

# **Equator Principles and Climate Change**

*Challenges and Opportunities*

By

**Haniehalsadat Aboutorabifard**

# **Equator Principles and Climate Change: Challenges and Opportunities**

**By Haniehalsadat Aboutorabifard**

**This book first published 2026**

**Ethics International Press Ltd, UK**

**British Library Cataloguing in Publication Data**

**A catalogue record for this book is available from the British Library**

**Copyright © 2026 by Haniehalsadat Aboutorabifard**

**All rights for this book reserved. No part of this book may be reproduced, stored in a retrieval system, or transmitted, in any form or by any means, electronic, mechanical photocopying, recording or otherwise, without the prior permission of the copyright owner.**

**Print Book ISBN: 978-1-83711-244-9**

**eBook ISBN: 978-1-83711-245-6**

# Preface

In the contemporary era of accelerating climate change, the global financial sector occupies a precarious and paradoxical position. Financial institutions are increasingly vulnerable to systemic climate risks—including physical disruptions—while simultaneously serving as the primary capital engine for infrastructure projects that drive greenhouse gas emissions. Equator Principles (EPs) were established as a voluntary risk management framework to navigate this tension, providing a baseline for financial institutions to identify, assess, and manage environmental and social risks in project finance. This book provides a rigorous, critical examination of the framework's efficacy, focusing specifically on the 2020 update, Equator Principles 4 (EP4), and its pivotal mandate to integrate climate change considerations into Environmental Impact Assessments (EIA).

This book intends to examine the likely effectiveness of the climate change-related policies embedded in EP4. By critically analyzing the substantive standards, procedural requirements, and implementation mechanisms introduced under EP4, the book assesses whether these measures are capable of meaningfully addressing climate-related risks and impacts associated with project finance. Particular attention is given to the extent to which EP4 aligns financial decision-making with broader climate governance objectives, promotes accountability among Equator Principles Financial Institutions, and influences project-level outcomes in practice. Through this analysis, the book seeks to

evaluate whether EP4 represents a transformative tool for climate-responsive project financing or remains primarily a normative and reputational instrument with limited practical effect.

This study bridges a critical gap in the sustainable finance literature by scrutinizing EP4 through a multi-dimensional theoretical lens. Drawing upon a synthesis of Shareholder Theory (focusing on financial materiality and risk-adjusted returns), Stakeholder Theory (addressing accountability to broader societal interests), and Institutional Theory (examining isomorphism and the pressure for legitimacy), the book evaluates whether EP4 serves as a genuine driver of sustainable development or merely is a window dressing tool.

The research moves beyond critique to offer substantive operational solutions. It identifies the specific strengths and weaknesses of the EP4's climate mandates. Crucially, the book develops a comprehensive set of criteria for integrating climate change variables into EIA. By translating vague policy directives into actionable assessment frameworks, this work demonstrates how EP4 can be leveraged to align shareholder value with global sustainability goals. It concludes that while EP4 has the potential to transform the financial sector's role in the climate crisis, its success depends on moving from discretionary guidance to rigorous, empirically grounded implementation. This manuscript is an essential resource for scholars of sustainable finance, banking regulators, corporate policymakers, and industry leaders seeking to navigate the complex intersection of infrastructure financing and climate change management.

# Table of Contents

Preface.....	v
Table of Contents.....	v
List of Tables .....	ix
List of Abbreviations.....	x
Chapter 1: Introduction .....	1
Significance of the Problem .....	6
Research Contribution .....	10
Chapter 2: Climate Change and Project Finance.....	15
Sustainable Development .....	16
Climate Change and Project Financing.....	25
World Bank .....	32
International Finance Corporation .....	40
Equator Principles.....	46
Functional Linkage.....	49
Chapter 3: Equator Principles.....	51
Equator Principles 4.....	57
Chapter 4: Theories and Motivators for Responsible Project Financing .....	64
Underlying Theories for Sustainable Development.....	66
Shareholder Theory .....	66
Stakeholder Theory .....	68
Institutional Theory .....	70
Motivators for Climate Change Management .....	72
Credit Risk Management .....	73

Reputational Risk Management.....	78
Corporate Social Responsibility .....	82
Chapter 5: EIA and Climate Change .....	86
General Process of EIA .....	88
Screening: Is EIA Needed? .....	89
Scoping: Which Impacts Should be Considered? .....	92
Decision-Making: How Can EIA be Integrated into Final Projects? .....	93
Follow-up and Monitoring: How Can the Implementation of EIA be Monitored? .....	95
Incorporating Climate Change Issues into EIA.....	96
Climate Change Mitigation .....	99
Climate Change Adaptation.....	101
Chapter 6: Criteria for Integrating Climate Change into EIA...	103
Screening Stage .....	105
Criterion #1: Describing the Project through Stakeholder Engagement .....	106
Criterion #2: Categorizing the Project .....	108
Scoping Stage .....	111
Criterion #3: Assessing Scope 1 to 3 GHGs .....	112
Criterion #4: Considering GHGs During the Life of the Project .....	114
Criterion #5: Determining the Significance of GHGs.....	116
Criterion #6: Identifying Climate Change Impacts on the Project through Stakeholder Engagement.....	119
Criterion #7: Considering Multiple Alternatives.....	121
Criterion #8: Considering No-Action Alternative .....	126
Criterion #9: Engaging Stakeholders for Alternative Analysis.....	128

Criterion #10: Disclosing the Result of Alternative Analysis .....	129
Decision-Making Stage .....	131
Criterion #11: Integrating Results of EIA in the Final Project .....	132
Follow-Up and Reporting Stage .....	134
Criterion #12: Monitoring the Project's GHGs .....	135
Criterion #13: Monitoring the Project Vulnerability to Climate Change Impacts .....	136
Chapter 7: Likely Effectiveness of the Equator	
Principles' EIA .....	138
Engaging Stakeholders throughout the Project Description and Identifying Need and Purpose .....	139
Categorizing the Project based on Climate Change Risks ...	143
Assessing Project-Associated GHGs .....	148
Considering GHGs During the Life of the Project .....	153
Determining the Significance of GHG Emissions .....	155
Identifying Climate Change Impacts on the Project through Stakeholder Engagement.....	158
Considering Multiple Alternatives.....	162
Considering No-Action Alternative.....	166
Engaging Stakeholders through Alternative Analysis.....	167
Disclosing the Result of Alternative Analysis.....	168
Integrating the Results of EIA in the Final Project .....	171
Monitoring Project-Associated GHG Emissions .....	173
Monitoring the Project Vulnerability to Climate Change Impacts .....	177

Chapter 8: Discussion and Analyses .....	179
Strengths of EP4 for Climate Change Management .....	181
Weaknesses of EP4 for Climate Change Management.....	188
Screening Stage.....	188
Scoping Stage.....	191
Decision-Making Stage.....	193
Follow-up Stage .....	195
Chapter 9: Conclusion .....	197
Citations .....	202

# List of Tables

Table 1: Examples of alternative analysis concerning climate change mitigation. ....	123
Table 2: Key concerns that should be considered during alternative analysis for climate change adaptation. ....	125

## List of Abbreviations

Bank Procedures.....	(BP)
Climate Change Risk Assessment.....	(CCRA)
Corporate Social Responsibility .....	(CSR)
Environmental and Social Framework.....	(ESF)
Environmental Impact Assessment.....	(EIA)
Equator Principles.....	(EPs)
Equator Principle Financial Institutions .....	(EPFIs)
Fifth version of Equator Principles .....	(EP5)
First Version of Equator Principles.....	(EPI)
Fourth version of Equator Principles .....	(EP4)
Free, Prior, and Informed Consent .....	(FPIC)
International Finance Corporation .....	(IFC)
Multilateral Development Bank.....	(MDB)
Non-governmental Institutions.....	(NGOs)
Operational Policy .....	(OP)
Sustainable Development Goals .....	(SDGs)
Second version of Equator Principles.....	(EPII)
Third version of Equator Principles .....	(EPIII)
Task Force on Climate-related Financial Disclosures .....	(TCFD)

# Chapter 1

## Introduction

Climate change has emerged as a pressing global concern, significantly impacting economic activities and resulting in reduced investments revenues. Investors and financial institutions will continue to be exposed to climate change-related risks, including the anticipated decline in economic growth and direct physical risks associated with extreme climatic events (Blyth et al., 2007; Fagbemi & Oke, 2024; Stern, 2006). Conversely, economic activities, particularly infrastructure projects, are among the primary drivers of the current global temperature rise attributed to elevated atmospheric greenhouse gas (GHG) concentrations (Chen et al., 2024; OECD/UNDP, 2024). The Intergovernmental Panel on Climate Change Sixth Assessment Report notes that climate change is unequivocal, and GHG emissions of large development activities are very likely to be the dominant cause (Intergovernmental Panel on Climate Change (IPCC), 2022a). Infrastructure development projects are typically capital-intensive and technologically complex, necessitating substantial financial support. Consequently, financial institutions, particularly private commercial banks, directly provide extensive funding for a diverse range of such projects that not only might be affected by but also have significant impacts on climate change.

Private commercial banks must be cognizant of the fact that climate change could exacerbate project-related risks throughout the entire investment sector and impose additional costs if no action is taken by them. In accordance with the principles of

shareholder, stakeholder, and institutional theories, banks must proactively develop strategies for managing credit, reparation, and legitimacy risks attributable to climate change through a transparent regulatory framework upon which they can adapt and base their investment decisions (Dlugolecki & Lafeld, 2005).

As such, Equator Principles Financial Institutions (EPFIs), who have developed the Equator Principles (EPs) as a financial industry benchmark for determining, assessing and managing environmental and social risk in projects, updated EPs, EP4, in 2020, to include project-related climate change risk in their project assessment (*Equator Principles EP4*, 2020). They support the objectives of the 2015 Paris Agreement and recognize their role to play in improving the availability of climate-related information when assessing the potential transition and physical risks of Projects financed under the Equator Principles. In the preamble to EP4, EPFIs state:

We, the EPFIs, have adopted the Equator Principles in order to ensure that the Projects we finance and advise on are developed in a manner that is socially responsible and reflects sound environmental management practices. EPFIs acknowledge that the application of the Equator Principles can contribute to delivering on the objectives and outcomes of the United Nations Sustainable Development Goals (SDGs). Specifically, we believe that negative impacts on Project-affected ecosystems, communities, and the climate should be avoided where possible. If these impacts are unavoidable they should be minimised and mitigated, and where residual impacts remain, clients should provide remedy for human rights impacts or offset environmental impacts as appropriate.

In EP4, Environmental Impact Assessment (EIA) emerges as the primary mechanism by which financial institutions ensure that climate change is considered a pivotal factor in the identification, assessment, and management of environmental/social risks associated with GHG-intensive projects. EIA “is usually prepared for greenfield developments or large expansions with specifically identified physical elements, aspects, and facilities that are likely to generate significant environmental or social impacts” (*Equator Principles EP4*, 2020, p. 25). By adopting EIA, EPFIs not only enhance shareholders’ benefits, incorporate stakeholders’ interests, and align with institutional requirements, but also mitigate credit risks, bolster their reputation, and demonstrate their commitment to corporate social responsibility (CSR).

At first glance, the adoption of climate change policies under EPs appears to mark a noteworthy advancement in embedding climate considerations within the project finance sector. These developments signal a growing recognition among EPFIs of their role in managing climate risks and aligning with broader sustainability goals. However, a persistent and substantive debate continues over the actual effectiveness of these policies in facilitating meaningful climate change mitigation and adaptation. One of the central challenges lies in the integration of climate change concerns into ESIA, which remains a complex and technically demanding task. Unlike traditional environmental considerations, climate change involves both backward-looking assessments (such as emissions inventories) and forward-looking projections (such as climate vulnerability and resilience), making it difficult for EPFIs to fully operationalize these dimensions within EIA frameworks. This complexity is compounded by

inconsistent methodologies, data limitations, and the absence of standardized tools for assessing climate-related risks across diverse geographical and sectoral contexts.

As a result, despite the adoption of EP4—which introduced new language addressing climate change—many of the commitments remain largely aspirational rather than operational. While EP4 marked a step forward by acknowledging the need for climate considerations in project finance, the policies it sets out are frequently criticized for their lack of specificity, measurable benchmarks, and enforcement mechanisms. Critics argue that the climate-related provisions are broadly worded, leaving considerable room for interpretation and inconsistent implementation among EPFIs (Sheehama, 2021). This variability not only undermines accountability but also raises concerns about greenwashing, as financial institutions can claim alignment with EP4 while failing to adopt meaningful internal reforms. Consequently, the effectiveness of EPs to catalyze substantial behavioral change in how banks and lenders address climate risks and responsibilities remains deeply uncertain.

Effectiveness, in this context, refers to the extent to which EPs not only assist financial institutions in identifying, assessing, and managing climate-related risks associated with project finance, but also whether they actively incentivize or compel institutional shifts toward more robust climate change mitigation and adaptation strategies (Macve & Chen, 2010). This involves moving beyond procedural compliance to foster genuine behavioral change in investment decision-making and project appraisal processes. The concept of effectiveness thus engages with a deeper normative inquiry: Do EPs serve merely as a window-dressing

tool, allowing institutions to signal climate consciousness without altering core practices? Or can they operate as meaningful governance instruments capable of driving substantive transformation in how climate risks and responsibilities are integrated into the global project finance architecture?

Evaluating this effectiveness requires examining not only formal commitments, but also implementation outcomes, and the broader institutional cultures that shape EPFI behavior. To investigate this issue, this book seeks to explain a significant gap in the current understanding of the climate change provisions introduced under the EP4, with a particular focus on the challenges involved in integrating climate considerations into EIA. It critically examines existing international guidelines on the integration of climate change into EIA frameworks, including those for assessing both mitigation and adaptation within project planning.

In parallel, this book explores the foundational principles, institutional drivers, and socio-political dynamics that shape climate policy development in financial governance contexts. This includes analyzing the influence of reputational concerns, regulatory uncertainty, and voluntary standard-setting on how financial institutions engage with climate risks. Drawing from these interdisciplinary insights, the study formulates a set of generalized evaluative criteria designed to assess the effectiveness, consistency, and depth with which climate change considerations are embedded in the EIA process under EP4. These criteria aim to support more rigorous, transparent, and accountable climate risk assessments in global project finance.

Applying these evaluative criteria, this book critically examines the extent to which EP4 mandates EPFIs to systematically incorporate climate-related risks and impacts into project-level EIA. It involves analyzing both the textual commitments within EP4 and the practical implications for project appraisal and due diligence. The assessment evaluates whether the EPs are facilitating meaningful improvements in the identification, mitigation, and monitoring of climate-related risks, or whether their contributions remain limited to procedural checkboxes without substantive effect.

Finally, the book interrogates the degree to which EP4 delivers on the foundational aims of EPs—namely, managing credit, reputational, and legitimacy risks in a financial sector that is under growing scrutiny for its role in enabling high-emissions infrastructure. This includes an inquiry into whether EP4 enhances institutional resilience in a climate-conscious financial landscape, or if it remains a voluntary standard with limited transformative potential.

## **Significance of the Problem**

Existing scholarship has extensively examined the likely effectiveness of EPs in addressing socio-environmental issues, with numerous studies concluding that the EPFIs frequently fall short of fully complying with the EPs' stated requirements (Hardenbrook, 2007; Wörsdörfer, 2017). However, with respect to the climate change provisions included in EP4, there remains a significant gap in the literature. Scholars have largely overlooked the theoretical foundations that might explain EPFIs' behavior and motivations for adopting climate change policies, as well as the

broader implications these developments might hold for other voluntary governance mechanisms aimed at addressing climate-related challenges.

Moreover, there is a noticeable absence of comprehensive document-based or policy-oriented analyses that evaluate EPs through the specific lens of climate change governance. This study seeks to fill that gap by undertaking the systematic examination of EP4's climate-related provisions. It aims to assess both the likely effectiveness of these policies and the practical challenges involved in their implementation. In particular, the study investigates whether the EIA processes mandated under EP4 can align with the principles derived from relevant theoretical frameworks—such as stakeholder, shareholder, and institutional theories—and whether they meet the EPFIs' core objectives of managing credit, reputational, and legitimacy risks. By foregrounding climate change as a central axis of inquiry, this thesis contributes to the ongoing scholarly debate surrounding the implementation and efficacy of EPs, while offering new insights into the capacity of voluntary governance frameworks to respond to the pressing demands of global climate governance.

Understanding the challenges associated with the EPs' climate change policies is crucial for several reasons. First, this study explores the theoretical foundations that shape financial institutions' behavior toward sustainable development, aiming to understand why EPFIs voluntarily adopt commitments in the absence of binding legal obligations. It also analyzes the key motivators driving EPFIs to address climate change, with the goal of identifying the specific objectives that EP4's climate provisions are intended to achieve. This analysis not only provides insight

into the effectiveness of EPs but also offers valuable lessons for other voluntary environmental governance mechanisms and soft-law approaches seeking to regulate financial sector conduct in relation to climate change.

Second, EPFIs are responsible for issuing over 80 percent of international project finance debt in emerging markets. Given this significant market share, their environmental conduct—whether proactive, passive, or negligent—carries substantial weight in shaping the trajectory of global climate mitigation efforts. The decisions EPFIs make in financing large-scale infrastructure and energy projects can either advance or undermine environmental objectives in some of the world’s most climate-vulnerable regions. As such, critically examining their practices is essential to assessing the real-world effectiveness of voluntary financial standards like EPs, and to determining whether these frameworks are genuinely capable of influencing institutional behavior in support of sustainability goals.

Third, this research offers EPFIs a valuable opportunity to cultivate a deeper internal understanding of their environmental performance and to critically assess and address potential gaps in their existing climate-related policies and practices. By shedding light on areas where implementation falls short of stated commitments, the study supports EPFIs in aligning their operations more closely with emerging climate and sustainability expectations. Moreover, the findings generate actionable insights for other private commercial banks that are navigating the complex terrain of reputational, credit, and legitimacy risks linked to climate change. In doing so, the research contributes to a broader shift in the financial sector, supporting institutions in

their transition toward more resilient, accountable, and sustainable development models.

Fourth, this study provides critical insights for external stakeholders affected by EPFI-financed projects—particularly civil society organizations, non-governmental organizations (NGOs), and advocacy groups that monitor the environmental conduct of financial institutions. By illuminating both best practices and persistent shortcomings in how EPFIs address climate-related risks, the research equips these actors with the evidence needed to engage in more informed, targeted, and effective advocacy. It strengthens their capacity to hold financial institutions accountable for their environmental impacts, while also fostering greater transparency and responsiveness within the project finance ecosystem.

Ultimately, integrating climate change considerations into the EIA process holds significant promise for enhancing both the environmental integrity and economic resilience of projects financed by EPFIs. When executed effectively, this integration can lead to more informed decision-making, reduced long-term risks, and improved project sustainability. However, if EPs fail to ensure the rigorous and consistent application of key evaluative criteria within the EIA framework—or if the systemic and institutional challenges surrounding the implementation of climate-related policies remain unaddressed—this potential benefits risk being substantially undermined. In such cases, the EIA process may become a procedural formality rather than a meaningful tool for climate-conscious project evaluation and mitigation.

## **Research Contribution**

This book aims to make a meaningful and original contribution to understanding the likely effectiveness of EPs in addressing climate change-related challenges within the global project finance sector. Specifically, it evaluates how EPFIs integrate climate considerations into EIA, and whether EPs serve as effective tools for promoting environmental accountability and sustainability. The study is structured around a four-step contribution framework, through which it systematically explores the conceptual, practical, and policy dimensions of climate governance under EPs.

In light of these contributory goals, Chapter 2 provides context on the emergence of the EPs' climate change policies, which are an integral element of this study. The method applied in this chapter is primary and secondary content analysis that will provide a brief description of the interaction between financing activities and climate change as well as the hierarchy of policies in the project-financing sector through the literature. This chapter tracks the evolution of EPs as a voluntary environmental initiative aimed at integrating sustainable decision-making into investment practices, using data from EPs' official documents and key academic literature. It reveals the influence of World Bank on International Finance Corporations (IFC) and investigates the interlinkages among EPs, IFC, and World Bank. Finally, it describes the incorporation of EIA and climate change risk assessment requirements into EP4 as a response to project-related climate change concerns.

Chapter 3 examines the evolution of EPs from their introduction in 2003 to the adoption of EP4 in 2020, highlighting how successive revisions have responded to criticisms concerning scope, transparency, accountability, and environmental effectiveness. Early versions (EPI and EPII) established project finance as a form of private environmental governance but were limited by narrow applicability, weak disclosure, and an absence of climate change and human rights considerations. EPIII expanded the scope of covered financial products, strengthened stakeholder engagement and disclosure, and introduced climate-related due diligence, including GHG assessment, yet it still fell short in addressing climate risks and Indigenous Peoples' rights. EP4 represents the most significant advancement, broadening applicability, strengthening requirements in designated countries, enhancing protections for Indigenous Peoples, and embedding climate change more firmly through climate risk assessment, GHGs thresholds, reporting obligations, and alignment with the Paris Agreement.

Chapter 4 examines the theoretical foundations and practical motivators that underpin responsible project financing, with a particular focus on climate-change management. It first outlines key theories of sustainable development—shareholder theory, stakeholder theory, and institutional theory—and explains how each frames the responsibilities of financial institutions in balancing profit maximization with broader social and environmental considerations. The chapter then analyzes the main drivers that motivate financial institutions to integrate climate considerations into project financing decisions. It shows how effective climate-risk management supports credit-risk and

reputational-risk management, while also reinforcing CSR. Together, these theories and motivators explain why banks and project financiers increasingly engage with environmental and climate governance frameworks, such as the Equator Principles, as tools to manage risk, maintain legitimacy, and align financial activities with sustainable development objectives.

Chapter 5 explains how EIA functions as a procedural framework for integrating climate-change considerations into project planning and decision-making. It reviews the main stages of EIA—screening, scoping, decision-making, and follow-up—and shows how each stage can either enable or limit the effective identification and management of climate-related impacts. The chapter then focuses on incorporating climate change mitigation and adaptation into EIA, including GHG assessment, alternatives analysis, and resilience measures. It concludes that embedding climate considerations throughout the EIA process strengthens environmental protection, improves risk management, and supports more sustainable and climate-resilient project outcomes.

Chapter 6 creates a set of generalized criteria for the incorporation of climate change issues into the EIA process. These criteria aim to balance the level of prescription, so as to be generic enough for application, but with enough specificity to avoid being misinterpreted. They also seek to provide a linkage between each step of EIA and underlying theories and motivators. The methodology here includes a review of examples of best practice policies incorporating climate change into EIA to show that how climate change issues should be included in project assessment. Best practice policies in this study are those policies—from developing countries, developed countries, and international

organizations—that provide well-regulated guidelines on integrating climate change issues into the EIA process. Following the identification of best practice policies, this chapter analyzes them under general themes to develop relevant criteria for incorporating climate change issues into EIA. This results in developing the 13 criteria that are integral for the likely effectiveness of policies that aim to incorporate climate change issues into EIA.

Chapter 7 evaluates the likely effectiveness of the EPs' EIA process in addressing climate change-related risks arising in the context of project finance. Drawing on the 13 evaluative criteria developed in this book, the chapter systematically assesses the extent to which climate change considerations are embedded within the climate-related policies and procedural requirements of the Equator Principles. The analysis examines how climate risks and impacts are addressed—both explicitly and implicitly—across the key stages of the EP-driven EIA process, including initial screening and scoping, impact assessment and mitigation design, decision-making, and post-approval follow-up and monitoring. By identifying gaps, inconsistencies, and strengths in the integration of climate considerations throughout these stages, the chapter provides a critical appraisal of whether the EPs' EIA framework is capable of meaningfully influencing project-level outcomes and enhancing climate resilience in project finance practice.

Chapter 8 evaluates whether EP4 represents substantive climate governance or merely a symbolic advance in project finance and concludes that, while EP4 marks a formal and important evolution, its integration of climate change into the EIA process remains uneven and structurally constrained. EP4's key strengths lie in

elevating climate change to a core due-diligence issue through explicit alignment with the Paris Agreement and the introduction of a clear GHG threshold that triggers mitigation and transition-risk analysis. However, applying the study's evaluative criteria reveals weaknesses across the EIA stages, including inadequate project categorization that overlooks GHG intensity, limited early stakeholder engagement, a narrow focus on alternative designs rather than alternative approaches, the absence of a mandatory no-action alternative and a pronounced imbalance between mitigation and adaptation requirements.

Chapter 9 is a concluding remark for this book. It highlights EP4 as a significant step forward in integrating climate change considerations into project finance, particularly through mandatory GHG assessments and the guidance note requiring clients to assess and report project vulnerability to climate risks. Its strengths include alignment with the Paris Agreement, enabling EPFIs to manage credit risk and reputational risk while practicing CSR. However, EP4 has notable weaknesses, such as limited monitoring of construction-phase emissions, underdeveloped adaptation measures, reliance on list-based categorization, and narrow alternatives analysis. The follow-up and monitoring stage is emphasized as critical for tracking emissions, evaluating mitigation strategies, and implementing adaptive measures. Recommendations for the fifth version of EPs (EP5) then include life-cycle GHG assessment, operationalized adaptation, deeper alternatives analysis, and enhanced transparency, aiming to transform EPs into a robust tool for climate governance and sustainable project finance.

## Chapter 2

# Climate Change and Project Finance

The interaction between climate change and responsible project financing cannot be fully understood without reference to the concept of sustainable development and its historical evolution. Sustainable development has long provided the normative and conceptual foundation for integrating environmental protection, economic growth, and social equity within decision-making processes, emphasizing that progress in one domain should not come at the expense of the others. Over time, this concept has profoundly influenced the way financial institutions evaluate risk, assess long-term value, and define their responsibilities to society and the environment. It has also shaped the emergence of frameworks and standards that explicitly incorporate environmental and social considerations into project appraisal and financing, including the assessment of climate-related risks and opportunities. By linking economic objectives with ecological limits and social well-being, sustainable development provides both a moral and strategic rationale for integrating climate considerations into project finance. Consequently, a thorough understanding of its origins, evolution, and practical implications is essential for appreciating the rationale, design, and effectiveness of contemporary climate-responsive financing practices, as well as for evaluating how financial institutions can balance profitability, risk management, and social responsibility in an era of escalating environmental challenges.

## Sustainable Development

The concept of “sustainable development” was discussed for the first time in 1987 in the *Report of the World Commission on Environment and Development: Our Common Future*, which was produced by the United Nations World Commission on Environment and Development (also known as the *Brundtland Commission*) (United Nations World Commission on Environment and Development, 1987). The report was a response to growing global concerns about the interplay between environmental protection, economic development, and social equity: many forms of development erode environmental resources, environmental degradation can undermine economic development,<sup>1</sup> and poverty is a significant cause and effect of global environmental problems. It noted that critical global environmental problems are the outcomes of the massive poverty in the South and the non-sustainable patterns of consumption/production in the North. The report then called for a new strategy that aligned economic development with environmental protection—encapsulated by the now-common term of sustainable development. *Our Common Future* significantly impacted global policymaking and set the stage for subsequent international agreements and conferences on sustainable development as a new way of decision-making that seeks to not restrict economic growth in developing countries

---

<sup>1</sup> The United Nations Economic and Social Commission for Western Asia defines environmental degradation as “the deterioration of the environment through depletion of resources such as air, water and soil; the destruction of ecosystems and the extinction of wildlife. It is defined as any change or disturbance to the environment perceived to be deleterious or undesirable.” Environmental degradation could thus be summarized as the triple planetary crisis of climate change, pollution, and biodiversity loss (United Nations Economic and Social Commission for Western Asia, 2015).

while sustaining human progress and ecological survival for the entire planet into the distant future. The report continues to be a seminal document in sustainable development discourse, highlighting the urgent need for collective action and long-term thinking to ensure a sustainable and prosperous future for all. It provides a descriptive definition of sustainable development:

Humanity has the ability to make development sustainable to ensure that it meets the needs of the present without compromising the ability of future generations to meet their own needs. The concept of sustainable development does imply limits -- not absolute limits but limitations imposed by the present state of technology and social organization on environmental resources and by the ability of the biosphere to absorb the effects of human activities. However, technology and social organization can be both managed and improved to make way for a new era of economic growth. The Commission believes that widespread poverty is no longer inevitable. Poverty is not only an evil in itself, but sustainable development requires meeting the basic needs of all and extending to all the opportunity to fulfill their aspirations for a better life. A world in which poverty is endemic will always be prone to ecological and other catastrophes (United Nations World Commission on Environment and Development, 1987 para 28).

This definition of sustainable development shaped the foundation of the United Nations Conference on Environment and Development, held in Rio de Janeiro in 1992. The Conference proposed the *Agenda for Environment and Development*, also known as *Agenda 21* (United Nations Conference on Environment and Development (UNCED), 1992a) as well as the *Rio Declaration*

(United Nations Conference on Environment and Development (UNCED), 1992b) to draw up action plans and strategies for moving towards a more sustainable pattern of development. *Agenda 21* is a comprehensive action plan for sustainable development that provides a blueprint for addressing social, economic, and environmental challenges at the global, national, and local levels. It outlines strategies and recommendations for achieving sustainable development across various sectors, including poverty eradication, sustainable consumption and production, biodiversity conservation, and stakeholders' roles in implementing sustainable development practices. The *Rio Declaration*, on the other hand, is a more general document, consisting of a set of 27 principles that establish States' fundamental rights and responsibilities in promoting sustainable development. It emphasizes the importance of environmental protection, equity, and the participation of all stakeholders in decision-making processes.

The *Rio Declaration* and *Agenda 21* are interconnected and mutually reinforcing. The *Rio Declaration* provides a guiding framework for sustainable development principles and values, while *Agenda 21* offers a practical roadmap for implementing those principles and achieving sustainable development goals. Together, they seek to provide a comprehensive approach to addressing environmental conservation and socio-economic development challenges. Both the *Rio Declaration* and *Agenda 21* have had a significant impact on shaping global sustainable development policies and practices. They remain essential references for policymakers, governments, and organizations working towards a more sustainable and inclusive future.

The pressing need to ensure cooperation for sustainable development and advance environmental, social, and economic priorities in an integrated manner is clearly reflected in the consensus of over 190 States in the 2002 World Summit on Sustainable Development. That World Summit, held in Johannesburg, was a significant milestone in advancing the global agenda for sustainable development. The Summit aimed to build upon the outcomes of the Rio de Janeiro conference and address new challenges and opportunities that had arisen since Rio. The 2002 World Summit focused on key thematic areas such as poverty eradication, water and sanitation, energy, health, biodiversity, agriculture, and sustainable consumption and production. It aimed to promote the integration of economic, social, and environmental dimensions of sustainable development and foster partnerships among governments, international organizations, civil society, and the private sector. The Summit resulted in the adoption of the *Johannesburg Declaration on Sustainable Development* and *the Plan of Implementation* to guide governments, organizations, and stakeholders in their efforts to promote sustainable development, address environmental challenges, and achieve social and economic progress in a balanced and integrated manner (World Summit on Sustainable Development (WSSD), 2002). The *Johannesburg Declaration on Sustainable Development* emphasized the need to integrate economic, social, and environmental aspects in decision-making processes in order to achieve sustainable development. It also recognized poverty eradication as a central objective and emphasized the need to address the needs of the poorest and most vulnerable populations via strengthening partnerships among governments, civil society, and the private sector to promote sustainable development. The

*Plan of Implementation* likewise provided a roadmap for translating the commitments made in the *Johannesburg Declaration* into concrete actions (World Summit on Sustainable Development, 2002). It addressed various thematic areas and identified specific targets, actions, and mechanisms for implementation. It mostly called for the promotion of sustainable consumption and production patterns, trade, and investment to minimize resource depletion, waste generation, and pollution.

In 2012, the United Nations Conference on Sustainable Development was held in Rio de Janeiro and was another landmark event in the field of sustainable development, following the landmark conference in the same city twenty years before. It aimed to assess progress, gaps, and new challenges to secure renewed political commitment to sustainable development. The conference resulted in the adoption of a key document called *The Future We Want* (United Nations Conference on Sustainable Development, 2012). *The Future We Want* reaffirmed political commitments to sustainable development and outlined a vision for the future. It emphasized the importance of poverty eradication, sustainable development goals, and the integration of economic, social, and environmental dimensions to promote a balanced and integrated approach. The document highlighted the potential of green technologies, renewable energy, sustainable agriculture, and resource efficiency in promoting sustainable development. The *Future We Want* document emphasized the importance of providing adequate means of implementation for sustainable development, particularly for developing countries, via financial resources, technology transfer, capacity-building, and partnerships that support sustainable development efforts.