmental obligations under EU law. This can be done either through infringement proceedings initiated by the European Commission under Article 258 TFEU, where the Court finds that a Member State has breached its obligations and orders it to take the necessary measures; when violations are persistent and thus may result in financial penalties, as provided for in Article 260 TFEU;[437] and finally, under Article 267 TFEU, national courts can refer questions of interpretation of EU environmental law to the CJEU, to ensure uniform application.[438] Nonetheless, the EU emphasises preventive and cooperative approaches, such as dialogue among Member States, and also in this context the Commission has a crucial role in trying to resolve environmental disputes before they escalate into legal action, either through EU environmental action programs or through Directives such as the Environmental Liability one (Directive 2004/35/EC).[439]

3.2. Environmental law: a "third generation" right

The classification of human rights into "generations" is the result of a dynamic conception of law and, ultimately, of society and human thought. Although it finds a very precise categorisation in legal theory, it involves many aspects of human action: from politics to economics and philosophy to social

trajectory referred to in Article 3(1); (b) the collective progress made by all Member States on adaptation as referred to in Article 4".

[435] Art. 6.1 foresees that: "By 30 September 2023, and every 5 years, thereafter the Commission shall assess: (a) the consistency of national measures identified, on the basis of the National Energy and Climate Plans or the Biennial Progress Reports submitted in accordance with Regulation (EU) 2018/1999, as relevant for the achievement of the climate-neutrality objective set out in Article 2(1) with that objective as expressed by the trajectory referred to in Article 3(1); (b) the adequacy of relevant national measures to ensure progress on adaptation as referred to in Article 4".

[436] Additionally, Article 7 establishes that, when conducting assessment, the Commission should pay attention to: "(a) information submitted and reported under Regulation (EU) 2018/1999; (b) reports of the European Environment Agency (EEA); (c) European statistics and data, including data on losses from adverse climate impacts, where available; and (d) best available scientific evidence, including the latest reports of the IPCC; and (e) any supplementary information on environmentally sustainable investment, by the Union and Member States, including, when available, investment consistent with Regulation (EU) 2020/... [Taxonomy Regulation]".

[437] TFEU, OJ C 326, 26.10.2012.

[438] Ibid.

[439] Directive 2004/35/EC of the European Parliament and of the Council of 21 April 2004 on environmental liability with regard to the prevention and remedying of environmental damage, OJ L 143.

organisation. In these areas, the boundaries between different generations of rights tend to overlap, blur, and contaminate each other. By way of information, the first generation comprises civil and political rights, the cornerstone of individual freedoms.[440] The second generation includes economic, social, and cultural rights, addressing societal well-being and collective welfare. The third generation involves the so-called solidarity rights, encompassing self-determination, peace, development, environmental protection, and quality of life.[441]

The term "generation" is employed to highlight the historical evolution and progressive affirmation of rights. While this concept of gradual evolution may be traced to the development of fundamental rights in Western Europe, it should not be construed as an intrinsic or universal feature of human rights.[442] These rights inherently possess a dynamism, as their content evolves over time and is subject to contestation and reinterpretation. In fact, the mere existence of a legal norm recognizing a right does not guarantee its effectiveness. Rights require procedural safeguards, institutional mechanisms, and, often, further legislative or policy action for their realisation and enforcement.[443]

Historically, the classification of rights was interpreted as a basis for creating a hierarchy between both fundamental rights and human rights. This view suggested a priority to civil rights as if states should first achieve the guarantee of civil rights before addressing social and economic ones. However, such a hierarchy is now considered outdated and incorrect. Modern international human rights frameworks emphasise the indivisibility and interdependence of rights, rejecting any hierarchy.[444] The classification of rights serves merely as an analytical tool, not as a basis for ranking their importance.

Another fundamental feature of rights is their correlative nature, imposing duties on parties other than the right-holder. In the realm of human rights, this correlativity may extend beyond the scope of rights themselves, sometimes giving rise to duties (both moral and legal) without corresponding rights. This correlativity between rights and duties underlies the characteristic of their enforceability. Generally speaking, rights impose negative correlative duties, requiring non-interference with the enjoyment of the right; and positive duties, obligating action to ensure the realisation of the right through resources,

---

[440] Jack Donnelly, *Universal Human Rights in Theory and Practice*, 3rd ed. (Ithaca: Cornell University Press, 2013), 31-32.

[441] Karel Vasak, *Human Rights: A Thirty-Year Struggle: the Sustained Efforts to Give Force of Law to the Universal Declaration of Human Rights*, UNESCO Courier, November 1977.

[442] Philip Alston, *Human Rights and Development: Towards Mutual Reinforcement*, (Oxford: Oxford University Press, 2005), 121-123.

[443] Dinah Shelton, *Advanced Introduction to International Human Rights Law* (Cheltenham: Edward Elgar Publishing, 2014), 74.

[444] Office of the High Commissioner for Human Rights (OHCHR), *The United Nations and Human Rights: A Handbook on the UN System* (Geneva: OHCHR, 2014), 15.

public policies, and institutional support. All human rights, therefore, entail obligations of respect, protection, and fulfilment.[445]

With regard to human rights related to the environment, it is necessary to emphasise that the protection of individuals and the protection of the environment are linked by a mutually functional relationship in which the protection of human beings cannot be separated from the protection of the environment of which human beings are a part, and any aggression against the environment actually affects the quality of human life.[446] In light of this relationship, a series of environmental rights have developed that are relevant to other human rights, such as the right to health and life, as well as to a healthy environment. The environment thus stands as a meta-value against which states engage, both nationally and internationally, in "defence policies".[447] In fact, damage mediated by the environment affects first and foremost the enjoyment of the individual's fundamental rights; moreover, directly protectable subjective situations can also be identified, such as the right to a healthy environment, the right to participation, and the right to information on the state of the environment.[448]

3.3. Environmental rights at the international and European levels

Reference to the collective rights of the "third generation" has been made in several texts, among which it is particularly important to mention the Stockholm Declaration and the Rio Declaration of 1992, which were the outcome of the first two environmental conferences, both of which were, however, not without criticism. Although the Stockholm Declaration was not as incisive as originally intended, it is patently clear that since its implementation, the impact of environmental constitutionalism has been unexpected but surprising. This trend is notable because it suggests that, despite criticism, the Stockholm Declaration has indeed helped cultivate the idea of the environment as an essential condition for the enjoyment of human rights.[449] Indeed, it proclaims that:

> Man is both a creature and moulder of his environment, which gives him physical sustenance and affords him the opportunity for intellectual, moral, social, and spiritual growth. […] Both

[445] Henry Shue, *Basic Rights: Subsistence, Affluence, and U.S. Foreign Policy* (Princeton: Princeton University Press, 1980), 35-36.
[446] John H. Knox, *The Human Right to a Healthy Environment* (Cambridge: Cambridge University Press, 2018), 4-5.
[447] David Boyd, *The Environmental Rights Revolution: A Global Study of Constitutions, Human Rights, and the Environment* (Vancouver: UBC Press, 2012), 63.
[448] Ibid.
[449] United Nations, *Report of the United Nations Conference on the Human Environment*, Stockholm, 1972, UN Doc. A/CONF.48/14/Rev.1.

> aspects of man's environment, the natural and the man-made are essential to his well-being and to the enjoyment of basic human rights, the right to life itself. [..] The protection and improvement of the human environment is a major issue which affects the well-being of peoples and economic development throughout the world.[450]

Moreover, Principle 1 states:

> Man has the fundamental right to freedom, equality, and adequate conditions of life, in an environment of a quality that permits a life of dignity and well-being, and he bears a solemn responsibility to protect and improve the environment for present and future generations.[451]

Unfortunately, there are reasons why scholars question the true effectiveness and legacy of the Stockholm Declaration. In fact, for example, in the subsequent Rio Declaration, there is no reference to this grand assertion that humanity simply has the "right to a healthy and productive life in harmony with nature".[452]

Another peculiarity of environmental rights is linked to what is considered climate change, as this can lead to violations of human rights. The 2023 Global Climate Litigation Report by the UNEP and the Sabin Center for Climate Change Law highlights that climate change is now one of the greatest threats to human rights, violating the fundamental rights to life, clean water, food, and shelter.[453] For instance, if the areas of the Middle East and North Africa become extremely hot, an increase in droughts will lead to crop failures, which can cause food crises, famines, and ultimately, deaths. Moreover, human rights violations will certainly be a reality for people living in low-lying coastal areas and island states, whose very existence is threatened by rising sea levels.[454] Agriculture and infrastructure are also at great risk in these areas, and it is well known that a possible scenario is that millions of people may be forced to leave their homes. Another aspect related to environmental rights is that in the future, it is expected that there will be many more climate refugees than those fleeing from wars and persecutions. The problem is that climate refugees have no legal status under current international law. There are no conventions or regulatory frameworks regarding the protection of

[450] Ibid.
[451] Ibid.
[452] United Nations, *Report of the United Nations Conference on Environment and Development (Rio Declaration)*, Rio de Janeiro, 1992, UN Doc. A/CONF.151/26 (Vol. I).
[453] UNEP and Sabin Center for Climate Change Law, *Global Climate Litigation Report: 2023 Status Review*, 2023.
[454] Ibid.

climate refugees, and one might wonder where they will receive assistance without any legal rights.[455] According to the United Nations High Commissioner for Refugees (UNHCR), the number of people displaced due to climate change could reach 250 million by 2050, and the world is not equipped to handle such numbers.[456] However, a convention to protect the victims of climate change is still not on the horizon, and there seems to be no consensus within the international community on the feasibility of such a document. Climate refugees, therefore, continue to be ignored and risk being deprived of their fundamental human rights. What is unjust is that these people usually come from poor countries, and therefore become victims of something that has been largely created by developed countries.[457]

The last aspect to analyse, is the main legal framework in which references to environmental law are contained, both at the international and European levels. First of all, there is the Universal Declaration of Human Rights (UDHR) and the International Covenant on Economic, Social and Cultural Rights (ICESCR): These documents, although they do not explicitly mention environmental rights, in Article 25 of the first and Article 11 of the second, provide a foundation by recognizing the right to an adequate standard of living, which has been interpreted as encompassing access to a healthy environment.[458] Secondly, there is the United Nations General Assembly Resolution A/RES/76/300. In this historic decision, it adopted a resolution that recognizes access to a clean, healthy, and sustainable environment as a human right. This follows a long advocacy effort, strengthening environmental protection as an integral part of human rights law.[459] At this international level, the enforcement is still very weak as violations only trigger reporting to international bodies or individual complaints.

Subsequently, at the European level, there is the European Convention on Human Rights. This does not explicitly include environmental rights, but the European Court of Human Rights has increasingly interpreted existing rights (such as the right to life in Article 2 and the right to private and family life in Article 8) as encompassing environmental protection. For example, the Court, in some sentences,[460] has established that severe pollution and environmental degradation could violate these rights. Lastly,

[455] UNHCR, "Climate Change and Displacement". Last access 02/09/2024 https://www.unhcr.org/climate-change-and-disasters.html.
[456] Ibid.
[457] Christian Aid, *Human Tide: The Real Migration Crisis*, 2007.
[458] UN General Assembly, *International Covenant on Economic, Social and Cultural Rights*, 16 December 1966, UN Doc. A/RES/2200A(XXI).
[459] UN General Assembly, *The Human Right to a Clean, Healthy and Sustainable Environment*, 28 July 2022, UN Doc. A/RES/76/300.
[460] See as an example: Kolyadenko and Others v. Russia: European Court of Human Rights, *Kolyadenko and Others v. Russia*, Nos. 17423/05, 20534/05, 20678/05, 23263/05, 24283/05, and 35673/05, Judgement of 28 February 2012.

violations of the Charter can lead to binding judgments from the European Court of Human Rights, including compensation and state reforms.[461]

In addition, the Charter of Fundamental Rights of the European Union incorporates the right to environmental protection in Article 37, which declares that "a high level of environmental protection and the improvement of the quality of the environment must be integrated into the Union's policies." While Article 37 does not confer a directly enforceable human right to environmental protection, it serves as an important legal foundation for environmental advocacy at the European level. This provision mandates that environmental considerations must be incorporated into all EU policies, thus guiding the Union's legislative and administrative framework in pursuing environmental goals. Thus, although Article 37 does not grant individuals a directly enforceable human right, it plays a critical role in shaping the EU's legislative agenda and strengthening environmental protection standards across the region.[462] Environmental violations within the EU are primarily overseen by the Court of Justice of the European Union, which ensures compliance with EU environmental legislation.[463] Through its jurisprudence, the CJEU can impose legal consequences for Member States or entities that fail to meet EU environmental obligations, thus acting as a key enforcer of the Union's environmental law.

This reflection on human rights stems from the fact that the principle of CBDR, despite its technical and economic aspects, reinforces the idea that, although human rights are universal, the ability to protect these rights is not distributed equitably. It is evident that vulnerable populations in developing countries are disproportionately affected by climate change and environmental damage, which directly violates their fundamental human rights.[464] Thus, in the context of human rights, the CBDR promotes a framework in which justice and equity guide the global protection of them. This approach aims to protect the human rights of the most vulnerable populations, seeking to ensure that these rights are universally respected and upheld, even in the face of global challenges such as climate change and environmental degradation.[465]

---

[461] European Court of Human Rights, *Convention for the Protection of Human Rights and Fundamental Freedoms*, as amended, Council of Europe, Rome, 1950.
[462] Charter of Fundamental Rights of the European Union, 2012/C 326/02.
[463] Court of Justice of the European Union, *Case C-6/04*, 2005.
[464] Philippe Sands, cit supra note 6, 286-287.
[465] Office of the High Commissioner for Human Rights (OHCHR), *Report of the Special Rapporteur on the Issue of Human Rights Obligations Relating to the Enjoyment of a Safe, Clean, Healthy, and Sustainable Environment*, A/HRC/37/59, 24 January 2018.

4. Conclusion

This chapter explored the process of integration of the principle of CBDR into the European Union. After analysing compass-related provisions for environmental directives and decisions, it outlined a set of solid principles underpinning the latter. The chapter then examined the evolution of environmental provisions in the EU Treaties, followed by a detailed chronological account of the steps leading to the Effort Sharing Regulation and the European Emissions Trading System. Additionally, it provided an overview of the European Green Deal with a clarification on the difference between carbon neutrality and net zero. Finally, the chapter concluded with a brief reflection on the characteristics of human rights and a comparison between, on the one hand, the current emptiness and indecision on the protection of environmental rights at the international level; and on the other hand, the protection of environmental rights at the level of the European regional organisation

To conclude, it must be reiterated that: Although the term principle of CBDR is not used in European provisions, it is clear that it has been a beacon guiding the direction in which Europe has moved. It aims to create a customised path towards uniformity, taking into account, on the one hand, common responsibilities, and on the other, without denying the differentiated economic capacities, historical emissions, and energy infrastructure among the states within its Organization. The above-described legal instruments such as the Effort Sharing Regulation, recognize that while the EU sets overall goals (such as climate neutrality by 2050), the pathways to achieving these goals vary from one another, depending on national circumstances.[466] Europe is undoubtedly the most advanced model in environmental matters. This is because, as reflected in the overall European legal framework, the compliance and enforcement mechanisms are more robust and stringent.[467] The key takeaway from this evaluation is that now is the time to revitalise and reinforce both International and European human rights protection architecture. It is crucial not only to offer wholehearted support to existing multilateral legal systems and mechanisms but also to involve civil society in the dialogue to ensure that the voices of human rights victims are heard. In conclusion, it can be said that although the EU has committed itself to this path of climate neutrality, considered by many to be too ambitious, it will, regardless, bring progress for our home: planet Earth.[468]

[466] Regulation (EU) 2021/1119, OJ L 243/1;.
[467] Sandrine Maljean-Dubois, *The European Green Deal: A Response to Climate Change in Times of Crisis?*, in *European Energy and Environmental Law Review*, vol. 30, no. 4 (2021): 95–100.
[468] Philippe Sands, cit supra note 6, 586.

Concluding remarks

The present study analyses the evolution and application of the principle of Common But Differentiated Responsibilities from 1992 to 2023, comparing its role in international governance with its adaptation within the European Union. This approach ultimately evaluated how, over time, the CBDR principle is outdated at the international level while the transposition at the European regional level was successful, despite its limitations.

The first chapter examined the CBDR-RC principle as a pillar of international environmental law, from its origins in the Rio Declaration to its evolution in the UNFCCC, the Kyoto Protocol, and the Paris Agreement. It assessed the role of CBDR-RC in global climate policy and its implementation challenges, highlighting how the principle seeks to adapt to changing geopolitical realities and the climate crisis. It also discussed the tensions between environmental and economic interests and the need for equity in global environmental governance. The chapter first, showed that although the principle has facilitated greater inclusion of developing countries, it has also allowed developed states to retain significant control over the financial and institutional mechanisms that shape international environmental policy. Second, how, over time, the Annex I/Non-Annex I dichotomy is outdated and leads to inefficient implementation of the CBDR principle. Indeed, it argues for an update of the CBDR framework to address the growing emissions of countries like China and India, while recognising the historical responsibilities of developed nations. However, this duality hides a greater challenge, namely the need for a continuous reassessment of how global environmental governance can equitably address the challenges of sustainable development, so as to truly reflect the differentiated responsibilities of all states, based on the constant historical evolution.

The second chapter explored the basic principles and instruments underlying international environmental governance, with a focus on sustainable development and the polluter pays principle as key elements of CBDR. The need to balance economic growth, environmental protection, and social equity was emphasised, ensuring that those who are most responsible for pollution take the main responsibility for tackling it. In addition to the legal content of treaties, it was analysed the importance of various policy instruments (regulatory, incentive-based, persuasive) to implement them, such as the Kyoto Protocol and the Paris Agreement. In particular, it was mentioned how the reporting for the Paris Agreement for developing countries is not compulsory and thus creates difficulties in fully understanding where they stand in achieving the common goal set. Another aspect touched upon is the role of the ICJ in resolving environmental disputes between states. It was useful

to give an idea of the level of compliance of international climate governance, with the conclusion that diplomatic and reputational consequences are often more effective. The chapter concludes with a description of the role of COPs and of state and non-state actors, such as NGOs. These, in fact, are seen as central forums for promoting international accountability and pressure. All these reflections in the chapter led once again to emphasise the need for a more inclusive and dynamic approach to the CBDR principle to address the challenges of the global climate regime.

This issue was further explored in the third and final chapter of the study. The latter examined the integration of the CBDR principle in the EU. It investigated the environmental commitments made by the Union with the ratification of the treaties and the implementation to achieve them through instruments such as the ESR and the ETS. It also provided clarification on the difference between carbon neutrality and net zero in the context of the European Green Deal. Although the term CBDR is not explicitly used in EU policies, the principle has nevertheless guided its approach, balancing common responsibilities and differentiated economic capacities among Member States. Through practical examples, the analysis provided an assessment of the extent to which directives allow for differentiation towards common goals. Undoubtedly, the EU represents an advanced model of environmental governance, thanks to stricter compliance mechanisms than other regions. Ultimately, the chapter identified the need to strengthen the protection of human rights by involving civil society in the climate and environmental rights debate to ensure that all voices are heard.

The concluding remarks of this study explore the critical question of the key differences in the approach of international governance and the European Union towards the principle of CBDR in combating climate change from 1992 to 2023. This comparison revealed important distinctions in how global and regional frameworks implement this principle. It was understood that at the international level, CBDR had been a pillar of climate agreements, from the 1992 UNFCCC to the 2015 Paris Agreement, reflecting the need to balance global cooperation with equitable differentiation based on historical emissions and capabilities. However, it was also acknowledged that this principle has been challenged by geopolitical changes, particularly with the rise of major developing economies. In contrast, the European Union, as a regional entity composed exclusively of developed nations, has adopted the CBDR in a more nuanced manner. Indeed, the EU's approach illustrates how the principle can be reinterpreted to foster internal solidarity while maintaining ambitious climate goals.[469]

[469] Philippe Sands, cit supra note 6, 286-287.

Based on these considerations, the main contribution of this thesis is to demonstrate, through a legal framework, that CBDR, although rooted in international environmental law, is not a static principle. Indeed, its application varies across different governance contexts. The EU approach offers valuable insights into how regional frameworks can adapt global principles to their specific political and economic realities, while international governance continues to struggle to maintain fairness and effectiveness in a rapidly changing world. Finally, the study has shown that while CBDR remains a vital principle in global climate governance, its application must continue to evolve to reflect changing geopolitical and economic realities.

Further empirical research on the effectiveness of differentiated responsibilities in achieving climate goals would be interesting, as exemplified by the flexible interpretation of the CBDR in the Paris Agreement, whose real impact remains little explored; or future investigations could examine how international law can better address the intersection of human rights in relation to environmental rights, especially in vulnerable contexts. In conclusion, looking ahead, the international climate regime should shift to balance historical responsibility with **current** capabilities, ensuring that all nations contribute equally to global efforts to combat climate change. By addressing these gaps, scholars will be able to contribute to the development of more robust, inclusive, and adaptive approaches to climate governance frameworks capable of meeting the evolving challenges of the 21st century.[470]

[470] John H. Knox, cit supra note 446.

Bibliography

International Documents

G77 and China Statement. United Nations Conference on Environment and Development (UNCED), 1992. Available at: https://www.g77.org/doc/.

Intergovernmental Panel on Climate Change, "Global Warming of 1.5°C: Summary for Policymakers," 2018, Available at: https://www.ipcc.ch/sr15/chapter/spm/.

Intergovernmental Panel on Climate Change, "IPCC Guidelines for National Greenhouse Gas Inventories," was established in 1996, with subsequent updates in 2006 and 2019.

Rio Declaration on Environment and Development. United Nations, 1992, Available at: https://www.un.org/en/development/desa/population/migration/generalassembly/docs/globalcompact/A_CONF.151_26_Vol.I_Declaration.pdf.

United Nations, *Charter of the United Nations*, 24 October 1945, 1 UNTS XVI. UNFCCC, "Copenhagen Accord," 2009. Available at: https://unfccc.int/resource/docs/2009/cop15/eng/11a01.pdf.

United Nations Framework Convention on Climate Change, "COP26: The Glasgow Climate Pact," Available at: https://unfccc.int/process-and-meetings/conferences/glasgow-climate-change-conference-october-november-2021/cop-26.

United Nations Framework Convention on Climate Change, "Glasgow Climate Pact," Available at: https://unfccc.int/sites/default/files/resource/cma2021_10a1_advance.pdf.

United Nations Framework Convention on Climate Change, "Global Stocktake under the Paris Agreement," Available at: https://unfccc.int/topics/global-stocktake.

United Nations Framework Convention on Climate Change, "The Paris Rulebook: Implementation and Compliance,".

United Nations, *Resolution* adopted by the General Assembly on 11 December 1987, 42/187. Report of the World Commission on Environment and Development (New York, United States of America, United Nations Document, 1987).

World Meteorological Organization, "COP28: Key Climate Mitigation Measures," December 2023, Available at: https://public.wmo.int/en/resources/bulletin/cop28-key-climate-mitigation-measures.

World Resources Institute, "COP26: Key Outcomes from the UN Climate Talks in Glasgow," November 17, 2021, Available at: https://www.wri.org/insights/cop26-key-outcomes-un-climate-talks-glasgow.

Legislation

Council Decision (EU) 2016/1841 of 5 October 2016 on the conclusion, on behalf of the European Union, of the Paris Agreement adopted under the United Nations Framework Convention on Climate Change, *Official Journal of the European Union*, L 282.

Directive 2003/87/EC of the European Parliament and of the Council of 13 October 2003 establishing a scheme for greenhouse gas emission allowance trading within the Community, *Official Journal of the European Union*, L 275/32.

Directive 2004/35/EC of the European Parliament and of the Council of 21 April 2004 on environmental liability with regard to the prevention and remedying of environmental damage, *Official Journal of the European Union*, L 143/56.

Regulation (EU) 2018/842 of the European Parliament and of the Council of 30 May 2018 on binding annual greenhouse gas emission reductions by Member States from 2021 to 2030, *Official Journal of the European Union*, L 156/26.

Regulation (EU) 2021/1119 of the European Parliament and of the Council of 30 June 2021 establishing the framework for achieving climate neutrality, OJ L 243/1.

Treaty on the Functioning of the European Union (TFEU), *Official Journal of the European Union*, OJ C 326, 26.10.2012.

Monographs

A.M. Farmer (ed), *Manual of European Environmental Policy*, 2012, London, Routledge, 3.

Andrew S. Goudie, *The Human Impact on the Natural Environment: Past, Present, and Future*, 7th ed. (Oxford: Wiley-Blackwell, 2018), 219-240.

Benoit Mayer, *The International Law on Climate Change* (Cambridge: Cambridge University Press, 2018), 178-179.

Bodansky Daniel, Jutta Brunée, and Lavanya Rajamani. *International Climate Change Law*. Oxford: Oxford University Press, 2017.

Bodansky Daniel. *The Art and Craft of International Environmental Law*. Cambridge: Harvard University Press, 2010.

Carmen M. Reinhart and Kenneth S. Rogoff, *This Time Is Different: Eight Centuries of Financial Folly* (Princeton: Princeton University Press, 2009), 209-236.

Chayes, Abram, and Antonia Handler Chayes. *The New Sovereignty: Compliance with International Regulatory Agreements.* Cambridge, MA: Harvard University Press, 1995.

Chris Wold, David Hunter, and Melissa Powers, *Climate Change and the Law* (LexisNexis, 2009), 95-98.

Chukwumerije Okereke. *Global Justice and Neoliberal Environmental Governance: Ethics, Sustainable Development and International Co-operation*. London: Routledge, 2018.

Cullet Philippe. *Differential Treatment in International Environmental Law*. London: Routledge, 2003.

David Boyd, *The Environmental Rights Revolution: A Global Study of Constitutions, Human Rights, and the Environment* (Vancouver: UBC Press, 2012).

David Harvey, *A Brief History of Neoliberalism* (Oxford: Oxford University Press, 2005), 64-86.

Dinah Shelton, *Advanced Introduction to International Human Rights Law* (Cheltenham: Edward Elgar Publishing, 2014).

Economist. "Blowing Hot and Cold: Is China a Climate Saint or Villain?" *The Economist*, March 12, 2024. Available at: https://www.economist.com/china/2024/03/12/is-china-a-climate-saint-or-villain.

Edith Brown Weiss, "Common But Differentiated Responsibilities in Perspective," *Recueil des cours* 303 (2003): 311–384.

Edith Brown Weiss, In *Fairness to Future Generations: International Law, Common Patrimony, and Intergenerational Equity*. Tokyo: United Nations University Press, 1989, 113-115.

Eila Jeronen, "Sustainability and Sustainable Development," in *Encyclopedia of Corporate Social Responsibility*, ed. Samuel O. Idowu et al. (Berlin: Springer, 2013), 2370-2378.

Falkner, Robert. *The Handbook of Global Climate and Environment Policy.* Oxford: John Wiley & Sons, 2016.

Farhana Yamin and Joanna Depledge, *The International Climate Change Regime: A Guide to Rules, Institutions and Procedures* (Cambridge: Cambridge University Press, 2004), 145-147.

Gro Harlem Brundtland, *Madam Prime Minister: A Life in Power and Politics* (New York: Farrar, Straus and Giroux, 2002), 289-310.

Grubb Michael, Christiaan Vrolijk, and Duncan Brack. *The Kyoto Protocol: A Guide and Assessment*. London: Earthscan, 1999.

Harriet Bulkeley, *Climate Governance and the Role of Cities* (Oxford: Oxford University Press, 2013), 112-114.

Harriet Bulkeley, *Transnational Climate Change Governance* (Cambridge: Cambridge University Press, 2014), 116-117.

Harriet Bulkeley and Peter Newell, Governing Climate Change (London: Routledge, 2015), 112-115.

Henry Shue, *Basic Rights: Subsistence, Affluence, and U.S. Foreign Policy* (Princeton: Princeton University Press, 1980), 35-36

Hunter David, James Salzman, and Durwood Zaelke. *International Environmental Law and Policy*, 4th ed. New York: Foundation Press, 2011.

Ian Brownlie, *Principles of Public International Law*. 7th ed. Oxford: Oxford University Press, 2008.

J. Timmons Roberts and Bradley C. Parks. *A Climate of Injustice: Global Inequality, North-South Politics, and Climate Policy.* Cambridge: MIT Press, 2007.

Jack Donnelly, *Universal Human Rights in Theory and Practice*, 3rd ed. (Ithaca: Cornell University Press, 2013).

Jackson John H. *The World Trading System: Law and Policy of International Economic Relations*, 2nd ed. Cambridge: MIT Press, 1997.

John H. Knox, *The Human Right to a Healthy Environment* (Cambridge: Cambridge University Press, 2018).

John McNeill. *Something New Under the Sun: An Environmental History of the Twentieth-Century World.* New York: W.W. Norton & Company, 2000, 105-132.

Jos Delbeke, ed. *Delivering a Climate Neutral Europe*. 1st ed. London: Routledge, 2024. Available at: https://doi.org/10.4324/9781003164943.

Joyeeta Gupta, *The History of Global Climate Governance.* Cambridge: Cambridge University Press, 2014.

Joyner Christopher C. *Governing the Frozen Commons: The Antarctic Regime and Environmental Protection*. Columbia: University of South Carolina Press, 1998.

Jutta Brunnée and Stephen J. Toope, *Legitimacy and Legality in International Law: An Interactional Account* (Cambridge: Cambridge University Press, 2010), 197-199.

Klaus Bosselmann, *The Principle of Sustainability: Transforming Law and Governance* (London: Routledge, 2008), 211-213.

Laurens M. Bouwer. *Loss and Damage from Climate Change: Concepts, Methods, and Policy Options*. Cham: Springer, 2018.

Lavanya Rajamani, *The Paris Agreement: A New Beginning?* (Oxford: Oxford University Press, 2016), 121-123.

Marc Pallemaerts, *EU Climate Policy: Up to the Kyoto Protocol and Beyond* (Brussels: Institut Royal des Relations Internationales, 2003).

Maurice Strong, ed. *Founex Report on Development and Environment*. Geneva: Founex Group, 1971, 12-14.

Patricia Birnie, Alan Boyle, and Catherine Redgwell. International Law and the Environment, 3rd ed. Oxford: Oxford University Press, 2009.

Paul Craig and Gráinne de Búrca, *EU Law: Text, Cases, and Materials*, (Oxford: Oxford University Press, 2015).

Philip Alston, *Human Rights and Development: Towards Mutual Reinforcement*, (Oxford: Oxford University Press, 2005), 121-123

Philippe Sands, Jacqueline Peel, Adriana Fabra, and Ruth MacKenzie, *Principles of International Environmental Law*, 4th ed. (Cambridge: Cambridge University Press, 2018).

Philippe Sands, *Principles of International Environmental Law*, 3rd ed. (Cambridge: Cambridge University Press, 2012).

Pieter Pauw, Steffen Bauer, Carmen Richerzhagen, Clara Brandi, and Hannah Schmole. *Different Perspectives on Differentiated Responsibilities: A State-of-the-Art Review of the Notion of*

Common But Differentiated Responsibilities in International Negotiations. Bonn: Deutsches Institut für Entwicklungspolitik, 2014.

Rajamani Lavanya. *Differentiation in International Environmental Law*. Oxford: Oxford University Press, 2006.

Roberts, J. Timmons, and Bradley C. Parks. *A Climate of Injustice: Global Inequality, North-South Politics, and Climate Policy*. Cambridge: MIT Press, 2007.

Robin Churchill and Alan Lowe. *The Law of the Sea*. Manchester: Manchester University Press, 1999.

Sebastian Oberthür and Timothy Pallemaerts, *The New Climate Policies of the European Union: Internal Legislation and Climate Diplomacy* (Brussels: VUBPress, 2010).

Shukla, Priyadarshi R., et al. *Climate Change 2022: Mitigation of Climate Change. Contribution of Working Group III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC)*. Cambridge: Cambridge University Press, 2022.

Stephen Macekura, *Of Limits and Growth: The Rise of Global Sustainable Development in the Twentieth Century* (Cambridge: Cambridge University Press, 2015), 157-173.

Steven Bernstein, *The Compromise of Liberal Environmentalism* (New York: Columbia University Press, 2001), 112-114.

Susan Strange, *States and Markets* (London: Continuum, 1994), 123-145.

Urry John. *What is the Future?* Cambridge: Polity Press, 2016.

Viñuales, Jorge E. *The Paris Agreement on Climate Change: A Commentary*. Oxford: Oxford University Press, 2017.

Wolfgang Sachs, ed., *The Development Dictionary: A Guide to Knowledge as Power*, 2nd ed. (London: Zed Books, 2010), 29-33.

Wolfgang Sachs. *Environment and Human Rights: Sustainable Development.* London: Earthscan Publications, 2001.

World Commission on Environment and Development (WCED), *Our Common Future* (Oxford: Oxford University Press, 1987).

Publications

Adger W. Neil. "Scales of Governance and Environmental Justice for Adaptation and Mitigation of Climate Change." *Journal of International Development* 13, no. 7 (2001): 921-931.

Adil Najam, "The Case for a Strong Global Climate Governance Regime: Essential Components and Reforms," *Global Governance* 17, no. 4 (2011): 545-563.

Alexander Eden, et al. *Putting the ETS 2 and Social Climate Fund to Work: Impacts, Considerations, and Opportunities for European Member States*. adelphi, Öko-Institut, Center for the Study of Democracy, and WiseEuropa, 2023.

Annabelle Littoz-Monnet, "The Politics of Expertise in International Organizations: How International Bureaucracies Produce and Mobilize Knowledge," *European Journal of International Relations* 23, no. 3 (2017): 599-623.

Ashmita Barthakur, "Polluter Pays Principle as the Key Element to Environmental Law," *International Journal of Scientific and Research Publications* 11, no. 3 (March 2021): 274-278, last accessed August 30, 2024. Available at: https://doi.org/10.29322/IJSRP.11.03.2021.p11137.

Carbon Brief. "China's CO2 Emissions: Current Data and Global Impact." 2021. Available at: https://carbonbrief.org.

Climate Analytics. "Critique of the Annex I/Non-Annex I Divide in Light of Rising Emissions from Developing Economies." 2020. Available at: https://climateanalytics.org.

Christian Aid, *Human Tide: The Real Migration Crisis*, 2007.

Christian Kurrer. *Environment policy: general principles and basic framework*. European Parliament, 05/2021. Available at : https://www.europarl.europa.eu/factsheets/en/sheet/71/environment-policy-general-principles-and-basic-framework.

Christina Voigt and Felipe Ferreira. "The Paris Agreement: A New Beginning?" *Journal of Environmental Law* 28, no. 1 (2016): 1-24.

Christina Voigt, "The Compliance and Implementation Mechanism of the Paris Agreement," *Review of European, Comparative & International Environmental Law* 25, no. 2 (2016): 161-173.

Christina Voigt, "The Role of International Law in Implementing the Principle of CBDR," *Review of European, Comparative & International Environmental Law* 21, no. 3 (2012): 191-193.

Daniel Bodansky. "The Paris Climate Change Agreement: A New Hope?" *American Journal of International Law* 110, no. 2 (2016): 288-319.

Daniel Bodansky. "The United Nations Framework Convention on Climate Change: A Commentary." *Yale Journal of International Law* 18, no. 2 (1993): 451-558.

Emanuela Orlando, *The Transatlantic Relationship and the Future Global Governance*. Transworld, Seventh Framework Programme, Working Paper No. 21, April 2013.

European Commission, *The European Green Deal*, COM/2019/640 final.

European Environment Agency (EEA), *Greenhouse Gas Emission Trends and Projections in Europe 2012*, EEA Report No. 6/2012 (Copenhagen: EEA, 2012).

European Parliament, "Climate Action in the EU: Latest State of Play," *Fact Sheets on the European Union*, accessed September 2, 2024. Available at: https://www.europarl.europa.eu/factsheets/en/sheet/72/climate-action-in-the-eu.

Handl Günther. "Declaration of the United Nations Conference on the Human Environment (Stockholm Declaration), 1972 and The Rio Declaration on Environment and Development, 1992." *United Nations Audiovisual Library of International Law* (2012).

Harro van Asselt, "The Legal Status of the Paris Agreement's Obligations," *Climate Policy* 18, no. 6 (2018): 713-727.

Hey Ellen, and Sophia Paulini. "Common but Differentiated Responsibilities." In *Max Planck Encyclopedia of Public International Law [MPEPIL]*, edited by Rüdiger Wolfrum. Last updated October 2021. Available online at: Max Planck Encyclopedias of International Law.

International Energy Agency, *Eastern Europe's Energy Transition*, IEA, accessed September 2, 2024. Available at: https://www.iea.org/reports/eastern-europe-energy-transition.

IPCC, *Global Warming of 1.5°C: An IPCC Special Report* (Geneva: World Meteorological Organization, 2018). Available at: https://www.ipcc.ch/sr15/.

Jacqueline Peel and Hari M. Osofsky, *Climate Change Litigation: Regulatory Pathways to Cleaner Energy* (Cambridge: Cambridge University Press, 2015), 210-213.

Jacob Werksman, "The Clean Development Mechanism: Unwrapping the 'Kyoto Surprise'." *Review of European Community & International Environmental Law* 8, no. 2 (1999): 147-158.

James Meadowcroft, "Sustainable Development: A New(ish) Idea for a New Century?" *Political Studies* 48, no. 2 (2000): 370-387.

John M. Meyer, "Political Nature: Environmentalism and the Interpretation of Western Thought," *Political Theory* 27, no. 2 (1999): 330-333.

Joseph E. Aldy and Robert N. Stavins, "The Promise and Problems of Pricing Carbon: Theory and Experience," *Journal of Environment and Development* 21, no. 2 (2012): 152-180.

Justice Ezechi Chigonu, Franca Princess Igwela, and Chikadibia Sophia Ahiakwo, "An Appraisal of the Principle of Common But Differentiated Responsibilities in International Environmental Law," *Achievers University Law Journal (AULJ)* 3, no. 1 (2023): 220-221.

Jutta Brunnée, "International Institutions and Global Environmental Governance," *International Law and International Relations: Bridging Theory and Practice*, ed. Thomas J. Biersteker and Peter J. Spiro (New York: Routledge, 2017), 154-158.

Karel Vasak, Human Rights: A Thirty-Year Struggle: the Sustained Efforts to Give Force of Law to the Universal Declaration of Human Rights, UNESCO Courier, November 1977

Kingsbury, Benedict, Nico Krisch, and Richard B. Stewart. "The Emergence of Global Administrative Law." *Law and Contemporary Problems* 68, no. 3/4 (2005): 15-61. Available at: https://scholarship.law.duke.edu/lcp/vol68/iss3/3.

Lisa Vanhala and Christian Hestbaek. "Framing Climate Change Loss and Damage in UNFCCC Negotiations: The Struggle Over Meaning and the Warsaw International Mechanism." *Global Environmental Politics* 16, no. 4 (2016): 111-129.

Malte Schneider, Annika Holzer, and Volker H. Hoffmann. "Understanding the CDM's Contribution to Technology Transfer." *Energy Policy* 36, no. 8 (2008): 2930-38. Available at: https://doi.org/10.1016/j.enpol.2008.03.032.

Maria Ivanova, "Designing the United Nations Environment Programme: A Story of Compromise and Confrontation," *International Environmental Agreements: Politics, Law and Economics* 7, no. 4 (2007): 337-361.

Martin Khor, "Challenges of the Green Economy Concept and Policies in the Context of Sustainable Development, Poverty, and Equity." United Nations Research Institute for Social Development, 2010.

Matthias Duwe, "The Role of Civil Society in International Climate Negotiations: A Historical Perspective," *Wiley Interdisciplinary Reviews: Climate Change* 6, no. 2 (2015): 81-90.

Meinhard Doelle. "The Paris Agreement: Historic Breakthrough or High Stakes Experiment?" *Climate Law* 6, no. 1 (2016): 1-20.

Michael Jacobs, *The Green Economy: Environment, Sustainable Development and the Politics of the Future* (London: Pluto Press, 1991), 56-62.

Michael Redclift, *Sustainable Development: Exploring the Contradictions* (London: Routledge, 1987), 23-28.

Mickelson Karin, "South, North, International Environmental Law, and International Environmental Lawyers." *Yearbook of International Environmental Law* 11, no. 1 (2000): 52-57.

Najam Adil, Mark Papa, and Nadaa Taiyab. *Global Environmental Governance: A Reform Agenda*. Winnipeg: International Institute for Sustainable Development, 2006. Available at: https://www.iisd.org/publications/global-environmental-governance-reform-agenda.

Najam Adil, Saleemul Huq, and Youba Sokona. "Climate Negotiations Beyond Kyoto: Developing Countries Concerns and Interests." *Climate Policy* 3, no. 3 (2003): 221-231.

Neumayer Eric. "In Defence of Historical Accountability for Greenhouse Gas Emissions." *Ecological Economics* 33, no. 2 (2000): 185-192.

Per Kågeson, *Applying the Principle of Common but Differentiated Responsibility to the Mitigation of Greenhouse Gases from International Shipping*, CTS Working Paper 2011:5 (Stockholm: Centre for Transport Studies, 2011).

Pieter Pauw, Kennedy Mbeva, and Harro van Asselt. "Subtle Differentiation of Countries' Responsibilities under the Paris Agreement." *Nature Climate Change* 9, no. 12 (2019): 1-7. Available at: file:///C:/Users/Utente/Downloads/s41599-019-0298-6.pdf.

Rajamani Lavanya. "Ambition and Differentiation in the 2015 Paris Agreement: Interpretative Possibilities and Underlying Politics." *International & Comparative Law Quarterly* 65, no. 2 (2016): 493-514.

Rajamani Lavanya. "Differentiation in International Environmental Law and Its Practical Implications: A Theoretical Exploration." *Yearbook of International Environmental Law* 16, no. 1 (2006): 81-118.

Rajamani Lavanya. "Differentiation in International Environmental Law," in *International Environmental Law: Contemporary Concerns and Challenges*, ed. Malgosia Fitzmaurice and Attila Tanzi. Cheltenham: Edward Elgar, 2020, 234-240.

Rajamani Lavanya. "The Principle of Common But Differentiated Responsibility and the Balance of Commitments under the Climate Regime." *Review of European, Comparative & International Environmental Law* 9, no. 2 (2000): 120-131.

Richard B. Stewart, "Instrument Choice," in *Environmental Law and Policy*, ed. Richard L. Revesz, Philippe Sands, and Richard B. Stewart (Oxford: Oxford University Press, 2008).

Sandrine Dubois and Matthieu Wemaere. "The Paris Agreement: A Starting Point towards Achieving Climate Neutrality?" *Carbon and Climate Law Review* 10, no. 1 (2016): 1.

Sandrine Maljean-Dubois. "The European Green Deal: A Response to Climate Change in Times of Crisis?" *European Energy and Environmental Law Review* 30, no. 4 (2021): 95–100.

Stadelmann, M., Axel Michaelowa, and J. Timmons Roberts. "Difficulties in Accounting for Private Finance in International Climate Policy." *Climate Policy* 13, no. 5 (2013): 652-672.

Stone, Christopher D. "Common But Differentiated Responsibilities in International Law." *American Journal of International Law* 98, no. 2 (2004): 276-301.

UNEP and Sabin Center for Climate Change Law, *Global Climate Litigation Report: 2023 Status Review*, 2023.

Xu, Ming, et al. "China's CO2 Emissions from Coal-Fired Power Plants and Other Major Sectors: Current Situation and Reduction Strategies." *Nature Communications* 12, no. 1 (2021): 300-310.

W. Timmons Roberts and Romain Weikmans, "Postface: Fragmentation, Failing Trust and Enduring Tensions Over What Counts as Climate Finance." *International Environmental Agreements: Politics, Law and Economics* 17 (2017): 129-137.

Treaties and other International Agreements

Antarctic Treaty. December 1, 1959, Article 1.

Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, March 22, 1989, as amended 1995.

Charter of the United Nations, Article 94(1), June 26, 1945, 1 UNTS XVI.

Convention on Biological Diversity. June 5, 1992, Article 20. Available at: https://www.cbd.int/doc/legal/cbd-en.pdf.

European Commission, "Burden Sharing Agreement: How the EU Agreed to Divide Up Emission Reduction Targets," Climate Action (1998), accessed September 2, 2024. Available at: *https://ec.europa.eu/clima/policies/strategies/2020_en*.

European Commission, The Paris Agreement, accessed September 2, 2024. Available at: *https://ec.europa.eu/clima/policies/international/negotiations/paris_en*.

European Council, Council Decision of 25 April 2002 Concerning the Conclusion of the Kyoto Protocol, Official Journal of the European Union, L 130, 15.5.2002.

General Agreement on Tariffs and Trade (GATT), 1947, Article 18; *Agreement Establishing the World Trade Organization (WTO)*, April 15, 1994.

International Convention for the Regulation of Whaling. December 2, 1946.

Kyoto Protocol to the United Nations Framework Convention on Climate Change. December 11, 1997, Article 3, paragraph 1, and Annex I. Available at: https://unfccc.int/resource/docs/convkp/kpeng.pdf.

Montreal Protocol on Substances that Deplete the Ozone Layer. September 16, 1987.

Paris Agreement. United Nations, 2015.

Statute of the International Court of Justice, Article 36, June 26, 1945. Available at: https://www.icj-cij.org/en/statute.

Stockholm Declaration on the Human Environment. June 16, 1972.

Treaty of Versailles. June 28, 1919, Article 405, paragraph 3.

United Nations Convention on the Law of the Sea (UNCLOS). December 10, 1982, Articles 61, 62, and Part XI.

United Nations Convention to Combat Desertification. June 17, 1994. Available at: https://www.unccd.int/sites/default/files/relevant-links/2017-01/UNCCD_Convention_ENG_0.pdf.

United Nations Framework Convention on Climate Change (UNFCCC), May 9, 1992. Available at: https://unfccc.int/files/essential_background/background_publications_htmlpdf/application/pdf/conveng.pdf.

United Nations, Paris Agreement to the United Nations Framework Convention on Climate Change, United Nations Treaty Series, vol. 3156 (2016), p. 31.

Jurisprudence

European Court of Human Rights, *Convention for the Protection of Human Rights and Fundamental Freedoms*, as amended, Council of Europe, Rome, 1950.

European Court of Justice (ECJ), Case C-127/07, "Commission v. French Republic," ECLI:EU:C:2009:703.

Kolyadenko and Others v. Russia, Nos. 17423/05, 20534/05, 20678/05, 23263/05, 24283/05, and 35673/05, Judgement of 28 February 2012.