



Approaching climate adjusted environmental due diligence for multilateral financial institutions

Kwame Boakye-Agyei

*Environmental Science and Policy Department, George Mason University,
Fairfax, Virginia, USA*

Received 20 July 2010
Revised 24 January 2011
Accepted 20 February 2011

Abstract

Purpose – This paper seeks to review literature on environmental safeguards for five selected multilateral financial institutions (MFIs) with the objective of verifying whether their environmental safeguards have been updated with climate change elements, and whether they have adopted specific climate change strategies for their investment portfolios.

Design/methodology/approach – The methodology set for this review was based on a set of descriptive criteria. These included content reviews on MFIs existing safeguards or formal environmental guidelines, the extent of incorporation of climate change to guidelines text, and overarching strategies adopted to address climate change.

Findings – Generally, the environmental safeguards reviewed have minimally discussed formal considerations of climate change issues. Although environmental safeguards continue to play vital roles in bank operations, it generally remains traditional with minimal adjustments to formally include climate change. Nevertheless, all the banks have developed overarching climate change strategies at the strategic level.

Research limitations/implications – The information presented herein is compiled from articles, reports, papers and books identified from computer-based searches. The research is limited to information available on the internet, books and papers. It is therefore possible that MFIs are involved in some climate change activities not yet in the public domain, and as such are not covered by this paper.

Practical implications – Quite clearly, the adjustment of environmental assessments such as environmental impacts assessment/strategic environmental assessment to include climate change is in the offing. This means that practitioners may need to considerably understand the character of climate change and thereby construct concrete approaches to tackle both ideological and methodological gaps.

Originality/value – This paper fulfils an identified need in the climate change discourse, bringing forward climate change as an issue deserving more legal, formal and obligatory attention.

Keywords Climate change, Environmental assessment, Multilateral financial institutions, Environmental due diligence, Banks

Paper type Research paper



International Journal of Climate
Change Strategies and Management
Vol. 3 No. 3, 2011
pp. 264-274
© Emerald Group Publishing Limited
1756-8692
DOI 10.1108/17568691111153410

Introduction

The global climate is changing and its impact is being observed across the world. The scientific consensus holds that this is largely anthropogenic and a consequence of human-generated greenhouse gases (GHGs) emissions. In the coming years, the multilateral financial industry will play very important and decisive role in addressing these climate-related issues by having a twofold responsibility. First, to recognize the need to prepare themselves for the negative effects that climate change may have on their business and clients, and second, to harness its financial potential to significantly help to mitigate the economic risks and enter the low-carbon economy by providing

appropriate strategies, products and services. Currently, there is little literature that focus on what is being done currently by these institutions and how they can become guiding examples for others. This paper therefore presents a comparative analysis of selected multinational financial corporations (multilateral financial institution, MFI), and how they are incorporating climate change into their environmental due diligences. The primary objective of this study therefore is to identify relevant findings on how the selected MFIs, through their environmental assessment procedures, are incorporating climate change risks and impacts in their corporate environmental due diligence. This paper, as a result, does not focus on the science of climate change or the processes with which environmental assessments such as environmental impacts assessments (EIA) and strategic environmental assessments (SEA) are prepared. With this objective, this paper aims at engaging both policy makers and development financial institutions with enhanced insights as they begin to take on various roles that contribute to the UNFCCC's aims of scaling up, optimising and shifting climate adaptation finance UNFCCC, 2008.

Climate adjusted environmental assessments for multilateral financial corporations

The publication of Intergovernmental Panel on Climate Change's (IPCC) 4th Assessment Report (IPCC, 2007) and the Stern (2006) review on the economics of climate change have clearly indicated the warming of the climate system is unequivocal while ignoring its effects in the changing climate will eventually damage economic growth. Until recently, the role of financial markets in using climate change and GHG emissions reduction tools was little understood and widely discounted. Generally, international financial institutions organize to provide financial and technical assistance to foster economic development, particularly in less developed countries. In terms of scope they may be global (the World Bank Group), regional (the Inter-American Development Bank (IDB), Asian Development Bank (AsDB), African Development Bank (AfDB), and European Bank for Reconstruction and Development (EBRD)), or specialized institutions (the Caribbean Development Bank or the East African Development Bank).

By incorporating a climate change criteria into their investment decision making, Multilateral Development Banks may directly and deliberately intervene with the key aim of avoiding the ill effects of climate change while supporting economic development. The emerging consensus is that since environmental assessments has successfully been used to address localized ecological impacts it may have a strong potential to be a useful tool in addressing climate change (Christopher, 2008). Environmental assessments such as the EIA was formally developed as part of the National Environmental Policy Act of 1969 in the USA as a sustainability decision-making tool in response to increased ability to create economic growth while overcoming environmental problems (Petts, 1999). Presently, all MFIs have well-established EIA procedures, which apply to their lending activities and projects undertaken by their borrowers (OECD, 1994; Kennedy, 1999). Although their operational policies, requirements and steps vary in certain respects, these financial organizations follow a relatively standard environmental assessment procedure as part of their environmental due diligence. Currently, there are no straightforward or easy way of readily incorporating climate change impacts and its corresponding uncertainties into environmental assessment analysis. In doing so, perhaps, the primary objective will be to reduce GHG emissions from investment project activity, and the second is to lessen the impact and vulnerabilities of unavoidable climatic changes. While a certain level

of awareness of risks posed by climate change to investment portfolios is clearly important, the processes and preparation of EIA/SEAs seem to provide more specific information for implementing an effective climate risk portfolio management. The general discussion is that incorporating climate change into environmental assessments is necessary and can be potentially useful in addressing investment portfolio risks and vulnerabilities (Environment and Finance Research Enterprise, 1994; Bisset, 1995). While environmental assessment “due diligence” may suggest that MFIs exercise extra caution on the environment in the way they conduct their business (Lawrence, 1994), climate proofing their procedures may support the identification of project risks and vulnerabilities due to direct impacts of climate change, thereby improving the environmental soundness of investment operations (ADB, 2005). Regarding the scope of analysis, any current standard output of the environmental assessment may have to address two basic questions which are “how will the project affect climate change” and “how will the project be affected by climate change” (ICF, 2007). To this end, aligning climate change with the existing MFIs internal governance procedures and risk identification through their environmental assessment procedures may help identify potential new liabilities from carbon emissions or climate variability uncertainties. In this way, environmental assessment processes could be harnessed to help identify, disclose, analyze, mitigate and support adaptive capacities on climate change. Here, MFIs management may well understand how climate change is impacting their business and what strategies they can employ to minimize its risks or maximize opportunities.

Methodology

The methodology set for this review was based on a set of descriptive criteria. These included content reviews on MFIs existing safeguards or formal environmental guidelines, the extent of incorporation of climate change to guidelines text, and overarching strategies adopted to address climate change. It should also be mentioned that all the banks have their environmental procedures (EIA, SEA, etc.) clearly designed within their respective safeguards. MFIs selected for this review included the EBRD, the World Bank (IBRD), IDB, AfDB, and AsDB.

This review was focused on three main questions (Table I):

- (1) Is the bank operating with an existent environmental assessment safeguard?
- (2) Has climate change been incorporated into the banks existing environmental assessment safeguards?
- (3) Is the bank operating under any overarching climate change strategy?

The information presented herein has been compiled from articles, reports, papers and books identified from computer-based searches and are summarized in Table II.

Existent environmental assessment safeguard	Climate change discussed in safeguard	Overarching climate change strategy
Is the bank operating with an existent environmental assessment safeguard?	Has climate change been incorporated into the banks existing environmental assessment safeguards?	Is the bank operating under any overarching climate change strategy?

Table I.
Review categories

Bank	Environmental safeguard	Reference to related climate change issues in safeguard	Overarching climate change policy	Strategic goal for climate policy
The World Bank (IBRD)	OPBP 4.01 environmental assessment last updated in 1999	Climate change and GHG mentioned as footnote in reference to transboundary and global environmental aspects (p. 1) GHG emissions mentioned in OP 10/04 1994 (p. 3) Encouraged the reduction of GHG in its operations (p. 12)	Development and climate change, the World Bank Group at work (2009) Climate change strategy profile (March 2010)	To help accelerate or maintain robust economic growth in developing countries while recognizing the added costs and risks of climate change and an evolving global climate policy Guiding instrument for developing climate strategy and scaling up IDB support for actions to mitigate and adapt to climate change within Latin America and the Caribbean (LAC) Establish a low-carbon technology (LCT) market place, which would bring together enterprises that can effectively exploit the full potential of LCTs in the immensely large and rapidly expanding energy markets in Asia and the Pacific
IDB	Environment and safeguards compliance policy (last updated in 2006)			
AsDB	Safeguard policy statement (last updated in January 2010)	The 2010 environmental safeguard policy statement did not address climate change and GHG issues directly However, the 2009 safeguard policy encouraged the reduction of project-related anthropological GHG emissions in a manner appropriate to the nature and scale of project operations	Long-term strategic framework 2008-2020 (Strategy 2020) Developed in 2008	
AfDB	Environmental policy procedures (last updated in 2001)	No mention of climate change and GHG However, newly proposed environmental safeguard review has recognized the need to establish the necessary legal and institutional frameworks to deal with gender and climate change mainstreaming Incorporated climate change discussions into policy	Medium-term strategy for 2008-2012 – climate risk management and adaptation strategy 2010	To ensure that progress is maintained by African countries towards the eradication of absolute poverty and there is steady improvement of people's living conditions in spite of climate change
ERBD	Environment and social policy (last updated in 2008)		Addressed by environment and social policy 2008	To ensure that energy efficiency and climate change have been integrated within the overall strategy of the EBRD and mainstreamed across the organization by each operational department

Table II.
Chart showing status of MFIs environmental safeguards and climate change

The research was limited to information available on the internet, books and papers. It is possible that MFIs are involved in some climate change activities not yet in the public domain and as such was not covered by this paper.

MFI analysis

Legal provisions for environmental assessments. All the organizations considered for this review have safeguard compliance procedures on environmental assessments and recognize it as prerequisite for ensuring environmental sustainability within the project cycle. While some referred to it as “policy” or “safeguards”, other institutions referred to it as “environmental guidelines”. They have adopted distinct environmental safeguards that suggest for their operations environmental assessment procedures such as EIAs and SEAs which has been useful instruments for improving the environmental soundness of investment operations (Kennedy, 1999). The first MFI to establish an environmental policy for its investment was IDB with the adoption of its environmental policy 1979 (IDB, 2006). The goal of this policy is to advance the bank’s mission in Latin America and the Caribbean (LAC) toward achieving sustainable growth and poverty reduction goals consistent with long-term environmental sustainability, and specific objectives are to enhance long-term development benefits to its member’s countries by integrating environmental sustainability outcomes in all bank operations. However, it was the formal adoption of the World Bank Operative Directive 4.01 (1989) that influenced other banks to develop environmental safeguards (The World Bank, 1999b). The AfDB approved their environmental safeguards in 1990 (AfDB, 1990) while the AsDB approved their safeguards in 1993 (AsDB, 2002). The EBRD adopted its first environmental policy in 1991 establishing the principle that a proposed project can be rejected on environmental grounds, when there are major environmental problems, or when a proposed project fails to address environmental issues in a satisfactory way (EBRD, 2003). It is worth noting that most of these banks have adopted the equator principles[1], a globally recognised benchmark for assessing and managing social and environmental risks in project finance. Although it is the leading voluntary standard for managing social and environmental risk in project financing it continues to serve as a common baseline and framework for the implementation by each adopting institution of its own internal social and environmental policies, procedures and standards related to its project financing activities. Generally, the overall objective of the environmental assessment guidelines or safeguards is to integrate an assessment process of environmental issues into banks development projects and programs. The key to this approach was its use to assess the environmental impacts of bank-lending programs and projects and to ensure environmental considerations, wherever essential, as an integral part of loan agreements and bidding documents. This would improve project selection, design and implementation and to minimize adverse environmental impacts. It is also important mentioning that the preparation of an Environmental Assessment Report (EIA/SEA) is a borrower responsibility, but the banks determine what type of EIA/SEA, if any, is required for each project they support (Petts, 1999; Gilpin, 1995). For environmental assessments, uncertainty as an intrinsic factor and decision making remains an inherent political process which most often arises from the incompatible objectives of different interest groups and stakeholders.

Extent of climate change incorporation into environmental assessment safeguards. All the selected banks have adopted EIAs and SEAs as part of their formal

environmental due diligence process for investments. EBRD formally recognize climate change within its environmental assessment procedures in a more direct manner. The 2003 EBRD Environmental Procedures which lacked in-depth climate change discussions has been revised to be consistent with EUs' EIA directive to reaffirm and strengthen the banks climate change commitments. Particular attention was paid to projects which include elements that focus upon priority environmental and social issues facing the region such as climate change mitigation and adaptation, energy and resource efficiency. The World Bank's OP 4.01 on the other hand, discusses the mitigation of impacts and GHG emissions but do so with minimal reference to climate change. For instance, the World Bank environmental safeguard OP 4.01 refers to GHG emissions and climate change only once in the entire environmental assessment due diligence document. Climate change was only mentioned as a global environmental issue in a footnote[2], while GHG was referred to as cross-border externality affecting neighboring countries in a footnote[3] (The World Bank, 1999a). The environmental safeguards for the AfDB (1990) acknowledged the significant progress made in the implementation of Agenda 21 but with no emphasis on climate change or reductions to GHG emissions. However, a recently proposed environmental safeguard review has recognized the need to establish the necessary legal and institutional frameworks to deal with gender and climate change mainstreaming (AfDB, 2010). In the proposal, gender equality and climate change were addressed as core dimension of development. The fundamental argument for focusing on gender and climate change was the fact that women have distinct vulnerability, exposure to risk, coping capacity, and ability to recover from climate change impacts than men (Denton, 2009). The environmental safeguard for the AsDB, recently reviewed in 2010 (AsDB, 2009) has the basic goal of promoting sustainability of project outcomes by protecting the environment and people from potential adverse impacts of projects. Although the safeguard policy statement testifies to the changing nature of AsDB's business to which the bank needed to transform itself, to a large extent the environmental safeguard was minimal in its formal consideration of climate change. In effect, there are no formal discussions on climate change that may be required under AsDB's environmental safeguards. The goal of IDB's environmental safeguard (Environmental Policy, 2006) is to advance the bank's mission in LAC toward achieving sustainable growth and poverty reduction. The safeguard encouraged the reduction and control GHG emissions in accordance with the emission estimation methodologies of the IPCC in a manner appropriate to the nature and scale of operations. However, it does so informally with no formal commitments in its environmental due diligence as to how to address GHG emissions and adaptations that may be required. In effect, only the EBRD explicitly addresses climate change as formal elements of its environmental due diligence. This might rightly imply that very few financial institutions have formally incorporated climate into their environmental due diligence. The question is why? Are there difficulties in understanding the risks climate change poses to their investments? Or climate change incorporation into environmental due diligence is more of a political and legal issue than environmental?

Overarching climate change strategy. Nevertheless, all the banks have developed overarching climate change strategies at the strategic level. "Strategic level" use here refers to the "managerial level" of decision making which are most often top-down and political. While most MFIs have no strict formal adherence (through environmental due diligence) to climate change, nevertheless, they have managed to assert themselves

as major players in the climate change arena. For example, the World Bank under its overarching “strategy framework for development and climate change” have advanced three major initiatives with a purported goal of helping developing countries reduce GHG emissions and adapt to climate change impacts (The World Bank, 2008, 2009). These are the Clean Technology Fund (CTF) and the Strategic Climate Fund (SCF) which together forms the Climate Investment Funds. According to the World Bank, the CTF “will provide new, large-scale financial resources to invest in projects and programs in developing countries which contribute to the demonstration, deployment, and transfer of low-carbon technologies”. The SCF on the other hand is an “overarching fund” that will focus on different programs, such as the Pilot Program for Climate Resilience, Forest Investment Program, Renewable Energy Access and Pre-commercial Technologies, including carbon capture and storage. Altogether the World Bank Group Strategy (of which IFC, MIGA, IDA are included) indicates an increase in financing for energy efficiency and new renewable energy by an average 30 percent a year, from a baseline of US\$600 million in average annual commitments. The AsDB is currently addressing climate change through its long-term strategic framework 2008-2020 (Strategy, 2020) which addresses climate change as part of the bank’s core operational areas (AsDB, 2008). Under its long-term strategic framework, the bank will respond to climate change as part of the broader agenda of promoting and strengthening climate adaptation and mitigation in Asia and the Pacific. By this strategy, the bank will scale up its support for environmentally sustainable development, including projects to reduce carbon dioxide emissions and to address climate change. In their 2009 Annual Report, more than 40 new grant-financed programs were approved to leverage over \$600 million in low carbon, climate resilient investments (ADB, 2009).

The AfDB addresses climate change under its medium-term strategy for 2008-2012. Presently, the bank has adopted a climate risk management and adaptation strategy and clean energy investment framework which address the broader issues of adaptation and mitigation (AfDB, 2008). The specific objectives of the CRMA are to reduce vulnerability to climate change variability and promote climate resilience in past and future bank financed development investments, and to build capacity and knowledge to address the challenges of climate change and ensure sustainability through policy and regulatory reforms. The CRMA focuses on women’s economic empowerment by addressing gender mainstreaming within the climate change framework. IDB on the other hand is currently developing a climate change strategy to serve as a guiding instrument for scaling up the banks support for climate change actions which will be submitted for approval by the IDB’s Executive Board in 2010 (IDB, 2010). In November 2006, the bank launched a Sustainable Energy and Climate Change Initiative in response to the growing interest of its member countries in alternative approaches to energy supply. With respect to EBRD, the bank is among the few MFIs that have adjusted their environmental procedures formally to incorporate climate change issues. It recognizes the importance of climate change mitigation and adaptation as high priority for the bank’s activities in the European region. Some key climate change initiatives by the bank have included the sustainable energy initiative in 2006 and the development of the GHG assessment methodology in 2009. Through these initiatives, EBRD has been able to introduce and integrate energy efficiency into their operations as a core strategic component of the bank.

Environmental safeguards versus overarching climate change policy

All the organizations considered for this review have safeguard compliance procedures on environmental assessments and recognize it as prerequisite for ensuring environmental sustainability within the project cycle. They as well recognize that climate change is a major challenge to sustainable development. What seems to be lacking, is the connection between the EIA due diligence and the effective integration of climate change into operational due diligence. With the exception of EBRD, all the banks have shown greater emphasize in addressing climate change at the strategic level than the established and more binding EIA due diligence. The question is, why are the banks not addressing climate change through their environmental safeguards but rather using strategic-level approaches to address climate change? For example, unlike EBRD, the World Bank strategic framework on development and climate change is a “guidance” document that explores what the World Bank Group can do to facilitate the global climate change process. The emphasis on guidance is important because guidance documents are usually non-legal and non-binding. The expectation, perhaps, is to first develop corporate environmental due diligence processes that incorporate climate change issues, and thereafter design strategy and guidance to ensure effective and efficient implementation. Quite obvious, most of the MFIs prefer to operate with guidance documents and probably “wait and see” how climate change maneuver itself statutorily with time. It should be noted, that the use of guidelines varies from organization to organization, amongst institutions at different stages of development in impact assessment practice. Nevertheless, it may necessary for safeguards to be formally climate change adjusted in order to effect a positive change in impact assessment practice. There are questions though. Must MFIs approach climate change statutorily? There appears to be a growing realization that safeguards are merely technical procedures that neglect real proactive management of the impact assessment process (OECD, 1994). Should safeguards always represent the organization’s best practice? Maybe operating at the strategic level is more convenient and appropriate within the multilateral bank setting. Since banks safeguards are prepared by a wide range of agencies, institutions and stakeholders, perhaps it more important that climate change is considered with a more political understanding than an operational one.

Conclusion

Generally, the environmental safeguards reviewed have minimally discussed formal considerations of climate change issues. Although environmental safeguards continue to play vital roles in banks operations, it generally remains traditional with minimal adjustments to formally include climate change. Being mindful of the quite recent and rapidly evolving nature of climate change, it may be safe to say that most banks have not been able to mainstream their environmental assessment procedures with climate change in a formal way. Instead, the increasingly expanding climate change portfolios among MFIs have derived their basis from overarching climate change guidance’s which are mostly non-binding in nature. Operating at the strategic level may carry significant moral or political weight but creates no obligations that would ensure a strict adherence to climate change as posited in their respective overarching climate change strategies. Perhaps the problem lies on the fact that MFIs have not been doing well enough in exploring their communications on their climate change policies. It can only be anticipated that with time these strategic climate policies would be made to formally

support operational environmental due diligence that recognizes a growing global imperative that encourages corporate regulatory and legislative changes that address the issue of climate change.

Key questions

Quite clearly, the adjustment of environmental assessments such as EIA/SEA to include climate change is in the offing. This means that practitioners may need to considerably understand the character of climate change and thereby construct concrete approaches to tackle both ideological and methodological gaps. But before they do so, practitioners and policy makers are urged to critically consider the following key questions. First, what does “incorporating of climate change into environmental assessment” mean? At the moment there seem to be no sufficient understanding of the character and extent to which climate change can be addressed when preparing environmental assessments. Second, there is a high degree of uncertainty about future climate impacts at a scale necessary for most decision making. Climate experts confirm that the level of scientific confidence in understanding and projecting climate change increases with spatial scale while the relevance and value of the projections for local societies decreases. While climate projections of smaller spatial and temporal scales would be more important for environmental assessments it is uncertain how long this need will remain as a scientific challenge. Fourth, how can we understand the motivations of practitioners and investors alike with respect to climate incorporation into environmental due diligence? Perhaps clearly identifying the relevance of climate change issues in investors operations and strategies could justify why their attention is necessary. Practitioners may have to consider the increase in cost for environmental assessment preparation, the level of expertise, and the lack of legal frameworks as issues that needs crucial attention. A close evaluation of the demerits and merits of climate incorporation into environmental assessment at this stage may be necessary. This might clarify the perceived and real need for climate incorporation and promote the real need to overcome barriers and create potential solutions. Fifth, how well can we convince institutional stakeholders to elevate climate change as a governance priority for board members and CEOs of banks and organizations? Beginning this dialogue might stir up the corporate hornets’ nest and probably suggest a possible way forward.

Notes

1. See the IFC Equator Principles web site: www.equator-principles.com/
2. See page 1 of the World Bank OP 4.01, footnote 4, January 1999.
3. See page 3 of the World Bank OP 10.04, footnote 5, September 1994.

References

- AfDB (1990), *Environmental Policy Paper*, African Development Bank, Abidjan, Côte d’Ivoire.
- AfDB (2008), *Bank Group Climate Risk Management and Adaptation Strategy (CRMA)*, African Development Bank, Côte d’Ivoire.
- AfDB (2010), *Gender Mainstreaming in ADB Projects Report of the Technical Working Group*, African Development Bank, Côte d’Ivoire.
- AsDB (2002), *Environmental Policy of the Asian Development Bank*, Asian Development Bank, Manila.

- AsDB (2005), *Climate Proofing: A Risk Based Approach to Adaptation*, Asian Development Bank Pacific Studies Series, Asian Development Bank, Manila.
- AsDB (2008), *Strategy 2020: The Long-term Strategic Framework of the Asian Development Bank*, Asian Development Bank, Manila.
- AsDB (2009a), *ADB Programs: Strengthening Adaptation and Mitigation in Asia and the Pacific*, Asian Development Bank, Manila.
- AsDB (2009b), *Annual Report*, Vol. 15, Asian Development Bank, Manila.
- Bisset, D. (1995), "Managing environmental risk: a new responsibility for banks", *The Bankers Magazine*, Vol. 178 No. 2, pp. 55-9.
- Christopher, C.W. (2008), "Success by 1000 cuts: the use of environmental impact assessment in addressing climate change", *Vermont Journal of Environmental Law*, Vol. 9, pp. 549-613.
- Denton, F. (2009), "Gender and climate change: giving the 'latecomer' a head start", *IDS Bulletin*, Vol. 35 No. 3, pp. 42-9.
- EBRD (2003), *Environmental Policy*, European Bank for Reconstruction and Development, London.
- Environment and Finance Research Enterprise (1994), *Global Survey on Environmental Policies and Practices of the Financial Services Industry*, Environment and Finance Research Enterprise, Chapel Hill, NC.
- Gilpin, A. (1995), *Environmental Impact Assessment. Cutting Edge for the Twenty-first Century*, Cambridge University Press, Cambridge.
- ICF (2007), *Addressing climate change in NEPA and CEPA documents*, ICF White Paper, Inner City Fund International, Fairfax, VA.
- IDB (2006), *Environment and Safeguards Compliance Policy*, Inter-American Development Bank, Washington DC.
- IDB (2010), *Climate Change Strategy Profile: Strategic Framework for Supporting Climate Change Action in Latin America and the Caribbean*, Inter-American Development Bank, Washington, DC.
- IPCC (2007), "Climate change 2007: impacts, adaptation and vulnerability", Contribution of Working Group II to the 4th Assessment Report of the Intergovernmental Panel on Climate Change, Annex I, Cambridge University Press, Cambridge.
- Kennedy, W. (1999), *EIA and Multi-lateral Financial Institutions*, OECD Conference on FDI and the Environment, The Hague.
- Lawrence, G.M. (1994), *Due Diligence in Business Transactions*, Law Journal Press, Newark, NJ.
- OECD (1994), *Towards Coherence in Environmental Assessment*, Volume III Summary of Country Policies and Procedures, Results of the Project on Coherence of Environmental Assessment for International Bilateral Towards Coherence in Environmental Assessment, Volume III Summary of Country Policies and Procedures, Results of the Project on Coherence of Environmental Assessment for International Bilateral Aid, OECD, Paris, Submitted by Canada to the DAC Working Party on Development Assistance and Environment.
- Petts, J. (1999), *Handbook of Environmental Impact Assessment Volume 2: Environmental Impact Assessment in Practice: Impact and Limitations*, Blackwell Science, Oxford.
- Stern, N. (2006), *The Stern Review: The Economics of Climate Change*, HM Treasury, London.
- UNFCCC (2008), "Investment and financial flows to address climate change: an update", *United Nations Framework Convention on Climate Change Report*, Technical Paper, FCCC/TP/2008/7, November.

- (The) World Bank (1999a), *Some Observations Regarding Environmental Covenants and Conditionality's in World Bank Lending*, The World Bank, Washington, DC.
- (The) World Bank (1999b), *World Bank Operational Manual*, The World Bank, Washington, DC.
- (The) World Bank (2008), *Development and Climate Change: A Strategic Framework for the World Bank Group*, The World Bank, Washington DC.
- (The) World Bank (2009), *Development and Climate Change: The World Bank Group at Work*, The World Bank, Washington, DC.

Further reading

- EBRD (2006), *Sustainable Energy Initiative (SEI)*, European Bank for Reconstruction and Development, London.
- EBRD (2008), *Environmental and Social Policy*, European Bank for Reconstruction and Development, London.
- EBRD (2009), *EBRD Methodology for Assessment of Greenhouse Gas Emissions Version 3*, European Bank for Reconstruction and Development, London.

About the author

Dr Kwame Boakye-Agyei teaches courses at George Mason University on environmental policy, human behavior in natural environments, research methods and data analysis. His research and teaching emphasis are on the international political economy of environment and development, institutional change and environmental conservation. He consults for the World Bank on issues that involve environmental quality assurance, SEA, EIA and natural resource governance for developing countries. Kwame Boakye-Agyei can be contacted at: kboakyea@gmu.edu

To purchase reprints of this article please e-mail: reprints@emeraldinsight.com
Or visit our web site for further details: www.emeraldinsight.com/reprints

Reproduced with permission of copyright owner. Further reproduction prohibited without permission.