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Access to Justice for Victims of the International Carbon Offset Industry

Kylie Wilson *

International carbon offset schemes allow industrialized countries and private entities to offset domestic greenhouse gas emissions by financing climate change mitigation projects in the developing world. Large multinational corporations profit from the sale of surplus credits and carbon derivatives on the international carbon market. The Clean Development Mechanism is a compliance-offset scheme established by the Kyoto Protocol and administered by the Clean Development Mechanism Executive Board. Despite the mechanism's stated objective that projects contribute to sustainable development, corporate investors pursue low-cost emission reductions while imposing a range of environmental and socioeconomic costs on developing countries. Poorly implemented projects damage local biodiversity and displace vulnerable communities. In spite of these concerns, the parties to the Kyoto Protocol are currently considering the proposal for a Clean Development Mechanism appeals procedure. The proposal, if implemented in its current form, would favor project developers by allowing them to appeal adverse decisions of the Executive Board. This Article presents an empirical critique of the Clean Development Mechanism's regulatory framework, focusing on access to information, public participation, environmental impact assessment, and access to justice. It argues for strengthened procedural requirements that would boost the mechanism's contribution to sustainable development and would enable non-governmental organizations to adequately scrutinize projects. The parties to the Kyoto Protocol should also grant local stakeholders and non-governmental organizations standing to appeal the registration of projects and the issuance of carbon credits to the impending Clean Development Mechanism Appellate Body. Without such reforms, the United Nations will continue to subsidize the destruction of biological diversity and the

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* B.Sc. L.L.B. (Hons.), 2010, Macquarie University, Sydney; Researcher to the Hon. Justice Brian J. Preston, Chief Judge of the Land and Environment Court of New South Wales. The author would like to thank Judith Preston for her insights and guidance during the research and drafting of this Article. Thanks also to Tim Stephens, Ilona Millar and Natalie Klein for their comments and advice, and to Gabrielle Cuskelly, Kristi Black, Nick Jimenez, Nate Johnson, Alex Bandza, and Tony Au of the *Ecology Law Quarterly* for their hard work.

marginalization of the poorest communities in the developing world in the name of climate change mitigation.

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INTRODUCTION

The origins of anthropogenic climate change are entrenched in the evolution of the global capitalist economy, and the need to reduce human dependence on fossil fuels represents a significant threat to continued economic growth.¹ Rather than directly regulating fossil fuel consumption, economists, governments, and corporate interest groups have focused on establishing carbon markets to reduce greenhouse gas emissions while maintaining

1. PETER NEWELL & MATTHEW PATERSON, CLIMATE CAPITALISM: GLOBAL WARMING AND THE TRANSFORMATION OF THE GLOBAL ECONOMY 9 (2010).

economic growth. International emissions trading and carbon offset schemes are attractive responses to climate change because they are seen as a “win-win” opportunity, enabling companies to abate their greenhouse gas emissions while profiting from the generation and sale of carbon credits.²

The Clean Development Mechanism (CDM) is one of three market-based mechanisms established by the Kyoto Protocol to the United Nations Framework Convention on Climate Change (Kyoto Protocol) that aim to reduce the cost of climate change mitigation to the global economy. It allows industrialized countries and private entities to finance projects in developing countries and then use Certified Emission Reductions (CER) accruing from projects to fulfill their emission reduction commitments or to trade on the international carbon market.³ The CDM is based on neoliberal logic,⁴ but its current legal framework is the result of a tenuous compromise struck during the Kyoto negotiations. Its three stated objectives are: (1) to assist non-Annex I parties in achieving sustainable development, (2) to contribute to the ultimate objective of the United Nations Framework Convention on Climate Change (UNFCCC), and (3) to assist Annex I parties in achieving compliance with their emission reduction commitments.⁵

Ostensibly, the CDM stands out as one of the Kyoto Protocol’s greatest success stories. It is the first and only market-based, flexible mechanism to have channeled private capital to finance greenhouse gas emission reductions in developing countries.⁶ It has established a primary market in a regulatory commodity worth \$7.4 billion in 2007,⁷ which far exceeds the level of investment voluntarily contributed by governments.⁸ The CDM has led to the generation of more than 800 million CERs, and is expected to generate a total

2. *Id.* at 111.

3. Kyoto Protocol to the United Nations Framework Convention on Climate Change art. 12(3)(b), Dec. 11, 1997, 2303 U.N.T.S. 148 [hereinafter Kyoto Protocol].

4. Emissions trading and carbon offsetting are forms of “neoliberal” or “market-based” environmental governance because the management of climate change is partly delegated to the market in an attempt to reduce greenhouse gas emissions more efficiently than under traditional forms of “command-and-control” regulation. See Adam Bumpus & Diana Liverman, *Accumulation by Decarbonization and the Governance of Carbon Offsets*, 84 *ECON. GEOGRAPHY* 127, 145 (2008); David Driesen, *Economic Instruments for Sustainable Development*, in *ENVIRONMENTAL LAW FOR SUSTAINABILITY* 277 (Benjamin Richardson & Stepan Wood eds., 2006); NEWELL & PATERSON, *supra* note 1, at 23–25.

5. Kyoto Protocol, *supra* note 3, art. 12(2).

6. Christina Voigt, *Responsibility for the Environmental Integrity of the CDM: Judicial Review of Executive Board Decisions*, in *LEGAL ASPECTS OF CARBON TRADING: KYOTO, COPENHAGEN AND BEYOND* 272, 273 (David Freestone & Charlotte Streck eds., 2009).

7. KARAN CAPOOR & PHILIPPE AMBROSI, WORLD BANK, STATE AND TRENDS OF THE CARBON MARKET 2008, at 2 (2008), available at <http://siteresources.worldbank.org/NEWS/Resources/State&Trendsformatted06May10pm.pdf>.

8. In 2006, the Global Environment Facility received a mere \$3.13 billion from thirty-two donor governments, which covered its entire operations between 2006 and 2010. *GEF 4 Replenishment*, GLOBAL ENVIRONMENT FACILITY, <http://www.thegef.org/gef/replenishment4> (last visited Jan. 16, 2011).

of 2.7 billion CERs by the end of the Kyoto Protocol's first commitment period in 2012.⁹ It has also spurred a vibrant derivatives market, which in 2010 was worth \$18.3 billion.¹⁰

However, criticism of the environmental and economic performance of the CDM is mounting. From an environmental perspective, the CDM has been described as ineffective and unjust. Scientists have argued that the methods of calculating emission reductions are inherently flawed and easy to manipulate, resulting in the issuance of CERs that do not reflect actual emission reductions.¹¹ The CDM has been criticized for enabling companies to prolong the use of fossil fuels rather than investing in the deployment of renewable energy technologies.¹² Indeed, the idea of offsetting does not come from environmentalists and climate scientists, "but from politicians and business executives trying to meet the demands for action while preserving the commercial status quo."¹³

Critical scholars argue that the CDM is a product of the entrenched inequalities of global society and is "geared in the interests of international capital."¹⁴ They say that the CDM shifts power from the state to corporations, thereby opening the door for a new form of "carbon colonialism" that will exacerbate existing environmental and social injustice.¹⁵ These criticisms challenge the fundamental economic assumptions behind the use of market-based mechanisms at the global level, and suggest that even a reformed CDM might not be able to achieve its objectives.¹⁶ Despite such opposition, the economic success of the CDM has ensured that the mechanism will continue to be an integral part of the post-2012 international climate change regime.¹⁷ The

9. *CDM in Numbers*, U. N. FRAMEWORK CONVENTION ON CLIMATE CHANGE, <http://cdm.unfccc.int/Statistics/index.html> (last visited Jan. 3, 2012).

10. NICHOLAS LINACRE, ALEXANDRE KOSSOY & PHILIPPE AMBROSI, WORLD BANK, STATE AND TRENDS OF THE CARBON MARKET 2011, at 9 (2011), available at http://siteresources.worldbank.org/INTCARBONFINANCE/Resources/State_and_Trends_Updated_June_2011.pdf.

11. Madhusree Mukerjee, *A Mechanism of Hot Air*, SCI. AM. June 2009, at 18; Quirin Schiermeier, *Clean-Energy Credits Tarnished*, 477 NATURE 517, 517-18 (2011), available at <http://www.nature.com/news/2011/110927/full/477517a.html>.

12. John Vidal, *Rich Countries to Pay Energy Giants to Build New Coal-Fired Power Plants*, GUARDIAN (London), July 14, 2010, at 22, available at <http://www.guardian.co.uk/environment/2010/jul/14/un-carbon-offset-coal-plants>.

13. Nick Davies, *The Inconvenient Truth About the Carbon Offset Industry*, GUARDIAN (London), June 16, 2007, at 14, available at <http://www.guardian.co.uk/environment/2007/jun/16/climatechange.climatechange>.

14. Andriana Vlachou & Charalampos Konstantinidis, *Climate Change: The Political Economy of Kyoto Flexible Mechanisms*, 42 REV. RADICAL POL. ECON. 32, 41-45 (2010).

15. Heidi Bachram, *Climate Fraud and Carbon Colonialism: The New Trade in Greenhouse Gases*, 15 CAPITALISM NATURE SOCIALISM 5, 6 (2004).

16. Harro van Asselt & Joyeeta Gupta, *Stretching Too Far? Developing Countries and the Role of Flexibility Mechanisms Beyond Kyoto*, 28 STAN. ENVTL. L.J. 311, 315-16 (2009).

17. At the Seventh Session of the Conference of the Parties Serving as the Meeting of the Parties to the Kyoto Protocol (COP/MOP) in Durban, the COP/MOP decided that the second commitment period under the Kyoto Protocol would begin on January 1, 2013, and end either on December 31, 2017, or December 31, 2020. This means the CDM will continue to operate at least up until the end of 2017.

CDM will also serve as a model for emerging and future offset schemes, including the Reducing Emissions from Deforestation and Forest Degradation mechanism.¹⁸

From an economic perspective, project developers have complained of high transaction costs, increasing regulatory delays, and a lack of transparency and accountability in Executive Board decision making. According to the World Bank, these deficiencies have contributed to a sharp downturn in the value of the CDM market, from \$7.4 billion in 2007 to \$1.5 billion in 2010.¹⁹ The establishment of an independent CDM appeals process has been suggested as a means to strengthen the procedural “rights” of project developers and create a more robust, transparent, and accountable system.²⁰ Project developers and carbon industry bodies such as the International Emissions Trading Association—which represents over 170 companies, including Goldman Sachs, Rio Tinto, BP, and Shell—have endorsed this recommendation and engaged in successful lobbying for the establishment of a CDM appeals process.²¹

The CDM draws competing criticisms regarding its economic and environmental performance because of the inherent tension between the stringent regulations necessary to ensure that projects deliver environmental benefits and the low-cost emission reductions demanded by project developers and investors.²² Efforts to improve environmental integrity through enhanced

United Nations Framework Convention on Climate Change, Conference of the Parties Serving as the Meeting of the Parties to the Kyoto Protocol on Its Seventh Session, Durban, S. Afr., Nov. 28–Dec. 9, 2011, *Outcome of the Work of the Ad Hoc Working Group on Further Commitments for Annex I Parties Under the Kyoto Protocol at Its Sixteenth Session*, Draft decision -/CMP.7, ¶ 1 (advance unedited version), http://unfccc.int/files/meetings/durban_nov_2011/decisions/application/pdf/awgkp_outcome.pdf (last visited Jan. 4, 2012).

18. United Nations Framework Convention on Climate Change, Report of the Conference of the Parties on Its Fifteenth Session, Copenhagen, Den., Dec. 7–19, 2009, *Copenhagen Accord*, dec. 2/CP.15, ¶ 6, U.N. Doc. FCCC/CP/2009/11/Add.1 (Mar. 30, 2010), available at <http://unfccc.int/resource/docs/2009/cop15/eng/11a01.pdf>.

19. ALEXANDRE KOSSOY & PHILIPPE AMBROSI, WORLD BANK, STATE AND TRENDS OF THE CARBON MARKET 2010, at 37–39 (2010), available at http://siteresources.worldbank.org/INTCARBONFINANCE/Resources/State_and_Trends_of_the_Carbon_Market_2010_low_res.pdf; LINACRE, KOSSOY & AMBROSI, *supra* note 10, at 9.

20. See, e.g., Moritz von Unger & Charlotte Streck, *An Appellate Body for the Clean Development Mechanism: A Due Process Requirement*, 3 CARBON & CLIMATE L. REV. 31 (2009); Jolene Lin & Charlotte Streck, *Mobilising Finance for Climate Change Mitigation: Private Sector Involvement in International Carbon Finance Mechanisms*, 10 MELB. J. INT'L L. 70 (2009); Ilona Millar & Martijn Wilder, *Enhanced Governance and Dispute Resolution for the CDM*, 3 CARBON & CLIMATE L. REV. 43 (2009); Ludger Giesberts & Alexander Sarac, *An Appeals Process for the Kyoto Protocol's Clean Development Mechanism*, 4 CARBON & CLIMATE L. REV. 260 (2010).

21. See *Our Members*, INT'L EMISSIONS TRADING ASS'N, <http://www.ieta.org/our-members> (last visited Jan. 17, 2011); *State of the CDM Market 2008: Facilitating a Smooth Transition into a Mature Environmental Financing Mechanism*, INT'L EMISSIONS TRADING ASS'N, 11 (2008), http://www.ieta.org/index.php?option=com_content&view=article&id=96%3Astate-of-the-cdm-2008&catid=27%3AArchived-reports&Itemid=93.

22. Jacob Werksman, *The “Legitimate Expectations” of Investors and the CDM: Balancing Public Goods and Private Rights Under the Climate Change Regime*, 2 CARBON & CLIMATE L. REV. 95, 99 (2008).

regulatory supervision increase transaction costs, while simplifying procedures and deregulating the market compromise environmental goals. The current CDM regulatory framework purports to achieve the optimum balance between these competing goals by imposing five main requirements that a project developer must satisfy before the CDM Executive Board will register a project. First, project developers must demonstrate that their project will result in real, measurable, and long-term reductions in emissions that are in fact “additional” to any that would occur in the absence of the mechanism.²³ Second, the project developer must obtain a letter of approval from the host country confirming that the project contributes to sustainable development.²⁴ Third, the project developer must invite comments from local stakeholders.²⁵ Fourth, the project developer must conduct an environmental impact assessment (EIA), if required by the host country.²⁶ Finally, the project design document must be made publicly available on the UNFCCC website to receive comments from non-governmental organizations (NGO) and state parties to the Convention.²⁷

Despite these requirements, the Executive Board consistently approves projects that cause significant socioeconomic and environmental damage. Large hydropower projects inundate fertile agricultural land and displace forest and farming communities.²⁸ Forestry projects pose a threat to native biodiversity and can disrupt local hydrological cycles, reducing the availability of water for indigenous people and local communities.²⁹ Some projects have even been associated with human rights abuses resulting from the forced removal of people from their land.³⁰ The international community has largely ignored these issues, instead focusing its attention on including new technologies within the CDM, removing barriers to investment and streamlining the approval process in order to attract more investment.

At the fifth session of the Conference of the Parties Serving as the Meeting of the Parties to the Kyoto Protocol (COP/MOP) in Copenhagen, the COP/MOP requested that the Executive Board draft procedures for appeals

23. Kyoto Protocol, *supra* note 3, art. 12(5)(b)–(c).

24. United Nations Framework Convention on Climate Change, Report of the Conference of the Parties Serving as the Meeting of the Parties to the Kyoto Protocol, Montreal, Can., Nov. 28–Dec. 10, 2005, *Modalities and Procedures for a Clean Development Mechanism As Defined in Article 12 of the Kyoto Protocol*, dec. 3/CMP.1, ¶ 40(a), U.N. Doc. FCCC/KP/CMP/2005/8/Add.1 (Mar. 30, 2006), available at <http://unfccc.int/resource/docs/2005/cmp1/eng/08a01.pdf> [hereinafter *Modalities and Procedures*].

25. *Id.* ¶ 37(b).

26. *Id.* ¶ 37(c).

27. *Id.* ¶ 40(c).

28. John Vidal, *Giant Dams Threaten Livelihoods of 300,000 Tribal People*, *GUARDIAN* (London), Aug. 9, 2010, at 18.

29. Joyotee Smith, *Afforestation and Reforestation in the Clean Development Mechanism of the Kyoto Protocol: Implications for Forests and Forest People*, 2 *INT'L J. GLOBAL ENVTL. ISSUES* 322, 327–28 (2002).

30. See, e.g., U.N. Special Rapporteur Issues Report on Panama Dam, *CULTURAL SURVIVAL* (May 21, 2009), <http://www.culturalsurvival.org/news/panama/un-special-rapporteur-issues-report-panama-dam>.

against its decisions.³¹ This proposal has been discussed extensively from the project developers' perspective.³² However, there has been only minimal exploration of whether or how such an appeals procedure could be used to strengthen the procedural rights of local stakeholders and hold CDM investors liable for the adverse environmental and social impacts of projects.³³ This Article aims to challenge the one-sided dialogue surrounding the proposed CDM appeals process, and to substantiate the need to significantly strengthen the CDM's procedural requirements and grant local stakeholders and NGOs standing to appeal decisions of the Executive Board. Such reforms will lead to greater consideration of the externalized costs associated with CDM projects, enhanced scrutiny by the general public and NGOs, increased pressure on investors to design and implement sustainable projects, and, ultimately, more equitable outcomes for local stakeholders.

Part I of this Article will outline the underlying neoliberal economic rationale of the CDM, its origins in the Kyoto Protocol negotiations, and its current regulatory framework. It will also briefly canvas the literature on the impending CDM appeals process. Part II examines the vexed issue of whether the CDM is fulfilling its goal of sustainable development. It focuses on whether the CDM's legal framework satisfies the procedural aspects of sustainable development, namely access to information, public participation in decision making, EIA, and access to justice. Part II also critiques the existing CDM legal framework based on primary observations from project design documents and case studies of hydroelectric, forestry, and waste projects. The contrast between the rationale outlined in Part I and the analysis of projects in Part II serves to highlight the substantial gap between the initial ambitions and rhetoric surrounding the CDM and the reality of how CDM projects are implemented. Part III will explore the legal and normative bases for strengthening local stakeholders' procedural rights and granting access to justice. It will then outline a set of recommendations to address the identified deficiencies in the CDM regulatory framework. Part III will also explore the political and practical limitations to reform and the broader implications of the ideas and arguments presented in this Article.

31. United Nations Framework Convention on Climate Change, Report of the Conference of the Parties Serving as the Meeting of the Parties to the Kyoto Protocol on Its Fifth Session, Copenhagen, Den., Dec. 7–19, 2009, *Further Guidance Relating to the Clean Development Mechanism*, dec. 2/CMP.5, ¶ 42, U.N. Doc. FCCC/KP/CMP/2009/21/Add.1 (Mar. 30, 2010), available at <http://unfccc.int/resource/docs/2009/cmp5/eng/21a01.pdf>.

32. See, e.g., Lin & Streck, *supra* note 20; Millar & Wilder, *supra* note 20; Giesberts & Sarac, *supra* note 20.

33. Cf. Voigt, *supra* note 6, at 285–86.

I. AN OVERVIEW OF CARBON OFFSETTING AND THE CLEAN DEVELOPMENT MECHANISM

A. *The Theory and Origins of Offsetting*

Climate change has been described as “a market failure on the greatest scale the world has seen.”³⁴ It is the result of the fact that commodities markets externalize the consequences of consumption and investment choices on the climate system.³⁵ The Pew Center on Global Climate Change recently pointed out that, “[i]n the absence of prices (costs) associated with environmental damages, producers and consumers need not account for such damages in their activities and choices.”³⁶ This is a reiteration of Ronald Coase’s argument that the problem of the harmful effects of pollution would be solved if the “damaging business has to pay for all damage caused.”³⁷ Emissions trading is a neo-liberal economic policy that applies the Coase Theorem to the problem of climate change. Coase argued that the market could internalize the external social and environmental costs if policy makers and businesses conceptualize “factors of production” as rights to perform certain physical actions, such as the creation of smoke, noise, or greenhouse gas emissions, and not just physical assets that businesses can acquire.³⁸ In the absence of transaction costs, it does not matter to whom rights to pollute are assigned because the market will modify the initial legal allocation of those rights through transactions to achieve the most efficient outcome.³⁹ Businesses will weigh the cost of eliminating the harmful effects of pollution against the cost of purchasing the right to pollute. This will lead to the utilization of factors of production—including rights to pollute—where the value of the product yielded is greatest, thereby minimizing external social and environmental costs more efficiently than under alternative systems of regulation.⁴⁰

Policymakers apply the Coase Theorem to the problem of climate change by placing a legal limit on greenhouse gas emissions and by assigning emission permits, allowances, or credits to participants in the scheme. Those who are able to reduce their emissions easily and cheaply will have surplus credits, which they can sell to those who have higher marginal abatement costs. By limiting the right to emit greenhouse gases and allowing individuals to trade those rights, the market places a price on carbon, which forces businesses to

34. NICHOLAS STERN, *THE ECONOMICS OF CLIMATE CHANGE: THE STERN REVIEW* 27 (2007).

35. *Id.*

36. Janet Pease & Robert Stavins, *Meaningful and Cost Effective Climate Policy: The Case for Cap and Trade*, PEW CENTER ON GLOBAL CLIMATE CHANGE, 1 (2010), <http://www.pewclimate.org/docUploads/case-for-cap-and-trade-paper.pdf>.

37. R. H. Coase, *The Problem of Social Cost*, 3 J.L. & ECON. 1, 2 (1960).

38. *Id.* at 43–44.

39. *Id.* at 15.

40. *Id.* at 40.

internalize the cost of their greenhouse gas emissions on the global environment.⁴¹ This encourages emitters to invest in low-carbon technologies and consumers of greenhouse-gas intensive goods and services to change their spending patterns in response to increasing costs.⁴²

The main advantage of emissions trading is that it leads to the employment of climate change mitigation efforts where the value of those efforts is greatest, and does so at a lower cost than under traditional command-and-control regulation.⁴³ Because greenhouse gases are not contained by national borders, the supply of emission reductions can be generated anywhere to benefit the environment by reducing the overall global concentration of greenhouse gases. Thus, regardless of the initial allocation of responsibility, the fungibility of emission reductions⁴⁴ enables the invisible hand of the market to direct investment to wherever the cheapest reductions can be made.⁴⁵

Carbon reductions are like many other commodities in that they are often easier and cheaper to produce in the developing world, where industrial processes are generally less efficient, regulatory requirements are less onerous, and raw materials, labor, and land are usually less expensive.⁴⁶ For example, in 1998, it was estimated that the cost of emission reductions in the United States was \$125 per metric ton of carbon dioxide equivalent (CO₂eq), compared to \$14–23 per metric ton in the developing world.⁴⁷ This is because the relatively advanced stage of technological development in industrialized countries makes replacing or retrofitting existing energy infrastructure with cleaner technologies increasingly difficult. In other words, energy producers experience diminishing returns in terms of the quantity of greenhouse gas reductions for each dollar invested in cleaner technologies. In developing countries, where new energy capacity is needed but existing energy infrastructure is less efficient, new, lower-emitting energy facilities can be built to meet the burgeoning demand for energy while substantially reducing emissions. This means that the same level of investment can result in greater emission reductions in the developing world

41. PATRICIA BIRNIE, ALAN BOYLE & CATHERINE REDGWELL, *INTERNATIONAL LAW AND THE ENVIRONMENT* 364 (3d ed. 2009).

42. STERN, *supra* note 34, at 353.

43. *See* Driesen, *supra* note 4, at 280.

44. Each of the six greenhouse gasses listed in Annex A of the Kyoto Protocol are fully fungible. The global warming potentials of each gas, as determined by the Intergovernmental Panel on Climate Change, are used to calculate the carbon dioxide equivalence of each gas so that each and every CER is equal to one metric ton of carbon dioxide equivalent (CO₂eq). INTERGOVERNMENTAL PANEL ON CLIMATE CHANGE, *CLIMATE CHANGE 1995: THE SCIENCE OF CLIMATE CHANGE* 22 (1995), available at http://www.ipcc.ch/ipccreports/sar/wg_I/ipcc_sar_wg_I_full_report.pdf.

45. Tom Tietenberg, *The Tradable-Permits Approach to Protecting the Commons: Lessons for Climate Change*, in *CLIMATE-CHANGE POLICY* 167, 168 (Dieter Helm, ed. 2005).

46. Bumpus & Liverman, *supra* note 4, at 133.

47. LAVANYA RAJAMANI, *DIFFERENTIAL TREATMENT IN INTERNATIONAL ENVIRONMENTAL LAW* 235 (2006).

than in the industrialized world.⁴⁸ Hence, the total cost of tackling climate change can be lowered by reallocating investment to climate change mitigation efforts in the developing world.⁴⁹

Despite these advantages, not all parties at the Kyoto negotiations supported market-based mechanisms to reduce the cost of climate change mitigation. The CDM resulted from negotiations that attempted to merge the United States-backed goal of market-based flexibility with Brazil's original proposal for a "clean development fund."⁵⁰ Brazil argued that Annex I Parties who did not comply with the Kyoto Protocol should pay a financial penalty of \$10 for every metric ton of CO₂eq emitted in excess of their assigned amount.⁵¹ These fines were to fund climate change mitigation and adaptation projects in developing countries.⁵² The Group of 77 (G77) and China⁵³ endorsed this proposal as a means of enforcing compliance with Annex I Parties' emission reduction commitments, while generating additional revenue for development assistance.⁵⁴ However, the United States, which was only willing to accept modest emission reduction commitments in exchange for a liberal international emissions trading scheme, characterized the fund as a "flexible financing instrument."⁵⁵ The result was Article 12 of the Kyoto Protocol with its multiple objectives: (1) to assist non-Annex I parties in achieving sustainable development, (2) to contribute to the ultimate objective of the UNFCCC, and (3) to assist Annex I parties in achieving compliance with their emission reduction commitments. The European Union, along with the G77 and China, reluctantly accepted emissions trading and the CDM in the hope of obtaining the United States' ratification of the Kyoto Protocol.⁵⁶

48. Michael Wara, *Measuring the Clean Development Mechanism's Performance and Potential*, 55 UCLA L. REV. 1759, 1774 (2008).

49. BIRNIE, BOYLE & REDGWELL, *supra* note 41, at 364.

50. Jacob Werksman, *The Clean Development Mechanism: Unwrapping the "Kyoto Surprise,"* 7 REV. EUR. COMMUNITY & INT'L ENVTL. L. 147, 152 (1998); U.N. Framework Convention on Climate Change, *Tracing the Origins of the Kyoto Protocol: An Article-by-Article Textual History*, ¶¶ 349–56, U.N. Doc. FCCC/TP/2000/2 (Nov. 25, 2000) (by Joanna Depledge), available at <http://unfccc.int/resource/docs/tp/tp0200.pdf>.

51. Werksman, *supra* note 50, at 151.

52. *Id.*

53. The G77 "is the largest negotiating coalition in the United Nations system." The group was originally established by seventy-seven signatories in 1964, but now has over 130 member states. It is the primary advocate of developing countries within the international climate change regime. China remains an associate to the G77, rather than a full member. FARHANA YAMIN & JOANNA DEPLEDGE, *THE INTERNATIONAL CLIMATE CHANGE REGIME: A GUIDE TO RULES, INSTITUTIONS AND PROCEDURES* 34–35 (2004).

54. Werksman, *supra* note 50, at 151.

55. *Id.* at 151–52.

56. David Driesen, *Sustainable Development and Market Liberalism's Shotgun Wedding: Emissions Trading Under the Kyoto Protocol*, 83 IND. L.J. 21, 36 (2008).

B. The CDM's Legal Framework

Since its inception, the CDM has come to be governed by a complex and dynamic body of legal text, which has evolved through incremental efforts of the COP/MOP and the Executive Board.⁵⁷ The following outline of the CDM's legal framework provides the necessary background for evaluating its effectiveness in Part II of this Article.

All three of the Kyoto Protocol's flexible mechanisms enable Annex I Parties to purchase or trade carbon credits. Each credit traded allows the purchaser to increase its emissions by one metric ton of CO₂eq above its legal limit. However, unlike the Joint Implementation mechanism and emissions trading between Annex I Parties,⁵⁸ the two parties to a CDM transaction are not in competition.⁵⁹ Host countries do not have a cap on their emissions. Therefore, the creation of CERs does not entail an economic cost, but rather an economic gain. Indeed, because host countries tax CERs, the more CERs a project generates, the more revenue the host country will receive.⁶⁰ The CDM market thus engages both host countries and investors who seek to maximize the number of CERs generated.⁶¹ In this context, a robust regulatory framework for the registration of projects and issuance of CERs is imperative to the success of the CDM and the overall performance of the global carbon market in achieving its environmental goals.⁶²

1. Institutions

The CDM is subject to the authority and guidance of the COP/MOP and is supervised by the Executive Board.⁶³ The COP/MOP formally adopted the

57. Matthias Krey & Heike Santen, *Trying to Catch Up with the Executive Board: Regulatory Decision-Making and Its Impact on CDM Performance*, in LEGAL ASPECTS OF CARBON TRADING: KYOTO, COPENHAGEN AND BEYOND 232, 232–34 (David Freestone & Charlotte Streck eds., 2009).

58. Under Joint Implementation, both investor country and host country are Annex I Parties. Therefore, new credits cannot be created and issued. Instead, the host country must convert some of its Assigned Amount Units into Emission Reduction Units and transfer them to the investor country. In order to avoid transferring surplus units, host countries have a strong incentive to ensure that emission reductions achieved by a project are real and verifiable. Kyoto Protocol, *supra* note 3, art. 6(1); see Jelmer Hoogzaad & Charlotte Streck, *A Mechanism with a Bright Future: Joint Implementation*, in LEGAL ASPECTS OF IMPLEMENTING THE KYOTO PROTOCOL MECHANISMS: MAKING KYOTO WORK 176 (David Freestone & Charlotte Streck eds., 2005).

59. Ernestine Meijer & Jacob Werksman, *Keeping It Clean – Safeguarding the Environmental Integrity of the Clean Development Mechanism*, in LEGAL ASPECTS OF IMPLEMENTING THE KYOTO PROTOCOL MECHANISMS: MAKING KYOTO WORK 191, 193 (David Freestone & Charlotte Streck eds., 2005).

60. See, e.g., *Measures for Operation and Management of Clean Development Mechanism Projects in China*, DEPARTMENT OF CLIMATE CHANGE, NATIONAL DEVELOPMENT AND REFORM COMMISSION, art. 24 (Nov. 21, 2005), <http://cdm.ccchina.gov.cn/english/NewsInfo.asp?NewsId=905>.

61. Axel Michaelowa, *Interpreting Additivity of CDM Projects: Changes in Additivity Definitions and Regulatory Practices over Time*, in LEGAL ASPECTS OF CARBON TRADING: KYOTO, COPENHAGEN AND BEYOND 248, 248–49 (David Freestone & Charlotte Streck eds., 2009).

62. Voigt, *supra* note 6, at 274.

63. Kyoto Protocol, *supra* note 3, art. 12(4).

CDM Modalities and Procedures, which govern the CDM project cycle, at its first meeting in 2005. The COP/MOP and the Executive Board continually amend and supplement these procedures. The Executive Board is also responsible for reviewing and registering projects, issuing CERs, accrediting and suspending designated operational entities, and developing a publicly available repository of rules, procedures, methodologies, guidelines and standards that it applies in reviewing projects and issuing CERs.⁶⁴ The Executive Board has established six specialized panels to assist in the performance of its functions, including the Accreditation Panel and the Registration and Issuance Team.⁶⁵ The Executive Board consists of ten members nominated by the relevant constituencies and elected by the COP/MOP.⁶⁶ Members are required to “[p]ossess appropriate technical and/or policy expertise” and to act in their personal capacity.⁶⁷ They must not have a pecuniary interest in any CDM project or designated operational entity.⁶⁸

While the Executive Board often conducts reviews of projects, the responsibility of determining the eligibility of proposed projects lies primarily with private auditors, known as designated operational entities.⁶⁹ Project developers contract designated operational entities to validate a proposed project or verify and certify emission reductions.⁷⁰ The Executive Board accredits entities on the basis of accreditation standards in the CDM Modalities and Procedures, and the COP/MOP is responsible for an entity’s final designation as a designated operational entity.⁷¹ If a designated operational entity ceases to meet accreditation standards, the COP/MOP may suspend or withdraw the entity’s accreditation.⁷² The COP/MOP may also require a designated operational entity to purchase and cancel CERs if significant deficiencies are identified in any of the entity’s reports.⁷³ The majority of the steps in the project cycle, as shown in Figure 1, are conducted by designated operational entities who decide, based on information provided by the project developer, whether or not to validate a project or certify CERs. The entity’s decision is final unless the Executive Board opts to conduct a review of the

64. Modalities and Procedures, *supra* note 24, ¶ 5; *see also Rules and Reference*, U.N. FRAMEWORK CONVENTION ON CLIMATE CHANGE, <http://cdm.unfccc.int/Reference/index.html> (last visited Jan. 17, 2011).

65. Modalities and Procedures, *supra* note 24, ¶ 18; *Governance*, U.N. FRAMEWORK CONVENTION ON CLIMATE CHANGE, <http://cdm.unfccc.int/EB/governance.html> (last visited Oct. 22, 2011).

66. Modalities and Procedures, *supra* note 24, ¶¶ 7–8(a).

67. *Id.* ¶ 8 (c).

68. *Id.* ¶ 8 (e)–(f).

69. Tyson Dyck, *Enforcing Environmental Integrity: Emissions Auditing and the Extended Arm of the Clean Development Mechanism*, 36 COLUM. J. ENVTL. L. 259, 261 (2011).

70. *List of DOEs*, U.N. FRAMEWORK CONVENTION ON CLIMATE CHANGE, <http://cdm.unfccc.int/DOE/list/index.html> (last visited Jan. 17, 2011).

71. Modalities and Procedures, *supra* note 24, ¶ 20.

72. *Id.* ¶ 21.

73. *Id.* ¶ 22.

project.⁷⁴ However, designated operational entities face unavoidable conflicts of interest because they contract directly with the project developer and therefore have an incentive to act in the project developer's interest.⁷⁵ It has been suggested that the costs of conducting the verification should be included in the CDM project application fees paid to the UNFCCC Secretariat. This way, the Executive Board could contract directly with designated operational entities, who would then have the incentive to disclose as much information as possible to the Executive Board and not to act in the developer's interest.⁷⁶

74. Rolf Weber, *Regulation and Financial Intermediation in the Kyoto Protocol's Clean Development Mechanism*, 22 *GEO. INT'L ENVTL. L. REV.* 271, 277 (2010).

75. Wara, *supra* note 48, at 1799.

76. *Id.*

2. *The Project Cycle*

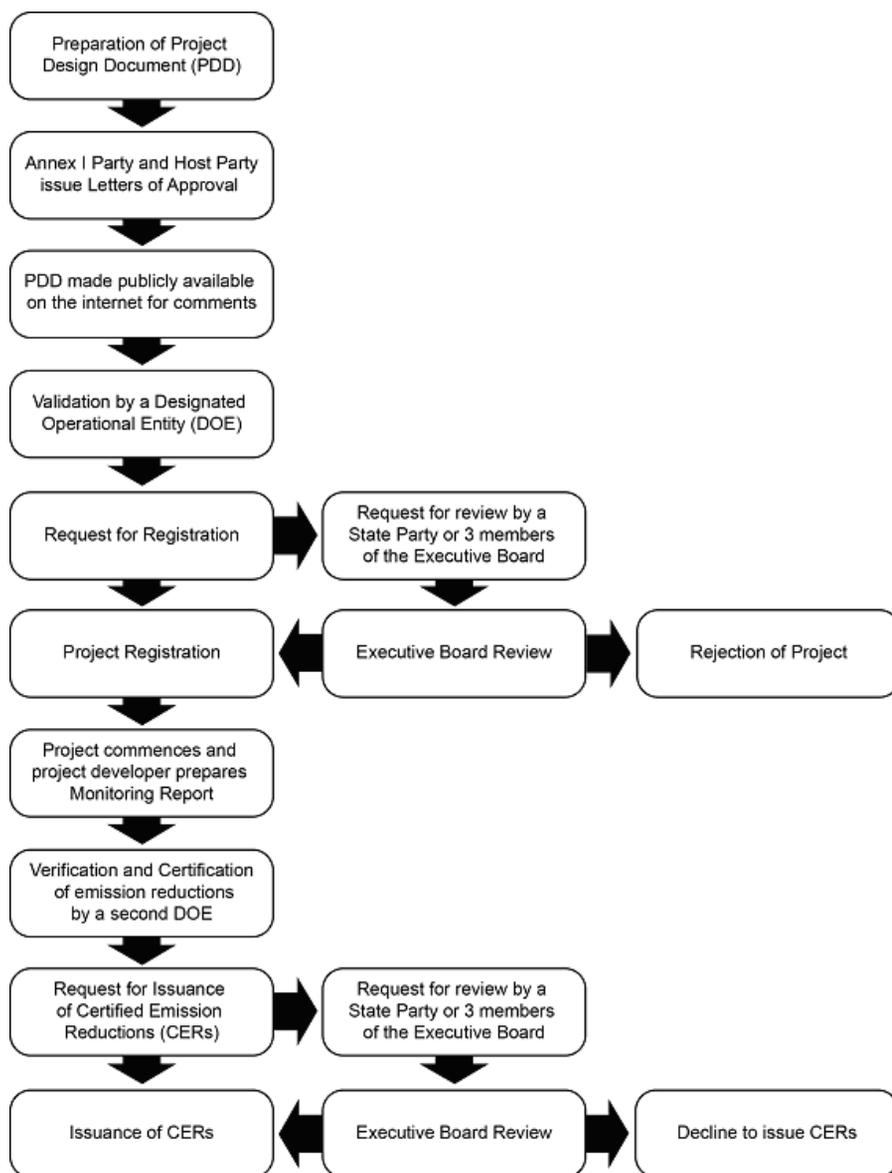


Figure 1: The CDM Project Cycle

Before a developer can submit a project to the Executive Board for registration, the developer must prepare a project design document, which contains a description of the project, the methodology used for calculating the baseline from which emission reductions will be measured, and the

methodologies to be used for data collection and monitoring.⁷⁷ The project design document must also demonstrate that the project will reduce emissions below those that would have occurred in the absence of the CDM project.⁷⁸ This project eligibility requirement, called the “additionality” criterion, is designed to ensure that CDM projects create emission reductions that are “additional to” any emission reductions that would have occurred if the CDM did not exist.⁷⁹ This means that the CDM operates as a subsidy by providing additional revenue, in the form of CERs, needed to make certain emission reduction projects financially viable.⁸⁰ If projects do not demonstrate additionality to a high degree of certainty, the integrity of the CDM will be undermined because it will be issuing credits for reductions that would have been made anyway, resulting in a net global increase in emissions.⁸¹

In preparing the project design document, the project developer must invite comments from local stakeholders. The project design document must contain a summary of the comments received, and state how those comments were taken into account.⁸² The term “stakeholders” is defined broadly to mean “the public, including individuals, groups or communities affected, or likely to be affected” by the proposed project.⁸³

The project design document must also describe the environmental impacts of the project. If the project participants or the host country considers those impacts to be significant, the project developer must undertake an EIA in accordance with the host country’s procedures.⁸⁴ Project developers must obtain written approval from the Designated National Authorities of the host country and the relevant Annex I country. The host country’s letter of approval must attest to the project’s contribution to their country’s sustainable development.⁸⁵

The project developer must then contract with a designated operational entity to validate the project. The entity reviews the project design document to confirm that the project is in full compliance with the CDM Modalities and Procedures and any other applicable standards or guidelines.⁸⁶ The designated operational entity must publish the project design document on the internet for thirty days in order to receive comments from state parties, stakeholders, and

77. Modalities and Procedures, *supra* note 24, app. B, ¶ 2(a)–(b), (h).

78. *Id.* ¶ 2(d).

79. Kyoto Protocol, *supra* note 3, art. 12(5)(c); see Michaelowa, *supra* note 61, at 248–49.

80. Wara, *supra* note 48, at 1764; Michaelowa, *supra* note 61, at 249; YDA SCHREUDER, THE CORPORATE GREENHOUSE: CLIMATE CHANGE POLICY IN A GLOBALIZING WORLD 171 (2009).

81. Meijer & Werksman, *supra* note 59, at 193.

82. Modalities and Procedures, *supra* note 24, ¶ 37(b).

83. *Id.* ¶ 1(e).

84. *Id.* ¶ 37(c).

85. *Id.* ¶ 40(a).

86. *Id.* ¶ 37(d)–(e).

UNFCCC accredited NGOs.⁸⁷ The designated operational entity then determines whether, on the basis of the information provided by the project developer and taking into account the comments received, the project should be validated.⁸⁸

Once the validation report is complete, the designated operational entity submits a request for registration to the Secretariat, who conducts a completeness check and publishes the request for registration on the internet.⁸⁹ The Executive Board registers the project unless a state party involved in the project or at least three members of the Executive Board request a review of the project within twenty-eight days of the publication of the request for registration.⁹⁰

During a review, the Review and Issuance Team and the Secretariat undertake independent technical assessments of the project and recommend either the registration or rejection of the project.⁹¹ If both assessments result in the same recommendation, it automatically becomes the Executive Board's final decision after twenty days.⁹² If the assessments result in two different recommendations or if a member of the Executive Board disagrees with the recommendation, the Executive Board considers the project at its next meeting.⁹³ If a project is rejected, the reasons for the decision must be communicated to the project developer and the public.⁹⁴

Once the project is underway, the project developer must prepare a monitoring report and a second designated operational entity must verify and certify the estimated emission reductions.⁹⁵ This designated operational entity determines whether the monitoring report is in accordance with the requirements of the registered project design document, and whether the methodologies for the estimation of emission reductions have been applied correctly.⁹⁶ The designated operational entity then certifies in writing that the

87. *Id.* ¶¶ 27(h), 40(b)–(c); United Nations Framework Convention on Climate Change, Clean Development Mechanism Executive Board, Procedures for Processing and Reporting on Validation of CDM Project Activities, ¶¶ 3, 5(g), 10, 13, EB 50 Rep., Annex 48 (Oct. 16, 2009), available at http://cdm.unfccc.int/Reference/Procedures/valid_proc02.pdf.

88. Modalities and Procedures, *supra* note 24 ¶ 40(d).

89. United Nations Framework Convention on Climate Change, Clean Development Mechanism Executive Board, Procedure for Requests for Registration of Proposed CDM Project Activities, ¶¶ 4, 12, 16, EB 59 Rep., Annex 12 (Feb. 18, 2011), available at <http://cdm.unfccc.int/UserManagement/FileStorage/1DZKI7NAS8BV34P6F5Q0U9MJTHGYCX>.

90. *Id.* ¶¶ 17, 19, 23–24.

91. United Nations Framework Convention on Climate Change, Clean Development Mechanism Executive Board, Procedures for Review of Requests for Registration, ¶¶ 12–15, EB 55 Rep., Annex 40 (July 30, 2010), available at <http://cdm.unfccc.int/UserManagement/FileStorage/CJTO27K6DXIUN0LHZ3A9F4P1GM8WEV>.

92. *Id.* ¶ 20.

93. *Id.* ¶ 22.

94. *See id.* ¶ 27.

95. Modalities and Procedures, *supra* note 24, ¶ 60.

96. *Id.* ¶ 62(a), (d).

project has achieved the verified quantity of emission reductions.⁹⁷ Both the verification and certification reports are submitted to the Secretariat, who conducts a completeness check and publishes the request for issuance of CERs.⁹⁸ The Executive Board issues the requested number of CERs, unless an involved state party or at least three members of the Executive Board request a review of the proposed issuance within twenty-eight days of the publication of the request.⁹⁹

C. *The Impending CDM Appeals Process*

The carbon offset industry has expressed dissatisfaction with regulatory delays in the CDM project cycle, which are said to have resulted in high transaction costs, losses in CER volumes, and low market values for CERs.¹⁰⁰ Project developers are concerned that the Executive Board reviews almost every project and that a considerable proportion of projects submitted for registration are not registered within the official timeline.¹⁰¹ However, since the CDM became operational the Executive Board has rejected only 5.3 percent of all projects requesting registration,¹⁰² and some scholars have identified a “culture of approval” within the Executive Board.¹⁰³ Despite this high rate of approval, the Executive Board has repeatedly been accused of making arbitrary and non-transparent decisions.¹⁰⁴ Between October 2006 and August 2007, the Secretariat received twelve unsolicited letters from companies expressing dissatisfaction with the rejection of projects.¹⁰⁵ Some stated that as a result of the decisions of the Executive Board, their companies suffered losses amounting to “several million Euros,” as well as “damage to their reputation

97. *Id.* ¶ 63.

98. United Nations Framework Convention on Climate Change, Clean Development Mechanism Executive Board, Procedure for Requests of Issuance of CERs, ¶¶ 9–13, EB 54 Rep., Annex 35 (May 28, 2010), available at http://cdm.unfccc.int/Reference/Procedures/iss_proc09.pdf.

99. *Id.* ¶¶ 14, 16.

100. KARAN CAPOOR & PHILIPPE AMBROSI, WORLD BANK, STATE AND TRENDS OF THE CARBON MARKET 2009, at 45 (May 2009), available at http://siteresources.worldbank.org/EXTCARBONFINANCE/Resources/State_and_Trends_of_the_Carbon_Market_2009-FINALb.pdf.

101. Krey & Santen, *supra* note 57, at 231, 242; INT’L EMISSIONS TRADING ASS’N, STATE OF THE CDM 2010: FOCUSING ON EFFICIENCY 3 (2010), <http://www.ieta.org/assets/Reports/ieta-the-state-of-the-cdm-2010.pdf>.

102. The statistic is based on the author’s calculation of the number of rejected projects as a percentage of the total number of projects submitted for registration as of January 2011. See *CDM Project Activities*, U.N. FRAMEWORK CONVENTION ON CLIMATE CHANGE, <http://cdm.unfccc.int/Projects/index.html> (last visited Jan. 17, 2011).

103. See Meijer & Werksman, *supra* note 59, at 205.

104. David Stanway, *Spurned Chinese Developers Blast UN CO₂ Rulings*, REUTERS (Aug. 6, 2010 9:10 AM), <http://www.reuters.com/article/idUSTRE6751BC20100806>.

105. United Nations Framework Convention on Climate Change, Conference of the Parties Serving as the Meeting of the Parties to the Kyoto Protocol, Third Session, Bali, Indon., Dec. 3–14, 2007, *Privileges and Immunities for Individuals Serving on Constituted Bodies under the Kyoto Protocol: Implementation of Decision 9/CMP.2*, ¶ 10, U.N. Doc. FCCC/KP/CMP/2007/2 (Nov. 13, 2007), available at <http://unfccc.int/resource/docs/2007/cmp3/eng/02.pdf>.

due to negative publicity.”¹⁰⁶ The main concerns raised in the letters were that the Executive Board failed to follow the review procedures specified in the CDM Modalities and Procedures, that the Executive Board violated “principles of due process,” that there was a lack of transparency in the interpretation and application of the Modalities and Procedures, and that there was inconsistency in the decisions concerning similar projects.¹⁰⁷

These claims arise because of the unique way in which the Executive Board, a public international body, directly regulates private entities participating in the CDM. Generally, treaties only contain obligations that member states have agreed to fulfill. States then chose to implement their treaty obligations domestically by regulating the actions of private entities. The domestic laws of each country govern any disputes that arise between national administrative bodies and private entities.¹⁰⁸

Most international review or dispute settlement proceedings, such as the International Court of Justice, can only be initiated by States.¹⁰⁹ Recently, the Gold Standard Foundation, a non-profit organization that operates as a premium quality certification scheme for carbon offsets, proposed an appeals procedure that will provide project developers with the option to challenge adverse decisions of the Gold Standard Foundation in the Permanent Court of International Arbitration.¹¹⁰ However, because the Foundation is a private entity, proceedings would arise from the contractual relationship between the project developer and the Foundation, and would be submitted to the Permanent Court of International Arbitration pursuant to an arbitration clause.¹¹¹ By contrast, all situations in which private entities wish to challenge Executive Board decisions involve purported rights and obligations born out of the CDM Modalities and Procedures, and not rights created by private contractual agreement.¹¹² Thus, designated operational entities cannot challenge an Executive Board decision to suspend or withdraw accreditation, nor do project developers have recourse when the Executive Board rejects a project or declines to issue CERs. This novel arrangement also poses questions of how local stakeholders can adequately participate in the CDM’s decision-making processes and how they can challenge the registration of projects.

106. *Id.* ¶ 11.

107. *Id.* ¶ 13.

108. See IAN BROWNLIE, *PRINCIPLES OF PUBLIC INTERNATIONAL LAW* 31–32 (7th ed. 2008).

109. Statute of the International Court of Justice art. 34, ¶ 1, June 26, 1945, 55 Stat. 1055.

110. Press Release, The Gold Standard Found., The Gold Standard Foundation Releases Proposed Appeals Procedure (July 19, 2010), http://www.cdmgoldstandard.org/fileadmin/editors/files/2_news/press-releases/Press_Release_Appeals_Body.pdf.

111. See THE GOLD STANDARD FOUND., *DRAFT RULES FOR APPEALS ON REGISTRATION, ISSUANCE AND LABELING* 28–30 (2010), http://www.cdmgoldstandard.org/fileadmin/editors/files/5_GS_legal-documents/DRAFT_GS_Rules_for_Appeals.pdf.

112. Ernestine Meijer, *The International Institutions of the Clean Development Mechanism Brought Before National Courts: Limiting Jurisdictional Immunity to Achieve Access to Justice*, 39 N.Y.U. J. INT’L L. & POL. 873, 896 (2007).

It is unclear whether decisions of the Executive Board are legally binding upon project developers, but this issue is largely irrelevant because only the Executive Board can register projects and issue CERs. Therefore, project developers are forced to subscribe to the Modalities and Procedures irrespective of whether they regard them as binding. In this respect, the Executive Board acts like a market regulator or an administrative authority because it makes decisions that apply the CDM Modalities and Procedures to the activities of private entities in a way that is comparable to national governments making administrative decisions that affect its citizens and private entities.¹¹³ CDM disputes are more akin to disputes brought before domestic administrative courts or tribunals than to contractual disputes dealt with in private international arbitration. The corollary is that the more international environmental law resembles domestic administrative law, the more it should be subject to the same safeguards and principles of public accountability as domestic decision making.¹¹⁴

Legal scholars have argued for the creation of an independent panel to review claims by private entities against decisions of the Executive Board.¹¹⁵ Assistant Professor Jolene Lin and Charlotte Streck, Director, ClimateFocus, argue that “the rules, institutions and the very property right that is the subject of private sector transactions in international carbon markets are created by the Kyoto Protocol.”¹¹⁶ The Executive Board makes decisions that affect these “rights.” Therefore, “the CDM must apply commonly accepted principles of administrative law and due process to guarantee fundamental fairness, justice and respect for property rights.”¹¹⁷ In other words, to the extent that the administrative actions of the Executive Board bear a direct and significant impact on the rights of an individual, “they should be subject to a body of rules and principles that ensure that when public officials take such action it is in accordance with the rule of law.”¹¹⁸

However, Adjunct Professor Jacob Werksman points out that due to successful lobbying by project developers and CDM investors, the COP/MOP has responded to the perceived deficiencies of the CDM without adequate consideration of whether there is, or should be, a legal basis for project developers’ claims in the first place.¹¹⁹ While the commercial expectations of project developers are undoubtedly at stake, legal scholarship advocating an appeals process has not proffered a clear legal theory as to how the relationship

113. Charlotte Streck & Jolene Lin, *Making Markets Work: A Review of CDM Performance and the Need for Reform*, 19 EUR. J. INT’L L. 409, 417 (2008).

114. Daniel Bodansky, *The Legitimacy of International Governance: A Coming Challenge for International Environmental Law*, 93 AM. J. INT’L L. 596, 611 (1999).

115. See, e.g., Meijer, *supra* note 112, at 895; Lin & Streck, *supra* note 20, at 90–92; Streck & Lin, *supra* note 113, at 417; Millar & Wilder, *supra* note 20, at 44; Giesberts & Sarac, *supra* note 20, at 262.

116. Lin & Streck, *supra* note 20, at 72.

117. *Id.* at 72, 86.

118. Streck & Lin, *supra* note 113, at 411.

119. Werksman, *supra* note 22, at 100.

between the Executive Board's authority and a project developer's commercial interest becomes one of actionable rights and duties.¹²⁰ Project developers base their complaints on a general assertion that because the Executive Board's decisions directly affect the expectations of private entities who cannot turn to their governments to protect these expectations, a right to legal redress must exist at the international level. The origin, nature, and content of the "rights" being claimed by project developers are unclear, and the literature refers only broadly to "procedural rights," "property rights," and the "right to judicial review."¹²¹

The commercial expectations of project developers are being dressed up as "rights" for rhetorical clout, but expectations and rights are far from synonymous. When a new regulatory commodity and an environmental market is established, the legal nature of the units being traded, the rights arising under the scheme, and how those rights may be enforced are defined by the instrument that creates and governs that scheme.¹²² Similarly, the decisions of bodies established pursuant to a treaty and the law that governs their functions and powers, including any rights to judicial review, are determined by its constituent instrument.¹²³ Until now, the COP/MOP has avoided the creation of legal interests and has not bestowed rights on private entities by virtue of their participation in any of the flexible mechanisms. The Kyoto Protocol asserts that participation in the CDM is voluntary, that it is subject to the absolute authority of the COP/MOP and the Executive Board, and that CERs will only be issued subject to certain conditions being met.¹²⁴ The COP/MOP has even gone so far as to explicitly state that the Kyoto Protocol has not created or transferred any rights or entitlements to state parties, let alone private entities.¹²⁵ Thus, despite their assertion of "rights," project developers do not possess proprietary rights to the CERs expected to accrue from a project, nor do they possess procedural rights arising from the CDM Modalities and Procedures.

Nevertheless, the COP/MOP has already bowed to the pressure of the international carbon industry lobby. In 2009, the COP/MOP requested the

120. *Id.*

121. Von Unger & Streck, *supra* note 20, at 35; Lin & Streck, *supra* note 20, at 86.

122. See Matthieu Wemaere, Charlotte Streck & Thiago Chagas, *Legal Ownership and Nature of Kyoto Units and EU Allowances*, in *LEGAL ASPECTS OF CARBON TRADING: KYOTO, COPENHAGEN AND BEYOND* 35, 39 (David Freestone & Charlotte Streck eds., 2009).

123. PHILIPPE SANDS & PIERRE KLEIN, *BOWETT'S LAW OF INTERNATIONAL INSTITUTIONS* 116, 447 (6th ed. 2009); JAN KLABBERS, *AN INTRODUCTION TO INTERNATIONAL INSTITUTIONAL LAW* 94, 178, 206, 226 (2d ed. 2009); C.F. AMERASINGHE, *PRINCIPLES OF THE INSTITUTIONAL LAW OF INTERNATIONAL ORGANISATIONS* 16, 17, 19, 20, 161–62, 195 (2d ed. 2005).

124. Kyoto Protocol, *supra* note 3, arts. 12(4), (5), (7), (9).

125. United Nations Framework Convention on Climate Change, Report of the Conference of the Parties Serving as the Meeting of the Parties to the Kyoto Protocol on Its First Session, Montreal, Can. Nov. 28–Dec. 10, 2005, *Principles, Nature and Scope of the Mechanisms Pursuant to Articles 6, 12 and 17 of the Kyoto Protocol*, Preamble para. 5, Dec. 2/CMP.1, U.N. Doc. FCCC/KP/CMP/2005/8/Add.1 (Mar. 30, 2006), available at <http://unfccc.int/resource/docs/2005/cmp1/eng/08a01.pdf>.

Executive Board establish procedures for considering appeals that are brought by stakeholders “directly involved, defined in a conservative manner,” in the design, approval, or implementation of CDM projects, in relation to (1) situations where a designated operational entity may not have performed its duties in accordance with the rules set by the COP/MOP, and (2) “rulings” taken by or under the authority of the Executive Board regarding the rejection of requests for registration or issuance.¹²⁶ In 2010, the Executive Board agreed on a set of draft procedures, which were put before the COP/MOP. However, the COP/MOP deferred its decision until 2011, requesting that the Subsidiary Body for Implementation provide recommendations for consideration.¹²⁷ In 2011, the Subsidiary Body produced a technical paper that identified the main issues for negotiation, but the COP/MOP postponed its decision once again, pending the Executive Board’s revision of the draft procedures in light of any conclusions made by the Subsidiary Body.¹²⁸

According to the draft procedures, only project developers and the Designated National Authorities of the relevant Annex I investor country and non-Annex I host country would have standing to appeal the decisions of the Executive Board.¹²⁹ The Subsidiary Body’s technical paper is largely silent on the issue of standing. It merely states: “Parties may also wish to consider whether interested stakeholders, such as those who participated in the consultations at the earlier stages of the CDM process, should be given the opportunity to intervene, for example at the discretion of the appeal mechanism.”¹³⁰

126. United Nations Framework Convention on Climate Change, Report of the Conference of the Parties Serving as the Meeting of the Parties to the Kyoto Protocol on Its Fifth Session, Copenhagen, Den., Dec. 7–19, 2009, *Further Guidance Relating to the Clean Development Mechanism*, dec. 2/CMP.5, ¶ 42, U.N. Doc. FCCC/KP/CMP/2009/21/Add.1 (Mar. 30, 2010), available at <http://unfccc.int/resource/docs/2009/cmp5/eng/21a01.pdf>.

127. United Nations Framework Convention on Climate Change, Report of the Conference of the Parties Serving as the Meeting of the Parties to the Kyoto Protocol on Its Sixth Session, Cancún, Mex., Nov. 29–Dec. 10, 2010, *Further Guidance Relating to the Clean Development Mechanism*, ¶ 18, dec. 3/CMP.6, U.N. Doc. FCCC/KP/CMP/2010/Add.2 (Mar. 15, 2011), available at <http://unfccc.int/resource/docs/2010/cmp6/eng/12a02.pdf>.

128. United Nations Framework Convention on Climate Change, Conference of the Parties Serving as the Meeting of the Parties to the Kyoto Protocol on Its Seventh Session, Durban, S. Afr., Nov. 28–Dec. 9, 2011, *Further Guidance Relating to the Clean Development Mechanism*, Draft decision -/CMP.7, ¶ 14 (advance unedited version), available at http://unfccc.int/files/meetings/durban_nov_2011/decisions/application/pdf/cmp7_cdmguidance.pdf (last visited Jan. 4, 2012).

129. United Nations Framework Convention on Climate Change, Annual Report of the Clean Development Mechanism Executive Board to the Conference of the Parties Serving as the Meeting of the Parties to the Kyoto Protocol on Its Sixth Session, Cancún, Mex., Nov. 29–Dec. 10, 2010, *Recommendation on the Procedure for Appeals Against Rulings by the CDM Executive Board Regarding Requests for Registration or Issuance*, ¶ 4, U.N. Doc. FCCC/KP/CMP/2010/10, Annex 2 (Nov. 3, 2010), available at <http://unfccc.int/resource/docs/2010/cmp6/eng/10.pdf> [hereinafter *CDM Registration or Issuance Appeals Recommendation*].

130. United Nations Framework Convention on Climate Change, Subsidiary Body for Implementation, Procedures, Mechanisms and Institutional Arrangements for Appeals Against the

This Article submits that project developers have no higher legal or normative claim to procedural “rights” than the local stakeholders whose livelihoods and human rights are affected by projects and whose needs are invoked in support of the CDM. Indeed, since project developers’ arguments in favor of an appeals process are based on analogies to domestic legal systems,¹³¹ the COP/MOP and the Executive Board should not ignore the fact that those systems provide access to justice not only for private entities, but also for affected individuals, and, in some instances, NGOs.¹³² This feature is considered to be an integral element of democracy and the rule of law.¹³³

If the COP/MOP accepts the argument that the Executive Board should be held publicly accountable for its decisions, then the “public” to hold it accountable should arguably include those communities that the CDM is intended to benefit, and not just the developers and investors who voluntarily participate in the mechanism. If the commercial expectations of project developers are elevated to the status of rights by the COP/MOP, without at least granting reciprocal procedural rights to local stakeholders and NGOs, project developers and investors will have a significantly stronger position in relation to host country governments, the Executive Board, and local stakeholders. This will only further serve to undermine the CDM’s goal of contributing to sustainable development. It could also open up the CDM to strategic litigation that would undermine the integrity of the mechanism and the effectiveness of the Kyoto Protocol by compelling the approval of projects that do not represent additional emission reductions, purely on the basis of alleged procedural improprieties of the Executive Board.

Decisions of the Executive Board of the Clean Development Mechanism: Technical Paper, ¶ 132, U.N. Doc. FCCC/TP/2011/3 (May 17, 2011), available at <http://unfccc.int/resource/docs/2011/tp/03.pdf>.

131. Lin & Streck, *supra* note 20, at 88; Streck & Lin, *supra* note 113, at 410; Giesberts & Sarac, *supra* note 20, at 263.

132. In Australia, for example, section 487 of the *Environment Protection and Biodiversity Conservation Act 1999* (Cth) extends the meaning of “aggrieved person” under the *Administrative Decisions (Judicial Review) Act 1977* (Cth) to include individuals aggrieved by the decision, and organizations involved in the protection or conservation of, or research into, the environment. In the state of New South Wales, most environmental statutes contain open standing provisions allowing “any person [to] bring proceedings . . . for an order to remedy or restrain a breach” of the relevant act. This allows individuals and community action groups to commence court proceedings against government decision makers and corporations if, for example, a project is approved in contravention of the relevant statute or regulation. See, e.g., *Environmental Planning and Assessment Act 1974* (NSW) s 123 (Austl.); *National Parks and Wildlife Act 1979* (NSW) s 193 (Austl.); *Protection of the Environment Operations Act 1995* (NSW) s 252 (Austl.); *Threatened Species Conservation Act 1995* (NSW) s 141F (Austl.).

133. See Brian J. Preston, *The Role of Public Interest Environmental Litigation*, 23 ENVTL. & PLAN. L.J. 337, 337 (2006).

II. THE CDM'S STRUGGLE TO CONTRIBUTE TO SUSTAINABLE DEVELOPMENT

The international community initially thought that the CDM's dual goals of cost-efficiency and sustainable development were not mutually exclusive.¹³⁴ The widely accepted and often cited definition of sustainable development is development that "meets the needs of the present without compromising the ability of future generations to meet their own needs."¹³⁵ This definition emphasizes the importance of equity in the economic system. This equity is intra-generational, in that it seeks to redress the imbalance in economic development between the industrialized and developing worlds by prioritizing the needs of the poor, as well as inter-generational, in that it seeks to preserve a fair allocation of natural capital for future generations.¹³⁶ The concept is comprised of three "interdependent and mutually reinforcing" pillars: economic development, social development, and environmental protection.¹³⁷ Sustainable development requires that environmental protection constitute an "integral part of the development process."¹³⁸ The international community envisaged that the CDM would contribute to intra- and inter-generational equity because an increasing supply of energy is essential for poverty eradication and socioeconomic development. By providing much needed sources of clean, rather than carbon-intensive, energy, Annex I Parties could decouple economic development from greenhouse gas emissions and thus contribute to the protection of the environment for future generations, while also increasing the standard of living in developing countries. Developing countries expected their communities to benefit from projects through employment opportunities, direct payments, access to energy, and savings from more efficient energy.¹³⁹

The reality is that emissions trading, like any other commodities market, subjects third parties to external costs. The economic theory that underpins emissions trading assumes that the traded commodity is homogenous, yet in reality CERs are an extremely heterogeneous commodity. CERs represent a range of vastly different emission reduction methods, technologies, and

134. Eriika Melkas, *Equitable as Equal: The Kyoto Protocol Project Based Flexibility Mechanisms in an Unequal World*, 9 INT'L COMMUNITY L. REV. 263, 266 (2007).

135. WORLD COMM'N ON ENV'T & DEV., OUR COMMON FUTURE 8 (1987).

136. BIRNIE, BOYLE & REDGWELL, *supra* note 41, at 55.

137. Report of the World Summit on Sustainable Development, Johannesburg, S. Afr., Sept. 2-4, 2002, *Johannesburg Declaration on Sustainable Development*, ¶ 5, U.N. Doc. A/CONF.199/20 (Sept. 4, 2002), available at <http://daccess-dds-ny.un.org/doc/UNDOC/GEN/N02/636/93/PDF/N0263693.pdf?OpenElement>.

138. United Nations Conference on Environment and Development, Rio de Janeiro, Braz., June 3-14, 1992, *Rio Declaration on Environment and Development*, princ. 4, U.N. Doc. A/CONF.151/26/Rev.1 (Vol. I), Annex I (Aug. 12, 1992), available at <http://daccess-dds-ny.un.org/doc/UNDOC/GEN/N92/836/55/PDF/N9283655.pdf?OpenElement> [hereinafter *Rio Declaration on Environment and Development*].

139. Bumpus & Liverman, *supra* note 4, at 144.

geographical locations. Industrial gas abatement projects in China, solar-heat cookers in Africa, hydroelectric dams in India, wind farms in Mongolia, and forestry projects in Brazil are considered commensurate as long as they achieve a reduction in greenhouse gas emissions during the projects' short-term crediting periods.¹⁴⁰ With homogeneity, transfers in carbon credits increase net benefits by allowing investment to flow to its highest valued use; without homogeneity, the international carbon market confers external costs and benefits on third parties.¹⁴¹ While flexibility in the location and method of emission reductions may enable Annex I Parties to reduce their short-term economic costs, it creates a new series of social and environmental costs inequitably imposed upon communities and individuals who have done little to contribute to climate change but will disproportionately suffer from the effects of climate change.¹⁴²

There is considerable evidence to suggest that many CDM projects have failed to contribute to sustainable development.¹⁴³ Studies conducted in China and Brazil show that, although these countries might prioritize particular types of projects, as of the end of 2009, neither country had rejected a single project on the basis that the project would not contribute to sustainable development.¹⁴⁴ In India, despite the fact that the national sustainable development priorities include the goal of poverty alleviation by generating additional employment, removing social disparities, and providing basic amenities, CDM projects do not contribute to rural poverty alleviation to any notable extent.¹⁴⁵ This is said to be due to the fact that "[t]he social development objective is not at the heart of formulation of these projects," and that the project design documents merely offer "lip service" to the expected contribution to socioeconomic development.¹⁴⁶ Another study estimates that

140. See Larry Lohmann, *Regulatory Challenges for Financial and Carbon Markets*, 3 CARBON & CLIMATE L. REV. 161, 168 (2009).

141. Tietenberg, *supra* note 45, at 187.

142. Cinnamon Carlarne, *Risky Business: The Ups and Downs of Mixing Economics, Security and Climate Change*, 10 MELB. J. INT'L L. 439, 446–47 (2009); Robert Mendelsohn, Ariel Dinar & Larry Williams, *The Distributional Impact of Climate Change on Rich and Poor Countries*, 11 ENV'T & DEV. ECON. 159, 173–74 (2006).

143. See, e.g., Christina Voigt, *Is the Clean Development Mechanism Sustainable? Some Critical Aspects*, 8 SUST. DEV. L. & POL'Y 15 (2008); Emily Boyd et al., *Exploring Socioeconomic Impacts of Forest Based Mitigation Projects: Lessons from Brazil and Bolivia*, 10 ENVTL. SCI. & POL'Y 419 (2007); Karen Holm Olsen & Jørgen Fenhann, *Sustainable Development Benefits of Clean Development Mechanism Projects: A New Methodology for Sustainability Assessment Based on Text Analysis of the Project Design Documents Submitted for Validation*, 36 ENERGY POL'Y 2819 (2008).

144. Lars Friberg, *Varieties of Carbon Governance: The Clean Development Mechanism in Brazil a Success Story Challenged*, 18 J. ENV'T & DEV. 395, 418 (2009); Miriam Schroeder, *Varieties of Carbon Governance: Utilizing the Clean Development Mechanism for Chinese Priorities*, 18 J. ENV'T & DEV. 371, 389–90 (2009); see also, Wara, *supra* note 48, at 1773.

145. Smita Sirohi, *CDM: Is It a "Win-Win" Strategy for Rural Poverty Alleviation in India?* 84 CLIMATIC CHANGE 91, 91–92 (2007).

146. *Id.* at 104.

less than 1 percent of all CDM projects are likely to contribute significantly to sustainable development.¹⁴⁷

In response to this deficiency, a group of NGOs established the Gold Standard Foundation as a private initiative to improve the CDM's contribution to sustainable development. The Foundation operates as a premium quality certification scheme for CERs and other carbon credits.¹⁴⁸ In addition to qualifying for registration under the CDM, project developers wishing to obtain Gold Standard certification must complete a "Sustainable Development Matrix" that assesses the project against twelve sustainable development indicators across three categories: environment, social development, and economic and technological development.¹⁴⁹ In order to qualify for Gold Standard registration, project activities must contribute positively to at least two of the three categories and be at least neutral to the third category.¹⁵⁰ CERs certified by the Gold Standard Foundation generally trade at a premium of 25 percent above the market value for normal CERs because of their perceived environmental integrity.¹⁵¹ Nevertheless, the number of projects with Gold Standard certification represents a very small proportion of all registered CDM projects.¹⁵²

Some scholars argue that each potential CDM project must demonstrate concrete social benefits in addition to the reduction of emissions in order to be eligible for registration by the Executive Board.¹⁵³ The alternative argument is that, given the role that climate change mitigation plays in promoting inter-generational equity, any use of technology to reduce emissions advances the goal of environmental protection, and therefore all CDM projects automatically contribute to sustainable development.¹⁵⁴ It is impossible to reconcile these arguments, because more than twenty years since the concept was first defined, scholars note that we are no closer to an international consensus on exactly

147. Christoph Sutter & Juan Carlos Parreño, *Does the Current Clean Development Mechanism (CDM) Deliver Its Sustainable Development Claim? An Analysis of Officially Registered CDM Projects*, 84 CLIMATIC CHANGE 75, 89 (2007).

148. *Who We Are*, GOLD STANDARD FOUND., <http://www.cdmgoldstandard.org/Who-we-are.68.0.html> (last visited Jan. 17, 2011).

149. GOLD STANDARD FOUND., GOLD STANDARD REQUIREMENTS 40 (July 1, 2009), http://www.cdmgoldstandard.org/fileadmin/editors/files/6_GS_technical_docs/GSv2.1/GSv2.1_Requirements.pdf.

150. *Id.*

151. Sam Headon, *Whose Sustainable Development? Sustainable Development Under the Kyoto Protocol, the "Coldplay Effect," and the CDM Gold Standard*, 20 COLO. J. INT'L ENVTL. L. & POL'Y 127, 130, 150 (2009).

152. As of July 2011, only forty-seven projects were generating Gold Standard certified CERs. *Gold Standard Certified CERs/ERUs*, GOLD STANDARD FOUNDATION, <https://gs1.apx.com/myModule/rpt/myrpt.asp?r=114> (last visited July 26, 2011).

153. See van Asselt & Gupta, *supra* note 16, at 348; Christina Voigt, *The Deadlock of the Clean Development Mechanism: Caught Between Sustainability, Environmental Integrity and Economic Efficiency*, in CLIMATE LAW AND DEVELOPING COUNTRIES: LEGAL AND POLICY CHALLENGES FOR THE WORLD ECONOMY (Benjamin Richardson et al. eds., 2009) 235, 249–50.

154. Driesen, *supra* note 56, at 58.

what constitutes sustainable development.¹⁵⁵ The principle does not provide adequate guidance as to what kind of decision is required when economic and environmental considerations inevitably conflict, because the core elements of sustainable development—economic development, social development, and environmental protection—are supposed to be given equal weight in decision making.¹⁵⁶

Ultimately, the decision of whether to approve a particular project is a political one because it necessarily involves trade-offs between economic growth and environmental protection. Different governments pursue their own priorities and make their own value judgments as to what they perceive is in the best interests of their country.¹⁵⁷ During the Kyoto negotiations, several attempts were made to agree upon universal indicators for sustainable development. However, developing countries argued, on the basis of “common but differentiated responsibilities and respective capabilities,”¹⁵⁸ that the decision of whether to allow the exploitation of their natural resources is theirs alone to make.¹⁵⁹ The parties therefore left the determination of sustainable development criteria and objectives to the discretion of individual host countries.¹⁶⁰

Assuming that national governments are best placed to represent the interests of their citizens, a country should only choose to host a CDM project if the full economic, environmental, and social benefits accruing to both local stakeholders and the inhabitants of the country at large outweigh the potential costs of the project.¹⁶¹ In reality, the fact that many countries that have national sustainable development objectives and criteria, such as India and Brazil, still host projects that cause significant socioeconomic and environmental harm indicates that substantive criteria alone are insufficient to ensure the quality of CDM projects. The mere existence of such criteria does not necessarily mean that each project is rigorously assessed in terms of its ability to meet each and every criterion of sustainable development. Developing countries may unwittingly approve detrimental projects because they have not developed the legal framework and administrative capabilities necessary to evaluate a project’s potential impacts.¹⁶² Indeed, many host countries have conceded that

155. BIRNIE, BOYLE & REDGWELL, *supra* note 41, at 54.

156. Daniel Barstow Magraw & Lisa Hawke, *Sustainable Development*, in THE OXFORD HANDBOOK OF INTERNATIONAL ENVIRONMENTAL LAW 613, 620 (Daniel Bodansky, Jutta Brunnée & Ellen Hey eds., 2007).

157. *Id.*

158. U.N. Framework Convention on Climate Change art. 3, ¶ 1, May 9, 1992, 1771 U.N.T.S. 107.

159. Emily Richman, *Emissions Trading and the Development Critique: Exposing the Threat to Developing Countries*, 36 N.Y.U. J. INT’L L. & POL. 133, 164–65 (2003).

160. Robert O’Sullivan & Charles Cormier, *Meeting Participating Country Responsibilities Under the CDM: Designating a National Authority*, in LEGAL ASPECTS OF IMPLEMENTING THE KYOTO PROTOCOL MECHANISMS: MAKING KYOTO WORK 213, 216 (David Freestone & Charlotte Streck eds., 2005).

161. Smith, *supra* note 29, at 332.

162. Richman, *supra* note 159, at 166.

they are not in a position to do more than take for granted the claims made by project developers in project design documents about the expected sustainable development benefits of projects.¹⁶³

Sustainable development requires the integration of environmental and social concerns into the development process. Therefore, the decision maker must have adequate information regarding potential costs and benefits in order to decide whether particular projects will promote both intra- and inter-generational equity. Procedural requirements such as public consultation and EIA are necessary to fulfill the need for decision makers to understand the social and environmental consequences of their decisions.¹⁶⁴ Public participation requirements can assist decision makers to identify and understand public interest concerns and potential social impacts of proposed projects, which may, in turn, influence the substantive outcomes of decisions by ensuring that decisions are reflective of, or at least account for, public values and priorities.¹⁶⁵

International instruments recognize the importance of such procedures in achieving sustainable development. *Agenda 21* is the non-binding international action plan for sustainable development adopted at the United Nations Conference on Environment and Development alongside the *Rio Declaration* and the UNFCCC.¹⁶⁶ It states that “[o]ne of the fundamental prerequisites for the achievement of sustainable development is broad public participation in decision-making.”¹⁶⁷ The *Rio Declaration on Environment and Development* also emphasizes that access to information, public participation, access to justice, and EIAs are necessary procedural elements of sustainable development.¹⁶⁸ Thus, it has been said that “sustainable development is as much about processes as it is about outcomes.”¹⁶⁹

Universal sustainable development criteria, such as those applied by the Gold Standard Foundation, are desirable because economic factors will usually trump other considerations, especially when international instruments and domestic laws do not give priority to environmental and social considerations.¹⁷⁰ Without such criteria, sustainable development may always be treated as an incidental gain, rather than an essential feature of CDM

163. Peter Newell, Nicky Jenner & Lucy Baker, *Governing Clean Development: A Framework for Analysis*, 27 DEV. POL’Y REV. 717, 720 (2009).

164. NEIL CRAIK, *THE INTERNATIONAL LAW OF ENVIRONMENTAL IMPACT ASSESSMENT: PROCESS, SUBSTANCE AND INTEGRATION* 26 (2008).

165. *Id.* at 36; Benjamin Richardson & Jona Razzaque, *Public Participation in Environmental Decision-Making*, in ENVIRONMENTAL LAW FOR SUSTAINABILITY 165 (Benjamin Richardson & Stepan Wood eds., 2006).

166. United Nations Conference on Environment and Development, Rio de Janeiro, Braz., June 3–14, 1992, *Agenda 21*, U.N. Doc. A/CONF.151/26/Rev.1 (Vol. I), Annex II (Aug. 12, 1992), available at <http://www.un.org/esa/sustdev/documents/agenda21/english/Agenda21.pdf>.

167. *Id.* ¶ 23.2.

168. *Rio Declaration on Environment and Development*, *supra* note 138, princs. 10, 17.

169. BIRNIE, BOYLE & REDGWELL, *supra* note 41, at 57.

170. Carlarne, *supra* note 142, at 468.

projects.¹⁷¹ In recent years, the debate surrounding the idea of universal sustainable development criteria has languished. It appears unlikely that any international body will adopt substantive criteria in the near future. Nevertheless, even if substantive criteria were eventually realized, the Executive Board or host country could not adequately assess the contribution of projects to sustainable development on a project-by-project basis without established procedures to deliver the relevant information to decision makers. This Article argues that the COP/MOP should strengthen the procedural requirements of the CDM to enable effective and informed decision making by host countries, and to enable stakeholders to challenge the registration of CDM projects and the issuance of CERs at the international level. Procedural requirements might also be more politically palatable than substantive sustainable development criteria by building upon the existing CDM legal framework to assist developing countries in their decision making, rather than taking the CDM completely out of their hands.

A. Standards for Public Participation and Environmental Impact Assessment in International Environmental Law

The literature identifies many different theoretical approaches to public participation.¹⁷² This Article focuses on “liberal-democratic” participatory procedures, which are narrowly defined, formal legal processes for public access to information, participation in decision making, and access to justice.¹⁷³ These are the three elements emphasized in Principle 10 of the *Rio Declaration*¹⁷⁴ and also represent the three pillars of the United Nations Economic Commission for Europe’s Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters (Aarhus Convention).¹⁷⁵

The Aarhus Convention remains the first and only multilateral environmental agreement to focus exclusively on obligations of states to their

171. Mark Kenber, *The Clean Development Mechanism: A Tool for Promoting Long-Term Climate Protection and Sustainable Development?* in CLIMATE CHANGE AND CARBON MARKETS: A HANDBOOK OF EMISSION REDUCTION MECHANISMS 263, 285 (Farhana Yamin ed., 2005).

172. See, e.g., Richardson & Razzaque, *supra* note 165, at 171; Jonas Ebbesson, *Public Participation*, in THE OXFORD HANDBOOK OF INTERNATIONAL ENVIRONMENTAL LAW, *supra* note 156, at 681, 687.

173. Richardson & Razzaque, *supra* note 165, at 173; Ebbesson, *supra* note 172, at 687.

174. Principle 10 of the *Rio Declaration* states that “[e]ach individual shall have appropriate access to information concerning the environment . . . and the opportunity to participate in decision-making processes. States shall facilitate and encourage public awareness and participation by making information widely available. Effective access to judicial and administrative proceedings, including redress and remedy, shall be provided.” *Rio Declaration on Environment and Development*, *supra* note 138, princ. 10.

175. Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters arts. 4, 6, 9, June 25, 1998, 2161 U.N.T.S. 447 [hereinafter Aarhus Convention].

citizens.¹⁷⁶ Professor Philippe Sands believes that, “building on the human rights model, developments [such as the Aarhus Convention] foresee the creation of a new range of procedural rights, which may be granted to individuals by international law and would be exercisable at the international level.”¹⁷⁷ The Aarhus Convention aims to contribute to the “protection of the right of every person of present and future generations to live in an environment adequate to his or her health and well-being” by guaranteeing “the rights of access to information, public participation in decision-making, and access to justice in environmental matters.”¹⁷⁸ Under the Aarhus Convention, members of the public and NGOs are granted a right of access to any environmental information held by public authorities and are permitted to take part in decision making and submit complaints to legal review.¹⁷⁹ By comparison, the UNFCCC narrowly states that countries shall “[p]romote and facilitate at the national, and as appropriate, sub-regional and regional levels, and in accordance with national laws and regulations, and within their respective capacities . . . public access to information on climate change” and “public participation in addressing climate change.”¹⁸⁰

It has been argued that the COP/MOP “should adopt detailed guidelines for the assessment of environmental and social impacts of CDM projects that are at least as strong as” the requirements of “international financial institutions implementing similar projects.”¹⁸¹ The World Bank has a set of Operational Policies and Bank Procedures for, inter alia, environmental assessments, indigenous peoples, involuntary resettlements, and forests.¹⁸² The Bank requires an environmental assessment of all its projects, including CDM projects.¹⁸³ The Bank undertakes environmental screening to determine the appropriate type and extent of environmental assessment, and then classifies the project into one of three main categories. Category A projects are those that are likely to have “significant adverse environmental impacts” that are “sensitive, diverse or unprecedented.”¹⁸⁴ Category B projects are those that have “potential adverse environmental impacts on human populations or environmentally important areas.”¹⁸⁵ Category C projects are those that are

176. Svitlana Kravchenko, *The Aarhus Convention and Innovations in Compliance with Multilateral Environmental Agreements*, 18 COLO. J. INT’L ENVTL. L. & POL’Y 1, 2 (2007).

177. PHILIPPE SANDS, *PRINCIPLES OF INTERNATIONAL ENVIRONMENTAL LAW* 118 (2d ed. 2003).

178. Aarhus Convention, *supra* note 175, art. 1.

179. *Id.* arts. 4, 9.

180. U.N. Framework Convention on Climate Change, *supra* note 158, art. 6(a).

181. Nathalie Eddy & Glenn Wiser, *Public Participation in the Clean Development Mechanism of the Kyoto Protocol*, in *THE NEW “PUBLIC”: THE GLOBALIZATION OF PUBLIC PARTICIPATION* 203, 206 (Carl Bruch ed., 2002).

182. WORLD BANK, OPERATIONAL MANUAL: OPERATIONAL POLICIES (OPS), <http://go.worldbank.org/0BM4HLLCB0> (last visited Oct. 22, 2011).

183. WORLD BANK, OPERATIONAL POLICY 4.01—ENVIRONMENTAL ASSESSMENT ¶ 1 (Jan. 1999), <http://go.worldbank.org/W4YNVZJ50>.

184. *Id.* ¶ 8(a).

185. *Id.* ¶ 8(b).

likely to have “minimal or no adverse environmental impacts.”¹⁸⁶ For Category A projects, the borrower must retain independent experts to carry out an EIA.¹⁸⁷ Otherwise, the borrower is responsible for carrying out the EIA.¹⁸⁸ In each case, the Bank will advise the borrower of the Bank’s specific environmental assessment requirements. The Bank will then review the assessment to determine whether the project is suitable for the type of finance sought.¹⁸⁹ Beyond the initial screening, the Bank does not require a further EIA for Category C projects. World Bank procedures relating to public consultation and the disclosure of relevant information to local groups are only required for Category A and B projects.¹⁹⁰

Individuals who claim to be affected by a World Bank project may request an inspection by the World Bank Inspection Panel if they can demonstrate that their “rights or interests have been or are likely to be directly affected” as a result of the Bank’s failure to follow its own policies and procedures.¹⁹¹ The Panel may make a recommendation to the Executive Directors of the Bank as to whether the complaint should be investigated. If the Executive Directors decide to investigate the matter, the Panel conducts an inspection and submits a report to the Executive Directors expressing its opinion as to whether the Bank has complied with its own procedures.¹⁹² The Executive Directors then consider the matter and decide what action to take, if any.¹⁹³ The Panel’s effectiveness is limited because it is not independent from the World Bank, is only a fact-finding body, does not have the power to issue binding decisions, and does not monitor the implementation of the Directors’ decisions regarding remedial actions.¹⁹⁴ Nevertheless, the Bank’s policies and procedures are indicative of the kind of requirements that can be imposed upon projects at the international level. The following Part II.B evaluates the CDM’s procedural requirements with respect to access to information, public participation, EIAs, and access to justice.

186. *Id.* ¶ 8(c).

187. *Id.* ¶ 4.

188. *Id.*

189. *Id.* ¶ 5.

190. *Id.* ¶ 14.

191. INT’L BANK FOR RECONSTRUCTION AND DEV. & INT’L DEV. ASS’N, WORLD BANK, RESOLUTION NO. IBRD 93-10 AND RESOLUTION NO. IDA 93-6: “THE WORLD BANK INSPECTION PANEL” ¶ 12 (Sept. 22, 1993), available at <http://siteresources.worldbank.org/EXTINSPECTION/PANEL/Resources/ResolutionMarch2005.pdf>.

192. *Id.* ¶¶ 2, 19, 20, 22.

193. *Id.* ¶ 23.

194. Streck & Lin, *supra* note 113, at 439; von Unger & Streck, *supra* note 20, at 40.

B. Evaluating the CDM's Procedural Requirements

1. Access to Information

Access to information is a prerequisite to public participation in decision making, monitoring, and enforcement.¹⁹⁵ As outlined in Part I, there are two opportunities for public participation within the CDM project cycle. First, the project developer must invite comments from local stakeholders. The project design document must contain a summary of comments received and an explanation of how the comments were taken into account by the project developer.¹⁹⁶ The second opportunity for public participation occurs when the designated operational entity makes the project design document available on the internet, giving state parties, stakeholders, and UNFCCC accredited NGOs thirty days to submit comments.¹⁹⁷

The initial preparation of the project design document is the least regulated phase of the project cycle in terms of requirements for access to information and public participation.¹⁹⁸ This paucity of regulation is particularly problematic because adequate access to information and public participation during the early planning phases are crucial to the incorporation of local stakeholders' concerns and the long-term success of a CDM project within its community. The CDM Modalities and Procedures require Project developers to invite input from local stakeholders, but they do not require project developers to provide any information about projects to local stakeholders, and there are no rules, standards, or guidelines regarding the kind of information that should be provided, nor the manner and timeframe in which the information should be provided.¹⁹⁹ The Modalities and Procedures also fail to ensure that if information is provided, it is accessible to the local communities likely to be affected, because it does not specify that information should be provided in any language other than English, nor does it specify that information should be provided through culturally appropriate media.²⁰⁰

In Brazil, government regulations require project developers to seek consent for a proposed project from local institutions and representatives of civil society. Key institutions, including the Brazilian Forum of NGOs, the

195. DONALD ANTON & DINAH SHELTON, ENVIRONMENTAL PROTECTION AND HUMAN RIGHTS 357 (2011).

196. Modalities and Procedures, *supra* note 24, ¶ 37(b).

197. *Id.* ¶¶ 27(h), 40(b)–(c); United Nations Framework Convention on Climate Change, Clean Development Mechanism Executive Board, Procedures for Processing and Reporting on Validation of CDM Project Activities, ¶¶ 3, 5(g), 10, 13, EB 50 Rep., Annex 48 (Oct. 16, 2009), available at http://cdm.unfccc.int/Reference/Procedures/valid_proc02.pdf.

198. Eddy & Wisner, *supra* note 181, at 205.

199. Nathalie Eddy, *Public Participation in CDM and JI Projects*, in LEGAL ASPECTS OF IMPLEMENTING THE KYOTO PROTOCOL MECHANISMS: MAKING KYOTO WORK 71, 86 (David Freestone & Charlotte Streck eds., 2005).

200. Eddy & Wisner, *supra* note 181, at 207; Eddy, *supra* note 199, at 74.

mayor's office, and local community associations, must be informed in writing about the proposed project.²⁰¹ Those informed have thirty days to respond. However, this practice has not ensured that projects are reviewed by a broad group of stakeholders. Fewer than 5 percent of projects receive written responses, and any responses received are of limited substance, usually consisting of a general welcome from the local mayor.²⁰² This is because most people contacted have insufficient information with which to form an opinion about particular projects.²⁰³

The CDM Modalities and Procedures do not specify the means by which project participants, operational entities, the Executive Board, and the Secretariat must provide information to local stakeholders. In practice, the Executive Board distributes the CDM website in CD-ROM format to expand the availability of information to stakeholders who have computer access but lack an adequate internet connection with which to download large files. Tracking a project's development through CD-ROM, however, is only effective if local stakeholders have access to computers and regularly receive updated CD-ROMs.²⁰⁴ It also requires locals to speak English, because all project documentation is submitted to the UNFCCC in English. The CDM Modalities and Procedures do not address "how or whether culturally appropriate means of communication will be required to ensure that local communities without access to the internet will remain informed of CDM project development and implementation."²⁰⁵

Project design documents do not specify what information, if any, was given to stakeholders prior to consultation. If an EIA is conducted, the host country decides whether or not to release the report to local stakeholders. The project design documents do not indicate whether the project developers or the government made the EIA or draft report publicly available to local stakeholders before public consultation. The project design document only indicates whether an EIA was conducted and whether the host country approved it, as well as a very brief summary of the issues identified in the EIA. The project design document also briefly summarizes the conclusions of the EIA and public consultations, which typically occupy no more than one page within the lengthy document. As CDM Watch, Transparency International, and Earthjustice noted,

[t]he right to comment only on the PDD is insufficient because it does not include all of the information and data justifying the project, thereby depriving the public of the ability to ensure that all of the requirements

201. Friberg, *supra* note 144, at 406.

202. *Id.* at 406–407.

203. Newell, Jenner & Baker, *supra* note 163, at 729.

204. Eddy & Wiser, *supra* note 181, at 209.

205. *Id.* at 207.

have been met and to effectively act as a check on the integrity of the CDM approval process.²⁰⁶

EIA reports are not made publicly available on the UNFCCC website alongside the project design documents during the thirty day international stakeholder consultation period. In fact, neither the UNFCCC secretariat nor the designated operational entities make available any of the supporting documentation that project developers are required to submit to designated operational entities, such as the evidence of public consultations. Without access to the supporting documentation, it is impossible for state parties, stakeholders, and NGOs to assess whether the conclusions in the project design documents are in fact supported by the studies conducted by the project developer. Similarly, without detailed information about how local stakeholders were given the opportunity to participate and whether they were given access to information about the project, it is impossible for parties and NGOs to judge whether the project developer enabled meaningful and informed public participation. Reliance on assessing the adequacy of public consultations is placed entirely on the designated operational entity who is contracted by the project developer.

Project developers may even conduct the initial local stakeholder consultation after the project design document has been published on the internet, thereby denying NGOs the opportunity to comment on the complete and final project design document. There is no obligation for the project developer to make the project design document publicly available for a second time once the relevant information on the local stakeholder consultation has been included in the document. For example, the project design document for the Inno-Kwants Mewah-Palm Oil Mill Waste Plantation Recycle Scheme in Malaysia did not contain any information on the local stakeholder consultation when it was posted on the internet. The only comment received by the designated operational entity requested that the project design document be posted again so that international stakeholders could comment on information regarding the local stakeholder consultation.²⁰⁷ In response, the designated operational entity explained that the information was omitted because the local stakeholders' consultation took place after it had posted the project design document on the internet.²⁰⁸ The designated operational entity asserted that it was under no obligation to invite comments for a second time after the relevant information was included in the project design document.²⁰⁹ This demonstrates

206. Eva Maria Filzmoser, Alice R. Thomas & Lisa Elges, *CDM Watch, Earthjustice and Transparency International's Views on Procedures for Appeals in Accordance with the CMP Requests in Paragraph 42-43 of Decision 2/CMP.5*, 5 (Mar. 5, 2010), http://cdm.unfccc.int/public_inputs/2010/cmp5_para42_43/cfi/S71E746O1LKEWDX7VG76607DX8CBJ1.

207. SGS U.K LTD., VALIDATION REPORT: INNO-KWANTS MEWAH-PALM OIL MILL WASTE RECYCLE SCHEME 22 (Jan. 27, 2010), available at <http://cdm.unfccc.int/UserManagement/FileStorage/X5GNBC9ALPRYTVKQ37OFDI16UZ0SME>.

208. *Id.*

209. *Id.*

that local stakeholder consultation can take place very late in the project cycle and that information about the consultation can be omitted or withheld so that state parties, stakeholders, and NGOs are unable to scrutinize this aspect of project development. Thus, the CDM, as it currently stands, excludes stakeholders and NGOs from effective participation in project design and implementation by failing to make vital information available, by making it available too late, and by using culturally inappropriate avenues of communication to notify and inform stakeholders of projects.²¹⁰

2. *Public Participation in Decision Making*

The first opportunity for public participation in the CDM is when the project developer invites comments from local stakeholders during the preparation of the project design document.²¹¹ Obtaining public input early on in the design process creates much better chances for the consideration and integration of public concerns than asking stakeholders to comment on a project after it has been designed.²¹² Although project developers are required to include a description of how input was sought and what comments were received,²¹³ the Modalities and Procedures remain silent about the method of consultation.²¹⁴ They do not specify the stage at which the public should be consulted, how they should be consulted, or how they should be assisted to provide meaningful input during those consultations. Within the CDM, public consultation processes generally take place after the project design has been finalized, thereby providing scant opportunity for the kind of public involvement that might help to minimize the environmental and socioeconomic impacts of the project.²¹⁵

In China, public consultations most commonly consist of a questionnaire, surveying only a very small sample of the local population. If questionnaires are distributed to individuals, the project design documents do not specify how participants are selected or how they are notified of the opportunity to participate in the survey. Questionnaires typically include questions asking respondents how familiar they are with the project, what positive and negative impacts they think the project will have, what measures they think should be carried out in order to reduce the negative impacts of the project, and whether

210. Eddy & Wisner, *supra* note 181, at 209.

211. Modalities and Procedures, *supra* note 24, ¶ 37(b).

212. Eva Lövbrand, Teresia Rindeljäll & Joakim Nordqvist, *Closing the Legitimacy Gap in Global Environmental Governance? Lessons from the Emerging CDM Market*, 9 GLOBAL ENVTL. POL. 74, 86 (2009).

213. Modalities and Procedures, *supra* note 24, ¶ 37(b).

214. Lövbrand, Rindeljäll & Nordqvist, *supra* note 212, at 86.

215. *Id.*

they support the project.²¹⁶ However, given the lack of access to information, it is virtually impossible for local stakeholders to make any kind of informed opinion about the project, rendering this form of public consultation otiose.

The standard practice in Central America is to conduct a public meeting where project developers explain their plans to locals and record any concerns raised at the meeting. Photographs of these highly staged meetings are often included in the project design document to demonstrate that project developers have fulfilled their public consultation obligation. Scholars suggest that these types of CDM consultations are more accurately described as public relations exercises because they are used to minimize or contain dissent and are often organized in urban areas where the affected rural populations have difficulty attending.²¹⁷

It is commonly accepted that “potentially more harmful activities warrant more extensive and legalistic forms of public consultation.”²¹⁸ However, within the CDM, the number of stakeholders engaged and the form of public consultation vary greatly between jurisdictions and projects. The size of a project and its potential impacts bear little correlation to the thoroughness of public consultation, suggesting that public consultation is often inadequate for the size and type of project. Often the developers of large-scale hydroelectric projects consult the same number of, if not fewer, stakeholders than for smaller hydroelectric projects.²¹⁹ By limiting the number of participants, project developers reduce their risk of identifying and having to address public opposition to the project.

There is a very low threshold for the adequacy of the project developer’s public consultation. Designated operational entities seem willing to validate the project design document so long as it includes *any* description of how the project developers solicited and took comments into account. In their validation reports, designated operational entities typically conclude that surveys were conducted and that the summary of responses in the project design document is

216. See, e.g., MITSUBISHI CORP., PROJECT DESIGN DOCUMENT FOR THE XUNDIAN JINFENG 12.6MW HYDROPOWER PROJECT, 33 (2009), <http://cdm.unfccc.int/UserManagement/FileStorage/GKX9CEVR4235O1YF7DLNIMB86WAJSZ>.

217. Mary Finley-Brook & Curtis Thomas, *Treatment of Displaced Indigenous Populations in Two Large Hydro Projects in Panama*, 3 WATER ALTERNATIVES 269, 282 (June 2010), http://www.water-alternatives.org/index.php?option=com_content&task=view&id=112&Itemid=1.

218. CRAIK, *supra* note 164, at 32.

219. For example, the Qinghai Jinshaxia 70-megawatt hydroelectric project in China is classified as a large-scale project, but during the public consultation, only forty-five questionnaires were distributed. This was less than the fifty questionnaires distributed for the 9.6-megawatt Xiaohe hydroelectric project, which is classified as a small-scale CDM project. PROJECT DESIGN DOCUMENT FOR THE QINGHAI JINSHAXIA 70MW HYDROPOWER PROJECT, 25 (2007) <http://cdm.unfccc.int/UserManagement/FileStorage/DP56GX4EKH3ZL6UNBIV8YH2FPOZDPU>; PROJECT DESIGN DOCUMENT FOR THE 9.6MW XIAOHE SMALL HYDROPOWER PROJECT, 22 (2006) <http://cdm.unfccc.int/UserManagement/FileStorage/RDJ6435X87WF8AEQ1Q4PDH6D1ZCQGQ>.

accurate.²²⁰ Even where a project developer receives negative feedback, it is considered adequate if the project design document ambiguously states that “the project owner took the public comments and feedback seriously,” and that “opinions and views of the public can be basically solved.”²²¹ The designated operational entity is the only entity within the CDM that has access to all the supporting documentation for a project, including the evidence of public consultation and the EIA, yet because they contract directly with the project developer, they have no incentive to require that the project design document substantively demonstrate that the project developer took steps to ensure that local stakeholders had a meaningful opportunity to influence the design of the project. Designated operational entities also have no incentive to confirm with local stakeholders that the supporting documentation supplied by the project developer accurately reflects the method and outcome of consultations.²²² Additional public participation may occur if the designated operational entity opts to conduct interviews with local stakeholders during an on-site inspection.²²³ However, this is probably not a common practice, and the Executive Board offers no guidance as to when interviews might be appropriate.²²⁴ Publicly available validation reports indicate that when designated operational entities choose to conduct on-site interviews, they typically interview people who support the project.

The second mandatory public comment period occurs when the project design document is made available on the internet for thirty days for state parties, stakeholders, and NGOs to provide their comments.²²⁵ In 2010, the Executive Board registered a total of 806 projects, yet only sixty-one projects received any comments.²²⁶ Engineers and project consultants submitted most of these comments, which focused on the technical aspects of the project, such as additionality and baseline and monitoring methodologies. Only six projects received criticism for inadequate community consultation or for a lack of information regarding the likely impacts on local stakeholders. This finding is

220. See, e.g., CHINA ENVTL. UNITED CERTIFICATION CENTER CO. LTD., VALIDATION REPORT FOR YUNNAN GENGMA TIECHANG RIVER 12.6MW HYDROPOWER PROJECT 28 (2009), <http://cdm.unfccc.int/UserManagement/FileStorage/O6QS4B7Y2EA1M9NTJD35XHZIG8UVRL>.

221. See, e.g., LUQUAN CNTY. XIAOPENGZU HYDROPOWER CO. LTD., PROJECT DESIGN DOCUMENT FOR XIAOPENGZU 44MW HYDROPOWER PROJECT, LUQUAN COUNTY, YUNNAN PROVINCE 41 (2010), <http://cdm.unfccc.int/UserManagement/FileStorage/7H9VU3WNYTZ4CD5MRBXAIGFSJOL6PK>.

222. Eddy & Wiser, *supra* note 181, at 211.

223. Modalities and Procedures, *supra* note 24, ¶ 62(b).

224. Eddy, *supra* note 199, at 86; Lövbrand, Rindeljäll & Nordqvist, *supra* note 212, at 87.

225. Modalities and Procedures, *supra* note 24, ¶¶ 27(h), 40(b)–(c); United Nations Framework Convention on Climate Change, Clean Development Mechanism Executive Board, Procedures for Processing and Reporting on Validation of CDM Project Activities, ¶¶ 3, 5(g), 10, 13, EB 50 Rep., Annex 48 (Oct. 16, 2009), available at http://cdm.unfccc.int/Reference/Procedures/valid_proc02.pdf.

226. This statistic is based on the author’s assessment of publicly available validation reports for all projects registered between Jan. 1, 2010 and Dec. 31, 2010. See *Project Cycle Search: Registered CDM Projects*, U.N. FRAMEWORK CONVENTION ON CLIMATE CHANGE, <http://cdm.unfccc.int/Projects/registered.html> (last visited Nov. 13, 2011).

supported by other empirical research, which found that fewer than 10 percent of CDM projects in Central America received online comments during the validation period.²²⁷ Astonishingly, none of the project design documents for the case studies discussed in Part II.C, below, received any online comments, even though there was obvious public opposition to the projects evidenced in national and international news sources.²²⁸

This lack of participation is due to a number of factors. First, unless individuals have access to the internet and routinely check the UNFCCC website, there is no notification procedure to alert the public that a CDM project is being verified and is open for comment. There are no requirements regarding how stakeholders will be notified of the start of this comment period, and there are no details on how the project design document will be made available to interested stakeholders if they do not have internet access. Second, without access to supporting documentation such as questionnaire responses, the minutes of public hearings, or EIA reports, NGOs and state parties have no information against which to judge the adequacy or veracity of the assertions made by project developers in the project design document.

3. *Environmental Impact Assessment*

EIAs outline ways in which project developers can avoid or minimize environmental and social costs, thereby enabling host countries to approve projects subject to certain modifications or conditions, which allow the project to proceed with minimal environmental consequences.²²⁹ Principles for domestic EIAs are found in the *Rio Declaration*²³⁰ and the United Nations Environment Programme's *Goals and Principles of Environmental Impact Assessment*.²³¹ Principle 17 of the *Rio Declaration* states that an EIA, "as a national instrument, shall be undertaken for proposed activities that are likely to have a significant impact on the environment and are subject to a decision of a competent national authority."²³² The provisions in these texts are couched in

227. Finley-Brook & Thomas, *supra* note 217, at 283.

228. TÜV SÜD INDUSTRIE SERVICE GMBH, VALIDATION OF THE CDM-PROJECT: XIAOXI HYDROPOWER PROJECT 15 (2008), <http://cdm.unfccc.int/UserManagement/FileStorage/EXT6N251OAG70F9IV4SHDRUKYCMP8Q> [hereinafter XIAOXI HYDROPOWER PROJECT VALIDATION REPORT]; DET NORSKE VERITAS, VALIDATION REPORT: MITIGATION OF METHANE EMISSIONS IN THE CHARCOAL PRODUCTION OF PLANTAR IN BRAZIL 16 (2007), <http://cdm.unfccc.int/UserManagement/FileStorage/EZG7AT3C7CHD70USTN3L11WK05JNQC> [hereinafter PLANTAR PROJECT VALIDATION REPORT]; DET NORSKE VERITAS, VALIDATION REPORT: A.T. BIOWATER RICE HUSK POWER PROJECT IN PICHIT, THAILAND 9 (2007), <http://cdm.unfccc.int/UserManagement/FileStorage/OUR7L1SX25WD2DXB1BHNCAGCR7PPW1>.

229. Kevin Gray, *International Environmental Impact Assessment: Potential for a Multilateral Environmental Agreement*, 11 COLO. J. INT'L ENVTL. L. & POL'Y 83, 88 (2000).

230. See *Rio Declaration on Environment and Development*, *supra* note 138, princ. 17.

231. U.N. Environment Programme, *Goals and Principles of Environmental Impact Assessment*, in BASIC DOCUMENTS OF INTERNATIONAL ENVIRONMENTAL LAW: VOLUME 1, at 187, 188 (Harald Hohmann ed., 1992).

232. *Rio Declaration on Environment and Development*, *supra* note 138, princ. 17.

aspirational terms and do not require domestic decision making to be unconditionally subject to an EIA.²³³ The UNFCCC states:

All Parties shall, taking into account their common but differentiated responsibilities and their specific national and regional development priorities . . . to the extent feasible . . . employ appropriate methods, for example impact assessments, formulated and determined nationally, with a view to minimizing adverse effects on the economy, on public health and on the quality of the environment, of projects or measures undertaken by them to mitigate or adapt to climate change.²³⁴

According to the CDM Modalities and Procedures, an EIA must only be performed when the project developer or the host country considers that the project's environmental impacts will be "significant."²³⁵ During the negotiations leading up to the adoption of the CDM Modalities and Procedures, the parties failed to agree upon guidelines for establishing what types of environmental impacts should be considered significant and guidelines or minimum standards for conducting an EIA. Thus, it is entirely up to the host country whether or not to require an EIA, unless a project is funded by the World Bank, in which case the Bank's policies and procedures would apply. Even if the potential impacts are considered significant, the "procedures . . . required by the host Party" will dictate the impacts considered, and the extent to which the public is consulted.²³⁶ The CDM does not require host countries to implement such procedures, and the Executive Board does not provide guidance to project developers operating in countries that lack laws and regulations regarding EIAs. Therefore, compliance with this loose CDM requirement depends entirely on developing countries' legal systems.

EIA reports for CDM projects are not made publicly available. Therefore, it is impossible to know whether the EIA processes for CDM projects in different jurisdictions are adequate. Lack of effective external scrutiny by public interest groups means such issues have gone undetected and unchallenged.²³⁷ Despite the fact that over two-thirds of developing countries have enacted some form of EIA legislation, scholars point out that EIA practices in the developing world generally fall far short of international good practice.²³⁸ Their main deficiencies include a focus on a very narrow range of potential impacts, a lack of consideration of alternatives to minimize damage to the environment, a failure to integrate public participation, and an absence of

233. Gray, *supra* note 229, at 92.

234. U.N. Framework Convention on Climate Change, *supra* note 158, art. 4 ¶ 1, ¶ 1(f).

235. Modalities and Procedures, *supra* note 24, ¶ 37(c).

236. *See id.*

237. Yan Wang, Richard Morgan & Mat Cashmore, *Environmental Impact Assessment of Projects in the People's Republic of China: New Law, Old Problems*, 23 ENVTL. IMPACT ASSESSMENT REV. 543, 566 (2003).

238. Christopher Wood, *Environmental Impact Assessment in Developing Countries*, 25 INT'L DEV. PLAN. REV. 301, 304 (2003).

monitoring requirements.²³⁹ China's EIA system, for example, has been criticized for its narrow focus on pollution of air, water, and soil, and its failure to incorporate social, health, and ecological impacts.²⁴⁰ Given that the environmental assessment of CDM projects is left to the discretion of the host country, it can only be assumed that the general criticisms of EIAs in developing countries also apply to the assessment of CDM projects in those countries.

4. Access to Justice

Neither the Kyoto Protocol nor the CDM Modalities and Procedures require host countries to provide a legal avenue for challenging host country decisions to approve projects or for enforcing national environmental laws. China, for example, does not allow any appeals against decisions of the relevant authorities to approve projects, irrespective of whether or not an EIA was conducted in accordance with national law.²⁴¹ Even if a host country does allow appeals by stakeholders or NGOs, courts in the developing world often lack the capacity to hold corporations accountable because the courts are underfunded, have inadequate human or administrative resources, are vulnerable to political influence, or are part of a legal system without laws sufficient to sustain a cause of action against project developers.²⁴² Corruption also prevents adequate enforcement of environmental standards in many countries.²⁴³

At the international level, the Executive Board can only review a proposed project if three or more members of the Executive Board or a state party requests a review.²⁴⁴ Neither local stakeholders nor NGOs can request a review based on the failure to meet validation requirements or the inadequacy of the public consultation process. Moreover, there is currently no procedure by which stakeholder input can be invited or considered during the Executive Board's review process.

Under the UNFCCC and the Kyoto Protocol, dispute settlement proceedings only apply to disputes arising between two or more state parties.²⁴⁵ The Kyoto Protocol has a Compliance Committee,²⁴⁶ which can

239. *Id.* at 305; CRAIK, *supra* note 164, at 42–43.

240. Wang, Morgan & Cashmore, *supra* note 237, at 558–59.

241. *Id.* at 557.

242. Natalie Bridgeman & David Hunter, *Narrowing the Accountability Gap: Toward a New Foreign Investor Accountability Mechanism*, 20 GEO. INT'L ENVTL. L. REV. 187, 196 (2008).

243. *Id.* at 197.

244. Modalities and Procedures, *supra* note 24, ¶ 41.

245. U.N. Framework Convention on Climate Change, *supra* note 158, art. 14; Kyoto Protocol, *supra* note 3, art. 19.

246. United Nations Framework Convention on Climate Change, Report of the Conference of the Parties Serving as the Meeting of the Parties to the Kyoto Protocol on Its First Session, Montreal, Can., Nov. 28–Dec. 10, 2005, *Procedures and Mechanisms Relating to Compliance Under the Kyoto*

suspend the eligibility of an Annex I Party to participate in the Kyoto Protocol's flexible mechanisms if that party ceases to meet eligibility requirements.²⁴⁷ However, the eligibility of non-Annex I Parties to host CDM projects is not subject to any restrictions, and non-Annex I Parties do not fall under the jurisdiction of the Kyoto Protocol's Compliance Committee. Therefore, the Compliance Committee cannot suspend non-Annex I Parties from participation in the CDM due to a failure to provide adequate public participation procedures or access to justice. The Compliance Committee also lacks the jurisdiction to review decisions made by the Executive Board.²⁴⁸ Thus, neither the Executive Board, the dispute settlement provisions under the Kyoto Protocol, nor the Compliance Committee can provide access to justice for victims of the international carbon offset industry.

Outside of the international climate change regime, there is currently no international court readily available for recourse by individuals or NGOs to challenge CDM projects.²⁴⁹ CDM stakeholders might take their claim to a regional human rights court or may allege breaches of the International Covenant on Civil and Political Rights to the United Nations Human Rights Committee.²⁵⁰ Such proceedings do not result in the kind of binding decisions that are desirable in the context of the CDM. Moreover, human rights litigation can only be used to address projects that specifically affect the rights of individuals, not to address the more general environmental and socioeconomic damage caused by a project.²⁵¹

C. Case Studies of Implemented CDM Projects

The following case studies illustrate how the regulatory deficiencies discussed above contribute to inequitable and unsustainable outcomes in certain hydroelectric, forestry, and waste projects within the CDM.

1. Hydroelectric Projects

Global enthusiasm for large dams has resurfaced now that they are seen as a source of renewable energy and a viable solution to climate change.²⁵² As of January 1, 2012, hydroelectric projects were the most common type of project in the CDM, with a total of 1941 projects either registered or undergoing

Protocol, Dec. 27/CMP.1, annex, pt. I, ¶ 1, 2, U.N. Doc. FCCC/KP/CMP/2005/8/Add.3 (Mar. 30, 2006), available at <http://unfccc.int/resource/docs/2005/cmp1/eng/08.pdf>.

247. *Id.* pt. XV, ¶ 4; The Annex I eligibility requirements to participate in the CDM are contained in the CDM Modalities and Procedures, *supra* note 24, ¶¶ 31–32.

248. Meijer & Werksman, *supra* note 59, at 204.

249. Ebbesson, *supra* note 172, at 693.

250. Optional Protocol to the International Covenant on Civil and Political Rights arts. 1, 2, Dec. 16, 1966, 999 U.N.T.S. 171 (effective Mar. 23, 1976).

251. Tim Stephens, *International Courts and Climate Change: 'Progression,' 'Regression' and 'Administration'*, in *IN THE WILDS OF CLIMATE LAW* 53, 60 (Rosemary Lyster ed., 2010).

252. Vidal, *supra* note 28, at 18.

validation.²⁵³ Of this number, China hosts 1208 hydroelectric projects, India hosts 191, and Brazil hosts 111.²⁵⁴ The electricity that these projects produce comes at a significant environmental cost, and dams are widely criticized as running counter to the CDM's goal of contributing to sustainable development.²⁵⁵ Dams reduce river flow and alter the natural hydrological regime, resulting in degraded water quality and reduced ecological functioning of the river. This in turn affects access to clean water and biological resources by those dependent on riverine ecosystems for their livelihoods. Dams also submerge large areas of land, displacing local communities and destroying riparian ecosystems, cultural heritage, and fertile land vital for farming and subsistence lifestyles.²⁵⁶

The European Union's Emissions Trading Scheme requires member states, when approving CDM hydroelectric projects with a generating capacity larger than 20 megawatts, to ensure that the guidelines contained in the *Report of the World Commission on Dams* are followed.²⁵⁷ In fulfilling this obligation, European Union member states may require the project developer to complete a World Commission on Dams Compliance Report.²⁵⁸ If the relevant member state requires the completion of the report, the project developer must provide information regarding, inter alia, the number of people who will be resettled, how relevant stakeholders have been informed of and involved in the decision making process, and how compensation and benefit agreements correspond with the identified needs and rights of stakeholders.²⁵⁹ On this basis, the designated operational entity or an accredited independent entity must validate the compliance report by assessing whether the project respects the seven strategic priorities for decision making detailed in the *Report of the World*

253. *Content of CDM/JI Pipeline: CDM Projects Grouped in Types*, U.N.E.P. RISØ CENTRE (Jan. 8, 2012), <http://cdmpipeline.org/cdm-projects-type.htm>.

254. *CDM Project Distribution Within Host Countries by Region and Type*, U.N.E.P. RISØ CENTRE (Jan. 1, 2012) <http://cdmpipeline.org/publications/CDMStatesAndProvinces.xlsx>.

255. See, e.g., Barbara Haya, *Failed Mechanism: How the CDM Is Subsidizing Hydro Developers and Harming the Kyoto Protocol*, INTERNATIONAL RIVERS (Nov. 2007), http://www.internationalrivers.org/files/Failed_Mechanism_3.pdf; John Nagle, *Discounting China's CDM Dams*, 7 LOY. U. CHI. INT'L L. REV. 9, 10 (2009).

256. WORLD COMM'N ON DAMS, DAMS AND DEVELOPMENT: A NEW FRAMEWORK FOR DECISION-MAKING: THE REPORT OF THE WORLD COMMISSION ON DAMS 15–16 (2000), available at http://www.unep.org/dams/WCD/report/WCD_DAMS%20report.pdf.

257. Directive 2004/101/EC, of the European Parliament and of the Council of 27 October 2004 Amending Directive 2003/87/EC Establishing a Scheme for Greenhouse Gas Emission Allowance Trading Within the Community, in Respect of the Kyoto Protocol's Project Mechanisms, art. 11b (6), 2004 O.J. (L 338) 18, available at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2004:338:0018:0018:EN:PDF>.

258. *Guidelines on a Common Understanding of Article 11b (6) of Directive 2003/87/EC as Amended by Directive 2004/101/EC (Non-Paper)* (Nov. 17, 2008), available at http://ec.europa.eu/clima/policies/ets/linking/ji-cdm/docs/art11b6_guide_en.pdf.

259. *Compliance Report Assessing Application of Article 11b (6) of Emissions Trading Directive to Hydroelectric Project Activities Exceeding 20MW* (Nov. 17, 2008), available at http://ec.europa.eu/clima/policies/ets/linking/ji-cdm/docs/art11b6_comp_temp_en.pdf.

Commission on Dams.²⁶⁰ The strategic priorities are: gaining public acceptance; comprehensive options assessment; addressing existing dams; sustaining rivers and livelihoods; recognizing entitlements and sharing benefits; ensuring compliance; and sharing rivers for peace, development, and security.²⁶¹ On the basis of the compliance report, the relevant member State will then make the final decision of whether or not to issue a Letter of Approval to the project developer.²⁶² The effectiveness of the European Union's approach is severely limited because even if a member State chooses to require the report, the project developer does not have to undertake any additional environmental assessment or public consultation; it merely requires the designated operational entity to form an additional opinion based on the information it would ordinarily receive from the project developer.

One of the most criticized CDM projects in China is the Xiaoxi Hydroelectric Project, financed by the German utility RWE. Flooding upstream of the dam required the resettlement of 7593 people.²⁶³ After conducting a field study of the area, the NGO International Rivers reported that many of those who were resettled into villages had known nothing but farming all their lives, but were not provided with alternative land to farm nor alternative employment opportunities after resettlement.²⁶⁴ Those who held out for more compensation were forcibly removed from their land.²⁶⁵ Even though the developer identified 7593 people that needed to be resettled, it surveyed only 316 people in the first round of surveys and 213 in the second round. The project's design document claimed that in the first round of surveys, 99 percent of the 316 respondents supported the project, and that in the second round of surveys, 97 percent of 212 respondents said they were satisfied with the compensation.²⁶⁶ The validation report prepared by the designated operational entity confirms that locals were not involved in the decision-making process, but the report referenced the surveys conducted by the dam operator in asserting that most locals were satisfied with the final outcome.²⁶⁷ The report assessing compliance with the World Commission on Dams also acknowledged that locals were not involved in the decision-making process, but nevertheless concluded that the "essence" of the World Commission on Dams' strategic

260. *Id.*; WORLD COMM'N ON DAMS, *supra* note 256, at 214–56.

261. WORLD COMM'N ON DAMS, *supra* note 256, at 214–56.

262. European Union, *supra* note 258, ¶ 7.

263. HUNAN XINSHAO XIAOXI HYDROPOWER DEV'T CO. LTD., PROJECT DESIGN DOCUMENT FOR XIAOXI HYDROPOWER PROJECT 34 (2008), <http://cdm.unfccc.int/UserManagement/FileStorage/D9XBLJ0Y7AP3WN6G4QR5UTZF2COIV1> [hereinafter XIAOXI HYDROPOWER PDD].

264. TINA LEA, INT'L RIVERS, XIAOXI AND XIAOGUSHAN CDM HYDROPOWER PROJECTS: REPORT FROM A FIELD TRIP, NOVEMBER 2008 9 (2008), <http://www.internationalrivers.org/files/XiaoxiXiaogushanReport.pdf>.

265. Joe McDonald & Charles Hanley, *China Dams Reveal Flaw in Warming Tool: Critics Worry Mechanism Doesn't Really Promote New Clean Energy Projects*, ASSOCIATED PRESS, Jan. 27, 2009, <http://www.msnbc.msn.com/id/28777386/>.

266. XIAOXI HYDROPOWER PDD, *supra* note 263, at 38.

267. XIAOXI HYDROPOWER PROJECT VALIDATION REPORT, *supra* note 228, at 33–34.

priorities were fulfilled because those affected “have improved their living environment.”²⁶⁸ This case study is exemplary of the gross inadequacy of the public consultations within the CDM. It also illustrates the significant disjuncture between the real impacts of projects on local communities and the information provided to the Executive Board.

The Changuinola Hydroelectric Project in Panama, which is being financed by the United States-based multinational power company AES Corporation, began construction in November 2006, and is currently undergoing CDM validation.²⁶⁹ The Project is situated within a nationally protected forest that serves as a buffer zone for La Amistad International Park, a World Heritage Site.²⁷⁰ The dam would affect the migration of fish, leading to the loss of major fish species within the Heritage Site, and would significantly reduce the flow of water to the San San-Pond Sak, a listed Wetland of International Importance.²⁷¹ In 2007, thirty-seven Panamanian and international environmental, scientific, and citizen groups filed a petition with the United Nations Educational, Scientific, and Cultural Organization’s World Heritage Committee to designate La Amistad as a site “in danger.”²⁷² The World Heritage Committee has requested the government of Panama to halt construction on the Changuinola River until a detailed environmental assessment of the wetland is undertaken.²⁷³ It has also requested the governments of Panama and Costa Rica to jointly invite a joint World Heritage Centre/International Union for Conservation of Nature monitoring mission to the site in order to assess the threat posed by ongoing dam construction and make a recommendation on the possible inscription of the property on the List

268. Ann-Kathrin Schneider, *International Rivers’ Critique of the Xiaoxi World Commission on Dams Compliance Report*, INTERNATIONAL RIVERS (May 2008), <http://www.internationalrivers.org/files/Xiaoxi%20critique.pdf>.

269. See *Changuinola I Hydroelectric Project in Panama*, UNFCCC, <http://cdm.unfccc.int/Projects/Validation/DB/TRB10UH4NZYNIGESERW4L7QGC126FR/view.html> (last visited July 23, 2011).

270. Letter from S. Jacob Scherr, Director, International Program, Natural Res. Def. Council, to Ms. Manja Welzel, TÜV SÜD Industrie Service GmbH, Carbon Mgmt. Serv. 4 (Aug. 8, 2008) (commenting on Changuinola I Hydroelectric Project (Panama)), available at <http://www.internationalrivers.org/files/Comments%20Changuinola-%20Panama%20NRDC%2008-08-2008.pdf>; *World Heritage List*, U.N. EDUCATIONAL, SCIENTIFIC & CULTURAL ORGANIZATION, <http://whc.unesco.org/en/list/205> (last visited Jan. 20, 2011).

271. Scherr, *supra* note 270, at 4; *The Ramsar List of Wetlands of International Importance*, RAMSAR CONVENTION ON WETLANDS, 31 (July 4, 2011), <http://www.ramsar.org/pdf/sitelist.pdf>.

272. Scherr, *supra* note 270, at 4. The List of World Heritage in Danger is comprised of sites that are threatened by serious and specific dangers such as large-scale public or private projects. Convention Concerning the Protection of the World Cultural and Natural Heritage art. 11 ¶ 4, Nov. 16, 1972, 1037 U.N.T.S. 151.

273. U.N. Educational, Scientific and Cultural Organization, World Heritage Comm., Rep. of Decs. Adopted by the World Heritage Comm. at Its 34th Sess., July 25–Aug. 3, 2010, dec. 34 COM 7B.32 at 85–86 ¶ 6, U.N. Doc. WHC-10/34.COM/20 (Sept. 3, 2010), available at <http://whc.unesco.org/document/104960>.

of World Heritage in Danger for consideration by the World Heritage Committee in 2012.²⁷⁴

Environmental NGOs have condemned the project, asserting that the CDM should not support a project that undermines the goal of sustainable development by violating the human rights of indigenous communities and damaging areas of international significance.²⁷⁵ The dam threatens the livelihood of approximately 5000 members of the Ngöbe indigenous forest dwellers who would lose their lands and access to fish.²⁷⁶ In 2008, villagers blocked ingress to the dam construction site for two weeks before the government brought in tear gas and tanks. Police officers, receiving a salary from the project developer, brutally attacked protesters, injuring men, women, and children. Police have maintained a presence at the site ever since, restricting the movement of the Ngöbe people throughout their traditional lands.²⁷⁷

The project's design document claims that the project is important to the sustainable development of the Bocas del Toro province,²⁷⁸ but fails to mention the uncompensated social and environmental impacts, human rights issues, land tenure conflicts, social opposition, threats to rare and endangered species, or impacts on areas of international significance caused by the project. Instead, the project design document merely states that "the project is receiving ample support by local communities and the local and national government."²⁷⁹ The EIA approved by the Panamanian government suggested that the majority of the local population supported the project, yet household surveys completed as part of the EIA process recorded widespread and serious concern.²⁸⁰ Letters from locals opposing the project were sent to the Panamanian government during the public consultation period, but were not taken into consideration during the approval process.²⁸¹ Consultations occurred before the Ngöbe people became aware of the project, so that communities who later opposed the project did not have the opportunity to attend the formal

274. U.N. Educational, Scientific and Cultural Organization, World Heritage Comm., Decs. Adopted by the World Heritage Committee at Its 35th Sess., June 19–29, 2011, dec. 35 COM 7B.29 at 73–74 ¶ 8, U.N. Doc. WHC-11/35.COM/20 (July 7, 2011), available at <http://whc.unesco.org/document/107150>.

275. See, e.g., Scherr, *supra* note 270; Osvaldo Jordan & Peter Galvin, *ACD Comments on Changuinola 1 (Chan 75) Large Hydro Project (Panama): Alliance for Conservation and Development, and Center for Biological Diversity Comments on Changuinola 1 (Chan 75) Large Hydro Project Panama*, INT'L RIVERS, <http://www.internationalrivers.org/en/global-warming/the-cdm-kyotos-carbon-offsetting-scheme/acd-comments-changuinola-1-chan-75-large-hydr> (last visited Jan. 20, 2011).

276. Scherr, *supra* note 270, at 3.

277. Finley-Brook & Thomas, *supra* note 217, at 276.

278. AES CHANGUINOLA S.A., CHANGUINOLA HYDROELECTRIC PROJECT, PANAMA PROJECT DESIGN DOCUMENT 35 (June 11, 2008), http://www.netinform.net/KE/files/pdf/AES_Changuinola.pdf [hereinafter CHANGUINOLA HYDROELECTRIC PDD].

279. *Id.*

280. Finley-Brook & Thomas, *supra* note 217, at 275.

281. *Id.*

stakeholder consultations, and their perspectives were not recorded in the project design document.²⁸² Despite the widespread opposition to the project, the project design document states that only thirteen interested stakeholders were present at the public hearings and only nine people commented on the project.²⁸³ In 2008, when the project design document was posted on the UNFCCC website, the month-long window to submit comments passed without any comments being submitted.²⁸⁴

The AES Corporation has reportedly used intimidation and coercion to obtain signatures for individual relocation agreements, which has spurred internal division and cultural disruption among the Ngöbe people as multi-generational households were split into nuclear family units.²⁸⁵ The U.N. Special Rapporteur on the Situation of Human Rights and Fundamental Freedoms of Indigenous Peoples has issued a Special Report on the project, noting significant discontent with the project and stating that the Panamanian government ignored its obligations to consult with communities and seek free, prior, informed consent.²⁸⁶ In 2008, two NGOs filed a formal petition with the Inter-American Commission on Human Rights to protect the human rights of the Ngöbe people under the American Convention on Human Rights.²⁸⁷ In June 2009, the Inter-American Commission ordered “precautionary measures,” requiring Panama to suspend the construction of the dam while the Commission held a hearing and deliberated on the merits of the case. The Inter-American Commission also “called upon the government of Panama to guarantee the Ngöbe people basic human rights, including rights to life, physical security, property, and freedom of movement.”²⁸⁸ Panama ignored this call and in August 2009, the Inter-American Commission on Human Rights formally charged the Panamanian government with violating twelve separate articles of the American Convention on Human Rights.²⁸⁹ In November 2009,

282. *Id.*

283. CHANGUINOLA HYDROELECTRIC PDD, *supra* note 278, at 34.

284. UNFCCC *Projects for Comments: Changuinola I Hydroelectric Project in Panama*, TÜV SÜD INDUSTRIE SERVICE, http://www.netinform.net/KE/Wegweiser/Guide2_3.aspx?ID=5097&Ebene1_ID=26&Ebene2_ID=1602&mode=0 (last visited July 27, 2011).

285. Finley-Brook & Thomas, *supra* note 217, at 276.

286. Special Rapporteur on the Situation of Indigenous People, *Report on the Situation of Human Rights and Fundamental Freedoms of Indigenous People, Addendum: Observations on the Situation of the Charco la Pava Community and Other Communities Affected by the Chan 75 Hydroelectric Project in Panama*, U.N. Doc. A/HRC/12/34/Add.5 (Sept. 7, 2009) (by James Anaya), available at <http://www2.ohchr.org/english/bodies/hrcouncil/docs/12session/A.HRC.12.34.Add.5.pdf>; U.N. Special Rapporteur Issues Report on Panama Dam, CULTURAL SURVIVAL (May 21, 2009), <http://www.culturalsurvival.org/news/panama/un-special-rapporteur-issues-report-panama-dam>.

287. *Panama's Ngöbe Indians Win Major Victory at Inter-American Commission on Human Rights: Dam Construction Ordered Haltered*, CTR. FOR BIOLOGICAL DIVERSITY (June 19, 2009), http://www.biologicaldiversity.org/news/press_releases/2009/changuinola-06-19-2009.html; Organization of American States, American Convention on Human Rights art. 44, Nov. 22, 1969, O.A.S.T.S. No. 36, 1144 U.N.T.S. 123.

288. CTR. FOR BIOLOGICAL DIVERSITY, *supra* note 287.

289. Finley-Brook & Thomas, *supra* note 217, at 277.

the Panamanian government, Ngöbe people, and AES Corporation entered into an agreement to settle the conflict through negotiations and further agreements that respect Panama's commitments under the American Convention on Human Rights.²⁹⁰ Construction of the project was completed in 2011.²⁹¹

2. *Forestry Projects*

Like hydroelectric projects, forestry projects carry significant environmental and social risks. The most significant social risk associated with forestry projects is that industrial plantations supported by CDM financing could exacerbate existing disparities in land distribution and deprive communities of customary land rights and livelihoods. So called "degraded" areas of forest targeted for CDM plantations may, in fact, be common property resources utilized by local people for a variety of uses such as fuel supply, subsistence farming, and grazing.²⁹² Scholars warn that social risks are probably the greatest in areas where rural land tenure is unclear and land conflicts are endemic, and that negative impacts are likely to be even higher where governments are repressive, governance is poor, and strong economic and political alliances exist between the government and the timber industry.²⁹³ CDM reforestation projects usually consist of a monoculture plantation of fast-growing, non-endemic tree species that sequester large amounts of carbon, but have significantly lower biodiversity values than native vegetative landscapes and can threaten endemic ecosystems.²⁹⁴ Although the Convention on Biological Diversity requires parties to prevent the introduction of alien species that threaten native ecosystems,²⁹⁵ the CDM provides the economic incentive to engage in such practices as a cost-effective way to generate CERs.

The first forestry project registered by the Executive Board—the Plantar Eucalyptus Project in Brazil—was financed by the World Bank's Prototype Carbon Fund.²⁹⁶ The project consists of vast eucalyptus plantations covering over 23,000 hectares. The timber produces charcoal for use in pig iron production, replacing the imported coal typically used.²⁹⁷ According to the

290. *Agreement Between the Panamanian Government, Company AES Changuinola, and Indigenous Ngobe Communities*, INDIGENOUS PEOPLES ISSUES & RES. (Nov. 28, 2009), http://indigenouspeoplesissues.com/index.php?option=com_content&view=article&id=2959:agreement-between-the-panamanian-government-company-aes-changuinola-and-indigenous-ngobe-communities&catid=60:central-american-and-caribbean-indigenous-peoples&Itemid=82.

291. *Press Notes: Changuinola I Reservoir Filled*, AES CHANGUINOLA (June 24, 2011) http://www.aeschanguinola.com/eng/pressnotes_details.asp?id_noticia=131.

292. Smith, *supra* note 29, at 328.

293. *Id.*

294. Alejandro Caparrós & Frédéric Jacquemont, *Conflicts Between Biodiversity and Carbon Sequestration Programs: Economic and Legal Implications* 46 ECOLOGICAL ECON. 143, 153 (2003).

295. Convention on Biological Diversity art. 8(h), June 5, 1992, 1760 U.N.T.S. 79.

296. *Brazil: Plantar Sequestration and Biomass Use*, WORLD BANK CARBON FIN. UNIT <http://wbcarbonfinance.org/Router.cfm?Page=PCF&FID=9707&ItemID=9707&ft=Projects&ProjID=9600> (last visited Jan. 20, 2011).

297. Vlachou & Konstantinidis, *supra* note 14, at 42.

World Bank, the project aims to demonstrate that “[c]arbon finance for well-managed forests . . . can reduce destruction of native forests, help conserve their unique biodiversity, help preserve local community use of forest fruits and other non-timber products, and secure high-quality employment in rural areas with few other employment opportunities.”²⁹⁸

Plantar’s project design document states that “as the project activity refers to implementation of improvements in the existing carbonization process, no relevant negative environmental impacts are expected within the project boundaries.” It also states that “[t]he project activity is expected to result in positive social and environmental impacts” and is “expected to strongly contribute to sustainable development within the project region and Brazil.”²⁹⁹ The validation report supports the World Bank’s conclusions. Public consultation was conducted in two stages. During the first stage, the project did not receive any comments, and during the second stage, all comments were “positive in nature.”³⁰⁰

However, in a letter addressed to the Members of the Executive Board, the NGO CDM Watch cited extensive environmental and social damage caused by the project, including: the contamination and disappearance of rivers and streams due to the rapid absorption of water by the plantation; the forced displacement of farmers and indigenous forest-dwelling communities; land disputes between communities fighting to recover their ancestral territory; the repression, criminalization, and intimidation of local community leaders who oppose the project; the threat to food security in areas surrounding eucalyptus plantations; and high rates of work-related accidents and disease among local people employed to work on the plantation.³⁰¹ A recent documentary produced by Carbon Trade Watch exposed the environmental degradation caused by the project, and in particular the hardship suffered by local farmers due to the disappearance of water from rivers, streams, and wells in the region.³⁰² Such negative publicity has caused the project to become a “public relations disaster” for the World Bank.³⁰³ The fact that the project design document and the validation report did not identify these impacts highlights the significant shortcomings in the CDM’s legal framework.

298. WORLD BANK CARBON FIN. UNIT, *supra* note 296.

299. PLANTAR S/A, PROJECT DESIGN DOCUMENT FOR THE PLANTAR PROJECT, BRAZIL, 48 (July 5, 2007), available at <http://cdm.unfccc.int/UserManagement/FileStorage/SA151AS7ID4USW89GIC3IOQX98RTKL>.

300. PLANTAR PROJECT VALIDATION REPORT, *supra* note 228, at 15–16.

301. *Plantar S.A. CDM Project: Global Warming Continues Unabated: A Letter to the Members of the CDM Executive Board*, CDM WATCH (2009) http://www.cdm-watch.org/wordpress/wp-content/uploads/2010/03/plantar_letter-to-the-executive-board.pdf (last visited Jan. 20, 2011).

302. *The Carbon Connection—New Documentary Examines the Impact of Carbon Trading*, CARBON TRADE WATCH (2011), <http://www.carbontradewatch.org/carbon-connection/index.html>.

303. Ben Pearson & Jutta Kill, *How Plantar Sinks the World Bank’s Rhetoric: Tree Plantations and the World Bank’s Sinks Agenda*, SINKSWATCH (June 2004), http://www.sinkswatch.org/sites/fern.org/files/How%20Plantar%20sinks%20the%20WB’s%20rhetoric_0.pdf.

3. *Biomass and Waste Projects*

Biomass and waste projects collect and incinerate agricultural waste or landfill to generate heat and produce electricity. These projects are seen as renewable sources of electricity, but communities in developing countries often depend on this waste for their livelihoods.³⁰⁴ In Thailand, many CDM projects burn rice husks to produce electricity. The AT Biopower Project, which is financed by a Japanese power company and Mitsubishi Securities, requires 500 tons of rice husks per day to generate electricity at its 22-megawatt power plant.³⁰⁵ However, rice husks are also used in Thailand as a form of fertilizer and play a vital role in small-scale agriculture throughout the country.³⁰⁶ Biomass power plants have forced local farmers to replace rice husk fertilizer with nitrogen-based chemical fertilizers because demand from power plants has driven up the price of rice husks.³⁰⁷ This destroys a self-sufficient economic system and increases the emissions of nitrous oxides from synthetic fertilizers, which have a greenhouse warming potential 296 times greater than carbon dioxide.³⁰⁸ Local residents have also complained of respiratory problems and skin irritations from the silica ash emitted from the power plant.³⁰⁹

The project design document did not consider the impacts of increased use of chemical fertilizer and resultant emissions, the dependence of local farmers on rice husks, or the potential impacts of the silica ash.³¹⁰ Instead, the project design document states that the project will “assist Thailand’s sustainable growth by providing electricity through biomass power production without relying on fossil fuel combustion,” and “[i]n addition to providing renewable energy, the Project will have an added contribution to Thailand’s sustainable development in that it will improve the disposal of a major source of agricultural waste.”³¹¹

Other waste projects that incinerate landfill also undermine the livelihoods of local waste pickers. Waste pickers are workers in the informal economy who recover and sell recyclable materials from landfills.³¹² Nearly 60 percent of Delhi’s waste, for example, is recycled by tens of thousands of pickers.³¹³

304. TAMRA GILBERTSON & OSCAR REYES, CARBON TRADING: HOW IT WORKS AND WHY IT FAILS 66 (2009), available at http://www.dhf.uu.se/pdfiler/cc7/cc7_web_low.pdf.

305. *Id.*

306. *Id.*

307. *Id.* at 67.

308. *Id.* at 68.

309. Nantiya Tangwisutijit, *Renewable Energy: Not So Clean and Green After All?*, IPS NEWS (Oct. 23, 2009), <http://www.ipsnews.net/news.asp?idnews=48967>.

310. A.T. BIOPOWER CO. LTD., PROJECT DESIGN DOCUMENT FOR THE A.T. BIOPOWER RICE HUSK POWER PROJECT IN PICHIT, THAILAND (Jan. 25, 2007), available at <http://cdm.unfccc.int/UserManagement/FileStorage/I2OT9XDEU9M0A8BK5P62P06OG8P24C>.

311. *Id.* at 2–3.

312. *Waste Energy Projects*, CDM WATCH, http://www.cdm-watch.org/?page_id=445 (last visited Jan. 20, 2011).

313. John Vidal, *U.N. Incineration Plans Rejected by World’s Rubbish-Dump Workers*, GUARDIAN (London), Aug. 6, 2010, at 24.

Waste projects deny waste pickers access to recyclable materials, reducing the earnings of society's poorest workers. The effect of waste pickers on greenhouse gas emissions from landfill are not calculated into the emission baselines of these projects, which means that when CDM projects replace recycling with incineration they actually increase the level of greenhouse gas emissions. In addition, waste-to-energy power plants emit carcinogenic chemicals, such as dioxin and heavy metals, which pose significant health risks to local communities. CDM Watch argues that "[t]o reduce emissions and protect livelihoods, grassroots recycling should be expanded and protected, not displaced."³¹⁴ In response to this problem, the NGO Gaia, an alliance of five hundred anti-incinerator groups across eighty countries, has called upon the Executive Board to stop approving waste-to-energy projects and begin investing climate funds in the informal recycling sector to increase employment and improve labor conditions while reducing emissions.³¹⁵

D. Lessons from Case Studies

The sobering conclusion from these case studies and preceding analysis is that the CDM Modalities and Procedures are grossly inadequate. The rules regarding access to information and public participation are so scant in detail that they have become a perfunctory box-ticking exercise and do not provide for any meaningful or effective public input into project design and implementation. This enables project developers to orient projects primarily toward reducing greenhouse gas emissions as cheaply as possible and to ignore the collateral social and environmental impacts of projects, resulting in either no or marginal contribution to sustainable development. The initial assumption of the win-win relationship between local stakeholders and project developers does not eventuate for many projects because the CDM regulatory framework does not require project developers or decision makers to take socioeconomic aspects into account. In each of the case studies, environmental and social impacts were neither identified nor considered prior to project approval, and public participation and EIAs were either completely absent or grossly inadequate. Local communities were not given the opportunity to influence project design, to input their knowledge of local environmental and economic conditions, or to ensure their basic needs were maintained by the project.

Sustainable development's call for the integration of environmental, economic, and social concerns requires the consideration of potential environmental and social impacts to a greater degree than the CDM currently provides. Perversely, the CDM also fails to penalize project developers for negative impacts, and provides incentives for projects that deliver cheap carbon credits but that damage biodiversity, exacerbate inequality, and lead to human

314. CDM WATCH, *supra* note 312.

315. Vidal, *supra* note 313, at 24.

rights abuses.³¹⁶ The UNFCCC accepts projects that violate fundamental goals of the United Nations, such as biodiversity conservation and poverty alleviation. Moreover, the lack of opportunities for stakeholders to lodge complaints or initiate reviews means the CDM is lagging behind the emerging principle of access to justice in international law, exemplified by the Aarhus Convention and the practices of international financial institutions, such as the World Bank.

Some scholars argue that the failure of the CDM Modalities and Procedures to provide “consistent, minimum EIA standards could create an incentive for some project developers to seek CDM host countries with the weakest EIA laws or practices.”³¹⁷ While developing host countries are free to set higher standards, they are unlikely to do so individually because they have no direct incentive to do so. Sustainable development benefits have no tangible economic value to host countries or project developers, and more onerous sustainable development requirements might shift CDM projects toward neighboring countries that offer a better return on investment and fewer regulatory hurdles.³¹⁸ Approvals can be obtained extremely quickly in many host countries. CDM project approval can take four to six months in Brazil, one month in China, and only one week in India.³¹⁹ Although a direct causative link cannot be drawn between approval processing time and the attractiveness of a host country for CDM investment, the desirability of procuring international investment heavily influences the host country’s decision making and the level of protection afforded to local stakeholders often depends on the relative power of the state and the corporation in question.³²⁰ Some argue that the consequence of this economic pressure is a “race to the bottom,” with developing countries undercutting each other in terms of sustainable development standards in order to attract CDM investment.³²¹ It is also possible that developing countries may not be actively relaxing their environmental standards in order to attract more investment, but rather that the CDM causes host countries to be “stuck at the bottom” with no incentive to improve its standards in order to increase the contribution of projects to sustainable development.³²²

Nevertheless, there are grounds for optimism. Host countries that have unilaterally required a high degree of public scrutiny over the implementation

316. Ben Pearson, *Market Failure: Why the Clean Development Mechanism Won't Promote Clean Development*, 15 J. CLEANER PROD. 247, 249 (2007).

317. Eddy & Wiser, *supra* note 181, at 211.

318. Van Asselt & Gupta, *supra* note 16, at 349.

319. Newell, Jenner & Baker, *supra* note 163, at 728.

320. Peter Newell, *Varieties of CDM Governance: Some Reflections*, 18 J. ENV'T & DEV. 425, 426 (2009).

321. Sutter & Parreño, *supra* note 147, at 76.

322. See Benjamin Richardson, Ikechi Mgbeoji & Francis Botchway, *Environmental Law in Post-Colonial Societies: Aspirations, Achievements and Limitations*, in ENVIRONMENTAL LAW FOR SUSTAINABILITY 413, 437–438 (Benjamin Richardson & Stepan Wood eds., 2006).

of projects have achieved significant benefits for their communities. The Cable Cars Metro Project in Medellín, Colombia, was financed by the Swiss government and registered by the Executive Board in 2010. The project developer conducted an extensive social impact assessment. It held fifty meetings with local stakeholders, involving a total of 2000 participants.³²³ Working groups for specific issues, including environment, education, and culture, were created amongst the locals and included representatives of schools and environmental groups. The project developer provided information to the community through walk-in information cubicles and street events. The project has been widely praised for replacing the use of old buses, cars, and taxis, reducing CO₂, and providing the poorest people living in the hilly areas of Medellín with cheap, convenient, and fast transportation to the center of the city.³²⁴ This project demonstrates that it is possible to implement projects with a rigorous EIA and public consultation while still providing a healthy return on investment. The following part of this Article—Part III—provides the legal and normative bases for reforming the CDM and outlines a set of recommendations to rectify the regulatory deficiencies discussed above.

III. AN EQUITABLE CDM APPEALS PROCESS

In order to improve the performance of the CDM in terms of integrating local stakeholders' needs, reducing environmental impacts, and contributing to sustainable development, more detailed procedural requirements need to be implemented at the international level. Stakeholders and NGOs also should be granted access to the impending CDM appeals process in order to challenge the registration of CDM projects and the issuance of CERs. Project developers and carbon industry bodies oppose stringent CDM requirements on the basis that such requirements will increase transaction costs and make emission reductions more expensive to achieve.³²⁵ While continuing to externalize environmental and socioeconomic costs may seem economically rational to CDM investors, there are strong legal, normative, and practical reasons for improving the CDM's contribution to sustainable development.

Claims of economic efficiency should not override environmental and social considerations because the goal of cost-efficiency is not the paramount objective of the UNFCCC. The goal of cost-efficiency must be reconciled with the environmental and social objectives of the Convention.³²⁶ The CDM's implementation should also be guided by the framework principles of the

323. EMPRESA DE TRANSPORTE MASIVO DEL VALLE DE ABURRÁ LTDA, PROJECT DESIGN DOCUMENT FOR CABLE CARS METRO PROJECT MEDELLIN, COLOMBIA, 36–38 (2009), available at <http://cdm.unfccc.int/UserManagement/FileStorage/QF27NA6PO8DWXEKUYHT314RJC9MISG>.

324. *Energy Efficient Cable Cars in Medellin, Colombia*, MY CLIMATE, <http://www.myclimate.org/en/carbon-offset-projects/international-projects/detail/mycproject/102.html> (last visited Jan. 21, 2011).

325. Driesen, *supra* note 56, at 65; Bruce Chadwick, *Transaction Costs and the Clean Development Mechanism*, 30 NAT. RES. FORUM 256, 260 (2006).

326. Melkas, *supra* note 134, at 274.

Convention.³²⁷ Cost-efficiency must be reconciled with the goal of sustainable development³²⁸ and the precautionary principle, which states that “where there are threats of serious or irreversible damage, lack of full scientific certainty should not be used as a reason for postponing” measures to mitigate environmental harm.³²⁹ The CDM must also accommodate the first principle of the Convention that climate change should be tackled “on the basis of equity,”³³⁰ as well as the preamble assertion that “responses to climate change should be coordinated with social and economic development in an integrated manner with a view to avoiding adverse impacts on the latter.”³³¹ These principles and assertions clearly require that climate change mitigation activities should not exacerbate existing socioeconomic inequalities, and that economic efficiency should not come at the unmitigated expense of sustainability. The CDM fails to strike this necessary balance because its current legal framework focuses only on a project’s ability to achieve low-cost emission reductions, rather than providing for the integration of socioeconomic and environmental considerations.³³² The CDM is patently incompatible with the precautionary principle because, without an EIA, the predictable environmental impacts of projects are not identified, mitigated, or avoided.

The polluter-pays principle remains conspicuously absent from the UNFCCC, but it is considered one of the fundamental principles of international environmental law, and it does provide an important normative basis upon which to evaluate the CDM.³³³ The principle states that countries should “endeavor to promote the internalization of environmental costs” and take into account that “the polluter should, in principle, bear the cost of pollution.”³³⁴ The CDM, as part of the international emissions trading system, internalizes the cost of greenhouse gas emissions, but polluters who use the mechanism remain free to off-load certain environmental and social costs associated with climate change mitigation onto the developing world. In developing countries, environmental and social costs are externalized to a greater extent than in industrialized countries, where there are generally greater environmental safeguards. In the context of the CDM, this gives developing countries a competitive advantage by providing cheaper emission reductions than in the industrialized world. Higher transaction costs resulting from more stringent EIA and public participation requirements in the CDM will raise the

327. Philippe Cullet, *Equity and Flexibility Mechanisms in the Climate Change Regime: Conceptual and Practical Issues*, 8 REV. EUR. CMTY. & INT’L ENVTL. L. 168, 173 (1999); Melkas, *supra* note 134, at 275.

328. U.N. Framework Convention on Climate Change, *supra* note 158, art. 3 ¶ 4; Kyoto Protocol, *supra* note 3, art. 12(2).

329. U.N. Framework Convention on Climate Change, *supra* note 158, art. 3 ¶ 3.

330. *Id.* art. 3 ¶ 1.

331. *Id.* pmbi. para. 21.

332. Voigt, *supra* note 153, at 240.

333. See BIRNIE, BOYLE & REDGWELL, *supra* note 41, at 27–28.

334. *Rio Declaration on Environment and Development*, *supra* note 138, princ. 16.

market price of CERs so that they represent a closer approximation of the true environmental and social costs of projects.³³⁵ This will provide the economic incentive for project developers to invest in renewable energy and energy efficiency projects that generate greater social and environmental benefits. The higher costs associated with conducting public consultations and EIAs for large-scale projects, such as hydroelectric and waste projects, will make these projects less attractive to investors.

Project developers might argue that EIAs and more stringent public consultation procedures will lead to the demise of the CDM by increasing the price of CERs to the extent that the CDM is no longer a viable alternative to domestic emission reductions. This suggests that the CDM is only profitable so long as certain environmental costs continue to be imposed on the developing world. Without leveling the regulatory playing field in terms of stakeholder involvement and EIA, the blatant environmental cost-shifting to developing countries will continue in defiance of the polluter-pays principle. Serious regard for sustainable development, as opposed to mere “lip service,” requires at least some consideration of the positive and negative externalities of projects, even if doing so would impose a cost barrier on some projects.³³⁶

There is also a strong business case for more extensive public participation and EIA procedures.³³⁷ Scholars agree that a level regulatory playing field and stronger international governance may remove some of the perceived or actual commercial risks associated with host country choice. Regulation by international bodies can reduce risk and thus encourage greater private sector participation, especially in countries and regions with “poor governance indicators,” such as Sub-Saharan Africa.³³⁸ Stricter public participation requirements will enable project developers to recognize and address community needs, gain community support early in the project cycle, and avoid delays and financial risks associated with legal action or local unrest, such as the social conflict and legal proceedings that have enveloped the Changuinola Hydroelectric Project.³³⁹

Within climate change negotiations, developing countries have frequently invoked the sovereign right to exploit natural resources in their opposition to the proposal for internationally determined sustainable development criteria.³⁴⁰ In accordance with the doctrine of state sovereignty, states have a customary

335. Driesen, *supra* note 56, at 65.

336. *Id.*

337. See e.g., STEVEN HERZ, JONATHAN SOHN & ANTONIO LA VINA, WORLD RES. INST., DEVELOPMENT WITHOUT CONFLICT: THE BUSINESS CASE FOR COMMUNITY CONSENT (May 2007), available at http://pdf.wri.org/development_without_conflict_fpic.pdf.

338. See Lin & Streck, *supra* note 20, at 96.

339. Smith, *supra* note 29, at 335; Kenber, *supra* note 171, at 267.

340. U.N. Conference on the Human Environment, Stockholm, Swed., June 5–16, 1972, *Stockholm Declaration on the Human Environment*, princ. 21, U.N. Doc. A/Conf.48/14/Rev.1 (1973) [hereinafter *Stockholm Declaration on the Human Environment*]; *Rio Declaration on Environment and Development*, *supra* note 138, princ. 2.

law duty 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.³⁴¹ However, international law does not require states to assess possible impacts of activities wholly within their own borders.³⁴² References to public participation and EIA in existing multilateral environmental treaties are limited and are primarily found in regional treaties, particularly under the auspices of the United Nations Economic Commission for Europe.³⁴³

Scholars have pointed out that there is nothing inherent or fundamental about the nature of statehood that makes it impossible for states to be subjected to international law.³⁴⁴ Professor James Brierly argues that “sovereignty” is merely a term that “designates an aggregate of particular and very extensive claims that states habitually make for themselves,” and in reality, the difficulty of subjecting states to international law is the fact that states possess power.³⁴⁵ International environmental law has been increasingly concerned with international governance and decision making at the international level due to a growing realization that the traditional conception of state sovereignty is inconsistent with an ecologically interdependent world.³⁴⁶ Scholars agree that that the global challenge of climate change may profoundly transform traditions of international law by reshaping expectations around the role of states, international institutions, private entities, and individuals.³⁴⁷ Indeed, the CDM is already at odds with the traditional view that only sovereign states could be directly affected by international regulation.³⁴⁸

In accordance with the doctrine of sovereignty, “consent reigns supreme in international law” and the “rules of law binding upon states emanate from their own free will.”³⁴⁹ Even though an international appeals process with standing for individuals and NGOs would be unprecedented in international law, multilateral environmental agreements are replete with examples of measures

341. Trail Smelter Arbitration (U.S. v. Canada), 3 R.I.A.A. 1905, 1965 (1941); Legality of the Threat or Use of Nuclear Weapons, Advisory Opinion, 1996 I.C.J. 226, 242 (July 8); *Stockholm Declaration on the Human Environment*, *supra* note 340, princ. 21; *Rio Declaration on Environment and Development*, *supra* note 138, princ. 2; U.N. Framework Convention on Climate Change, *supra* note 158, pmb. para. 8.

342. BIRNIE, BOYLE & REDGWELL, *supra* note 41, at 167.

343. See, e.g., Aarhus Convention, *supra* note 175; Convention on Environmental Impact Assessment in a Transboundary Context, Feb. 25, 1991, 1987 U.N.T.S. 309.

344. J. L. BRIERLY, *THE LAW OF NATIONS: AN INTRODUCTION TO THE INTERNATIONAL LAW OF PEACE* 47 (6th ed. 1963); Bodansky, *supra* note 114, at 614.

345. BRIERLY, *supra* note 344, at 47–48.

346. SANDS, *supra* note 177, at 14; Susan Bragdon, *National Sovereignty and Global Environmental Responsibility: Can the Tension Be Reconciled for the Conservation of Biological Diversity?* 33 HARV. INT’L L.J. 381, 391 (1992); Bodansky, *supra* note 114, at 610.

347. See, e.g., Christina Voigt, *State Responsibility for Climate Change Damages*, 77 NORDIC J. INT’L L. 1 (2008).

348. Voigt, *supra* note 153, at 253.

349. RAJAMANI, *supra* note 47, at 2; Jutta Brunnée, *COPing with Consent: Law-Making Under Multilateral Environmental Agreements*, 15 LEIDEN J. INT’L L. 1, 7 (2002).

aimed at correcting the perverse externalities caused by the global market economy and compensating for the developing world's inability to reach the same environmental standards as the industrialized world.³⁵⁰ The CDM's regulatory framework has already evolved through a pragmatic process of trial and error, with the COP/MOP responding to perceived deficiencies and correcting market failures as they become apparent.³⁵¹ It is therefore entirely possible to strengthen the rules by which the CDM market was created to ensure that it delivers benefits to its intended beneficiaries. Such measures will not interfere with the ability of states to freely govern their internal affairs nor prevent states from exploiting their natural resources pursuant to their own developmental policies. The reforms will merely require project developers, who voluntarily participate in the CDM, to comply with an additional set of requirements in order for their project to be eligible to receive United Nations subsidies in the form of CERs. The reforms will mandate adherence to procedural requirements, but will not require that outcomes reflect substantive environmental objectives.³⁵² Given that the CDM is, after all, an international offset market and that without its existence these projects would not have otherwise gone ahead, the responsibility for regulating the market and correcting its failures should rest entirely at the international level.

The doctrine of sovereignty is not the reason why states object to certain international laws. It is merely a concept that is used to legitimize their objection. Arguing that the recommendations in this Article cannot be implemented because they infringe upon state sovereignty obfuscates the political and economic reality surrounding developing states' unwillingness to risk a reduction in foreign investment.

A. *Reforming the Operation of the CDM*

In order to rectify the deficiencies identified in Part II and improve the CDM's contribution to sustainable development, the Executive Board should establish an expert Sustainability Panel responsible for formulating detailed EIA and public participation requirements for each type of CDM project. The Panel should also be responsible for issuing guidelines and clarifications of the various procedural requirements and for reviewing the adequacy of the EIA and public consultations conducted by project developers.

Project design documents, EIA reports, and validation reports should be made publicly available in English and the relevant language of the host country or sub-national region. Notifications about the project that include information on the availability of documentation, such as EIAs and project design documents, and information on how stakeholders can participate in

350. See, e.g., Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal, Mar. 22, 1989, 1673 U.N.T.S. 57.

351. Krey & Santen, *supra* note 57, at 232.

352. CRAIK, *supra* note 164, at 33.

public consultations, should be made available not only on the UNFCCC website, but in culturally appropriate local media, including newspapers, radio, TV, and public notices.

The notice for public consultation should include information on the proposed activity, its possible impacts, and the nature of the possible decision. Once the project developer has distributed the relevant notifications, it must provide members of the public with the EIA report and any non-confidential supplemental information used in the preparation of the EIA upon request. Draft EIA reports in the relevant language should be made publicly available prior to public consultation to allow sufficient time for stakeholders to inform themselves of the potential impacts of a project and participate effectively in the public consultations.

The scope and methods of public consultation should be commensurate with the size of the project and the scale of its likely impacts. The rules should set out the methods of public consultation that should be conducted for different types of projects, how they should be undertaken, and the minimum number of people that should be involved. The results of the public consultations must be incorporated into the final EIA report and the project design document, and both documents must state how the design of the project takes into account the public comments.

When submitting a project for validation, project developers must provide a statement declaring that the project has not been the subject of an adverse decision by a national, regional, or international human rights court, and that such proceedings are not pending at the time the project is submitted for registration. The Executive Board should not be permitted to register a project that has been the subject of an adverse decision by such a court. If the Executive Board or the COP/MOP discovers that a registered project has been the subject of an adverse decision, that project should be struck from the CDM register, and any issued CERs remaining in the CDM registry should be confiscated.

All projects should be subject to an EIA, although the minimum level of detail required and the type of assessment undertaken should vary according to project type and the potential significance of environmental impacts. Hydroelectric projects, forestry projects, and waste and biomass projects should be subject to rigorous EIAs. Demand-side energy efficiency projects that are unlikely to have any significant environmental impacts, such as lightbulb switching programs and the deployment of solar heat cookers, will only need to be subject to a simplified EIA or preliminary screening to assess the significance of any potential impacts.

EIA reports should be required to include a description of the project, an outline of the main alternatives to the project, the aspects of the environment likely to be significantly affected, measures to limit adverse environmental effects, and a monitoring plan. EIAs must also include not only atmospheric impacts, but also any impacts on biological diversity and local soil and water

conditions. The EIA must also detail the likely social and economic outcomes for local stakeholders and any relevant measures that will be taken to preserve or enhance the quality of life of local stakeholders. The report must also outline all potential effects on areas of international significance, including World Heritage Areas and listed Wetlands of International Importance.

The CDM Modalities and Procedures should require that if the host country places conditions upon the approval of projects, such as employment creation, the provision of education, or compensation to local stakeholders, these conditions must be outlined in the host country's Letter of Approval and be made publicly available on the UNFCCC website. Within the project design document, project developers should be required to define their intentions regarding the distribution of benefits to local communities. Where applicable, these details should include compensation to locals, the number of employees to be selected from the local labor force, and the development of local income generation options, such as a commitment to purchase a certain minimum quantity of supplies and services from the local community.

The CDM Modalities and Procedures should require the subsequent monitoring of ongoing environmental risks associated with projects after they have been registered by the Executive Board. Environmental monitoring reports should be submitted to the Executive Board along with the verification report made by the designated operational entity. Monitoring reports should also be made publicly available to enable local stakeholders and NGOs to assess whether the implementation of the project has conformed with the conditions of approval and whether the mitigation measures outlined in the EIA report have been implemented. CERs should only be issued by the Executive Board if the monitoring report has complied with the monitoring plan outlined in the EIA report.

Local stakeholders should also have the right to request a review of registration or issuance requests on the basis that EIA, public participation, or monitoring requirements have not been met. This "will help ensure that CDM projects seeking registration meet all of the applicable requirements, and that all errors, inconsistencies, or omissions in the project design document and supporting documentation are clarified and explained before" registration in order to avoid unnecessary and costly appeals.³⁵³ "Without the right to raise issues early during the registration stage, the public must wait for the Executive Board to approve the project and then lodge an appeal."³⁵⁴ This internal review procedure would enable the quick and cheap resolution of disputes, as opposed to an expensive and lengthy hearing by a tribunal or court.³⁵⁵ Environmental

353. *CAN Comments: CDM Appeals Procedure April 2010*, CLIMATE ACTION NETWORK INT'L, 6 (Apr. 2010), http://cdm.unfccc.int/public_inputs/2010/cmp5_para42_43/cfi/KTDEUYD4LL4X9ZVNV62GFQMFLNEM2S; see also Filzmoser, Thomas, & Elges, *supra* note 206.

354. Filzmoser, Thomas, & Elges, *supra* note 206, at 7.

355. Peggy Rodgers Kalas & Alexia Herwig, *Dispute Resolution Under the Kyoto Protocol*, 27 *ECOLOGICAL Q.* 53, 120–21 (2000).

NGOs and local stakeholders should also be specifically invited to submit comments during a review initiated by the Executive Board so that the scope of review may include issues regarding the EIA or public consultation, alongside other concerns of the Executive Board regarding additionality and baseline and monitoring methodologies.

B. Access to Justice for Local Stakeholders and NGOs Within the Impending CDM Appeals Process

Scholars have already looked at modeling the future CDM Appellate Body on existing institutions including the World Bank Inspection Panel, the European Ombudsman, the International Sea-Bed Authority, the World Anti-Doping Agency's Court of Arbitration for Sport, the World Trade Organization's Dispute Settlement Body, and the Permanent Court of Arbitration.³⁵⁶ The Executive Board has recommended that the COP/MOP consider the Enforcement Branch of the Kyoto Protocol Compliance Committee or the creation of a new body or ad hoc panel to serve as the CDM Appellate Body.³⁵⁷ The Subsidiary Body for Implementation has considered the type and composition of the body, its rules of procedure, and standard of review.³⁵⁸ Such issues are beyond the scope of this Article and should be the subject of further research. It suffices to say that any person or group of people who have been, or are likely to be, negatively affected by a project should be eligible to submit a claim to the CDM Appellate Body. Environmental NGOs should also be allowed to submit a claim in the public interest or on behalf of affected communities.

The Aarhus Convention's compliance mechanism contains several features relevant to the design of a CDM appeals process. NGOs are allowed to nominate experts for election to the Compliance Committee, and NGOs and members of the public have the right to submit "communications" to the Compliance Committee alleging a party's non-compliance.³⁵⁹ This gives individuals the possibility of seeking remedies at the international level when their governments have failed to implement the Convention at the national level.³⁶⁰ When deciding on a complaint, the Compliance Committee reports to the Meeting of the Parties and can make any number of recommendations: that the Meeting of the Parties provide advice and assistance, regarding the implementation of the Convention, to the country concerned; that the country concerned produce a strategy with a time schedule for compliance; that the

356. See, e.g., Streck & Lin, *supra* note 113; Millar & Wilder, *supra* note 20.

357. *CDM Registration or Issuance Appeals Recommendation*, *supra* note 129, ¶ 17.

358. Subsidiary Body for Implementation, Technical Paper, *supra* note 130; see also Ludger Giesberts, Alexander Sarac & John Wunderlin, *The Institutional Design of the CDM Appeals Body: Recent Developments and Key Considerations*, 5 CARBON & CLIMATE L. REV. 277 (2011).

359. U.N. Econ. Comm. for Europe, Rep. of the 1st Meeting of the Parties—Addendum—Dec. I/7 Review of Compliance, ¶¶ 4, 18, U.N. Doc. ECE/MP.PP/2/Add.8 (Apr. 2, 2004).

360. Kravchenko, *supra* note 176, at 50.

parties issue a declaration of non-compliance; or that the parties suspend the country's rights and privileges under the Convention.³⁶¹

In 2010, prior to drafting its recommendations, the Executive Board issued a call for public input on the design of a CDM appeals process.³⁶² Michael Wara submitted that the appeals process should only be accessible to those stakeholders that submit public comments during the thirty-day public comment period at the validation stage of the project cycle.³⁶³ He argued that this strikes a balance between inclusiveness aimed at ensuring due process and environmental integrity, while also limiting the universe of appeals to those individuals who have made their views known early in the process and to those perspectives that have been appropriately considered by the Executive Board.³⁶⁴ However, as discussed in Part II of this Article, designated operational entities very rarely receive public comments during the validation stage, and local stakeholders have virtually no opportunity to communicate their opposition to a project to the Executive Board. Even for highly controversial projects, such as the Changuinola Hydroelectric Project in Panama and the Xiaoxi Hydro Project in China, the designated operational entities did not receive any comments. The CDM appeals process would be completely ineffectual if standing was limited to those parties who submit comments during the validation stage. Stakeholders directly affected by a project should be allowed to bring an appeal regardless of whether they made a prior submission to the designated operational entity.

Appeals should be allowed against Executive Board decisions to approve projects and issue CERs—and not just against rejections of requests from project developers.³⁶⁵ If appeals are limited to the rejection of projects, this would inadvertently limit stakeholder standing to project developers because local stakeholders have little incentive or capacity to address technical issues such as additionality, baseline calculations, and other issues that usually form the basis of the Executive Board's decision to reject projects.³⁶⁶

Because the CDM Appellate Body would be an international body, its range of available remedies and ability to enforce its decisions would be restricted because it would not have its own enforcement authority or institutions to compel compliance with its orders. Therefore, the CDM appeals process should not be seen as a substitute for the continued application and

361. U.N. Economic Commission for Europe, *supra* note 359, ¶ 37.

362. *Stakeholder Interaction: Procedures for Appeals in Accordance with the CMP Requests in Paragraphs 42-43 of Decision 2/CMP.5*, UNFCCC, http://cdm.unfccc.int/public_inputs/2010/cmp5_para42_43/index.html (last visited Oct. 30, 2011)

363. Michael Wara, *Response to Call for Public Input by the Executive Board of the Clean Development Mechanism: Regarding Design of an Appeals Process for the Clean Development Mechanism* CLEAN DEV. MECHANISM (Apr. 23, 2010), http://cdm.unfccc.int/public_inputs/2010/cmp5_para42_43/cfi/370ZQ0MCM9N5ROLQ8HBAPIWLSCPDLP.

364. *Id.*

365. CLIMATE ACTION NETWORK INT'L, *supra* note 353.

366. Filzmoser, Thomas & Elges, *supra* note 206, at 3.

enforcement of national law by national courts. Since the Appellate Body could only have jurisdiction to review the decisions of the Executive Board, its remedies would be limited to overturning only those decisions. Thus the Appellate Body would be able to de-register projects and confiscate CERs. This approach would be consistent with the COP/MOP's current powers when designated operational entities cease to meet CDM accreditation standards.³⁶⁷ Confiscated CERs that still meet the additionality criterion should be sold and the proceeds should be used to compensate the affected local community.

C. Conceptual, Practical, and Political Limitations to Reform

Strengthening the procedural requirements of the CDM and granting access to justice is not a panacea. These measures are only tools that help environmental decision makers inform themselves of the potential impacts of a project.³⁶⁸ A thorough EIA may identify significant environmental and social consequences, but it remains the host country's prerogative to determine the level of risk it is willing to accept in exchange for significant amounts of foreign investment. In the absence of substantive international norms concerning the quality of the environment, States will continue to set their own divergent standards, with resulting environmental and social consequences. Therefore, the effectiveness of EIA provisions within the CDM will remain contingent on the willingness of authorities to prioritize environmentally sound development.

Providing opportunities for public participation in environmental decision making and providing standing to appeal the registration of projects will not in itself ensure that participation will occur or be effective.³⁶⁹ The ability to participate in policy making is closely tied to one's economic and political power. Even when opportunities for stakeholder participation are provided, stakeholders and project developers are not equally positioned to participate in or influence decision making.³⁷⁰ Access to the courts is also prohibitively expensive for most individuals, and therefore local stakeholder recourse to the CDM Appellate Body is unlikely to be effective without generous state legal aid and intervener funding.³⁷¹ Michael Wara points out that project developers will be the most frequent users of an appeals process no matter who is given standing because of their financial interest in a particular project as compared to other more generalized interest in the environmental integrity of the

367. If a designated operational entity ceases to meet accreditation standards, the COP/MOP has the power to suspend or withdraw accreditation and cancel CERs. *Modalities and Procedures*, *supra* note 24, ¶¶ 21–22.

368. Gray, *supra* note 229, at 94.

369. See Michael Jeffery, *Intervenor Funding as the Key to Effective Citizen Participation in Environmental Decision-Making: Putting the People Back into the Picture*, 19 ARIZ. J. INT'L & COMP. L. 643 (2002).

370. Richardson & Razzaque, *supra* note 165, at 191.

371. *Id.* at 193; Jeffery, *supra* note 369, at 676.

CDM.³⁷² In its fifteen-year review of the Inspection Panel, the World Bank identified two key challenges that it has failed to meet: (1) making the Panel accessible to affected people, and (2) increasing public awareness of the Panel in developing countries.³⁷³ Therefore, in addition to the recommendations outlined in this Article, there is a need for widespread dissemination of information about the CDM and its appeals process as well as capacity building in developing countries.

Even if local stakeholders succeed in their appeal, the potential remedies available will have a very narrow application and may not secure the desired outcome for stakeholders. The CDM Appellate Body may find the Executive Board's decision-making process to be unlawful but, while reconsidering the matter, the body may re-affirm the decision in a lawful way.³⁷⁴ The Appellate Body would only have limited authority to de-register or de-certify projects. This may be inadequate to stop projects from going ahead because projects that fail to qualify for registration by the Executive Board may instead generate credits for voluntary carbon offset markets that impose less stringent criteria.³⁷⁵

Despite its limited remedies, however, the Appellate Body's ability to publicly issue reports, including findings of fact, will be a critical driver of public pressure upon project developers and investors to improve their operations and make socially and environmentally responsible investment decisions. The recommendations outlined above will, at the very least, encourage greater international discourse and greater public awareness surrounding poorly implemented projects. The recommendations likely to have the greatest impact on the operation of the CDM are those relating to access to information. Publicly available EIA reports and more detailed project design documents will open up projects to increased international scrutiny and will place pressure on host countries to improve decision making and on Annex I investors to become more socially and environmentally responsible with their investment choices.

D. Broader Implications

The consideration of how to improve the performance of the CDM is critical not only from an international perspective, but also from regional and national perspectives. If agreement on the reforms outlined above proves impossible, Annex I Parties can unilaterally impose measures to improve CDM projects or limit the eligibility of undesirable projects.³⁷⁶ The European Union has already attempted this in relation to large-scale hydroelectric projects, and,

372. Wara, *supra* note 363.

373. WORLD BANK, ACCOUNTABILITY AT THE WORLD BANK: THE INSPECTION PANEL AT 15 YEARS 47–48 (2009), available at <http://siteresources.worldbank.org/EXTINSPECTIONPANEL/Resources/380793-1254158345788/InspectionPanel2009.pdf>.

374. See Richardson & Razzaque, *supra* note 165, at 183.

375. NEWELL & PATERSON, *supra* note 1, at 109.

376. Wara, *supra* note 48, at 1800.

starting in 2013, the European Union's Emissions Trading Scheme intends to only accept credits from CDM projects that have "clear sustainable development benefits and no significant negative environmental or social impacts."³⁷⁷ In 2011, the European Climate Change Committee voted to ban the use of CERs generated by certain types of industrial gas projects.³⁷⁸ The European Commission has drafted regulations prohibiting the use of such credits within the Emissions Trading Scheme from January 1, 2013.³⁷⁹ Unsurprisingly, the International Emissions Trading Association has called upon the European Union to stop debating the eligibility of CDM offsets for compliance in its Emissions Trading Scheme. The Association blames Europe's policy for "leading to dramatic decreases of private financing allocated to reducing emissions, rather than increasing the scaling up that the EU and IETA wants to see."³⁸⁰ New emissions trading legislation in Australia and pending climate change legislation in the United States will further encourage the use of carbon offsets internationally. These countries would be wise to adopt higher offset standards, similar to those of the European Union, in order to increase the compatibility of national carbon markets and potentially link their emission trading schemes with the European Union's Emissions Trading Scheme.³⁸¹ Indeed, it appears as though New Zealand will follow Europe's footsteps. In 2011, the New Zealand government conducted a public consultation on proposed regulations restricting the use of HFC-23 and N₂O CERs in its emissions trading scheme. Australia's emissions trading scheme, scheduled to commence on July 1, 2012, will allow businesses to meet up to half of their annual obligations by purchasing international offsets.³⁸² Australia intends to exclude the use of "temporary CERs, long-term CERs and CERs from nuclear projects, the destruction of trifluoromethane, the destruction of nitrous oxide

377. Directive 2009/29/EC of the European Parliament and of the Council of 2 April 2009 Amending Directive 2003/87/EC So As to Improve and Extend the Greenhouse Gas Emission Allowance Trading Scheme of the Community, 2009 O.J. (L 140) 63, ¶ 29.

378. Press Release, European Comm'n, Emissions Trading: Commission Welcomes Vote to Ban Certain Industrial Gas Credits (Jan. 21, 2011), available at <http://europa.eu/rapid/pressReleasesAction.do?reference=IP/11/56>.

379. Draft Commission Regulation of 7 June 2011 Determining, Pursuant to Directive 2003/87/EC of the European Parliament and of the Council, Certain Restrictions Applicable to the Use of International Credits from Projects Involving Industrial Gases, art. 1, available at http://ec.europa.eu/clima/news/docs/2011012101_draft_regulation_en.pdf.

380. Letter from Henry Derwent, President and CEO, Int'l Emissions Trading Ass'n, to Commissioner Connie Hedegaard, Directorate Gen. for Climate Action, European Comm'n, (Aug. 24, 2010), available at http://www.ieta.org/index.php?option=com_content&view=article&catid=24%3Aposition-papers&id=69%3Aletter-to-commissioner-hedegaard-and-questions-on-possible-restrictions-of-international-offsets-for-use-in-the-eu-ets&Itemid=88.

381. See M. J. MACE, ET AL., FINAL REPORT: ANALYSIS OF THE LEGAL AND ORGANISATIONAL ISSUES ARISING IN LINKING THE EU EMISSIONS TRADING SCHEME TO OTHER EXISTING AND EMERGING EMISSION TRADING SCHEMES 62 (May 2008), available at http://www.field.org.uk/files/Linking%20emission%20trading%20schemes_0.pdf.

382. *Clean Energy Act 2011* (Cth) s 133(7) (Austl.).

from adipic acid plants or from large-scale hydro-electric projects not consistent with criteria adopted by the European Union.”³⁸³

CONCLUSION

Thus far, the CDM has been unable to bridge the contradictory ideological premises of economic efficiency and sustainable development.³⁸⁴ It is rhetorically mandated to assist in achieving sustainable development, but no part of its legal framework specifically incorporates social, environmental, or economic considerations beyond the quantity of short-term emission reductions achieved. It merely assumes that greenhouse gas emission reductions are an unmitigated good. Left entirely to market forces, however, the CDM undermines the goal of sustainable development because multinational companies impose a range of environmental and social costs upon local communities in their quest to generate cheap credits. Many projects displace and marginalize local stakeholders and indigenous communities, ignoring the basic needs and human rights of the world’s poorest people, and in some cases, damaging areas of international significance. The international community cannot in good conscience continue to support a “solution” to climate change that is manifestly unjust, exacerbates global inequality, and undermines many of the UN’s goals and principles.

Much of the CDM’s failure to contribute to sustainable development is due to inadequate procedural requirements relating to access to information, public participation, and EIA. The case studies outlined in this Article demonstrate that the project developer, host country, and the Executive Board failed to identify or consider significant environmental and social impacts of projects. Local stakeholders remain in the dark about potential CDM projects that might affect them because the CDM, as it currently stands, fails to make key information available, makes it available too late in the process, and uses culturally inappropriate modes of communication to inform stakeholders of projects. In addition, local stakeholders are altogether excluded from providing meaningful input on the design and implementation of projects because the provisions of CDM Modalities and Procedures relating to public consultation are so scant in detail that the requirement amounts to a superficial box-ticking exercise. Project developers design and conduct their public consultations so as to avoid receiving any negative feedback. Thus, stakeholders have no opportunity to influence project design, to input their knowledge of local environmental and economic conditions, or to ensure that their basic needs are maintained. Sustainable development’s call for the integration of environmental, economic, and social concerns requires the consideration of

383. DEP’T OF CLIMATE CHANGE AND ENERGY EFFICIENCY, SECURING A CLEAN ENERGY FUTURE: THE AUSTRALIAN GOVERNMENT’S CLIMATE CHANGE PLAN 107 (2011), *available at* <http://www.cleaneenergyfuture.gov.au/wp-content/uploads/2011/07/Consolidated-Final.pdf>.

384. Schreuder, *supra* note 80, at 172.

potential environmental and social impacts to a much greater degree than the CDM currently provides.

While the use of economic instruments for climate change mitigation was fiercely contested in the Kyoto negotiations, the reliance on market mechanisms has been an unquestioned assumption in the discussions of a post-2012 international climate change regime.³⁸⁵ The pressure that corporate lobby groups have placed on the COP/MOP and the Executive Board has led to the drafting of procedures for a CDM appeals process, with minimal debate in the COP/MOP as to whether there should be an appeals process and whose interests it should serve. This reveals the extent to which economic considerations overwhelm other social, environmental, and equitable considerations in the international climate change regime, and the significant influence that corporate interests have on the shape and direction of the flexible mechanisms.³⁸⁶ If the draft appeal procedures are adopted in their current form, the CDM appeals process will secure project developers' commercial expectations and drive the CDM further away from achieving its goal of sustainable development. Proponents of this one-sided approach draw analogies with national administrative laws in support of a "right" to review for project developers. However, these arguments conveniently ignore the fact that in most Western legal systems, such as Australia and the European Union, individual stakeholders and NGOs have standing to challenge environmental decisions. It is ironic that, despite calls for public international law to deliver climate justice to vulnerable communities,³⁸⁷ the first set of interests to be entitled to formal rights of redress will be the private commercial interests of the polluters who invest in CDM projects.³⁸⁸ In this context, it is critical that the victims of the international carbon offset industry are granted access to justice in order to protect their rights against vested economic interests.

This Article has not sought to question the use of market-based mechanisms, but to critique the operation of the CDM and to unsettle the current superficial dialogue surrounding the proposed CDM appeals process. Research elsewhere suggests that market mechanisms, in particular the CDM, will be insufficient to significantly reduce global greenhouse gas emissions.³⁸⁹ Arguably, much broader reform of the international climate change regime is needed in order to spur the necessary shift toward a low-carbon economy. While the CDM remains, the recommendations in this Article provide guidance on how to integrate stakeholders' needs within the design of the CDM in future climate policy. Providing avenues for meaningful and effective stakeholder

385. Lin & Streck, *supra* note 20, at 93–94.

386. See Vlachou & Konstantinidis, *supra* note 14, at 46; Carlarne, *supra* note 142, at 468.

387. See, e.g., Voigt, *supra* note 6.

388. Werksman, *supra* note 22, at 104.

389. See Craig Hart et al., *East Asia Clean Development Mechanism: Engaging East Asian Countries in Sustainable Development and Climate Regulation Through the CDM*, 20 GEO. INT'L ENVTL. L. REV. 645, 680 (2008).

input is essential to ensure that the CDM does not continue to operate against the interests of its intended beneficiaries.

The challenge for the international community is to maintain its active participation in the CDM while honestly facing up to its flaws. If the international community can agree to the vital reforms outlined in this Article, a more socially and environmentally effective, equitable, and just system might be possible. The CDM may be on its way to achieving all three of its stated objectives in the period beyond 2012. However, if this cannot be managed, poorly implemented projects will continue to undermine the legitimacy of the CDM as the world's first market-based mechanism to achieve multiple environmental and social goals.

This Article presents a cautiously optimistic perspective. There is growing awareness of the negative impacts of CDM projects and an emerging political will, particularly in the European Union, that projects should be rigorously assessed and should not be subsidized by the United Nations if they will lead to adverse social or environmental consequences. There are some projects, such as the Metro Cars project in Colombia, that, when implemented with extensive public consultation and a thorough EIA, have yielded significant benefits for the host country and local stakeholders, and have delivered a healthy return on investment. This indicates that if the CDM's environmental safeguards are significantly strengthened, it could become the multi-billion dollar source of funding for high quality climate change mitigation projects that its original creators envisaged.

